Moscow Exchange Market Data Policy

This document (hereafter the Policy) defines the terms for provision, distribution, and other use by related parties of Market Data about trades on the markets of Moscow Exchange and other trade organisers that have permitted Moscow Exchange to use their trade data in its data products.

Moscow Exchange owns all data related to the course and results of trading (the trading session) on Moscow Exchange and trading venues of other trade organisers permitted Moscow Exchange to use their trade data in its data products.

1. Terms and definitions

- 1.1. Access point: Identification tools (including codes, logins, and passwords, used to gain individual authorised access to data products or services containing Real Time Streaming Data for the purpose of demonstrating data on computers, tablets, mobile telephones, or other equipment, or for the purpose of using Real Time Streaming Data for Non-display Usage that preclude simultaneous access to Real Time Streaming Data for more than one piece of technical equipment or software application, for more than one database or another system, treated as a unit of count for the purpose of calculating payment for Real Time Streaming Data provision services.
- 1.2. Alternative data and trading systems/platforms (Alternative Systems, AS) the combination of software and hardware means, telecommunication tools and/or other equipment which is not part of the MOEX SHC and enables the submission of orders and other similar documents declaring intention to buy/sell financial instruments traded on MOEX, and automated execution of trades in those instruments (also between clients of the MOEX trading member and between the trading member and its clients in case of two or more buy and sell client instructions with the trading member acting as a formal party in every trade) by using prices (orders, trades, weighted average values, etc.) from Market Data, which prices are registered in the MOEX SHC at the time the sell/buy instruments are entered, or by using prices calculated in the system based on Market Data (price estimates).

The system used by the trading member on MOEX <u>only</u> to trade Instruments with a secondary listing, trades with clients/counterparties to facilitate final settlement of onexchange trades, rollover trades as well as other trades with its clients, does not constitute an AS.

- 1.3. **Archive data:** Market Data about the trading results for a certain period of time, including the following sets of data:
 - a) archives of all trades and orders in the form of a historic log (register) of all trades (anonymous data) and all orders (anonymous data); or
 - b) archives of all trades and best bids and offers in the form of a historic log (register) of all trades (anonymous data) and best bids and best offers (anonymous data), or
 - c) archives of all trades in the form of a historic log (register) of all trades (anonymous data).

- 1.4. **Data audit:** Actions by the Exchange to verify observation by a Distributor, Service Facilitator/Technical Agent, Re-distributor, subscriber, user, Trading Member, or client of the Trading Member, of liabilities arising with the distribution, provision, or other usage of market and/or training data, as well as observation of the conditions of 1) contracts signed with the Exchange or a Distributor and/or 2) this Policy.
- 1.5. **Data Products:** Market or training data sets provided to third parties.
- 1.6. **Delayed Streaming Data:** Market Data on the deals of the current trading day delayed for not less than 15 minutes after it appeared in the Exchange's hardware and software complex.
- 1.7. **Derived Data:** Digital data (including indices and indicators) calculated based on market and/or training data, which differ from the original exchange and/or training data used for calculation and are calculated in such a way that the calculation algorithm for the Derived Data prevents the reverse reconstruction or reengineering of the original market and/or training data.
- 1.8. **Derived data intended to estimate prices of orders (Derived Prices)** data computed automatically based on MOEX's Market Data by using software and hardware other than the MOEX SHC, which is used as order prices to execute trades in instruments traded on MOEX off MOEX's markets, excluding dual-listed Instruments.
- 1.9. **Dual-listed instrument** a security listed on more than one exchange, and one of these exchanges is Moscow Exchange; the security was first listed on an exchange other than Moscow Exchange.
- 1.10. **Distributor:** an entity which has entered into a Market Data distribution agreement giving the right to distribute market and/or training data.
- 1.11. **The Exchange:** Public Joint Stock Company "Moscow Exchange MICEX-RTS".
- 1.12. **External Software & Hardware (ESH):** Software and hardware designated by the Exchange that can, by agreement with the Exchange, be connected by the user with the Exchange's software & hardware suite (SHS) via specific software & hardware (including the Internetworking Device or universal software & hardware gateway).
- 1.13. **Hardware & Software Developer:** A company which develops hardware & software, including ESH, used by a Trading Member and/or client thereof for the purpose of participating in trading on Moscow Exchange and by other related parties for other uses of Market Data.
- 1.14. **Individual Usage:** The usage of Market Data received from the Exchange, from a Distributor, from a Re-distributor, or from a Trading Member for any purposes except:
 - Onward distribution of Market Data to third parties;
 - Non-display usage of Market Data;
 - The creation, based on Market Data, of Derived Data for the purpose of onward dissemination or provision to third parties, or the granting to third parties the right to use such Derived Data.
- 1.15. **Internal Usage:** Use, agreed with the Exchange, of Real Time Streaming Data by employees of a Distributor for the following commercial purposes: organisation, control, and monitoring of the process of receiving Real Time Streaming Data; creation

of products containing Real Time Streaming Data and/or programmes used for receiving and/or processing and/or displaying Real Time Streaming Data; development of programmes designed to distribute and provide Market Data; quality control and testing of such products and/or programmes; and demonstration of such products and/or programmes to potential clients; and providing subscribers with support in using such products and/or programmes.

- 1.16. Market Data: any information (messages, data) of a non-confidential nature regarding the course and results of trading on the Exchange and trading venues of other trade organisers, provided in real time, with a delay, or in the form of trading results, as well as data messages of the Exchange or third parties that have been received, processed or systemised with the help of the Exchange's software & hardware and equipment.
- 1.17. Non-display Usage: any treatment of Market Data including recording, copying, systematization, transformation, transfer, logic and/or arithmetic operations and other actions performed, in full or in part, with the use of computer programs (software tools, software) which does not intend to: demonstrate Market Data on displays (screens), and/or calculate Derived Data. The term does not cover back office processing of data on orders and trades of the Client which is a Trading Member and receiving, processing and transmission of Market Data by Vendors to their clients for displaying on the devices with screens (displays).
- 1.18. **Operator of an Alternative System** an entity which owns the Alternative System and/or operates solely or jointly the system and/or determines the policy and operational framework for users. An Operator of an Alternative System which is authorised by law to perform transactions in financial instruments on its own behalf may be a User of the Alternative System at the same time.
- 1.19. **Tariffs:** prices as approved and introduced unilaterally by the Exchange for its services regarding the provision of Market or Training Data, which prices are published on the Exchange's website.
- 1.20. **Real time deal data:** Market Data about deals from the current trading day (anonymised data) with a delay of less than 15 minutes from the moment the data appear in the Exchange's software and hardware complex.
- 1.21. Real time streaming data: Market Data about trading with a delay of less than 15 minutes from the moment the data appear in the Exchange's software and hardware complex, including anonymised data about trades and orders on the current trading day.
- 1.22. **Re-distributors:** Entities that have signed contracts with the Distributor to receive real time deal data and/or delayed streaming data and/or trading results and/or training data for the purpose of onward distribution subject to conditions that do not breach conditions set by the Exchange.
- 1.23. **Trading member's client (the Client):** A legal or individual entity registered (i.e. possessing an individual code) in the MOEX trading system as a client of a Trading Member or a client of a broker or an asset manager which is a client of a Trading Member (second level client) in accordance with the MOEX trading rules.

- 1.24. **Trading results:** Market Data on trading results for a specific period, including total (aggregated) trading results for each trading day of a specified period (prices, volumes, quantities).
- 1.25. Service facilitator / Technical Agent: An entity authorised by the Distributor in written form to receive Real Time Streaming Data from the Distributor for the purpose of technical delivery of Real Time Streaming Data to subscribers, and to cooperate in technical development of the Distributor's services related to distributing Real Time Streaming Data and without contractual relations with the subscribers regarding delivery of Real Time Streaming Data.
- 1.26. **Subscriber:** an entity which has entered into the Market Data agreement not giving the right to re-distribute the data and/or an employee of a Distributor given access to Real Time Streaming Data for personal usage.
- 1.27. Technical Details any information concerning the use of Market Data and/or Training Data in the Distributor, Re-Distributor, Service Facilitator/Technical Delivery Agent or Subscriber's IT Systems including routes of the users, aggregate data on the lengths of the sessions and amount of data viewed.
- 1.28. **Trading member:** A legal entity included, in accordance with the established regulations, in the structure of Trading Members on the Exchange, and registered (with an individual code) in the MOEX trading system and having the right to announce (file) orders and conclude trades on MOEX's markets.
- 1.29. **Training data:** Data, produced by the Exchange with the use of the Exchange's training servers, providing imitation deal making with financial instruments for testing, training, and other purposes unrelated to participation in real exchange trading.
- 1.30. **Users:** Any entity with access to market or training data under conditions set by the Exchange.
- 1.31. **User of the AS** an entity which is allowed to perform transactions/activities on terms and conditions set by the Operator of the AS, related to the submission instructions or other similar documents declaring an intention to buy/sell financial instruments traded on MOEX.
- 1.32. **Website:** the official website of the Exchange with URL address https://www.moex.com/.

Terms not expressly defined in this Policy are used in accordance with the meanings ascribed to them in law and Exchange's other documents.

2. Terms and conditions of providing Market Data and/or Training Data

- 2.1. Depending on the purpose, user category, composition, content and other factors, Market Data is divided into data which is provided (published) by the Exchange pursuant to current Russian law and data which is provided by the Exchange on a contract basis.
- 2.2. To comply with the effective Russian law, the Exchange performs the following actions with respect to Market Data:

- 2.2.1.Disclosing Market Data on the Exchange website to all interested parties for information;
- 2.2.2.Providing Trading Members with Market Data in the amount and subject to restrictions set out in the trading rules and this Policy, for the purposes of their participation in trading;
- 2.2.3. Providing legally authorised agencies and other entities with Market Data as part of written replies to their official requests.
- 2.3. In other cases, Market and/or Training Data is provided by the Exchange for the following purposes on a contract basis:
 - 2.3.1. Onward distribution and provision to third parties;
 - 2.3.2.Non-display usage;
 - 2.3.3. Execution of Alternative Trades on the markets determined by the Exchange;
 - 2.3.4. Creation of Derived Data intended for onward distribution and usage:
 - 2.3.5. Processing, accumulation and other treatment of data for individual use.

3. Terms of use for Market and/or Training Data

3.1. Terms of use for Market Data published on the Exchange website

Trading Results and Delayed Streaming Data which must be disclosed as required by law are published by the Exchange on the Website and available to all concerned. The users must not disseminate and provide the Market Data, carry out its Non-display Usage and create Derived Data for any third parties without the pertinent information service agreement with the Exchange. Terms of use for Market Data and other data which must be disclosed and published on the Exchange website are set out in the User Agreement available on the Exchange website.

3.2. Use of Market Data by Trading Members and their Clients.

- 3.2.1.Market Data regarding the specific market is provided by the Exchange to a Trading Member or by a Trading Member to its Client who is registered on that market for the purpose of trading on that market, as provided for by the trading regulations of the relevant market and regulated by current Russian law and by this policy.
- 3.2.2.A Trading Member may provide its Clients registered (i.e. having an individual code) on that market, with Market Data regarding the market for the purpose of these clients participating on that market, is provided for in the trading rules for that market, is regulated by current Russian law and this policy. When the Trading Member provides Market Data to its clients, it must notify them in writing about permitted manners of use of Market Data and associated penalties.
- 3.2.3.If a Trading Member or a Client of a Trading Member uses Market Data received while trading on a particular market to create Derived Data, they are not required to enter into a separate contract with the Exchange provided that such Derived Data is not intended for its further distribution or provision to third parties (this does not apply if such Derived Data is provided to clients registered in the Exchange's trading system on that market) or for provision of rights to third parties to use such Derived Data or create financial products on its basis.
- 3.2.4. Any other usage, distribution, and provision of market and training data (including its Non-display usage, for the creation of Derived Data, distribution, or provision

to any third parties) are allowed only if the relevant agreement with the Exchange is in place.

3.3. Use of Market Data provided by request

The Exchange provides Market Data on Trading Results in the form of a written reply to a written request from competent agencies, organisations or individuals authorised to do so by Russian, foreign or international law for the purpose of performing their functions and executing powers, as well as other entities as set out by the Exchange. These entities and individuals may use Market Data for individual use and submit it to whom it may concern; but they must not disseminate the Market Data to third parties unless otherwise provided for by Russian law.

3.4. Use of Market and/or Training Data provided on a contract basis

3.4.1. Dissemination and provision of Market and/or Training Data

- 3.4.1.1. Using Market and/or Training Data for its onward distribution and provision to third parties is allowed only on the basis of an agreement with the Exchange which must provide the following:
 - 3.4.1.1.1 The services by the Exchange regarding the provision of Market Data a Distributor for onward distribution of Real Time Streaming Data to Subscribers, and/or
 - 3.4.1.1.2. The services by the Exchange regarding the provision of the following Trading and/or Market Data to a Distributor for distribution among Users and onward provision to Re-distributors of:
 - a) Training data;
 - b) Real time deal data:
 - c) Delayed streaming data;
 - d) Trading results.

A Distributor may distribute market and training data indicated in clause 3.4.1.1.2 by demonstrations on the Distributor's own websites, distribution by email and to mobile devices, distribution by radio and television channels and other distribution systems of the Distributor, and may not undertake such distribution via websites not belonging to the Distributor and receiving from the Distributor technical support (hosting). The Distributor may distribute the product "real time deal data" only on their own websites. Training data may be distributed only to users authorised by login and password,

- 3.4.1.1.3. Internal usage of Market Data by the Distributor,
- 3.4.1.1.4. Usage by the Distributor of Market Data for the creation of Derived Data intended for distribution to Subscribers. In this case distributing and providing Derived Data to any third parties or granting the right to the third party to use such Derived Data is allowed only subject to the execution of a separate agreement (see clause 3.4.4 hereof),

- 3.4.1.1.5. Provision of free access to Real Time Streaming Data for familiarisation purposes to any interested parties upon first contact for no more than 30 calendar days no more frequently than once per year on the condition that they register and their identity verified,
- 3.4.1.1.6. Provision of the Exchange with monthly reports, including:
 - a) Names of subscribers and the number of access points for each subscriber;
 - b) Names of Service Facilitators/Technical Agents and the number of access points for each Service Facilitator/Technical Agent;
 - c) The number of access points for internal use;
 - d) Names of Re-distributors, their website addresses, and names of their data products/services/systems via which Market Data is distributed;
 - e) Remuneration for provision of Real Time Streaming Data to each subscriber, calculated based on the Tariffs and the number of access points;
 - f) The sums of all payments according to the contract.
- 3.4.1.1.7. Receiving remuneration by the Exchange for the provision of Market Data. Such remuneration consists of a fixed part and a variable part (a per client fee, only applicable to Real Time Streaming Data). The remuneration amount is calculated in accordance with the Tariffs. Access points are used as the unit of count in determining the variable part of the remuneration (per client fee). The right to distribute Real Time Streaming Data includes the right to distribute delayed streaming data and trading results without an additional payment. The right to distribute delayed streaming data includes the right to distribute trading results without an additional payment,
- 3.4.1.1.8. Market and/or Training Data Agreements with Subscribers, Redistributors or Service Facilitators/Technical Agents must include terms and conditions as well as restrictions set out in the Mandatory Requirements for Recipients of Information given in Appendix 3 to this Policy. If Market and/or Training Data is disseminated or provided without an agreement with the recipient (Users and/or entities stated in clause 3.4.1.1.5), the recipient must be notified (also by posting the relevant notices on Websites, notifications, etc.) of the requirement to have a separate agreement with the Exchange to be able to disseminate the Market Data in any form and in any manner or create Derived Data for onward distribution or licensing as well as carry out Non-display Usage of the Market Data and/or Training Data.
- 3.4.1.2. The priority target group for concluding contracts for the distribution of Market Data include Distributors that must meet the following criteria:
 - Having Market Data from the leading global exchanges in the product offering.
 - Operating on the Market Data market for at least 10 years.
 - Having in place FIX/FAST technical platforms.

- Having substantial client bases, both local (national) and international (regional).
- 3.4.1.3. Provision of Real Time Streaming Data to hardware & software developers for the purpose of testing hardware & software is permitted in cases provided for by contracts with Distributors and other cases following agreement with the Exchange and conclusion of relevant contracts and/or agreements.

3.4.2. Non-display Usage

- 3.4.2.1. Non-display Usage of Market Data is allowed if an agreement including the following provisions has been concluded with the Exchange:
 - 3.4.2.1.1. The Exchange provides any kind of Market Data (Real Time Streaming Data, real time deal data, delayed streaming data, trading results) for the purpose of Non-display Usage.
 - 3.4.2.1.2. The customer pays remuneration to the Exchange for the service in accordance with the Tariffs.
 - 3.4.2.1.3. The customer receives Market Data directly from the Exchange (without any data mediators involved), unless otherwise specified in the agreement.
- 3.4.2.2. Non-display Usage of Market Data is allowed without the Non-Display Usage Agreement with the Exchange if the Distributor provides Real Time Streaming Data to Subscribers with the Tariffs for per client payments applied, or if Market Data is provided to clients of companies which gave entered into the Technical Connection Agreement with the Exchange.
- 3.4.2.3. Market data is provided for Non-display Usage in order to execute trades on the markets of the Exchange, and risk calculation (risk management operations) related to execute trades on markets of the Exchange, as well as for other purposes defined by the term "Non-display Usage".
- 3.4.2.4. Market data is provided for Non-display Usage to conclude deals during trading of other trading organisers not connected with the Exchange, but only in instruments not traded on the Exchange.

3.4.3. Using Market Data in Alternative Systems

- 3.4.3.1. Using Market Data in Alternative Systems is allowed only on the basis of an agreement with the Exchange, which shall provide for the following:
 - 3.4.3.1.1. The Exchange provides any type of Market Data (Real Time Streaming Data, Real Time Deal Data, Delayed Streaming Data, Trading Results) for using in Alternative Systems to execute trades in instruments traded on the market specified by the Exchange;
 - 3.4.3.1.2. The Operator of the Alternative System shall submit information regarding the Users of the Alternative System according to the procedure set out in the agreement; this

- includes also the case where the Operator of the Alternative System is also the User of the Alternative System.
- 3.4.3.1.3. The Exchange receives remuneration for its Market Data services according to the Tariffs;
- 3.4.3.1.4. Market Data is received directly from the Exchange (without data vendors transmitting the data), unless otherwise stated in the Agreement.

3.4.4. Usage of Market Data to create Derived Data for public distribution and usage

- 3.4.4.1. Usage of Market Data to create Derived Data for its future distribution and usage is allowed if the customer has entered into an agreement with the Exchange which sets out the following:
 - 3.4.4.1.1. The Exchange provides the services regarding any type of Market Data (Real Time Streaming Data, real time deal data, delayed streaming data, trading results) for the purpose of creating Derived Data for its onward distribution.
 - 3.4.4.1.2. The customer pays remuneration to the Exchange for the service in accordance with the Tariffs.
 - 3.4.4.1.3. All rights to the Derived Data, including rights to relevant results of intellectual activity relating to Derived Data and databases containing Derived Data are owned by an entity that created the Derived Data; this entity may use the Derived Data in any manner and for any purposes at its own discretion.
- 3.4.4.2. Using Market Data to create Derived Data without executing the agreement specified in clause 3.4.4.1 hereof is permitted in the following cases:
 - 3.4.4.2.1. Derived Data is created as part of individual usage and not intended for its further distribution to any third parties, provision or other public usage;
 - 3.4.4.2.2. Derived Data is created by the Distributor and provided to subscribers receiving Real Time Streaming Data;
 - 3.4.4.2.3. Derived Data is created by a Trading Member and provided to clients of that Trading Member;
 - 3.4.4.2.4. The Exchange provides Market Data to clients of companies which have entered into the Technical Connection Agreement with the Exchange.
- 3.4.4.3. The Exchange reserves the right to adopt individual tariffs for Market Data used to create Derived Data, including by Trading Members in their own quotation (matching) systems that facilitate the return of liquidity to the Exchange.

- 3.4.4.4. The priority group for concluding Derived Data contracts with the Exchange is index providers that create indices and indicators that stimulate interest in the Exchange's markets.
- 3.4.4.5. All conditions specified in clause 3.4.4 above apply also to usage of training data to create Derived Data.
- 3.4.4.6. The provisions above in this paragraph 3.4.4 do not apply to cases where Market Data is used to create Derived Prices.

3.4.5. Usage of Market Data to create Derived Prices

- 3.4.5.1. Usage of Market Data to create Derived Prices is allowed if the customer has entered into an agreement with the Exchange which sets out the following:
 - 3.4.5.1.1. The Exchange provides the services regarding any type of Market Data (Real Time Streaming Data, real time deal data, delayed streaming data, trading results) for the purpose of creating Derived Prices for instruments traded on markets set by the Exchange, for the use of such prices in Alternative Systems.
 - 3.4.5.1.2. The customer pays remuneration to the Exchange for the service in accordance with the Tariffs.
- 3.4.5.2. The provisions above in this paragraph 3.4.5 do not apply to cases where Market Data is used to create Derived Prices for Instruments with a secondary listing.

3.4.6. Usage of Market Data in FX Market quotation systems

- 3.4.6.1. Using Market Data in the FX Market quotation systems is allowed if the customer has entered into the agreement with the Exchange which sets out the following conditions:
 - 3.4.6.1.1. The Exchange provides the services regarding any type of Market Data from the Exchange's FX Market (Real Time Streaming Data, real time deal data, delayed streaming data, trading results) for its use in the FX Market quotations systems.
 - 3.4.6.1.2. The customer pays the following remuneration to the Exchange for the service in accordance with the Tariffs:
 - the fee for Non-display Usage of Market Data re one market – applied only to Trading Members of the MOEX FX Market:
 - the fee for Market Data for creating Derived Data applied to entities which are not Trading Members of the FX Market.

3.4.7. Processing, compilation, and other forms of Individual Usage without the right to further distribution

- 3.4.7.1. The Exchange provides the Subscriber with Market Data for processing, accumulation and other Individual Use of the data by virtue of an agreement with the Exchange which is executed by accepting the Public Offer (available on the Exchange website) by the Subscriber and/or in the form of a written reply to a written request.
- 3.4.7.2. The agreement (public offer) provides for:
 - 3.4.7.2.1. Provision of the following types of Market Data by the Exchange:
 - a) Real time streaming data;
 - b) Trading results;
 - c) Archive data.
 - 3.4.7.2.2. Remuneration paid to the Exchange for the provision of Market Data. The amount of the remuneration is determined by:
 - a) the type of Market Data selected;
 - b) the type of Data Product (only for Real Time Streaming Data). Remuneration is calculated in accordance with the Tariffs.
 - 3.4.7.2.3. Market data are provided using the Exchange's web services;
 - 3.4.7.2.4. Market data are provided only to registered (authorised by login and password) users who are subscribers;
 - 3.4.7.2.5. Subscribers are prohibited from giving their login and password to third parties;
 - 3.4.7.2.6. Onward distribution of Market Data received by a subscriber to third parties is prohibited;
 - 3.4.7.2.7. Simultaneous receipt of Market Data by numerous users via the same login and password is prohibited;
 - 3.4.7.2.8. Non-display Usage by a Subscriber of data received according to the Market Data contract ca be made only of the Non-Display Usage agreement;
 - 3.4.7.2.9. The creation by a subscriber of Derived Data is permitted only if the Derived Data is used by the subscriber for personal use, is not distributed, and is not provided to third parties, and if licences are not intended to be issued to third parties to use the Derived Data or to create financial products based on it.
- 3.4.7.3. The Exchange provides Trading Results data for a fee in the form of a written reply to a written request received from entities not specified on paragraph 3.3. above; the fee amount is determined by Tariffs and paid based on an invoice issued by the Exchange. Entities indicated in this clause which received a written answer from the Exchange that contains

Market Data, are entitled to make individual usage of Market Data received, and to provide that Market Data on demand, but do not have the right to distribute the Market Data to any third parties, unless otherwise provided for by Russian legislation.

4. Data audit

- 4.1. The main goals of a data audit are: to ensure observance of distribution principles and usage of market and/or training data specified in this document, trading rules and in contracts concluded between the Exchange or a Distributor and interested parties; to prevent distribution and usage of market and/or training data that has not been agreed with the Exchange; the creation of equal and fair conditions for all categories of users and Distributors of market and/or training data.
- 4.2. Data audits are conducted in accordance with the regulation on conducting data audits in addendum 1 of this policy.
- 4.3. The Exchange may conduct a data audit independently or with third parties (including specialist auditing companies, exchanges, and others). Third parties involved by the Exchange to conduct data audits should not be direct professional competitors of the audited company.
- 4.4. The Exchange determines the audit method independently.
- 4.5. A data audit of one entity cannot be conducted more than once in a year, except the Exchange becomes aware of any information and/or facts evidencing any breach of the terms of the Market Data and/or Training Data distribution and/or usage. The audit period shall not exceed three (3) years. Data Audit with regard to one period shall not be conducted more than once.
- 4.6. Any documentation pertinent to the data audit, and any information and records received by the Exchange or a third party involved by the Exchange to conduct data audits, are confidential. The Exchange guarantees that any information and documentation received during any Data Audit will be kept confidential. The Exchange is entitled to disclose confidential information to government bodies authorised to request such information pursuant to applicable law. In this case, the Exchange is not liable for disclosure.

5. Free of charge data use

- 5.1. The Exchange exempts from charges payable for provision of Market Data in the following cases:
 - 5.1.1.Internal usage of Real Time Streaming Data by a Distributor for controlling the process of receiving Real Time Streaming Data, creating products containing Real Time Streaming Data or programmes intended for the distribution and provision of Market Data, as well as quality control and testing of such products, demonstrations of these products to potential clients for a limited period agreed previously with the Exchange, provision of client support to the subscriber related to the usage of products containing Real Time Streaming Data.
 - 5.1.2. Provision by a Distributor of Real Time Streaming Data to a Service Facilitator/Technical Agent for the purpose of providing technical provision of Real Time Streaming Data to the subscriber, as well as cooperation in the technical

- development of the Distributors services relating to distribution of Real Time Streaming Data.
- 5.1.3.Internal Usage of Real Time Streaming Data and its provision to any Service Facilitators/Technical Agents as set out in clauses 5.1.1 and 5.1.2 hereof is permitted only subject to preliminary approval of the number of Access Points necessary for such Internal Usage and Service Facilitators/Technical Agents by the Exchange. The Exchange is entitled to determine on its own the maximum number of such Access Points and to change such number unilaterally with 3 (three) month's notification of the Distributor.
- 5.1.4. Provision by a Distributor of Real Time Streaming Data to any interested parties for familiarisation upon first request for no more than 30 calendar days.
- 5.2. In cases of provision by a Distributor of Real Time Streaming Data to interested parties for familiarisation upon first request as provided for in clause 5.1.4, the Distributor is obliged to indicate in its monthly report to the Exchange the number of access points provided for this purpose.

6. Notification of changes

- 6.1. The Exchange may introduce unilaterally the following changes giving a notice to parties concerned including counterparties to which Market and/or Training Data is provided on a contract basis, within the following time frames:
 - 6.1.1. Changes to the composition of Market Data (the start of trading in new instruments, the suspension and termination of trading; changes to parameters of traded instruments, etc.) in accordance with current Russian legislation;
 - 6.1.2. Changes to the Tariffs at least 120 (one hundred and twenty) calendar days before the effective date for the changes unless otherwise provided for in the agreement. The Exchange may review unilaterally the Tariffs once a year or less frequently;
 - 6.1.3. Changes to this document also by issuing its new version at least 15 (fifteen) calendar days before the changes take effect.
- 6.2. Unless otherwise provided for in market data agreements executed with the Exchange, the notices set out in paragraphs 6.1.1-6.1.3 above are given by the Exchange by posting the relevant information (the new version of the Policy) on the Website. The notice date is deemed to be the date on which the information was posted on the Website. Parties concerned should make their own efforts to obtain notices stated in this paragraph. The Exchange is not responsible for the failure of those parties to obtain the information stated in this paragraph.
- 6.3. The notice of changes stated in paragraph 6.1.4 is given by the Exchange by sending a message (notification) to Users to postal address or email (if any) specified by the User upon registration on the Website or signing the agreement with the Exchange.

7. Liability for breach of the conditions of the Moscow Exchange Market Data Policy

Liability for breach of the conditions of the Moscow Exchange Market Data Policy is stated in addendum 2 to this policy.

Addendum 1 to the Moscow Exchange Market Data Policy

Data audit procedure rules

1. Terms and definitions

For the purposes of these data audit procedure rules (hereafter the rules), the following terms and conditions are used:

- **1.1. Data audit (hereafter audit):** Actions to verify fulfilment by a Distributor, Service Facilitator/Technical Agent, Re-distributor, subscriber, user, Trading Member, client of a trading member, and/or other third party (the "Auditee") of obligations arising from the usage, distribution, and/or provision of exchange and/or training data, as well as the observation of the conditions of contracts signed with the Exchange or a Distributor or a Trading Member of the Moscow Exchange Market Data Policy, and including verification of:
 - Products and services that include market and/or training data;
 - Data systems and hardware & software that support receipt and distribution, provision, and other usage of market and/or training data;
 - Systems for registration, accounting, and authorisation of subscribers, Trading Members, and clients of Trading Members;
 - Compliance of documents (agreements, written notifications/warnings, etc.) maintaining relationships with subscribers/Trading Members' clients with regard to Market Data, with this Policy;
 - Accuracy of accounts provided for by contracts regarding data product and services that contain market and/or training data, and mutual payments for these products and services;
 - Other activities of a Distributor, Service Facilitator/Technical Agent, Re-distributor, Subscriber, User, Trading Member, Trading Member Client with regard to the distribution, provision and other usage of Market and/or Training Data.
- **1.2. Monitoring:** regular monitoring of compliance of a Distributor, Service Facilitator/Technical Agent, Re-distributor, Subscriber, User, Trading Member, Trading Member Client and other third parties with the trading rules, agreements concluded with the Exchange and the Moscow Exchange Market Data Policy. Such monitoring is carried out by verifying public information systems (website(-s)) of the monitored entity in order to identify the Market Data usage not agreed with the Exchange.
- **1.3. Notification:** A message sent by the Exchange in written form with information pertaining to issues relating to the audit.
- **1.4. On site audit:** An audit conducted by the Exchange at the premises/place of business of the Auditee.
- **1.5. Remote audit:** An audit conducted by the Exchange remotely, including using special programmes provided by the Auditee.

2. General conditions

- **2.1.** These rules were developed for the purpose of defining procedures, methods, and timeframes for the conduct of data audits.
- **2.2.** An audit is conducted with regard to conditions and demands listed in the Moscow Exchange Market Data Policy, and in contracts for the provision of services and products containing Market and/or Training Data (hereafter contracts).

- **2.3.** The Exchange independently determines the period for which the audit is conducted (the "Audit Period"). Any Audit Period cannot be more than three years.
- **2.4.** The Exchange shall not conduct a Data Audit more than once for the same Audit Period.
- **2.5.** When preparing to and conducting an Audit, the Exchange may require that the Auditee gives it all documents or copies thereof, materials, written explanations and other information that are necessary for the Audit. The Exchange is entitled to take copies of documents and/or electronic data (including copies made with its own electronic media).
- **2.6.** When carrying out an Audit and compiling the Report, the Exchange uses documents and information provided by the Auditee and information received by the Exchange when preparing to and conducting the Audit.

3. Audit procedure

- **3.1.** No later than 30 calendar days before the day an Audit begins (the "Audit Date"), the Exchange will notify the Auditee of the upcoming audit, the Audit Date and procedure, the list of documents to be presented by the Auditee to the Exchange for audit, and the timeframes for providing them to the Exchange. The Audit ends on the day that is the date of the Audit Finding Report.
- **3.2.** Within 10 working days of the date of receipt of notification, the Auditee is obliged to provide the Exchange with the documents listed in the Notification. In case of breach by the Auditee of the deadline for providing the Exchange with the documents, the Exchange can declare the audit null and void.
- **3.3.** If an Audit cannot be carried out on site on the day specified in the Notification due to reasonable cause, the Auditee must agree another Audit Date with the Exchange within five (5) business days of receiving the Notification.
- **3.4.** The Exchange may change the Audit Date upon agreement with the Auditee.
- **3.5.** During the course of the audit, the Exchange examines the following:
- **3.5.1.** General points regarding Auditee's activities.

This entails discussion of issues regarding the Auditee's activities, the presence of affiliated companies, the client base structure, the presence of Service Facilitators/Technical Agents, cooperation with hardware & software developers, etc.

- **3.5.2.** Services/products of the Auditee that contain market and/or training data. This entails definition of the type of Market Data (Real Time Streaming Data, delayed streaming data, trading results, archive data) and/or training data used, the target audience of the service/product, and the composition and volume of market and/or training data provided as part of the provision of services and/or in the product composition. It also entails demonstration of services/products and/or specialized software & hardware (including that intended for trading participation), that uses market and/or training data, as well as websites that contain market and/or training data.
- **3.5.3.** Source (sources) of market and/or training data.

This entails discussion of the source of market and/or training data for each specific service/product and/or piece of specialised software & hardware used, including that intended for trading participation, with the type of Market Data indicated.

3.5.4. Technical issues of receipt/usage/distribution of market and/or training data and/or services/products that contain market and/or training data.

This entails discussion and demonstration of equipment that supports the receipt of Market Data (in case of the presence of special programmes it also entails verification of their correct usage, and of inspection of the premises on which the receipt of Real Time Streaming Data is organised). It also entails discussion and demonstration of IT and/or broker systems and/or other software & hardware intended for usage and distribution of market and/or training data and/or developing services/products containing market and/or training data. It also entails discussion of changes to systems of receiving market and/or training data that occurred during the audit period. It also entails discussion of the methods and the process of distribution/usage of market and/or training data and/or services/products containing market and/or training data. It also entails discussion of the control system for the process of market and/or training data processing for each specific service/product containing market and/or training data. It also entails familiarisation with authorisation and access systems of interested users to training data, and of subscribers/clients of the Trading Member to Real Time Streaming Data and/or a specific service or product containing Real Time Streaming Data, as well as the ability to access to such information by unauthorised users. It also entails demonstration of such access systems for subscribers/clients of Trading Members to Real Time Streaming Data. It also entails the process of providing and terminating access for subscribers/clients of Trading Members to Real Time Streaming Data and/or specific services/products containing Real Time Streaming Data. It also entails verification of the presence of a log of connections and disconnections (logs must be kept for at least one quarter from the date they are made) of subscribers/clients of Trading Members, that contain data on each instance of access, including record of the user name of the accessing party, including the ID of the subscriber/client of a Trading Member, and for systems of access to Real Time Streaming Data, that include the date and time of the start of access (session opening), the date and time of the end of access (session close), the IP address of the computer or other equipment from which access was obtained, the data unit to which access was obtained (for subscribers) or the name of the market (for clients of Trading Members). It also entails verification of registration of all events related to access to Real Time Streaming Data. Verification is also conducted of the presence and functionality of a control mechanism that precludes the possibility of receiving Real Time Streaming Data simultaneously from multiple access points of subscribers/clients of Trading Members under a single ID, as well as the possibility of exceeding the number of access points of subscribers/clients of Trading Members that simultaneously receive Market Data that is specified in the contract between the Distributor/Trading Member and the subscriber/client of a Trading Member. It also entails comparing methods of distributing Market Data with methods defined in Moscow Exchange Market Data Policy, contracts concluded with the Exchange, in trading regulations for the relevant exchange market, and in other exchange documentation. It also entails discussion of possible methods of exporting data into other applications.

3.5.5. Protection of Market Data.

This includes verification of the presence of written notices to Subscribers and/or Trading Members Clients having access to Real Time Market Data about usage restrictions. It also entails the presence in data systems of Distributors/Re-distributors and/or on websites of Distributors/Re-distributors that contain market and/or training data or products/services that contain market and/or training data, indications of data sources, and other information provided for by contracts concluded with the Exchange. It also entails the verification of storage methods and mechanisms for protecting market and/or training data in systems of the Auditee stated in clause 3.6.2 from unauthorised access, including discussion of methods of protection when distributing/using market and/or training data and/or services/products containing market and/or training data.

3.5.6. Work with subscribers or clients of Trading Members.

This includes verification of contracts concluded with subscribers on access to Real Time Streaming Data and/or with clients of Trading Members on participation in trading, and their correspondence to conditions of providing Market Data established by the Exchange. It also entails discussion and demonstration of systems of Distributors and/or Trading Members used

for registration, control, and keeping records on subscribers/clients of Trading Members, and used for creating reports on subscribers for the Exchange, and it also entails discussion/demonstration of software & hardware that has access to Market Data at the current moment. It also entails verification of current and archive lists of all subscribers of the Distributor. It also entails discussion of procedures of connection/disconnection of subscribers and/or provision and termination of access of clients of Trading Members to Real Time Streaming Data. It also entails verification of the presence of non-paying users, including employees of the Auditee that have access to Real Time Streaming Data and/or products/services containing Real Time Streaming Data, with discussion of the aims of providing them such an access. It also entails verification of the presence of Re-distributors. It also entails discussion of issues of registration of clients of Trading Members in trading systems of the Exchange.

- **3.6.** Audit timing and scope are determined by the Audit type (on site or remote), volume of documents and materials to be verified, aims and procedures of usage of Market Data by the Auditee and the Auditee's profile.
- **3.7.** While carrying out an Audit, the Exchange may issue recommendations to the Auditee on how to bring its activities in line with documents governing organised trading, information agreements with the Exchange and the Moscow Exchange Market Data Policy. Such recommendations will specify any errors identified, solutions recommended to eliminate such errors and a deadline for the notification of the Exchange about the performance of the recommendations. In case of failure to perform recommendations by the established deadline and provide a relevant report, or set a deadline for their performance serves as a ground to include relevant errors in the Audit Findings Report.
- **3.8.** Based on the audit results, the Exchange creates a report on the Audit Findings Report (hereinafter the "Report"). Such Report sets out either the absence of any outstanding issues with regard to the usage of Market Data and/or Training Data or the description of outstanding issues identified during the Audit.
- **3.9.** The report is executed in two copies and signed by authorised individuals who conducted the Audit. One copy is dispatched to the Auditee and the other remains with the Exchange.
- **3.10.** The Exchange shall send one copy of the Report to the audited party within forty-five (45) business days after the Audit completes.
- **3.11.** Within 10 business days after receiving the Report, the Auditee may send any notes with regard to the Audit findings to the Exchange. The Exchange shall consider the notes and make relevant corrections to the Report if necessary.
- **3.12.** The Exchange considers Audit findings in making a decision on the execution and renewal of Market Data/Training Data agreements.
- **3.13.** The Report and any audit findings specified in it may be used by the Exchange in making a decision on the application of penalties set out in the trading rules, agreements executed with the Exchange and/or the Moscow Exchange Market Data Policy.
- **3.14.** The Exchange and any third parties involved by the Exchange to carry out an Audit must ensure that the Audit creates no obstacles to business operations of the Auditee.
- **4.1.** Monitoring is a kind of control and supervision of the Market Data usage that is carried out by the Exchange on its own without any preliminary notifications to and communications with a

verified party.

- **4.2.** If any breach of the Moscow Exchange Market Data Policy has been identified by the Exchange during the monitoring process that relates to the distribution/use of the Market data or Training Data and/or services/products incorporating Market Data or Training Data, the Exchange sends a notice to the breaching party with information about the breach, as well as terms and timing for the elimination thereof.
- **4.3.** The Exchange may decide to apply penalties set out in the Moscow Exchange Market Data Policy for any breach of the Policy identified during the monitoring process.

Addendum 2 to the Moscow Exchange Market Data Policy

Liability for breaches of the Moscow Exchange Market Data Policy

1. Liability of Trading Members

In case of a breach by a Trading Member of the rules of organised trading regarding usage of Market Data, penalties provided for in the organised trading rules for the relevant market may be imposed on the Trading Member.

2. Liability of Distributors and Users receiving Market and/or Training Data on a contract basis

- 2.1. If Market and/or Training Data provided by the Exchange for Non-display Usage or Derived Data is used for the purposes and in manners other than as stipulated in the agreement (except where Market Data is used in Alternative Systems and/or to create Derived Prices), the User must pay a penalty for each case occurred in the amount of RUB 250,000 (two hundred and fifty thousand) on request from the Exchange, or its equivalent calculated at the Bank of Russia rate as of the date of the penalty invoice, in case of a payment in foreign currency;
- 2.2. If the Exchange reveals (following also a Data Audit) that Market Data was used in Alternative Systems or distributed to third parties for the use thereof in Alternative Systems without the appropriate agreement executed, as well as where the Alternative System Operator submits misleading information regarding the number of Users of the Alternative System, the User or the Operator pays a penalty on request from the Exchange, which is double the underpayment due to the Exchange based on the actual number of Users of the Alternative System, according to the Tariffs for using Market Data in Alternative Systems.
- 2.3. If the Exchange reveals (following also a Data Audit) that Market Data was used to create, or distributed to third parties for the creation of, Derived Prices without the appropriate agreement executed, as well as where the Alternative System Operator submits misleading information regarding the number and composition of instruments used to create Derived Prices, the User pays a penalty on request from the Exchange, which is double the underpayment due to the Exchange based on the actual number and composition of such instruments according to the Tariffs for using Market Data to create Derived Prices.

2.4. In case the Exchange reveals (following also a Data Audit) that:

- The Distributor used Market or Training Data for the purposes other than those set out in the agreement(except where Market Data is used in Alternative Systems and/or to create Derived Prices), or in the composition and in the amount other than as set out in the agreement, the Distributor must pay a penalty for each case occurred in the amount of RUB 250,000 (two hundred and fifty thousand) on request from the Exchange, or its equivalent calculated at the Bank of Russia rate as of the date of the penalty invoice, in case of a payment in foreign currency;
- The Distributor submitted monthly reports containing incomplete or incorrect information on the number of Access Points, Subscribers and/or Re-Distributors, the Distributor must pay a penalty on request from the Exchange. The penalty amount is the amount of the fee owned to the Exchange for its services as per the Tariffs, considering the number of Access Points of Subscribers and Re-Distributors omitted in the monthly reports, but having received Market Data from the

Distributor and/or the number of Access Points of Re-Distributors omitted in the monthly reports, but having received Training Data from the Distributor;

- The Distributor organized access to Real Time Streaming Data for third parties other than Subscribers, except cases set out in paragraphs 3.4.1.1.3 and 3.4.1.1.5 of the Policy, the Distributor must pay a penalty on request from the Exchange. The penalty amount is the amount of the fee owned to the Exchange for its services as per the Tariffs, considering the number of Access Points used by entities which received Real Time Streaming Data;
- The Distributor organized access to Training Data for third parties other than Re-Distributors, Service Facilitators/Technical Agents or duly authenticated Users, the Distributor must pay a penalty on request from the Exchange. The penalty amount is the amount of the fee owned to the Exchange for its services as per the Tariffs, considering the number of entities having received the Training Data.

3. Liability of subscribers that receive Market Data via access to the Exchange's internet server

In case of the use of Market Data for purposes and in ways not provided for in the contract with the Exchange (Public Offer), penalties provided for in the contract (Public Offer) may be levied on the subscriber.

Alongside responsibilities set out in the agreement with the Exchange (the Public Offer), a Subscriber must pay a penalty to the Exchange in case the Exchange reveals (following also a Data Audit) that Market Data was used for the purposes and in manners other than those set out in the agreement with the Exchange (the Public Offer). The penalty amount is in twice the amount of the fee owned to the Exchange for its services as per the Tariffs considering the manners in which the data was used, but no less than RUB 250,000 (two hundred and fifty thousand) for every breach of the obligation to use the Market Data for the purposes and in manners set out in the agreement with the Exchange (the Public Offer). Where Market Data was used in Alternative Systems and/or to create Derived Prices, the penalty is double the underpayment due to the Exchange taking into account the actual number of Users of the Alternative System and/or the actual number and composition of instruments used to create Derived Prices, and the Tariffs for using Market Data in Alternative Systems and/or creating Derived Prices.

4. Liability of the Hardware & Software Developer

The following cases of usage of Market Data without conclusion of a relevant data contract with the Exchange may lead to the imposition of penalties:

- Provision and distribution of Market Data to third parties, including Trading Members and clients of Trading Members, including for the purpose of demonstrating the capability of ESH;
- Public distribution of Market Data via the internet or other mediums, including electronic, mechanical, photocopying, recording, or other (including using remote mobile (wireless) access, and television and radio broadcasting);
- Non-display Usage of Market Data;
- The usage of Market Data in own, gaming, training, and educational systems;
- Creation of Derived Data, products and services, including in the form of widgets, updatable banners, and others, that contain Market Data and are intended for usage by third parties that do not have a relevant data agreement with the Exchange, including on websites of third parties.
- Distribution of Market Data for using thereof in Alternative Systems and/or creation of Derived Prices,

The penalties may be as follows:

- Measures provided for by Russian legislation;
- If the hardware & software developer has a certificate of compliance with the Exchange's EHS requirements, the certificate may be withdrawn and notice of the withdrawal placed on the Exchange's website;
- Where Market Data was distributed for the use thereof in Alternative Systems and/or to create Derived Prices, the penalty is double the underpayment due to the Exchange taking into account the actual number of Users of the Alternative System and/or the actual number and composition of instruments used to create Derived Prices, and the Tariffs for using Market Data in Alternative Systems and/or creating Derived Prices.

Addendum 3 to the Moscow Exchange Market Data Policy

Mandatory requirements for recipients of data

- 1. Distributors must ensure that any agreement governing the provision of Market Data (except for Real Time Streaming Data) and/or Training Data to a Re-Distributor includes the following obligations for the Re-Distributor:
 - 1.1 The Re-Distributor must not publish Market and/or Training Data (also as part of its products) on third parties' websites and information platforms;
 - 1.2 The Re-Distributor must not disseminate Real Time Deal Data in manners other than publishing it on the Re-Distributor's website;
 - 1.3 The Re-Distributor must not use Market Data in Non-Display systems;
 - 1.4 The Re-Distributor must not use Market Data to create Derived Data including indices and other benchmarks intended for public disclosure or transmission to third parties;
 - 1.5 The Re-Distributor must notify (also by posting the relevant notifications on its websites) Users receiving Market and/or Training Data from the Re-Distributor of their obligation to meet conditions similar to those set out in paragraph 2 of clause 3.4.1.1.8 of the Policy;
 - 1.6 The Re-Distributor must accumulate Technical Data generated in its data systems while Market and/or Training Data is being disseminated or provided. Technical Data must be collected to the extent necessary to confirm that the Re-Distributor meets the terms of use for Market and/or Training Data;
 - 1.7 The Re-Distributor must keep Technical Data for a reasonable period of time, but no less than for 3 (three) years of receiving it;
 - 1.8 Upon request and under supervision of its specialists, if necessary, the Re-Distributor must provide the Exchange and/or a third party authorised by the Exchange with access to its products, services and information systems containing Market and/or Training Data to facilitate Data Audits by the Exchange also by giving an opportunity to review Technical Data collected and kept by the Re-Distributor;
 - 1.9 Training Data must be transmitted to Users only with their prior authorization with a login and password or other access controls of this kind.
- 2. Distributors must ensure that any agreement governing the provision of Market Data to a Subscriber include the following obligations for the Subscriber:
 - 2.1 The Subscriber must not further distribute or provide Market Data to third parties in any form and by any means including electronic, mechanical, photocopying, recording or other means (including using remote wireless access), transmit also via TV or radio broadcasting, demonstrate that information on websites, mobile applications and services as well as use it in game, training or other systems with an option for demonstration or any other kind of distribution of data provided to the Subscriber, without written consent of the Exchange;
 - 2.2 The Subscriber must not use Market Data for the creation of Derived Data including indices and other benchmarks intended for public disclosure or transmission to third parties;
 - 2.3 Upon request from the Exchange or the Distributor, the Subscriber must accumulate Technical Data generated in its data systems while Market Data is being used.

- Technical Data must be collected to the extent necessary to confirm that the Subscriber meets the terms of use for Market Data;
- 2.4 The Subscriber must keep Technical Data for a reasonable period of time, but no less than for 6 (six) months of receiving it;
- 2.5 Upon request and under supervision of its specialists, if necessary, the Subscriber must provide the Exchange and/or a third party authorised by the Exchange with access to its products, services and information systems containing Market and/or Training Data to facilitate Data Audits by the Exchange also by giving an opportunity to review Technical Data collected and kept by the Subscriber (in case clause 2.3 is applicable);
- 3. Distributors must ensure that any agreement governing the transmission of Real Time Streaming Data to a Service Facilitator/Technical Agent include the following obligations for the Service Facilitator/Technical Agent:
 - 3.1. The Service Facilitator/Technical Agent must not use Real Time Streaming Data for the purposes other than providing technical delivery of the data to Subscribers and facilitating technical development of the Distributor's services used to distribute Real Time Streaming Data;
 - 3.2. The Service Facilitator/Technical Agent must accumulate Technical Data generated in its data systems while Market Data is being transmitted. Technical Data must be collected to the extent necessary to confirm that the Service Facilitator/Technical Agent meets the terms of use for Market Data;
 - 3.3. The Service Facilitator/Technical Agent must keep Technical Data for a reasonable period of time, but no less than for 3 (three) years of receiving it;
 - 3.4. Upon request and under supervision of its specialists, if necessary, the Service Facilitator/Technical Agent must provide the Exchange and/or a third party authorised by the Exchange with access to its products, services and information systems containing Market and/or Training Data to facilitate Data Audits by the Exchange also by giving an opportunity to review Technical Data collected and kept by the Service Facilitator/Technical Agent.