KAZAKHSTAN STOCK EXCHANGE JSC

Approved by

by a decision of the Management Board Kazakhstan Stock Exchange JSC

(Minutes No.74 of meeting dated of June 9, 2022)

Effective from

July 1, 2022

RULES

for working with the trading and clearing system in remote access mode

LIST OF AMENDMENTS

1. Amendments No. 1:

- Approved by a decision of the Management Board Kazakhstan Stock Exchange JSC (minutes No. 69 dated July 14, 2023);
- Effective as of July 27, 2023.

These Rules determine the main terms of connection to the trading and clearing system of Kazakhstan Stock Exchange JSC (hereinafter - the Exchange) to work with it in the remote access mode.

Article 1. Main provisions

- 1. The terms used in these Regulations shall have the following meaning:
 - "Internet service provider" means an organisation that provides telecommunication services for access to the Internet
 - 2) **An "observer organisation"** is a legal entity that has the right to view the progress and results of trades in the trading and clearing system;
 - 3) "remote access network provider" an organization that provides communication services to provide access to the trading and clearing system via a direct point-to-point connection and a data processing center rental service (this sub-item was changed by a decision of the Exchange's Management Board dated 14 July of 2023);
 - 4) "software terminal" trading and clearing system terminal software;
 - 5) **"remote access mode"** is a way of working with the trading and clearing system that does not require the physical presence of the user of the trading and clearing system (an individual authorised to perform certain actions in the trading and clearing system) on the Exchange;
 - 6) **"Participant"** is an entity entitled to operate the trading and clearing system in remote access mode;
 - 7) "gateway systems" software and hardware complex of the Exchange's trading and clearing system, through which interaction of information systems of the Participants with the trading and clearing system is carried out in the course of exchange trading;
 - 8) **Co-location"** a service consisting in the fact that the remote access network provider places the equipment of the Exchange's client on its territory in the data center, connects it to electricity, provides maintenance and connection to high-bandwidth communication channels (this sub-item was included by a decision of the Exchange's Management Board dated 14 July of 2023).
- Other concepts used in these Rules are identical to those defined in the Rules of Exchange Activities and other internal documents of the Exchange, as well as the legislation of the Republic of Kazakhstan.
- 3. Connection to the trading and clearing system to operate it remotely is only permitted:
 - 1) to participants in trades conducted by the Exchange (Exchange members);
 - 2) users of the control and assurance system;
 - 3) observer organisations;
 - 4) SMA clients via DMA systems.
- 4. An organization from among those listed in sub-items 1) and 2) of item 3 of this article can work with the trading and clearing system in remote access mode, provided that an application is submitted in the form of Appendix 1 to these Rules. From the first working day following the day the Exchange receives the specified application, this organization receives the status of a Participant and, subject to its compliance with the minimum technical and other requirements established by items 4–7 of article 2 of these Rules, is connected to the trading and clearing system to work with it in remote access mode (this item was changed by a decision of the Exchange's Management Board dated 14 July of 2023).

- An organization willing to work with a trading and clearing system in remote access mode as an observer organization, must submit an application in the form of appendix 1 to these Rules and obtain a written permission from the Exchange to operate this organization with the trading system in remote access mode as an observer organization (this item was changed by a decision of the Exchange's Management Board dated 14 July of 2023).
- 6. SMA clients operate the trading and clearing system remotely on the basis of agreements between them and the Exchange members serving them.
- 8. For the persons referred to in sub-items (1) to (3) of item 3 of this article, these Rules shall have the force of a contract of adhesion. For such a person to become a Member in accordance with items 4 and 5 of this article means that the contract as a whole shall be subject to the conditions specified in these Rules.
- 9. Exclusive rights to the software terminal and trading information as intellectual property belong to the Exchange; Participants are granted only the right to use them.
 - The Exchange provides Participants with the right to display (demonstrate) Market Data to their clients only through DMA systems and only to the extent and in the composition necessary for conclusion of deals on the Exchange. Distribution of Market Data in any other way and for any other purposes is a secondary distribution of Market Data and must be carried out only in accordance with the Rules of Distribution of Market Data and Regulations on Terms of Commercial Presentation of Market Data.
- 10. Peculiarities of work with the trading and clearing system in the remote access mode when software-cryptographic information security devices are used shall be established by the Rules for use of software-cryptographic information security devices when working with the trading system in the remote access mode.
- 11. Amendments and additions to these Rules may be introduced take effect not earlier than 15 days after their approval and are subject to notification (through publication on the Exchange's website) of persons working with the trading and clearing system in remote access mode immediately after approval of such changes and additions.

Article 2. Minimum technical and other requirements for connection to the trading and clearing system

- In order to connect to the trading and clearing system in order to work with it in remote access mode the Participant (candidate Participant) shall have the following communication channels:
 - the main communication channel organised through a direct connection via a remote access network provider or via the internet through an internet service provider.
 - Organisation of the main communication channel via a direct connection without the involvement of a remote access network provider is only permitted by the state authority responsible for the regulation and supervision of the securities market;
 - a redundant communication channel organised by direct connection or via the Internet through a provider other than the one referred to in sub-item (1) of this item.

The reserve communication channel shall be used by the Participants to work with the trading and clearing system in remote access mode in case of failure of the main channel organised in accordance with sub-item 1) hereof.

2. To connect to the trading and clearing system in order to work with it in remote access mode, the IP addresses set by the Exchange are used.

The list of IP addresses and ports for connection (including IP addresses the list of IP addresses and ports (including IP addresses and ports of the automatic update services of the trading and clearing system terminals and other services) via the main and backup communication channels, as well as changes and/or additions to such list, are published on the Exchange website.

- Connection to the trading and clearing system via the Internet is only permitted if software and cryptographic information security features are used when operating the system.
- 4. The personal computer on which the software terminal is to be installed must have a Core i5 or higher processor and a storage capacity of at least 2 Gb. This computer must have the Microsoft® Windows® 8.1 operating system or higher installed.

In case the Participant's software is connected to the Exchange gateway systems from the Linux family of operating systems, it is recommended to use RedHat/CentOS 6.5 operating systems and above, Ubuntu 14.04 LTS/Debian 7 and above 64-bit version.

- 5. In order to connect to the trading and clearing system via a direct communication channel without involving a remote access network provider, the state securities market regulator and supervisor must have:
 - an active direct channel of communication to the Exchange, which shall comply with the requirements laid down in item 7 of this Article;
 - 2) operable telecommunication equipment required to connect the terminal to the trading and clearing system.
- 6. In order to connect to the trading and clearing system in remote access mode, the Participant (candidate Participant) must:
 - conclude a contract with one of the remote access network providers or internet service providers, under which the Participant (candidate Participants) will be able to connect its terminal or information system to the trading and clearing system;
 - have a functioning direct link to the provider referred to in sub-item (1) of this item, which shall comply with the requirements laid down in item 7 of this Article;
 - 3) have operable telecommunication equipment required to connect the terminal with the trading and clearing system and the characteristics of which are agreed with the provider specified in sub-item 1) hereof;
 - 4) send a letter on letterhead to the Exchange confirming that the Participant (candidate Participant) has the main and backup communication channels that meet the requirements set out in item 1 of this article.
- 6-1 In order to activate the Co-location service, the Participant (candidate for Participants) it is necessary to:
 - enter into an agreement with the remote access network provider, according to which the Participant (candidate for Participant) will have the opportunity to install their equipment in the same data center where the Exchange equipment is located;
 - 2) have operational telecommunications equipment necessary to ensure connection of your computer equipment (server) with the Exchange equipment located in the data processing center;
 - 3) send an application to the Exchange to connect to the Co-location service in accordance with the form of Appendix 2 to these Rules.

(This item was included by a decision of the Exchange's Management Board dated 14 July of 2023)

- 6-2. In order to disable the Co-location service, the Participant sends an application to the Exchange in accordance with the form of Appendix 2 to these Rules (this item was included by a decision of the Exchange's Management Board dated 14 July of 2023).
- 7. When connecting to the trading and clearing system to work with it in the remote access mode, the bandwidth of the communication channel (when connecting to the trading and clearing system via a direct connection via a remote access network provider CIR) shall be at least 256.0 kilobits per second per one terminal of the trading and clearing system.

When connecting to the Exchange's gateway systems in remote access mode, the communication channel capacity (CIR) must be at least 15 Mb per second per gateway instance.

When connecting to the trading and clearing system or to the Exchange's gateway systems in the remote access mode using a direct communication channel to the provider, cryptographic information security tools of the trading and clearing system are not required.

8. The Exchange provides advice to Participants (candidate Participants) on how to connect to the trading and clearing system for remote access.

These consultations shall be provided free of charge, unless they require the Exchange employees to travel to provide on-site consultations. In such cases the Exchange shall be entitled to charge from Participants (candidates to Participants) a fee as reimbursement of expenses for departure of its employees.

Libraries of access to the Exchange's gateway systems, software terminal, as well
as programs and/or instructions for its installation are provided to Participants
through publication on the Exchange's website and/or the Exchange's autoupdate servers.

The installation of the software terminal or the use of access libraries to the Exchange's gateway systems is carried out by the Participants themselves, with advice from Exchange staff, if necessary.

Such consultations shall be provided, as a rule, by phone or e-mail (support@kase.kz). If the Exchange employees travel to provide such advice on site, the Exchange shall be entitled to charge from Participants a fee as reimbursement of expenses for departure of its employees.

- 10. The Exchange is not responsible for:
 - 1) for the inability to install and run the software terminal due to the Participant's failure to comply with the requirements laid down in items 4 to 6 of this article;
 - 2) for the Participant's incorrect installation of the software terminal and the consequences of such incorrect installation;
 - 3) for inability to connect the terminal to the trading and clearing system due to inoperability of communication channels and telecommunication equipment of the Participant, malfunction of the remote access network provider or Internet provider, lack of network level access by the Participant to the IP addresses, the list of which is provided to Participants by the Exchange in accordance with item 2 of this article;
 - 4) for delays in the operation of the trading and clearing system terminal due to the Participant's failure to comply with the requirements set out in items 4-7 of this Article.
- 11. The number of trading and clearing system terminals of one Participant shall not be limited provided that its communication channel(s) and the performance of its telecommunication equipment are sufficient, as well as that the Exchange has sufficient capacity of its communication channel(s).

The Participant may use different ways of connecting to the trading system in respect of different terminals.

Article 3. Special conditions

- 1. In case of modification or development of a new generation of the software terminal, the Exchange shall transfer it to the Participants in the manner prescribed by Article 2, item 9 hereof.
- 2. Participants are prohibited from:
 - decompile and disassemble the software terminal;
 - Pass on the software terminal in any way or form to third parties;
 - 3) violate the restrictions imposed by Article 1(9) of these Regulations in relation to the distribution of trade information.
- 3. The Exchange shall be entitled to suspend the Trading and Clearing System of the Participant if the Participant violates the condition stipulated in sub-item 2) of item 1 of Article 2 hereof.
- 4. Resumption of the Participant's work with the trading and clearing system shall be made by the Exchange (with subsequent written notification of this Participant thereof) after such Participant has eliminated violations of the requirements set forth in item 2 of this article.
- 5. In case of detection of abnormal network activity (multiple connection requests, DOS attack, etc.) from the Participant's IP address, the Exchange reserves the right to take all necessary actions to eliminate this activity up to complete blocking of this IP address until the circumstances that led to this situation are clarified.
 - The Exchange shall give that Participant a written notice of the blocking of his IP address within three working days of the date on which the Participant's IP address was blocked.
- 6. The Exchange may suspend the Participant from operation of the trading and clearing system (with subsequent written notification of this Participant) if the violation by this Participant of any of the prohibitions set forth in item 2 of this article creates, in the Exchange's opinion, a significant threat to the operability of the trading and clearing system or the Exchange's exclusive rights to the software terminal and trading information as intellectual property objects.
- 7. The procedure for settling situations in case of failures (failures, errors or delays) in the operation of the trading and clearing system and terminals is set out in the Rules for resolving issues in case of technical failures in the operation of the software and hardware complex of the Exchange.

Article 4. Exchange fees for services related to the operation of the trading and clearing system in remote access mode

- Participants shall pay fees to the Exchange for the provision of services related to to work with the trading and clearing system in remote access mode, in accordance with the Regulations on Membership Fees, Exchange and Clearing Fees.
- 2. A Participant may temporarily or permanently refuse to operate with the trading and clearing system in the remote access mode with proportionate exemption of that Participant from payment of fees of the Exchange for provision of services on provision by the Exchange of remote access to the trading and clearing system provided that the Exchange receives a written notification of that Participant on such refusal before the beginning of the month in which that Participant wishes to suspend (terminate) work with the trading and clearing system in remote access mode.

3. The Participant shall be exempt from payment of fees of the Exchange for provision by the Exchange of remote access to the trading and clearing system, starting from the month of suspension (termination) of with the trading and clearing system in the remote access mode.

Article 5. Final provisions

- 1. These Rules shall be published on the Exchange website.
- 2. It shall be the responsibility of the tendering unit and information technology unit to ensure that these Rules are amended and/or updated in a timely manner.
- 3. These Regulations shall be updated as necessary, but at least once every three years from the date of entry into force of these Regulations.

Chairperson of the Board

A. Aldambergen

Appendix 1

to the Rules for the operation of the trading and clearing system in remote access mode (this element was changed by a decision of the Exchange's Management Board dated 14 July of 2023)

[letterhead]

Kazakhstan Stock Exchange JSC

APPLICATION

	hereby express our intention to operate specfy]:	your trading and clearing system in re	emote access mode			
	Trading participant					
	the user of the control and assurance system					
	an observer organisation with a connect	observer organisation with a connection to it [tick]				
	over a direct connection without the involvement of a remote access network provider (only for the state securities market regulator and supervisor)					
	over a direct connection via a remote access network provider					
	via the internet through an internet service provider					
	would like to use [insert number] of tradi	ng and clearing system terminal/s to be	e located at [specify]:			
then with	declare that we have read the Rules of and undertake to comply with their tell subsequent changes and amendments be been notified to us in accordance with	rms. This obligation also includes the to the Rules, provided that such chang	obligation to comply			
incluon on	accept liability for breach of the obligated liability for the acts (or omissions) our behalf with your trading and clear pliance) with the rules of these Rules are	of our employees and clients (clients' aring system in remote access mod	employees) working e in violation (non-			
[pos	ition]	[signature]	[surname, initials] ¹			
[pos	ition]	[signature]	[surname, initials] ²			

The title, signature, surname and initials of the person authorised to give the first signature on behalf of the Participant (candidate Participant).

The title, signature, surname and initials of the person entitled to give a second signature on behalf of the Participant (candidate Participant).

Appendix 2

to the Rules for operating the trading and clearing system in remote access mode

(This appendix was included by a decision of the Exchange's Management Board dated 14 July of 2023)

[letterhead]

Kazakhstan Stock Exchange JSC

REQUEST

[Specify a name of the Participant (candidate for participants)] hereby expresses his intention to connect/ disconnect [specify the applicable] Co-location services:

No.	Service	Note about selection of service	Number of services to be connected	Number of services to be disconnected	Market	
1	Connection of software to backup data processing center of the Exchange	1U 🗆	0	0	Stock	
					Currency	
					Derivatives	
2	Increase in carrying capacity up to 1 Gb/s					

We declare that we have read the Rules for operating the trading and clearing system in remote access mode, agree with them and undertake to comply with their terms and conditions. Our obligation also includes the obligation to comply with the terms and conditions of subsequent amendments and additions to these Rules, provided that such changes and additions have been brought to our attention in accordance with item 11 of article 1 of these Rules.

We accept responsibility for violation of the obligations contained in this request. This responsibility also includes responsibility for actions (inaction) of our employees and clients (client employees) operating on our behalf your trading and clearing system in remote access mode in violation of (non-compliance with) the provisions of these Rules and for consequences of such actions (such inaction).

[position]	[signature]	[surname, initials] ³
[position]	[signature]	[surname, initials]4

Position, signature, surname and initials of a person with a primary authority to sign on behalf of the Participant (candidate to the Participants).

Position, signature, surname and initials of a person with a primary authority to sign on behalf of the Participant (candidate to the Participants).