Key risk factors

The most significant risk factors that may potentially influence MTS PJSC business results are provided below.

Details on these and other risks see in the section "Item 3 – Key Information – D. Risk Factors" of the Annual Report according to the form 20-F¹, and in reports of MTS PJSC².

Strategic risks

Risks Mitigation Measures Impact on Objectives

Depreciation of services provided by the Company and loss of competitiveness, difficulties in developing additional sources of income

Continuous improvement of technology, development of new products and services, increased competition associated with the emergence of new players in the market, in particular, new mobile operators, government-backed operators, mobile virtual network operators, alternative fixed-line and satellite TV operators, as well as strengthening of existing companies and increased use of IP-telephony and other services provided via the internet, may adversely affect the ability to maintain subscriber base, lead to a reduction in market share and operating margin

Besides, in September 2021 the extraordinary general meeting of shareholders resolved to separate the tower infrastructure of MTS PJSC and a considerable part of the network and digital infrastructure of MTS PJSC into 100% subsidiaries of MTS PJSC. Inability to realize the expected benefits of this separation may have unfavorable impact on the business, financial position, business results and prospects of MTS PJSC

To ensure the highest level of quality of our basic communication services, MTS is systematically increasing the capacity and bandwidth throughput of the network, which is extremely important in the context of the observed continuous increase in the volume of data traffic consumption. The company is comprehensively approaching the issue of network development, making the necessary investments in 3G and 4G infrastructure, ensuring the possibility of further network evolution in the direction of the fifth generation, including deployment and operation of 5G test zones, and carrying out pilot projects in the NB-IoT area. From the point of view of marketing activity, an effective method for leveling the adverse impact of VOIP-solutions are integrated V&D rates that combine voice and data services.

The key tool to maintain direct contact with the end user and increase the average level of income from the subscriber in the near future will be a gradually developing portfolio of high-level digital services aimed at meeting various customer needs. Both our own developments and high-quality partner products will participate in the formation of such a digital environment.

- Retention of basic mobile revenue
- Compensation for traditional telecoms revenues decrease caused by active development of digital products portfolio
- Leadership in the mobile internet and data services segment

Loss of control over activities and assets in the countries of operation

The risk of termination, suspension of operation or claims by regulators may adversely affect business, financial state and results of operations

MTS is monitoring the political situation in the markets of operation of the Group of Companies, striving to respond quickly to changing conditions in the markets

 Achievement of sustainable initiation of business

https://ir.mts.ru/investors/financial_center/annual_reports.

https://ir.mts.ru/investors/financial_center/financial_results.

Risks of acquisitions, investments and mergers with other companies

New acquisitions make it possible to diversify the business of MTS PJSC.

At the same time, there may be additional risks associated with the obligations of the acquired companies, as well as risks of failure to achieve the initial financial and operational goals, problems with the integration of acquired assets, risks associated with a lack of experience in new markets, including political, economic, social, legal and regulatory risks, competition risks, etc.

MTS sees opportunities for growth through the participation in promising new businesses in the digital economy, which enables the company to significantly expand the range of services provided and to enter new markets. When closing transactions in the field of M&A, MTS conducts a thorough audit of companies, where the company plans to participate as a shareholder. Assessment of the feasibility of investments occurs with the involvement of independent consulting companies and takes into account the strategic position, financial results and features of the business operations of such companies. Further implementation of MTS rights as a shareholder in them corresponds to the best practices of corporate governance. Integration of the acquired business into the management structure of MTS (if such decision is made) is carried out by a special unit with a wealth of experience of this kind

- Expansion of the Company's business and faster entrance into new markets:
- Product line expansion
- Achieving operational synergies between different business areas
- Mutual exchange of best practices in management and operations

Inability to successfully develop the network

Due to the development, construction and maintenance of the communications network, MTS needs to make purchases of equipment and software, which is associated with significant capital investments.

In addition, limitation of the frequency spectrum available for the development may prevent gaining all the expected benefits from network construction and weaken expansion effect.

Network deployment may be connected with difficulties to obtain sites for base stations on commercially viable terms, to collect permits and certificates for telecommunications equipment and/or import and export permits for certain network equipment, which may delay procurement and interfere with network development plans.

Starting from 2017, the issue of frequency resource allocation for the deployment of next-generation (5G) networks has been actively discussed in the telecommunications environment of Russia (including the relevant state authorities).

In July 2022, MTS PJSC joined New Digital Solutions LLC, which is a joint venture of mobile operators (hereinafter referred to as JV). Earlier in November 2021, the State Committee of Radio Frequencies located the JV frequency bands 4500-4555 MHz and 4630-4800 MHz for research in the interests of the development of 5G technologies. The purpose of the JV is to carry out conversion work and release the spectrum for the subsequent development of 5G technologies. The decision on the possible distribution of the spectrum in the range of 4500-4990 MHz, including the results of work on its release, will be made by the regulator. The business model of operators for the development of 5G services will depend on this decision.

While further investing into the development of infrastructure, the Company sees the opportunity for gradual reduction of our capital expenditures with maintained quality of the services provided. MTS with a number of partners conducts joint procurement procedures, as well as carries out joint construction and operation of network infrastructure elements. In addition to the economic benefits, within the framework of cooperation, technical and functional requirements, approaches and methods are unified.

The company maintains ongoing contacts and closely interacts with representatives of regulatory bodies, industry associations, manufacturers of network equipment and other participants in the telecommunications market. Such interaction on the part of MTS is aimed at upholding the interests of the Company, maintaining an atmosphere of healthy market competition, dynamic and timely development of the state-of-the-art technological solutions and, as a result, at the formation of advanced and diverse customer experience. MTS PJSC is confident that all actions of the regulating authorities, in particular making decisions on the mechanism for deployment of 5G networks, shall be aimed at maintaining the long-term sustainability of the industry and take into account the interests of all parties, including consumers of services and operators.

- Increasing network capacity and data rates to meet growing demand;
- Effective network planning and investment optimization
- Upholding the interests of the company in matters of frequency resource allocation

Risks

Inability to realize the benefits of investing in radio communications systems

Key risks:

- impossibility to build 4G networks (including NB-IoT) and 5G networks in accordance with the planned terms or in accordance with the terms stipulated by the license conditions;
- difficulties in ensuring quality and required level of service;
- demand for 4G services (including NB-IoT) and 5G services in the markets of operation of MTS PISC and its subsidiaries will be lower than expected

In August 2021 the State Committee of Radio Frequencies extended for 10 years the duration of the decision on allocation of radio frequency bands in the ranges of 700 BHz, 800 MHz and 2600 MHz for construction of LTE networks. The main conditions of the extension were the following:

- for the bands in the ranges of 800 and 2600 MHz: ensuring coverage of settlements with population of 1000 and more people and public motor roads of federal importance until September 2031 with the time schedule:
- for the bands in the range of 700 MHz in case of their redistribution for mobile communications: ensuring coverage of settlements with population of 500 and more people and regional motor roads until the end of 2031 with the time schedule:
- obligation to use domestic equipment since 2023.

In March 2022, the State Committee of Radio Frequencies postponed the fulfillment of the above conditions for one year – until 2023. And the use of domestic equipment was postponed for a period from 2028, while from 2025 an annual plan for the installation of domestic equipment should be carried out.

The combination of the above changes, on the one hand, makes it possible to continue using the necessary radio frequency resource, and on the other hand, may result in additional costs for construction of the network infrastructure.

Mitigation Measures

MTS has significant experience in dealing with hardware and software vendors, as well as with regulatory authorities. This enables us to reach agreements under the most comfortable conditions for us, including in terms of delivery times and construction. The Company takes all necessary measures to comply with licensing conditions and other regulatory requirements, as well as carry out timely renewal of licenses and permits.

MTS conducts regular monitoring of communication quality parameters and promptly reacts in case of identifying the need for additional capacity and bandwidth throughput in local areas of the network, which enables the company to maintain a consistently high level of service quality. With the help of marketing tools, MTS stimulates usage of data transmission services, thus increasing the degree of network resource utilization

Impact on Objectives

- Ensuring the best compliance with IoT technology requirements and infrastructure readiness for 5G implementation
- Efficient capital expenditures planning
- Increased operational efficiency by optimizing the operating costs associated with network operation

External environment risks

Risks Mitigation Measures Impact on Objectives

Volatility of economic and social situation

The volatility of the economic and social situation, as well as possible future downturns or slowdowns of economic growth in the countries of our presence, caused by a number of reasons, including geopolitical events, the COVID-19 pandemic, the credit market crisis (including uncertainty regarding credit and financial institutions and global capital markets), instability of prices for major exported goods (including oil and metals), a shortage of chips and other factors may lead to a decrease in demand for the services provided, as well as have a negative impact on the financial condition of our corporate clients and partners, including financial institutions, which may lead to a decrease in our revenues, performance indicators and negatively affect the safety of assets.

Besides this, in February and March 2022, as a result of the continuing geopolitical conflict in Ukraine, the European Union, USA, UK and some other countries introduced new significant sanctions and export control in respect to Russia (territorial sanctions), certain economic sectors of Russia and some Russian and Belorussian individuals and legal entities. For example, in 2023, the sanctions were imposed in respect of MTS Bank. Continuation or expansion of such restrictions, as well as factors of uncertainty in connection with the regulatory environment change in Russia may put the additional compliance and operating tasks before the Company and adversely impact the business of the Company and its customers and suppliers. Besides, some Western companies and stock exchanges suspended, stopped or limited their business in Russia not because of the laws applicable thereto, but at their own initiative. On February 28 the trading in all equity securities (including ordinary shares of the Company) at the Moscow Stock Exchange were suspended until partial recovery of trading in shares on March 24, 2022 and complete recovery of trading at the Moscow Stock Exchange on March 28, 2022. Besides, on February 28 the New York Stock Exchange suspended trading in American Depositary Receipts (ADR) of the Company and some other Russian companies. On August 8, 2022, MTS ADR was delisted from the New York Stock Exchange.

MTS is monitoring the macroeconomic situation in the markets of operation of the Group companies, promptly and effectively responding to changes in the general economic background with the help of, first and foremost, rate tools. The Company is aimed at ongoing expansion of the range of services provided and is stimulating consumption, increasing the level of satisfaction of our customers in the corporate and mass segments. MTS pays great attention to ensuring optimal conditions for raising outside financing for the company, controlling the level, cost and structure of debentures, which makes it possible, in particular, to neutralize the negative effects of currency exchange rates variations under conditions of high volatility of foreign exchange markets.

Achievement of sustainable initiation of business

It is difficult to predict further development of the above events, the circumstances may change very fast and often without a prior notice. In general the situation development is beyond the control of the Group. Besides, the risk that any member of the Group or individuals holding positions in the Group, as well as its shareholders, employees or contractors of the Group are impacted by the future sanctions may not be excluded as well. Risks also include the risk of restriction and complete closure of access to the capital markets and the opportunity to obtain financing under the commercially justified terms (or to obtain any financing at all), risk of restrictions to import of certain equipment and software (including limitation of technical support), the risk of changes in terms, restrictions or termination of work with partners and organizations, as well as the risk of depreciation of the Russian ruble against other currencies and the risk of interest rate increases, which may affect the Group and its counterparties. In addition, maintaining or expanding sanctions restrictions and reducing air traffic may also negatively affect MTS PJSC revenue from roaming services.

Regulatory risks

Our business in the countries where we operate is regulated by governments; in particular, through licensing and laws. Legislation in the field of communication services is constantly changing. New laws or regulations, or changes in existing legislation at the federal, local or international level may, among other things, change the business model of MTS PJSC and the ways of providing services, require additional costs and worsen income opportunities.

MTS conducts regular monitoring of the legislation in order to meet the requirements set

As market representatives, the Company participates together with the regulatory authorities in working groups on the optimization of the regulatory framework in the communication industry.

Regulatory risks are given special attention within the framework of strategic planning.

- Achievement of good operating indicators
- Ensuring compliance with regulatory requirements

Operational risks

Risks **Mitigation Measures Impact on Objectives**

instruments

A number of portfolio structuring

measures have been taken in order to

reduce dependence on exchange rate

tion of currency risk hedging program

with the use of swaps (Eurobonds) as

fluctuations, including implementa-

Financial risks

The Company's expenses, including capital expenses, may be denominated in rubles, USD, EUR and/or RMB, or closely related with them, while a large portion of income is denominated in the local currency of the countries where the Company operates.

The situation in the Company's markets, including stability of the banking system, inflation, changes in the exchange rates of local currencies against USD and/or EUR, and the possibility for free conversion of currencies and making currency payments impacts the Company's operating performance and business results. Additional information is specified in the external environment risks - "Volatility of Economic and Social Situation"

The rate of the Company's development and its financial standing, among other factors depend on debt financing. Crisis of financial markets, external limitations and sanction may restrict the ability of the Company to raise debt financing.

The contracts related to certain issues of MTS bonds, and also some loan agreements include restrictive provisions that limit the opportunities to raise loans and engage in various activities. Failure to comply with these contractual provisions could have resulted in default and, as a result, in a request to immediately repay the debt, which could have negative effects on

MTS is monitoring the implementation of the provisions of contracts and agreements for granting loans in order to comply with the financial covenants

contained in the loan documentation.

Maintaining investment attractiveness by maintaining an optimal level of debt

Maintaining investment

attractiveness

business of the Company.

Risks of technological failures

The ability to continuously provide communications services is one of the basic conditions of licenses and subscription contracts. An occurrence of process failures on our network and information resources due to a system malfunction, accident, or a violation of the network's security or information systems can adversely affect the ability to provide services to subscribers or affect other business processes, which can lead to significant negative consequences for the business, performance results and reputation of MTS PJSC.

In order to ensure stability of the network and continuity of communication services rendering, the network management system is centralized, and the telecommunication network operation system provides for regular maintenance and use of the backup telecommunications equipment.

In order to protect and be able to restore data from information resources for critical facilities, the use of backup equipment is ensured, including that with a geographical distribution, and executing procedures for data recovery testina.

Processes and systems for ensuring quality of information systems, as well as change monitoring and control are used on a regular basis in order to protect integrated information systems under the conditions of continuous changes.

Information security is provided by a complex system of technical and organizational information-security measures

- Achievement of good operating indicators
- Achievement of sustainable initiation of business
- Ensuring compliance with the requirements of FZ-126, FZ-152 and other.

Information security risks, including cyber risks

Unauthorized actions of employees and partners violating the information security policy, as well as illegal actions of third parties may lead to a violation of confidentiality, integrity or availability of information, including leakage of subscriber data, which may lead to the shutdown of core business processes, loss of market share, claims of subscribers, regulators and partners and have significant negative consequences for the reputation, business, financial position, results of operations and prospects of MTS PJSC. Despite the measures taken, it is impossible to completely exclude the possibility of such incidents in the future.

MTS PJSC ensures the security of processing restricted access information in corporate information systems, including remote work.

 Ensuring compliance with provisions FZ-126, FZ-152, etc.

Compliance with requirements

Compliance risks

Risks

MTS securities are traded on the U.S. stock market, and we are subject not only to Russian, but also to American anti-corruption legislation (US Foreign Corrupt Practices Act), and potentially to the anti-corruption law of the UK (UK Bribery Act). If an inconsistency of our actions or actions of third parties acting on behalf of or in our interests with these requirements is revealed, this may result in criminal and/or civil law sanctions against us.

In March 2014, MTS PJSC received a request for information from the US Securities and Exchange Commission and the US Department of Justice regarding the investigation of the former subsidiary in Uzbekistan.

In February 2019, the MTS Group reached a settlement with the US Department of Justice (DOJ) and Securities and Exchange Commission (SEC) in relation to the previously disclosed investigation into the activities of the former subsidiary of the Group in Uzbekistan.

The Group agreed with a restraint order issued by the US Securities and Exchange Commission ("Order").

The district court of the Southern District of New York, USA, approved the deferred prosecution agreement (the "Agreement") concluded by the Group and the agreement on admission of guilt concluded by the Group subsidiary company in Uzbekistan. According to the terms of the agreements with the US Department of Justice, we agreed to pay the United States a fine of \$ 850 million (59.1 billion rubles as of December 31, 2018). The Group has accrued a provision for payment of the fine in the amount of USD 850 million (55.8 billion rubles as of the date of accrual) reflecting it as a loss caused by ceased operations in the consolidated profit and loss statement for the year ending on December 31, 2018.

Mitigation Measures

Starting from 2012, when a separate compliance division was established at MTS, the Company has been systematically developing a system for anti-corruption compliance in accordance with the best international practices.

The Company has special rules and procedures in place for the prevention of corrupt practices, both on the part of employees and with respect to contractors¹.

The main documents governing anti-corruption legislation within MTS are the Code of Business Conduct and Ethics, Policy "Compliance with anti-corruption legislation" Besides, procedures for assuring compliance with anti-corruption legislation are fixed in the regulations of the company's business processes.

Impact on Objectives

 Support of fair and ethical business conduct and abuse prevention

For more information, see the section "Compliance and Ethical Culture".

² https://ir.mts.ru/about_mts/compliance_and_business_ethics/anticorruption_policies.

³ https://ir.mts.ru/about_mts/compliance_and_business_ethics/anticorruption_policies.

In accordance with the terms of the Agreement and the Order, the Group agreed to introduction of independent supervision (monitoring) over compliance with their requirements. According to the terms of the Agreement and the Order, monitoring had to be first conducted for three years from the date of its establishment and the monitoring period could have been reduced or extended depending on certain circumstances. The final decision in this regard shall be made by the United States Department of Justice and the United States Securities and Exchange Commission. We received no notice about any violations of the Order or the Agreement from the US Department of Justice or the US Securities and Exchange Commission or the third-party compliance Monitor. Nevertheless, with account of some factors, including the COVID-19 pandemic, we agreed with the US Securities and Exchange Commission and the US Department of Justice to extend the duration of monitoring for one year, in order to provide (i) the Group with sufficient time for introduction of the necessary improvements into certain important elements of the business ethics and anti-corruption compliance program, (ii) the opportunity to complete the inspection of the Group actions, including introduction of the Monitor's recommendations and assessment of the resistance of actions taken by the Group. Therefore, the duration of the third-party compliance monitoring will last until September 2023

Tax risks

The system of taxation in the countries where MTS operates is undergoing constant changes; legislation in this area may be interpreted ambiguously. For example, poorly drafted Russian transfer pricing rules may increase the risk of price adjustment by tax authorities and lead to additional tax burden within transfer pricing control. This may complicate tax planning and related business processes, and may also have adverse material impact on MTS PJSC business, financial standing and operating results.

MTS meets the requirements of tax legislation in the countries of the Group's presence, is responding quickly to any changes and following the current trends in law-making, as well as the tax laws of Russia and foreign jurisdictions, which allows us to make timely integrated decisions in the field of tax planning and customs regulation. The Company regularly uses the experience of qualified consultants

Achievement of sustainable initiation of business

Compliance with requirements

System for managing the key risks associated with the social aspects of business

Care for employees is one of the main priorities of the Company, determining the success of its activities in the contemporary market. The Company is constantly improving social and labor relations in the following areas: occupational safety and health of employees, social support, opportunities for career and personal growth¹.

Risks related to violations in the field of occupational health and safety

Description of Risks

Possible risks of violations in the field of health and safety associated with training of employees, medical examination, provision of personal protective equipment, compliance with sanitary and epidemiological requirements, special assessment of working conditions, etc.

Mitigation Measures

MTS PISC operates a GOST R ISO 45001-2020 (ISO 45001:2018) certified Occupational Health and Safety Management System (OHSMS). OHSMS includes the following: organizational structure; planning; distribution of responsibility; procedures; processes and resources for developing, implementing goals, analyzing the effectiveness of health and safety policies and measures. The main objectives of OHSMS include monitoring compliance with laws and other regulatory legal acts on health and safety. Health and safety specialists are regularly trained.

In 2020, MTS PISC organized testing of employees for coronavirus and blood testing for antibodies; employees were regularly provided with protective masks, gloves, disinfectants; interaction with the bodies of Rospotrebnadzor was carried out.

MTS adopted a number of local regulations governing the main issues in the field of health and safety. The documents contain all the basic requirements and instructions in the field of health and safety, including the procedure for conducting internal control over status of working conditions.

The Company strictly adheres to the requirements of labor legislation and tries to take into account the interests of personnel as much as possible. The H&S management system at MTS PJSC has been recognized at the regional and district levels.

Detailed information is provided in the ESG and Sustainability section, as well as in the MTS Sustainability Report for 2022 at the link Sustainability Report - Moscow (mts.ru).

Risks associated with human rights violations

Description of Risks

Possible risks of human rights violations related to compliance with labor laws, non-discriminatory and ethical conduct, public statements, insurance deductions, observance of the rights of socially vulnerable groups, etc.

Mitigation Measures

MTS recognizes that a person, its life and health are the highest value.

MTS services help to provide equal opportunities for education, development and self-fulfilment.

MTS does not bear with discrimination in any form and manifestation, strives to create an inclusive and diverse environment and tries to adhere to the best world practices.

Therefore, in 2022:

- The Diversity, Equality & Inclusion Policy of MTS is complemented by expressing the company's commitment to the principles of political neutrality of the working environment and guarantees of non-discrimination based on political views
- During the year, the ESG Committee and the Board of Directors of MTS PISC regularly discussed issues related to the development of the corporate culture of inclusivity and its significance for the future of the company
- An audit of the company's business processes was conducted from the point of view of DEI- metrics, an action plan has been drawn up to comply with the principles of inclusiveness, diversity and equality, including in the field of human rights
- Workplaces and offices of the Company were audited from the position of accessibility
- Cooperation with Employment Centers (EC) of Moscow and regions was expanded (25 events)
- Additional training was conducted for employees on maternity leave and persons of pre-retirement age, aimed at acquiring new skills and competencies
- Educational programs were conducted for managers and HR on hiring and adapting people with disabilities, research and surveys of employees with special needs were conducted for their satisfaction with the employer's activities.
- Research and surveys were conducted among the employees with special needs for their satisfaction with the employer's activities;

Risks in the field of human rights observance are regularly digitized according to the recommendations received based on the results of the external annual audit of compliance programs and the results of assessment of compliance risks at the level of business processes.

MTS adopted local regulations governing the main issues of observance of human rights in the workplace. The documents consolidate key principles of respect for human rights and conduct of the Company's employees.

There is a Unified Hotline at MTS, through which employees can file an appeal on issues of complex work situations¹.

Information about requests received at the hotline is given in the section "Unified Compliance System of MTS PJSC".

System of managing the key risks associated with the environmental aspects of business

In order to comply with the requirements of environmental law and ensure environmental safety at MTS facilities, the Company has developed an Environmental Safety and Environmental Protection Policy, the fundamental principles of which are compliance with the requirements of national and international standards in the field of environmental protection, increasing the level of environmental awareness and education of all employees of the company, reducing the level of negative impact on the environment and striving for sustainable development¹.

Description of Risks

Description of Risks

Failure to meet the requirements of environmental reporting provision.

- Doing business without state registration of a facility with a negative environmental impact.
- Failure to meet the requirements in the field of environmental control and monitoring.
- Doing business without permits issued in accordance with the established procedure for emissions of pollutants into the atmosphere, waste handling

Mitigation Measures

The Environmental Safety and Environmental Protection Policy has fixed/provided for a set of processes that ensure compliance with environmental legislation. Namely: the need for issuing permits and updating data, objectives for planning, financing and logistical support for implementation of environmental programs and environmental protection (EP) measures, the need to undergo training in the field of environmental protection, conducting industrial environmental monitoring (a set of preventive actions aimed at eliminating the possibility of an emergency and damage to the environment).

At the level of CC and the regions, changes in the requirements of environmental legislation are monitored.

MTS regularly makes the payment provided for by the legislation for adverse impact at the environment, bears the costs associated with waste management and atmospheric air protection, as well as with the reduction of risks associated with government regulation in the field of environmental protection and maintaining the image of the Company's environmental sustainability.

MTS regularly reports under the forms of the state reporting and prepares non-financial reporting on the activities of MTS Group of Companies in the field of environmental responsibility and safety at the level of the Committee for Sustainable Development and CSR under the President of MTS and within the framework of the working group on environmental issues and responsible finance

The work on environmental protection is aimed at the implementation of measures of an organizational, technological and sanitary-hygienic nature with the aim to prevent and reduce the harmful effects of economic activities on the nature and health of people.

https://ir.mts.ru/sustainability.