
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

Form 20-F/A

(Amendment No. 1 to Form 20-F)

- ☐ REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934
OR
☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2022
OR
☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
OR
☐ SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
Commission file number 333-12032



MOBILE TELESYSTEMS PUBLIC JOINT STOCK COMPANY

(Exact name of Registrant as specified in its charter)

Not Applicable

(Translation of Registrant's name into English)

Russian Federation

(Jurisdiction of incorporation or organization)

4 Marksistskaya Street, Moscow 109147 Russian Federation

(Address of principal executive offices)

Andrey M. Kamenskiy

Vice President, Finance and Chief Financial Officer

5 Vorontsovskaya Street, bldg. 2, 109147 Moscow Russian Federation

Phone: +7 495 223 20 25, E mail: ir@mts.ru

(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act: None

- (1) Listed, not for trading or quotation purposes, but only in connection with the registration of common ADSs pursuant to the requirements of the Securities and Exchange Commission.

Title of Each Class

COMMON AMERICAN DEPOSITARY SHARES, EACH REPRESENTING TWO COMMON SHARES

COMMON SHARES, PAR VALUE 0.10 RUSSIAN RUBLES PER SHARE

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:

Title of Each Class

None

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report. 1,129,245,695 ordinary shares, par value 0.10 Russian rubles each and 391,398,362 American Depositary Shares as of December 31, 2022

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes ☐ No ☒

Note—Checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 from their obligations under those Sections.

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Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See definition of "large accelerated filer," "accelerated filer," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐

Accelerated filer ☐

Non-accelerated filer ☐

Emerging growth company ☐

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards[†] provided pursuant to Section 13(a) of the Exchange Act. ☐

[†] The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP ☐

International Financial Reporting Standards as issued by
the International Accounting Standards Board ☒

Other ☐

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow.
Item 17 ☐ Item 18 ☐

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

EXPLANATORY NOTE

This is amendment No.1 (“Amendment No. 1”) to the annual report on Form 20-F of Mobile Telesystems Public Joint Stock Company for the fiscal year ended December 31, 2022, which was originally filed with the Securities and Exchange Commission on April 17, 2023 (the “2022 Annual Report”).

As disclosed in the 2022 Annual Report, the Group’s consolidated financial statements as of and for the year ended December 31, 2022 were prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board, and were audited in accordance with both International Standards on Auditing (“ISAs”) and the standards of the Public Company Accounting Oversight Board (United States) (the “PCAOB”). The 2022 Annual Report, as originally filed, inadvertently contained an audit report of AO “Business Solutions and Technologies”, the Group’s Independent Registered Public Accounting Firm, which referred only to an audit conducted in accordance with the ISAs. This Amendment No. 1 is being filed solely for the purpose of including the correct form of audit report of the Group’s Independent Registered Public Accounting Firm referring to such firm’s audit conducted in accordance with the standards of the PCAOB.

No other disclosures have been updated to the date of this Amendment No. 1.

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ABOUT THIS ANNUAL REPORT

Unless otherwise indicated or unless the context requires otherwise, references in this document to (i) “MTS,” “the Group,” “the Company,” “we,” “us,” or “our” are to Mobile TeleSystems Public Joint Stock Company individually or together with its subsidiaries as the context may require; (ii) “Vodafone Ukraine” and “VF Ukraine” are to Private Joint Stock Company “VF Ukraine”(formerly PJSC MTS Ukraine) which is our former subsidiary in Ukraine disposed of in December 2019; (iii) “Uzdunrobita” are to our former subsidiary in Uzbekistan, which was deconsolidated in 2013; (iv) “MTS-Turkmenistan” our Turkmenistan subsidiary and “BCTI” are to Barash Communication Technologies, Inc., our former Turkmenistan subsidiary, which was compelled to suspend communication services in Turkmenistan in 2017; (v) “Comstar” or “Comstar-UTS” are to COMSTAR—United TeleSystems, our former fixed line subsidiary, which was merged into MTS PJSC in 2011; (vi) “MGTS” are to Public Joint Stock Company Moscow City Telephone Network, our Moscow public switched telephone network (“PSTN”) fixed line subsidiary; and (vii) “MTS-Armenia,” “K-Telecom” or “VivaCell-MTS” are to our Armenian subsidiary; (viii) “MTS Bank” are to PJSC «MTS Bank», our subsidiary that provides banking services; (ix) “UMS” are to Universal Mobile Systems LLC, our former subsidiary in Uzbekistan which was deconsolidated in 2016; (x) “NVision” or “NVision Group” are to our former subsidiary which provided integration services and was sold in 2019 to Sistema, becoming a related party, (xi) “Sistema” are to Sistema Public Joint Stock Financial Corporation, our significant shareholder. We refer to Mobile TeleSystems LLC, our 49% owned equity investee in Belarus, as “MTS Belarus.” As MTS Belarus is an equity investee, our revenues and subscriber data do not include MTS Belarus.

In this document, references to “U.S. dollars,” “dollars,” “\$” or “USD” are to the lawful currency of the United States, “Russian rubles,” “rubles” or “RUB” are to the lawful currency of the Russian Federation, “dram” are to the lawful currency of Armenia, “soms” are to the lawful currency of Uzbekistan, and “€,” “euro” or “EUR” are to the lawful currency of the member states of the European Union that adopted a single currency in accordance with the Treaty of Rome establishing the European Economic Community, as amended by the treaty on the European Union, signed at Maastricht on February 7, 1992. References in this document to “shares” or “ordinary shares” are to our ordinary shares, “ADSs” are to our American Depositary Shares, each of which represents two ordinary shares, and “ADRs” are to the American Depositary Receipts that evidence our ADSs. Prior to May 3, 2010, each ADS represented five ordinary shares of our common stock. “CIS” refers to the Commonwealth of Independent States. “CBR” refers to the Central Bank of Russia.

None of the websites referred to in this document, including where a link is provided, nor any of the information contained on such websites is incorporated by reference in this document.

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The following tables show, for the periods indicated, certain information regarding the exchange rate between the ruble and the U.S. dollar, based on data published by the CBR. These rates may differ from the actual rates used in preparation of our financial statements and other financial information provided herein.

Years ended December 31,	Rubles per U.S. dollar			Period End
	High	Low	Average ⁽¹⁾	
2020	80.88	60.95	72.15	73.88
2021	77.77	69.55	73.65	74.29
2022	120.38	51.16	68.55	70.34

(1) The average of the exchange rates on the last business day of each full month during the relevant period.

	Rubles per U.S. dollar	
	High	Low
April 2022	83.59	71.02
May 2022	71.02	56.30
June 2022	61.97	51.16
July 2022	63.14	52.51
August 2022	62.05	59.13
September 2022	61.18	57.41
October 2022	63.76	55.30
November 2022	62.10	60.22
December 2022	72.13	60.88
January 2023	70.34	67.57
February 2023	75.43	70.04
March 2023	77.24	74.89

Source: CBR.

The exchange rate between the ruble and the U.S. dollar quoted by the CBR for April 10, 2023 was 82.40 rubles per U.S. dollar.

SUMMARY RISK FACTORS

Our business is subject to a number of risks of which you should be aware of before making an investment decision. These risks are discussed more fully in the below “Risk Factors” section of this annual report. The following summarizes some, but not all, of the risks provided below:

Risks Relating to Economic Risks in Our Countries of Operation including, among others, the following risks:

- Geopolitical situation and sanctions imposed as a result of current political environment could materially adversely affect our business, financial condition, results of operations, prospects and the value of our shares.
- The imposition of sanctions on MTS Bank and the potential for further international sanctions and export restrictions affecting the Group may have a material adverse impact on our business, financial condition and result of operations.
- Economic volatility in the countries where we operate could adversely affect our business.
- Fluctuations in the global economy may materially adversely affect the economies of the countries where we operate and our business in these countries.
- Failure to comply with existing laws and regulations as well as requirements of international and regional standards or to obtain all approvals, authorizations and permits required to transmit television channels or operate telecommunications equipment, or the findings of government inspections or increased governmental regulation of our operations, could result in a disruption in our business and substantial additional compliance costs and sanctions.
- Russian and foreign legislation on personal data and information security in information systems and communication networks may turn out to be hard to implement and require significant resources. Inability to comply with the requirements may lead to sanctions.
- The Russian taxation system is underdeveloped and any imposition of significant additional tax liabilities could have a material adverse effect on our business, financial condition or results of operations.

Risks Relating to Our Shares and ADSs and the Trading Market including, among others, the following risks:

- ADS holders who have not yet converted their ADSs into shares may face difficulties (including a loss of value) in converting their ADSs into shares or may even be unable to do so.
- The market price of our shares has been and may continue to be volatile.
- Shareholders may be unable to repatriate distributions made on the shares.
- Foreign judgments may not be enforceable against us.

Risks Relating to Our Financial Condition including, among others, the following risks:

- Continued turmoil in the credit markets could cause our business, financial condition, results of operations and the value of our shares to suffer.
- Our inability to generate sufficient free cash flow to satisfy our debt service obligations or to refinance debt on commercially reasonable terms, could materially adversely affect our business, financial condition, results of operations and prospects.
- Ruble volatility and regulatory changes in foreign currency regulation could increase our costs, decrease our available funds or make it more difficult for us to comply with financial covenants and to repay our debts and would affect the value of dividends received by holders of shares.

- If we are unable to obtain adequate capital, we may have to limit our operations substantially, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

Risks Relating to Business Operations in Emerging Markets

- Emerging markets such as the Russian Federation and other CIS countries are subject to greater risks than more developed markets, including significant legal, economic, social, regulatory, tax and political risks which could have a material adverse effect on our business and could cause the value of our shares to fluctuate widely.

Risks Relating to Our Business including, among others, the following risks:

- The telecommunications and digital services market is characterized by rapid technological change, which could render our services obsolete or non-competitive and result in the loss of our market share and a decrease in our revenues.
- We are subject to anti-corruption laws in the jurisdictions in which we operate, including anti-corruption laws of Russia and the US Foreign Corrupt Practices Act (the “FCPA”), and we may be subject to the UK Bribery Act 2010 (the “UK Bribery Act”). Our failure to comply therewith could result in penalties which could harm our reputation and have a material adverse effect on our business, financial condition and results of operations.
- We have incurred and are continuing to incur costs and related management oversight obligations in connection with our obligations under the DPA and the SEC Order.
- We could be subject to criminal prosecution or civil sanction if we breach the DPA and the SEC Order, and we may face other potentially negative consequences relating to the investigations by, and agreements with, the DOJ and SEC and other authorities, including additional investigations and litigation.
- COVID-19 and potential variations or escalations thereof may have a material adverse effect on our business, financial condition, results of operations and prospects
- If we cannot interconnect cost-effectively with other telecommunications operators, we may be unable to provide services at competitive prices, which may diminish our market share and result in a loss of revenues and margins.
- We may not realize the benefits we expect to receive from our investments in 4G and 5G wireless services and Internet of Things (IoT) technologies, which could have a material adverse effect on our business and results of operations.
- If we are unable to successfully develop and/or deploy 4G and 5G wireless services in the countries in which we operate, or if any operators in those markets obtain a significant technological and/or commercial advantage over us in 4G and 5G wireless services, it may have a material adverse effect on our business and results of operations in the long term.
- Failure to renew our licenses, or receive renewed or new licenses with similar terms to our existing licenses, could have a material adverse effect on our business and results of operations.
- Failure to monitor, manage and prevent MTS Bank’s operational and technological risks, could have a material adverse effect on our business, financial condition and results of operations.
- Changes to the rules and regulations involving roaming charges in Russia may adversely affect our financial condition and results of operations.

CAUTIONARY STATEMENT REGARDING FORWARD LOOKING STATEMENTS

Matters discussed in this document may constitute forward-looking statements within the meaning of Section 27A of the U.S. Securities Act of 1933 (the “U.S. Securities Act”), and Section 21E of the U.S. Securities Exchange Act of 1934 (the “U.S. Exchange Act”). The Private Securities Litigation Reform Act of 1995 provides safe harbor protections for forward-looking statements in order to encourage companies to provide prospective information about their businesses. Forward-looking statements include statements concerning plans, objectives, goals, strategies, risks and their assessment, future events or performance, and underlying assumptions and other statements, which are other than statements of historical facts.

MTS desires to take advantage of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995 and is including this cautionary statement in connection with this safe harbor legislation and other relevant law. This document and any other written or oral statements made by us or on our behalf may include forward-looking statements. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our financial condition, results of operations, business strategy and financial needs. The words “believe,” “expect,” “anticipate,” “intend,” “estimate,” “forecast,” “project,” “predict,” “plan,” “may,” “should,” “could” and similar expressions identify forward-looking statements. Forward-looking statements appear in a number of places including, without limitation, “Item 3. Key Information—D. Risk Factors,” “Item 4. Information on our Company—B. Business Overview,” “Item 5. Operating and Financial Review and Prospects,” and “Item 11. Quantitative and Qualitative Disclosures about Market Risk” and include statements regarding:

- our strategies, future plans, economic outlook, industry trends and potential for future growth;
- our liquidity, capital resources and capital expenditures;
- our payment of dividends;
- our capital structure, including our indebtedness amounts;
- our ability to generate sufficient cash flow to meet our debt service obligations;
- our ability to achieve the anticipated levels of profitability;
- our ability to timely develop and introduce new products and services;
- our ability to obtain and maintain interconnect agreements;
- our ability to secure the necessary spectrum and network infrastructure equipment;
- our ability to meet license requirements and to obtain and maintain licenses and regulatory approvals;
- our ability to maintain adequate customer care and to manage our churn rate; and
- our ability to manage our rapid growth and train additional personnel.

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The forward-looking statements in this document are based upon various assumptions, many of which are based, in turn, upon further assumptions, including without limitation, management's examination of historical operating trends, data contained in our records and other data available from third parties. Although we believe that these assumptions were reasonable when made, because these assumptions are inherently subject to significant uncertainties and contingencies which are difficult or impossible to predict and are beyond our control, we cannot assure you that we will achieve or accomplish these expectations, beliefs or projections. In addition to these important factors and matters discussed elsewhere herein, important factors that, in our view, could cause actual results to differ materially from those discussed in the forward-looking statements include:

- growth in demand for our services;
- changes in consumer preferences or demand for our products;
- availability of external financing on commercially acceptable terms;
- the developments of our markets;
- the highly competitive nature of our industry and changes to our business resulting from increased competition;
- the impact of regulatory initiatives;
- the rapid technological changes in our industry;
- cost and synergy of our recent acquisitions;
- the acceptance of new products and services by customers;
- the condition of the economies of Russia, and certain other countries of the CIS;
- risks relating to legislation, regulation and taxation in Russia and certain other CIS countries, including laws, regulations, decrees and decisions governing each of the telecommunications industries in the countries where we operate, currency and exchange controls relating to entities in Russia and other countries where we operate and taxation legislation relating to entities in Russia and other countries where we operate, and their official interpretation by governmental and other regulatory bodies and by the courts of Russia and the CIS;
- political stability in Russia and certain other CIS countries;
- further deterioration in geopolitical situation and sanctions imposed as a result thereof could materially adversely affect our business, financial condition, results of operations, prospects and the value of our shares; and
- the impact of general business and global economic conditions and other important factors described herein and from time to time in the reports filed by us with the U.S. Securities and Exchange Commission (the "SEC").

All future written and verbal forward-looking statements attributable to us or any person acting on our behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section. New risks and uncertainties arise from time to time, and it is impossible for us to predict these events or how they may affect us. Readers are cautioned not to place undue reliance on these forward-looking statements. Except to the extent required by law, neither we, nor any of our respective agents, employees or advisors intends or has any duty or obligation to supplement, amend, update or revise any of the forward-looking statements contained or incorporated by reference in this document.

PART I

Item 1. *Identity of Directors, Senior Management and Advisors*

Not applicable.

Item 2. *Offer Statistics and Expected Timetable*

Not applicable.

Item 3. *Key Information*

A. [Reserved]

B. Capitalization and Indebtedness

Not applicable.

C. Reasons for the Offer and Use of Proceeds

Not applicable.

D. Risk Factors

An investment in our securities involves risks. You should carefully consider the following information about these risks, together with other information contained in this document, before you decide to buy our securities. If any of the following risks actually occurs, our business, prospectus, financial condition or results of operations could be materially adversely affected. In that case, the value of our securities could also decline and you could lose all or part of your investment. In addition, please read “Cautionary Statement Regarding Forward-Looking Statements” where we describe additional uncertainties associated with our business and the forward looking statements included in this document.

Risks Relating to Economic Risks in Our Countries of Operation

Geopolitical situation and sanctions imposed as a result of current political environment could materially adversely affect our business, financial condition, results of operations, prospects and the value of our shares.

Starting from February 2022, the EU, the U.S., the UK and certain other countries have imposed new significant sanctions and export control measures on Russia, particular sectors of Russian economy, and some Russian and Belarusian persons and entities. Most recently, these sanctions were extended to MTS Bank. See “—Political and Social Risks— The imposition of sanctions on MTS Bank and the potential for further international sanctions and export restrictions affecting the Group may have a material adverse impact on our business, financial condition and result of operations.” For example, on April 11, 2023, Felix Evtushenkov, the Chairman of our Board of Directors, was designated under asset freeze and travel ban sanctions by the HM Treasury of the United Kingdom. Mr. Evtushenkov resigned as Chairman and member of the Board of Directors effective April 17, 2023. The continuation or expansion of such restrictions as well as uncertainty due to changes in the regulatory environment in Russia may raise additional compliance and operational challenges for the Company and its staff and adversely affect the business of the Company and its customers and suppliers.

In addition, a number of western companies and exchanges have taken further action suspending, stopping, or restricting their operations in Russia by their own initiative. On February 28, 2022, trading on the Moscow Exchange in all equity securities was temporally suspended (including the Company’s ordinary shares). Also, on February 28, 2022, the New York Stock Exchange halted trading in the Company’s ADSs and shares of certain other Russian companies. The Company’s ADSs were effectively delisted from New York Stock exchange on August 8th, 2022.

In addition, starting from February 2022, the U.S. Department of Commerce, Bureau of Industry and Security (“BIS”) repeatedly issued regulations introducing new export control measures on Russia and Russian legal entities, therefore licenses of BIS generally are now required for the export, reexport in Russia or transfer (in country) of a number of items subject to the Export Administration Regulations (“EAR”), including electronics, computers, telecommunications and information security, sensors and lasers, navigation and avionics, marine, and aerospace and propulsion. Similar restrictions have also been issued on certain non-dual-use categories of goods (including luxury goods such as cars, watches, alcohol, leather goods, yachts, etc.). Most export license applications for Russia now are subject to a policy of denial. BIS issued and expanded similar export control measures relating to Belarus. For example, in February 2023, our wholly owned subsidiary, Vision Labs, was included by BIS into the Entity list. As a result, exports of items subject to the EAR to Vision Labs may now require a license. Starting from February 2022 the UK, the EU and certain other countries also issued a significant number of sanction and export control measures relating to Russia. These restrictions are similar to the measures introduced by the U.S. and includes, *inter alia*: (i) sanctions that block the property of certain Russian entities and individuals, including a number of financial institutions; (ii) targeted sanctions that prohibit certain debt and/or equity or other transactions with identified companies (including those operating in the Russian financial, energy, and defense sectors); (iii) restrictions on transactions with the Russian Central Bank, National Wealth Fund, Ministry of Finance; (iv) territorial sanctions restricting investment in and trade at Crimea, Donetsk, and Luhansk People’s Republics, as well as Kherson and Zaporizhia regions; and (v) restrictions on delivery of goods, software and dual-use technologies in Russia, as well as certain categories of other goods, including luxury goods. In addition, a number of Russian financial institutions have been removed from the SWIFT messaging system. In addition to these measures some countries prohibited provision of particular services to Russian persons, including management and tax consulting services, IT and PR consulting services, as well as legal advisory and marketing research services.

Moreover, the restrictions introduced by the U.S., the EU, the UK and other countries may impact supply chain and cost of delivery of equipment and other products, and our business and financial condition.

In particular, pursuant to Decrees of the President of the Russian Federation, Orders of the Russian Government and acts of the Central Bank of Russia a special procedure is established for the execution by residents of certain contracts with foreign legal entities and individuals. In particular, transactions for the provision of credits and loans to certain non-residents, as well as transactions that concern the ownership title to securities and real estate are subject to restrictions. Such transactions may be carried out subject to permits issued by the Special government Commission.

Furthermore, a special procedure has been established for the fulfillment by residents (debtors) of their obligations in excess of 10 million rubles (or equivalent of this amount in foreign currency) per month on credits, loans and financial instruments (including payment of bond coupons and dividends) to foreign persons (creditors). These obligations are fulfilled by the debtor with the permission of the Central Bank of Russia (for credit organizations), the Finance Ministry of the Russian Federation (for other debtors) or in rubles through special accounts of type “C”. In addition, the Central Bank of Russia is authorized to set limits on the amount of funds for transfers by non-residents from their accounts opened in the Russian Federation to the accounts of other non-residents, as well as for the purchase by non-residents of foreign currency in the foreign exchange market of Russia. Additionally, restrictions on transfers by certain non-residents of funds held on their accounts opened in Russia to any accounts opened outside the Russian Federation was introduced on April 1, 2022.

Moreover, in June 2022 the EU and Switzerland imposed blocking sanctions on the National Settlement Depository (“NSD”). Since NSD is, *inter alia*, a part of the chain of record keeping and custody of securities circulating on SPB Exchange and MOEX, all transactions with foreign securities of European companies were suspended for Russian investors (purchase and sale, receiving of coupons and dividends, etc.) if their rights are recorded with NSD. Additionally, because of these restrictions, non-resident holders of Eurobonds issued by Russian companies may not be able to receive coupons on these securities. In addition, the Federal law No. 114 dated April 16, 2022 “On Amendments to the Federal Law “On Joint Stock Companies” and certain legislative acts of the Russian Federation” requires Russian companies to terminate foreign depository programs, under which the depository receipts of such companies (including the Company) are listed on foreign stock exchanges. The Russian Government Commission on Monitoring Foreign Investment decided that MTS could retain its depository program until July 12, 2022. Accordingly, currently MTS’ shares’ trading outside of the Russian Federation in the form of depository receipts is stopped. The Company’s ADSs were delisted from the NYSE effective August 8, 2022.

Under the winding down process of the ADS program, the last day of period guaranteed for conversion of MTS ADRs into underlying ordinary shares was January 12, 2023. See “Risks Relating to Our Shares and ADSs and the Trading Market - ADS holders who have not yet converted their ADSs into shares may face difficulties (including a loss of value) in converting their ADSs into shares or may even be unable to do so.”

The underlying shares continue to be listed on MOEX, which remains the sole listing venue of our equity securities.

Moreover, on April 3, 2022 certain deputies of the State Duma and members of the Federation Council of the Federal Assembly of the Russian Federation announced amendments to the Criminal Code of the Russian Federation that would establish criminal liability for complying with foreign sanctions on the territory of the Russian Federation. If such amendments were adopted, they could limit MTS's access to foreign supplies of materials and equipment, as foreign counterparties may be unable to work with MTS, which could have a material adverse effect on our business, financial condition, results of operations, prospects and the value of our shares.

The aforementioned geopolitical events, and any of their continuation, has had and may continue to have a negative impact on the volatility and trading price of the Group's securities. Developments relating to these matters are highly unpredictable, occur swiftly and often with little notice, and are mostly outside the control of the MTS Group. The risk that any MTS Group member, or individuals holding positions within the MTS Group as well as its counterparties, staff and shareholders, may be affected by sanctions designations cannot be excluded. Current and future risks to the MTS Group include, among others, the risk of reduced or blocked access to capital markets and ability to obtain financing on commercially reasonable terms (or at all), the risk of restrictions on the import of certain equipment and software (including technical services and support), risk of changes in conditions, restrictions or termination of work with partners and organizations, as well as the risk of further depreciation of the Russian ruble against other currencies and risk of key interest rate increases, which may adversely impact the MTS Group and its counterparties. In addition, the continuation or expansion of sanction restrictions may also adversely affect our roaming revenue.

Operations of MTS Belarus, which is also a part of MTS Group, are also susceptible to the risks described above, as well as to specific sanctions risks arising from the EU, the U.S., the UK and certain other countries' sanctions and export controls regimes imposed in respect of Belarus since February 2022.

See also “—Political and Social Risks— The imposition of sanctions on MTS Bank and the potential for further international sanctions and export restrictions affecting the Group may have a material adverse impact on our business, financial condition and result of operations.”

The imposition of sanctions on MTS Bank and the potential for further international sanctions and export restrictions affecting the Group may have a material adverse impact on our business, financial condition and result of operations.

In February 2023, the US Office of Foreign Assets Control (OFAC) and the UK Office of Financial Sanctions Implementation (OFSI) designated MTS Bank as a sanctioned person pursuant to applicable sanctions regulations adopted by the US and the UK, respectively.

The full impact and potential implications of the imposed sanctions on MTS Bank on the Group's operations, assets and liabilities cannot be reliably estimated at this time. It is expected, however, that the imposition of sanctions on MTS Bank will lead to significant operational and governance challenges for MTS Bank which could consequentially adversely affect the Group's business and financial performance. By way of illustration, from an operational perspective MTS Bank is now subject to so-called “blocking” (asset-freeze) sanctions maintained by the US and the UK. Among other matters, these sanctions require US and UK third parties, including banks, to block or freeze assets which MTS Bank holds with such parties or otherwise block the settlement of payments to or from MTS Bank and its counterparties. We expect this to lead to complexities for MTS Bank in operating its business, including when dealing with its assets, satisfying liabilities owed to counterparties and entering into agreements with international parties and other stakeholders. In addition, from a governance perspective, the imposition of sanctions on MTS Bank may impact its ability to deal with other members of the Group and their respective directors and senior executives.

Although no other member of the Group has become the subject of sanctions (except for export restrictions for Vision Labs due to its inclusion by BIS into the Entity list), it is unclear at this stage how the imposition of sanctions on MTS Bank will affect the Group more broadly. For example, it is possible that counterparties and other stakeholders may take a more cautious approach when dealing with the Group. Moreover, we cannot rule out that additional restrictive measures could be implemented that could further affect our business.

See also “—Political and Social Risks—Geopolitical situation and sanctions imposed as a result of current political environment could materially adversely affect our business, financial condition, results of operations, prospects and the value of our shares.”

Economic volatility in the countries where we operate could adversely affect our business.

The economies of Russia and other countries where we operate have experienced periods of volatility and downturns.

Russian GDP grew by 4.7% in 2021, and decreased by 2.1% in 2022. See also “—Political and Social Risks—Geopolitical situation and sanctions imposed as a result of current political environment could materially adversely affect our business, financial condition, results of operations, prospects and the value of our shares.”

Any future economic downturns in Russia or the other countries where we operate, could lead to a decrease in demand for our services and, consequently, in our revenues, and negatively affect our liquidity position and ability to obtain further debt financing, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

The Russian banking system remains underdeveloped, the number of creditworthy banks in Russia is limited and another banking crisis could place severe liquidity constraints on our business.

Russia’s banking and financial services systems are less developed or regulated as compared to other countries, and Russian legislation relating to banks and bank accounts is subject to varying interpretations and inconsistent application. Many Russian banks currently do not meet international banking standards, and the transparency of the Russian banking sector in some respects still lags far behind internationally accepted norms. Aided by inadequate supervision by the regulators, certain banks do not follow existing CBR regulations with respect to lending criteria, credit quality, loan loss reserves or diversification of exposure. Furthermore, in Russia, bank deposits made by corporate entities are generally not insured.

In recent years, there has been a rapid increase in lending by Russian banks, which has been accompanied by a deterioration in the credit quality of the borrowers. In addition, a robust domestic corporate debt market is leading Russian banks (including the banks with which we conduct banking transactions) to hold increasingly large amounts of Russian corporate ruble bonds in their portfolios, which is further deteriorating the risk profile of Russian bank assets. The serious deficiencies in the Russian banking sector, combined with the deterioration in the credit portfolios of Russian banks, may result in the banking sector being more susceptible to market downturns or economic slowdowns, including due to Russian corporate defaults that may occur during any such market downturn or economic slowdown. In addition, the CBR has from time to time revoked the licenses of certain Russian banks, which resulted in market rumors about additional bank closures and many depositors withdrawing their savings. Recently, a number of banks and credit institutions have lost their licenses due to the deficiency of capital and failure to meet the CBR requirements. In 2014-2018, for instance, the CBR revoked the licenses of a number of Russian banks for reasons associated with implementing high-risk lending policies, loss of liquidity and non-compliance with anti-money laundering legislation. A combination of these factors may result in a significant deterioration in the financial fundamentals of Russian banks, notably liquidity, asset quality and profitability. In addition, the Russian banking sector may experience volatility and weaker financial results due to the ongoing volatility in the global financial and commodity markets, as well as any decline in the Russian economy as a result of geopolitical events, COVID-19 or declines in oil prices.

There is currently a limited number of sufficiently creditworthy Russian banks and few ruble denominated financial instruments in which we can invest our excess ruble cash. We hold the bulk of our excess ruble and foreign currency cash in Russian banks.

In the event of a banking crisis, Russian companies may be subject to severe liquidity constraints due to the limited supply of domestic savings and the withdrawal of foreign funding sources that may occur during such crisis. Another banking crisis or the bankruptcy or insolvency of the banks from which we receive or with which we hold our funds could result in the loss of our deposits or affect our ability to complete banking transactions in Russia, which could have a material adverse effect on our business, financial condition and results of operations. See also “—Political and Social Risks—Geopolitical situation and sanctions imposed as a result of current political environment could materially adversely affect our business, financial condition, results of operations, prospects and the value of our shares.”

The physical infrastructure in Russia and the other countries where we operate is generally in poor condition, which could disrupt our normal business activities and adversely impact our results.

The physical infrastructure in Russia and the other countries where we operate does not always meet modern technical requirements, has not been always funded and maintained over the past years.

Particularly affected are the rail and road networks, power generation and transmission systems, communication systems and building stock.

In addition, the road conditions throughout our countries of operation may be poor with many roads not meeting minimum quality and safety standards, causing disruptions and delays in the transportation of goods to and within these countries. The governments of the countries where we operate are actively considering plans to reorganize their national rail, electricity and communications systems. Any such reorganization may lead to additional costs and increased tariffs while failing to generate the anticipated capital investment needed to repair, maintain and improve these systems. The deterioration or insufficient renewal of the physical infrastructure in the countries where we operate harms the national economies, adds costs to doing business in these countries and impedes companies to operate effectively. These difficulties can impact us directly; for example, we keep portable electrical generators to help us maintain base station operations in the event of power outages. Further deterioration of the physical infrastructure in Russia and the other countries where we operate could have a material adverse effect on our business, financial condition and results of operations. In addition, the increased charges and tariffs that may result from the government reorganization may also have a material adverse effect on our business, financial condition and results of operations.

Fluctuations in the global economy may materially adversely affect the economies of the countries where we operate and our business in these countries.

The economies of the countries where we operate are vulnerable to market downturns and economic slowdowns elsewhere in the world. As has happened in the past, financial problems or an increase in the perceived risks associated with investing in emerging economies could dampen foreign investment in Russia and the other countries where we operate, and businesses in these countries could consequently face severe liquidity constraints. Additionally, as Russia produces and exports large amounts of oil and gas, the Russian economy is especially vulnerable to the price of oil and gas on the world market and a decline in the price of oil and gas could negatively impact its economy. See also “—Ruble volatility and regulatory changes in foreign currency regulation could increase our costs, decrease our available funds or make it more difficult for us to comply with financial covenants and to repay our debts and would affect the value of dividends received by holders of shares”. In addition, recent military conflicts and international terrorist activity have significantly impacted the oil and gas prices globally, and pose additional risks to the Russian economy. Russia is also a major producer and exporter of metal products and its economy is vulnerable to world commodity prices and the imposition of sanctions, tariffs and/or anti-dumping measures by the United States, the European Union or other principal export markets.

The disruptions recently experienced in the domestic and international capital markets have led to reduced liquidity and increased credit risk premiums for certain market participants and have resulted in a reduction of available financing. Companies located in emerging markets, including us, may be particularly susceptible to these disruptions and reductions in the availability of credit or increases in financing costs. To the extent that the current market downturn continues or worsens, it may lead to constraints on our liquidity and ability to obtain debt financing, which may have a material adverse effect on our business, financial conditions and results of operations. See also “—Political and Social Risks—Geopolitical situation and sanctions imposed as a result of current political environment could materially adversely affect our business, financial condition, results of operations, prospects and the value of our shares.”

Political and Social Risks

Political and governmental volatility in Russia and other countries of our operations could materially adversely affect our business, financial condition, results of operations and prospects and the value of our shares.

The political and economic situation in Russia has been negatively affected by geopolitical events, the economic sanctions imposed by the United States, the European Union, Switzerland, the United Kingdom and other countries, the ongoing volatile economic conditions and other factors. Other countries where we operate may pose similar challenges. Current and possible future political changes in Russia and other countries where we operate, major policy shifts or a lack of consensus between the various branches of power and powerful economic groups could affect economic and regulatory reforms. This could, in turn, lead to political volatility or conflicts among powerful economic groups, which could have a material adverse effect on our business, financial condition, results of operations, prospects and the value of our shares. For example, after the presidential elections, which took place on August 9, 2020, protests began in Belarus. Moreover, the United States, the European Union, the United Kingdom and other countries have imposed additional sanctions on certain Belarusian persons and entities. Further volatility of the political and social situation can negatively affect our business, financial position and operations. A deterioration of the socio-political situation in Russia could also trigger an event of default under some of our loan agreements.

On July 4, 2020, the Law of the Russian Federation on Amendment to the Constitution of the Russian Federation came into force which implemented a number of constitutional reforms aimed at altering the balance of power between the legislative, executive and judicial branches and introducing certain other changes to the Constitution of the Russian Federation. This Law, among other things, prioritizes the Constitution of the Russian Federation over international treaties and the decisions of international bodies, strengthens the Russian State Council as an advisory board to the Russian President and grants the Russian Federal Council with authority to terminate the powers of the judges of the Constitutional Court of Russia upon the recommendation of the Russian President. These amendments to the Constitution may have a significant impact on the Russian political landscape and regulatory environment and lead to other changes that are currently difficult to predict. See also “—Geopolitical situation and sanctions imposed as a result of current political environment could materially adversely affect our business, financial condition, results of operations, prospects and the value of our shares.”

Potential conflict between central and regional authorities could create an uncertain operating environment hindering our long-term planning ability.

The Russian Federation is a federation of units, consisting of republics, territories, regions, cities of federal importance and autonomous regions and districts. The delineation of authority and jurisdiction among the members of the Russian Federation and the federal government is, in many instances, unclear and remains contested. A lack of consensus between the federal government and local or regional authorities could result in the enactment of conflicting legislation at various levels and may lead to political volatility. In particular, conflicting laws have been enacted in the areas of privatization, land legislation and licensing. Some of these laws, as well as governmental and administrative decisions implementing them and certain transactions consummated pursuant to them, have in the past been challenged in the courts, and such challenges may occur in the future. This lack of consensus may hinder our long-term planning efforts and create uncertainties in our operating environment, both of which may prevent us from effectively and efficiently implementing our business strategy.

Additionally, ethnic, religious, historical and other divisions have, on occasion, given rise to tensions and, in certain cases, military conflict, which can halt normal economic activity and disrupt the economies of neighboring regions. The intensification of violence, including terrorist attacks and suicide bombings, or its spread to other parts of Russia, could have significant political consequences, including the imposition of a state of emergency in some parts or the whole of Russia. Moreover, any terrorist attacks and the resulting heightened security measures are likely to cause disruptions to domestic commerce and exports from Russia. Any of these factors could materially adversely affect our business and the value of our shares.

Crime and corruption could disrupt our ability to conduct our business and thus materially adversely affect our operations.

Crime and corruption could result in negative publicity, disrupt our ability to conduct our business and could thus materially adversely affect our business, financial condition, results of operations and prospects. Additionally, some members of the media in the countries we operate in regularly publish disparaging articles in return for payment. Any actions which could result in a negative effect on investor confidence in Russia’s business and legal environment could have a further material adverse effect on the Russian securities market and prices of Russian securities or securities issued or backed by Russian entities, including the shares.

Actions of fraudsters aimed against subscribers cause additional risks for operators. Despite our efforts to detect and prevent fraud, some forms of rendering services (for example, offering payments via external Internet sources) might entail risks of fraudulent charge-offs from subscribers’ personal accounts. Such fraud actions could materially adversely affect our business, financial condition, results of operations and prospects as well as our reputation and lead to an increase in subscriber churn.

Legal Risks and Uncertainties

Weaknesses relating to the legal system and legislation in the countries where we operate create an uncertain environment for investment and business activity, which could have a material adverse effect on the value of our shares.

Each of the countries we operate in is still developing the legal framework required to support the market economy. The following risk factors relating to these legal systems create uncertainties with respect to the legal and business decisions that we make, many of which do not exist in countries with more developed market economies:

- inconsistencies between and among the constitution, federal and regional laws and subordinate legislation (presidential decrees and governmental, ministerial and local orders, decisions and resolutions) and other acts;

- legislation ambiguities which do not allow to predict how these provisions should be followed and how an authorized body or a court will interpret these provisions;
- the lack of judicial and administrative guidance on interpreting certain legislation as well as conflicting interpretations of supreme general jurisdiction and arbitrazh courts;
- the lack of necessary legislation in the reality of digital economy and rapid developing of new technologies;
- the relative inexperience of judges and courts in interpreting certain aspects of legislation;
- the lack of an independent judiciary;
- a high degree of discretion on the part of governmental authorities, which could result in arbitrary actions such as suspension or termination of our licenses; and
- poorly developed bankruptcy and liquidation procedures and court practice that create possibilities of abuse.

The recent nature of much of the legislation in the CIS countries, the lack of consensus about the scope, content and pace of economic and political reform and the rapid evolution of these legal systems in ways that may not always coincide with market developments result in ambiguities, inconsistencies and anomalies. In addition, legislation in these countries often contemplates implementing regulations that have not yet been promulgated, leaving substantial gaps in the regulatory infrastructure. All of these weaknesses could affect our ability to enforce our rights under our licenses and contracts, or to defend ourselves against claims by others. Moreover, it is possible that regulators, judicial authorities or third parties may challenge our internal procedures and bylaws, as well as our compliance with applicable laws, decrees and regulations.

Any inability of our subsidiaries in the countries in which we are present to maintain control over their operations and assets may adversely affect our business, financial condition and results of operations.

If we are unable to protect our business entities in the countries in which we operate from the withdrawal or suspension of required permissions or unwarranted regulatory scrutiny, this may adversely affect our business, financial condition and results of operations.

An outcome of the proceedings relating to sustaining operations of our subsidiary in Turkmenistan is unpredictable.

MTS-Turkmenistan was compelled to suspend communication services in Turkmenistan from September 29, 2017, due to the actions of the Government of Turkmenistan, the Ministry of Communications of Turkmenistan, the state-owned telecommunications company, Turkmentelekom, and its wholly-owned subsidiary, Altyn Asyr, the state owned mobile operator in Turkmenistan. These actions resulted in the disconnection of international and long-distance zonal communication services and Internet access.

In July 2018, we filed a Request for Arbitration against the Sovereign State of Turkmenistan with the ICSID in order to protect its legal rights and investments in Turkmenistan. The Tribunal for these proceedings was constituted on December 18, 2018 and the Company subsequently filed its Memorial (statement of claim) with ICSID on March 29, 2019.

Unless resolved to our satisfaction, we intend to vigorously pursue our claims in arbitration and seek all available remedies.

In May 2022, the tribunal held the main hearing and we expect the final award to be rendered by the tribunal in 2023.

See also Note 33 to our audited consolidated financial statements and “Item 8. Financial Information—A. Consolidated Statements and Other Financial Information—7. Litigation—Turkmenistan.”.

Russian companies can be forced into liquidation on the basis of formal non-compliance with certain legal requirements.

Certain provisions of Russian law, including the general provisions of the Civil Code of the Russian Federation, may allow government authorities to seek a court order for the liquidation of a Russian legal entity on the basis of its formal non-compliance with certain requirements during formation, reorganization or during its operation.

For example, under Russian corporate law, if the net assets of a Russian joint stock company calculated on the basis of Russian accounting standards are lower than its charter capital as of the end of second reporting year or any subsequent reporting year, the company must either decrease its charter capital or be placed in liquidation. If the company fails to comply with these requirements, governmental or local authorities can seek the involuntary liquidation of such company in court.

Special rules are also provided for joint-stock companies. If, as of the end of the second reporting year or each subsequent reporting year, the company's net assets are lower than the amount of its charter capital:

- the Board of Directors of the company, when preparing for the annual general meeting of shareholders, is obliged to include a section on the state of its net assets in the annual report of the company;
- the company is obliged to make one of the following decisions no later than 6 months after the end of the corresponding reporting year:
 - to decrease its charter capital of the company to an amount not exceeding the value of its net assets;
 - to liquidate the company.

At the same time, if the company's net assets are less than its charter capital by more than 25 percent at the end of three, six, nine or twelve months of the reporting year following the second reporting year or each subsequent reporting year, at the end of which the company's net assets turned out to be less than its charter capital, the company twice with a periodicity of one once a month, it is obliged to place in the mass media, in which data on the state registration of legal entities are published, a notice of a decrease in the company's net assets.

The creditor of the company, if his rights of claim arose before the publication of the notice of the decrease in the company's net assets, no later than 30 days from the date of the last publication of such notice, has the right to demand from the company the early fulfillment of the corresponding obligation, and if its early fulfillment is impossible, the termination of the obligation and compensation for related losses.

If, at the end of the second reporting year or each subsequent reporting year, the company's net assets turns out to be less than the minimum charter capital specified in the Federal Law "On Joint Stock Companies", the company is obliged to make a decision on its liquidation no later than six months after the end of the reporting year.

However, pursuant to the Federal Law No. 46-FZ dated March 8, 2022 "On Amendments to Certain Legislative Acts of the Russian Federation," (in the edition as of December 28, 2022) a reduction in the value of the net assets of a Russian joint stock company below the size of its charter capital as of the end of 2022 and 2023 will not require:

- when preparing for the annual general meeting of shareholders, the inclusion of a section on the state of net assets in the annual report;
- making a decision to reduce the charter capital to an amount not exceeding the value of its net assets, or to liquidate the company.

The existence of negative assets may not accurately reflect the actual ability to pay debts as they fall due. Many Russian companies have negative net assets due to very low historical asset values reflected on their Russian accounting standards balance sheets; however, their solvency, i.e., their ability to pay debts as they fall due, is not otherwise adversely affected by such negative net assets. Some Russian courts, in deciding whether or not to order the liquidation of a company for having negative net assets, have looked beyond the fact that the company failed to fully comply with all applicable legal requirements and have taken into account other factors, such as the financial standing of the company and its ability to meet its tax obligations, as well as the economic and social consequences of its liquidation. Nonetheless, creditors have the right to accelerate claims, and file damages claims, and governmental or local authorities may seek the liquidation of a company with negative net assets.

Courts have, on rare occasions, ordered the involuntary liquidation of a company for having net assets less than the minimum charter capital required by law, even if the company had continued to fulfill its obligations and had net assets in excess of the minimum charter capital at the time of liquidation.

The amount of net assets in accordance with the local accounting standards of some of our subsidiaries is less than the minimum charter capital required by law. Although these subsidiaries continue to meet all of their obligations to creditors, there is a minimal risk of their liquidation while the net assets remain below the minimum legal requirements.

There have also been cases in the past in which formal deficiencies in the establishment process of a Russian legal entity or non-compliance with provisions of Russian law have been used as a basis to seek the liquidation of a legal entity. Weaknesses in the Russian legal system create an uncertain legal environment, which makes the decisions of a Russian court or a governmental authority difficult, if not impossible, to predict. If involuntary liquidation were to occur, such liquidation could lead to significant negative consequences for our group.

Nevertheless, according to sub-paragraphs 1 and 2 of paragraph 1 of Article 17 of Federal Law No. 46-FZ dated 08.03.2022 "On Amendments to Certain Legislative Acts of the Russian Federation" (in the edition as of December 28, 2022) a decrease in the value of net assets in subsidiaries of MTS PJSC below the size of subsidiaries' charter capital as of the end of 2022 and 2023 will not require the company to make a decision on reducing the charter capital to an amount not exceeding the value of its net assets or liquidation of the company.

Insufficient adherence to the independence and competitiveness of the judicial process, the difficulty of enforcing court decisions and governmental discretion in enforcing claims could prevent us or holders of our securities from obtaining effective redress in a court proceeding.

The judicial bodies in the countries where we operate are not always completely independent or immune from economic and political influences, and are often understaffed and underfunded. Judges and courts are often inexperienced in the area of business, corporate and industry (telecommunications) law. Judicial precedents generally have no binding effect on subsequent decisions, and not all court decisions are readily available to the public or organized in a manner that facilitates understanding. The judicial systems in these countries can also be slow or unjustifiably swift.

Enforcement of court orders can, in practice, be very difficult to achieve. All of these factors make judicial decisions in these countries difficult to predict and effective redress uncertain. Additionally, court claims are often used in furtherance of political and commercial aims or infighting. We may be subject to such claims and may not be able to receive a fair hearing. Additionally, court orders are not always enforced or followed by law enforcement agencies. Furthermore, recognition and enforcement of arbitral awards in countries where we operate is subject to compliance with corresponding rules of civil procedure and applicable laws, and courts in the countries where we operate may interpret applicable regulations in a manner which would result in denial of such recognition and enforcement.

These uncertainties also extend to property rights. For example, during Russia's transformation from centrally planned economy to market economy, legislation has been enacted in the country to protect private property against uncompensated expropriation and nationalization. However, there is a risk that due to the lack of experience in enforcing these provisions and due to political factors, these protections would not be enforced in the event of an attempted expropriation or nationalization. Expropriation or nationalization of any of our entities, their assets or portions thereof, potentially without adequate compensation, would have a material adverse effect on our business, financial condition, results of operations and prospects.

Failure to comply with existing laws and regulations as well as requirements of international and regional standards or to obtain all approvals, authorizations and permits required to transmit television channels or operate telecommunications equipment, or the findings of government inspections or increased governmental regulation of our operations, could result in a disruption in our business and substantial additional compliance costs and sanctions.

Our operations and properties are subject to regulation by various government entities and agencies in connection with obtaining and renewing various licenses, approvals, authorizations and permits, as well as with ongoing compliance with existing laws, regulations and standards. Regulatory authorities exercise considerable discretion in matters of enforcement and interpretation of applicable laws, regulations and standards, the issuance and renewal of licenses, approvals, authorizations and permits and in monitoring licensees' compliance with the terms thereof. Russian authorities have the right to, and frequently do, conduct periodic inspections (planned and unscheduled) of our operations and properties throughout the year. Any such future inspections may conclude that we or our subsidiaries have violated laws, decrees or regulations, and we may be unable to refute such conclusions or remedy the violations. See also "—The regulatory environment for telecommunications in Russia and other countries where we operate or may operate in the future is uncertain and subject to political influence or manipulation, which may result in negative and arbitrary regulatory and other decisions against us on the basis of other than legal considerations and in preferential treatment for our competitors."

Primarily due to delays in the issuance of permits, approvals and authorizations by regulatory authorities, it is frequently not possible to procure all of the permits for each of our base stations or other aspects of our network before we put the base stations into commercial operation or to amend or maintain all of the permits when we make changes to the location or technical specifications of our base stations.

We are constantly in the process of registration and re-registration of ownership over certain infrastructure facilities. For example, MGTS carries out measures aimed at registration of ownership rights to the cable line structures (CLS). At the same time, MGTS is not insured against the risks of challenging the ownership rights by third parties. MGTS performs legal registration of its ownership rights to minimize the risk. In case of receiving reasonable claims, MGTS reconciles cable line objects to distinguish the ownership rights. MGTS is ready to assert its rights to CLS in court when necessary.

In addition, we may be unable to transmit certain television channels if entities that provide television content to us do not possess the requisite licenses. In case such providers of television content do not obtain the required licenses, or have their existing licenses suspended or terminated, our selection of potential television channels for transmission could be significantly limited. The inability of operators to comply with requirements on sequence of channels, sound and image quality and signal reception points of national mandatory free television channels (pursuant to the Federal Law dated July 13, 2015 No. 257, Order dated July 31, 2020 No. 369, Order dated September 03, 2021 No. 921) may lead to suspension or termination of a license.

Furthermore, we could be subject to fines and other penalties, including forced suspension of our cable network operators' activity for up to 90 days. In some cases of our service provision (for example, those employing GPON technology) power failures in subscribers' households may lead to non-compliance with rules regulating local telephony communication services. Any of these consequences could have a material adverse effect on our business, financial condition and results of operations.

On June 1, 2018, Federal Law No. 245 "On Amendments to the Federal Law" "On Communications" entered into force and is aimed at further aligning the process of entering into a contract for the provision of mobile radiotelephone communication services without appropriate identification of a subscriber (i.e., a user) of communication services. Operators may be subject to penalties and other sanctions, including the suspension of an operator's activity for up to 90 days, for non-compliance with the Law.

Our failure to comply with existing laws and regulations of the countries where we operate as well as requirements of international and regional standards or to obtain all approvals, authorizations and permits required to operate telecommunications equipment, or the findings of government inspections including the State Labor Inspection Service may result in the imposition of fines or penalties or more severe sanctions including the suspension, amendment or termination of our licenses, approvals, authorizations and permits, or in requirements that we cease certain of our business activities, or in criminal and administrative penalties applicable to our officers. We have also engaged in certain disputes, which could require us to pay damages or settlements. We may incur expenses in defending these lawsuits. See "Item 8. Financial Information—A. Consolidated Statements and Other Financial Information—7. Litigation".

Moreover, an agreement or transaction entered into in violation of law may be invalidated and/or unwound by a court decision. Any such decisions, requirements or sanctions, or any increase in governmental regulation of our operations, could result in a disruption of our business and substantial additional compliance costs and could materially adversely affect our business, financial condition, results of operations and prospects. In addition, we may assume risks of potential claims from subscribers and regulating authorities regarding former activities of the acquired or merged businesses.

Generally, communication networks are vulnerable to physical or software break-ins, viruses, unauthorized interferences and similar events. Should such events occur with respect to our network elements, we may become subject for additional inspection by the regulatory authorities. Although we obtain all necessary permissions and certificates for the operation of our equipment and provide measures to protect confidential information, our failure to fully comply with all legislation requirements could result in the imposition of fines or penalties, additional government regulations, substantial additional compliance costs, disruption of our business including its suspension or termination, and other adverse effects.

We provide certain common contractual protections to the purchaser under the VF Ukraine Sale Agreement and are subject to certain post-closing obligations.

In December 2019, we sold our telecommunication business in Ukraine under an agreement entered into with Telco Solutions and Investments LLC, as purchaser, an entity affiliated with telecommunication company Bakcell LLC, which is a part of the NEQSOL Holding international group of companies (the “Sale Agreement”), see “Item 4. Information on our Company—A. History and Development” and Note 10 to our audited consolidated financial statements for details of the transaction. We provide certain common contractual protections to the purchaser and are subject to certain post-closing obligations under the Sale Agreement. Further, the Sale Agreement contains a post-completion price adjustment mechanism. As a result of applying this mechanism, the purchase price was adjusted in our favor so we were not required to pay any sum to the purchaser.

Although we do not anticipate any further material price adjustments or other liability under the Sale Agreement, there can be no assurance that a liability will not emerge in the future, in which case it could have an adverse effect on our financial position and results of operations.

According to the terms of the Sale Agreement, an additional consideration based on the performance of the discounted operations in Ukraine was receivable. The group received the first part of the additional contingent consideration in March 2021. In 2022 following uncertainty over the receipt of the consideration and economic volatility and sanctions in Russia, the group created expected credit allowance for the total amount of receivable and its value decreased to nil. See also Note 10 to our audited consolidated financial statements.

There is insufficient minority shareholder protection in Russia.

Minority shareholder protection under Russian law principally derives from (a) supermajority shareholder approval requirements for certain corporate actions, (b) the ability of a shareholder to demand that the company purchase the shares held by that shareholder if that shareholder voted against or did not participate in voting on certain types of actions, (c) the ability of a shareholder to sell his shares at a fair price when the control is changed, the company is acquired at a price determined in accordance with the requirements of the current legislation, (d) shareholders’ right to challenge decisions of the company’s management bodies in certain circumstances, and (e) shareholders’ right to challenge transactions which caused company’s loss. Companies are also required under Russian law to obtain the approval of disinterested shareholders for certain transactions with interested parties. In practice, enforcement of these protections has not always been effective. Shareholders of some companies have suffered as a result of fraudulent bankruptcies initiated by hostile creditors.

The supermajority shareholder approval requirement is met by a vote of 75% of all voting shares that are present at a shareholders’ meeting. Thus, controlling shareholders owning slightly less than 75% of outstanding shares of a company may have a 75% or more voting power if certain minority shareholders are not present at the meeting. In situations where controlling shareholders effectively have 75% or more of the voting power at a shareholders’ meeting, they are in a position to approve amendments to the charter of the company or significant transactions including asset transfers, which could be prejudicial to the interests of minority shareholders. It is possible that our controlling shareholder in the future may not operate us and our subsidiaries for the benefit of minority shareholders, and this could have a material adverse effect on the value of our shares.

While the Federal Law on Joint Stock Companies provides that shareholders owning not less than 1% of the company's outstanding common stock may bring an action for damages caused to a company by its CEO, member of the Board of Directors or its Management Board and certain other officials acting on behalf of the company, minority shareholders may have difficulties with proving such damages with the court and as a consequence their claims may be denied by the court. Although there have been several disputes in the past few years, Russian courts do not have a clear and consistent approach in regards to class action litigation. In addition, the issue of claims by shareholders against the company to compensate the shareholders for their losses is not clearly regulated by the current legislation.

Moreover, due to the adoption of Federal Law No. 55-FZ dated March 14, 2022, until December 31, 2022 shareholders holding alone or with other holders 5% or more of the voting shares have the right to appeal to the court with claims to challenge major and interested party transactions, as well as claims against a member of the Board of Directors or member of any executive body of the Company. Before the adoption of this Federal Law, shareholders holding alone or with other holders 1% or more of the voting shares had the right to file such lawsuits.

Accordingly, your ability to pursue legal redress against us may be limited, reducing the protections available to you as a holder of our shares.

In addition, Federal Law No. 55-FZ of 14.03.2022 temporarily (until December 31, 2023) raised the threshold from 1% to 5% of voting shares required for access to information provided for in paragraph 1 of Article 84, paragraphs 2 and 3 of Article 91 of the Federal Law "On Joint Stock Companies".

Also, the Decree of the Government of the Russian Federation No. 351 of March 12, 2022 (in the edition as of November 24, 2022) allows us not to disclose or disclose in a limited manner some information until July 1, 2023.

According to Russian legislation, shareholders/participants of Russian companies have an opportunity to demand either liquidation of a company in a judicial proceeding or exclusion of other shareholder/ participant (except for public joint stock companies) from the company.

According to the Civil Code of the Russian Federation, shareholders and participants of Russian companies have, inter alia, the following rights, which can be executed via judicial proceedings:

- to demand the liquidation of a company in case of failure to achieve a corporate purpose for which it was created, including a case when an operation of a company becomes impossible or is substantially hampered; and
- to demand exclusion of a shareholder or a participant (except for the public joint stock companies, including MTS) whose actions/inactivity either cause significant harm or hampers the company's operations.

In this regard, we cannot rule out the possibility of such claims being filed against MTS or our subsidiaries which may have a negative impact on our business, financial condition and results of operations.

Shareholder liability under Russian legislation could cause us to become liable for both obligations of our subsidiaries and losses of the legal entities in which we have a practical possibility of determining actions.

The Civil Code of the Russian Federation, the Joint Stock Companies Law and the Federal Law "On Limited Liability Companies" generally provide that shareholders in a Russian joint stock company or members of a limited liability company are not liable for the obligations of the company and bear only the risk of loss of their investment. This may not be the case, however, when one entity is capable of determining decisions made by another entity. The entity capable of determining such decisions is deemed an "effective parent." The entity whose decisions are capable of being so determined is deemed an "effective subsidiary." The effective parent bears joint and several liability for transactions concluded by the effective subsidiary in carrying out its decisions or decisions made with its consent. However, joint and several responsibility of the effective parent is excluded in case of voting of the effective parent on the approval of the transaction at a general shareholders' meeting of the effective subsidiary, as well as the approval of the transaction by the body of the effective parent, if the need for such approval is envisaged in the charter of the effective subsidiary and/or the effective parent. In addition, an effective parent is secondarily liable for an effective subsidiary's debts if an effective subsidiary becomes insolvent or bankrupt resulting from the action or failure to act of an effective parent. This is the case no matter how the effective parent's ability to determine decisions of the effective subsidiary arises.

Accordingly, we could be liable in some cases for debts of our subsidiaries and losses of the legal entities to the extent that we had any power of determining such subsidiaries' actions that caused such losses. This liability could have a material adverse effect on our business, results of operations and financial condition.

Shareholder rights provisions under Russian law could impose additional obligations and costs on us, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

Russian law provides that shareholders that vote against or did not participate in voting on certain matters have the right to sell their shares to the company at market value in accordance with Russian law. The decisions that trigger this right to sell shares include:

- decisions with respect to a reorganization;
- the approval by shareholders of a “major transaction,” which involves property in excess of 50% of the balance sheet value of the company’s assets calculated according to Russian accounting standards, regardless of whether the transaction is actually consummated (including those which are simultaneously interested-party transactions), except for transactions undertaken in the ordinary course of business;
- the amendment of our charter in a manner that limits shareholder rights;
- the amendment of our charter in a manner that excludes reference to the entity’s public status, approved simultaneously with a decision on applying to the CBR on release from obligation to disclose information under the laws of the Russian Federation on securities; and
- a decision on applying for delisting of shares and convertible securities from a stock exchange.

See also “Item 16E—Purchases of Equity Securities by the Issuer and Affiliated Purchasers.” Our obligation to purchase shares in these circumstances, which is limited to 10% of the company’s net assets calculated in accordance with Russian accounting standards at the time the matter at issue is voted upon, could have a material adverse effect on our business, financial condition, results of operations and prospects. Under Russian law, if we are unable to sell the repurchased shares at a price equal to or exceeding the market price within one year of the date of repurchase, we will have to make a decision within a reasonable time period to reduce our charter capital accordingly.

The Strategic Foreign Investment Law imposes certain restrictions on us and our existing and potential foreign shareholders, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

On May 7, 2008, the Federal Law “On the Procedure for Foreign Investment in Commercial Organizations of Strategic Importance for the Defense and Security of the State,” or the Strategic Foreign Investment Law, came into force in Russia. This law sets forth certain restrictions relating to foreign investments in Russian companies of “strategic importance.” Among others, companies with a dominant position in the Russian telecommunications market are considered to be strategically important and foreign investments in such companies are subject to regulations and restrictions to these companies set out by the Strategic Foreign Investment Law. For purposes of the Strategic Foreign Investment Law, a mobile telecommunications provider is deemed to be dominant if its market share in the Russian market exceeds 25%, as may be determined by the FAS. In addition, a company may be considered to be strategically important due to our offering of services involving the use of cryptographic technologies.

Under the Strategic Foreign Investment Law, a foreign investor (including Russian citizens having foreign citizenship) seeking to obtain direct or indirect control over a strategically important company is required to have the respective transaction pre-approved by FAS. The law further stipulates that foreign investors are obliged to obtain prior approval of transactions envisaging the acquisition of right of ownership, possession or use of property classified as the fixed production assets of a strategic company and the value of which represents 25% or more of the balance sheet value of the assets of such company as of the last reporting date, according to accounts. In addition, foreign investors are required to notify this authorized governmental body about any transactions undertaken by them resulting in the acquisition of 5% or more of the charter capital of strategically important companies. Within 45 days from the effective date of the Strategic Foreign Investment Law, foreign investors having 5% or more of the charter capital of strategically important companies were required to notify the authorized governmental body about their current shareholding in such companies.

A foreign investor is also obliged to notify the authorized governmental body about the fact of conducting the pre-approved transactions. Offshore companies (and companies under their control) are also prohibited from obtaining control over a strategically important company and are obliged to have any acquisition of 25% or more of right of ownership of voting shares pre-approved. Certain sanctions may be imposed in respect of such transactions conducted without notification, for example, a deprivation of the foreign investor of any voting rights at a shareholders' meeting of strategically important companies through judicial proceedings brought by an authorized governmental body.

As we are classified as a strategically important company, our current and future foreign investors are subject to the notification requirements described above and our current and potential investors may be limited in their ability to acquire a controlling stake in, or otherwise gain control over, us. Such increase in governmental control or limitation on foreign investment could impair the value of your investment and could hinder our access to additional capital.

Regulatory changes in Russia as well as regulatory changes at the international level may have a material adverse effect on our financial condition and results of operations.

New laws or regulations or changes to the existing regulatory framework at the federal, local, or international level, such as those described below, could, among other things, change the ways in which we operate our businesses and provide our services, require additional costs, and impair revenue opportunities.

The Ministry of Digital Development, Communications and Mass Media is considering altering the approach to inter-carrier settlements in Russia and the subsequent lowering of the settlement rate, which could have a negative impact on our average monthly service revenues per subscriber and margins. Over the past few years the government has developed a number of new initiatives, however, it remains unclear whether all such initiatives will be implemented or whether those implemented initiatives will be enforced. For example, the enforcement of certain provisions of the agreement on the conditions of inter-carrier mutual settlements while delivering international communication services in CIS-countries, signed on October 30, 2015, may adversely affect our operation in terms of the execution of inter-carrier mutual settlements among CIS-operators, however, such agreement has not yet been implemented into law.

The supra-national antimonopoly body established by the Eurasian Economic Union is currently responsible for general competition and anti-trust rules, including powers to administer fines and other remedies. If violations with respect to companies operating on cross-border markets be identified, this might lead both, to imposition of fines in accordance with the legislation of the EEU and adoption of the decisions for compulsory execution.

Pursuant to the Federal Law No. 374 "On the Introduction of Amendments to Certain Legislative Acts of the Russian Federation with Respect to Setting up of Additional Counter-terrorism Measures and Public Security Enforcement" dated July 6, 2016, operators are obliged to store certain information, such as voice information and text messages (for a three-year period) and the contents of such communications (for up to six months). The Government regulation "On Rules, Terms and Volume of Voice Information, Text Messages, Images, Sounds, Video- and Other Messages of Telecommunications Services Users to be Stored" requires communication operators that render communication services such as intercity and international communication services to store voice information and text messages, for a period of six months from the moment of the end of their receipt, transfer, delivery and/or processing. Operators that render telematics services, as well as data transmission services (except for data transmission services for the purposes of transferring voice information) are also obliged to store telecommunication messages by using data storage technical equipment in the volume of electronic communication messages sent and received by the operator's subscribers (the actual traffic) for 30 days. Moreover, the capacity of the data traffic storage system is required to be increased by 15% annually for 5 years from the date the data storage technical equipment was put into operation. Significant additional costs have been and will be required in order to comply with these requirements.

In 2019, new legislation regarding class actions in Russia was introduced (191-FZ dated July 18, 2019) giving consumers the right to file class action lawsuits with the courts of general jurisdiction. The law allows mass consumer claims where the amount of each individual claim is small, but the total amount of all claims is significant and expanded the list of persons who can advocate the interests of a group of persons.. These measures could increase the number and change the nature of class actions filed against us, which could have a material adverse effect on our business, financial condition and results of operations.

In November 2019, the Federal Law No. 90 “On certain amendments to the Federal Law “On communications” and the Federal Law “On information, information technologies and information protection” dated May 1, 2019 (the “Sovereign Internet Law”) aimed at ensuring stable, secure and integral functioning of the Internet in the territory of the Russian Federation, came into force. Under the Sovereign Internet Law, operators, installed equipment on their networks, which could adversely affect the networks’ stability and the quality of provided communication services. Practical issues may require further subordinate legislation to be adopted further clarifying the provisions of the law. Furthermore, additional costs for maintenance and operation of this equipment were required from the operators.

On July 17, 2022 criminal liability and fines for non-compliance with rules of work with technical means of countering threats to stability, security and functional integrity of the Internet in the territory of the Russian Federation and the public communications network were increased and, from January 1, 2023, further administrative and criminal liability was introduced for non-compliance with requirements for traffic transmission via technical means of countering threats to stability, security and functional integrity of the Internet in the territory of the Russian Federation and the public communications network (Federal Law No. 259 dated 14.07.2022, Federal Law No. 260 dated 14.07.2022).

Amendments to the Law “On Communications”, effective from June 2021 (533-FZ dated December 30, 2020), clarify the contracting process with subscribers, including provisions, among others, on concluding contracts, rendering services for corporate clients and the responsibility of Roskomnadzor for developing an information system for monitoring the contracting process between operators and their subscribers. Federal Law No. 319 and the Order No. 1313 of the Russian Government dated 22.07.2022 determine information, which operators are obliged to transfer to Roskomnadzor, including information about subscribers (users), volume and period of providing telecommunication services etc.

Pursuant to Russian law (319-FZ dated July 2, 2021), free access must be granted to the websites of domestic socially significant Internet resources as determined by the Government Commission. In addition, rules (Decrees No.2531 dated December 29, 2021 and No.2469 dated December 25, 2021) have been adopted for maintaining a list of such resources and establishing a relevant Government Commission. The list includes the “Vkontakte” social networking system and the “Gosuslugi” Integrated Identification and Authentication System. As we provide free access to these resources on our mobile network, this could potentially have a material adverse effect on our business, financial condition and results of operations.

Russian law (319-FZ dated July 2, 2021 and 465-FZ dated December 30, 2021) also imposes a variety of related requirements for operators, including:

- compliance with requirements established by Roskomnadzor for communication lines, crossing the Russian state border, and communication facilities, , and requirements to send a compliance notification to Roskomnadzor in order to include the relevant information in the register;
- obligations to connect and send/receive information through a system developed by the radio frequency service, used by operators to monitor compliance with the requirements of the Federal Law "On Communications";
- obligations to transmit free SMS messages with a confirmation code to citizens and legal entities in case of their authentication through the Integrated Identification and Authentication System (IIAS) as well as in case of their significant actions using the IIAS;
- the extension of special features of providing communication services, connection services and traffic transmission services (for example, pricing) to certain other state bodies, local governments and organizations (customers), if they: conclude contracts for such services in accordance with the legislation of the Russian Federation on the contract system and; pay for them using the funds of the budget system of the Russian Federation; and
- prohibitions from suspending or terminating the provision of telecommunication services to the above-mentioned customers after the expiration of the contract.

On January 01, 2023 a law (480-FZ dated December 30, 2021) came into force establishing administrative sanctions for non-compliance with obligations related to the transfer of a subscriber number or a unique identification code and termination of rendering communication services or services for traffic transmission. It also established connection by operators to the system for ensuring their compliance with requirements for the provision of communication services and services for traffic transmission in the public communication network.

The Federal Law No. 625 dated December 29, 2022 introduces additional liability in the telecommunication sector, including certain prescribed matters for the formation and performance of contracts and verification procedures.

On September 1, 2022 amendments came into force that require advertising distributors to provide or ensure the provision of information about advertisements distributed on the Internet, including information about advertisers and advertising distributors, advertising system operator, to Roskomnadzor through the advertising data operator. This legislation lacks sufficient regulation, interpretations from the regulator and law enforcement practice, which may cause difficulties in interpreting these developments.

At the end of 2022 a law was approved banning, among other things, LGBTQ+ propaganda. MTS is monitoring the changes and law enforcement practice, however, it is currently unclear how the law could affect our business.

Currently, the Russian Civil Code undergone substantial revisions, such as Federal Law No.430 dated December 21, 2021 which came into force on March 1, 2023 and, among other things, supplements the Civil Code of the Russian Federation and regulates certain immovable things, land, buildings, structures, and premises. At present, the potential interpretation of these amendments and their impact on our activities is unknown.

Russian companies are obliged to pay various and significant taxes and other non-tax payments, including payments into Universal Service Fund which currently amounts to 1.2% of our annual revenue on telecommunications services. Furthermore, potential future regulatory changes, such as the introduction of new rules regulating MVNOs, and new rules concerning our pricing policy could weaken our competitive position in the mobile telecommunications market. Changes in tax laws and non-tax regulations may lead to the growth of our tax burden and increase of our costs and may, as a result, materially adversely affect our financial condition and results of operations.

The failure of our subsidiaries that are subject to regulations as natural monopolies to comply with the requirements of the Federal Law No. 223 “On Procurement Process,” inter alia, in case of collective tendering, could result in liabilities for subsidiaries.

One of our subsidiaries, MGTS, is categorized as a natural monopoly in the Moscow telecommunications market. According to the Federal Law No. 223 “On Procurement Process,” natural monopolies are obliged to conduct the procurement process in accordance with the principles of transparency and non-discrimination and unjustified limitation of competition. If our subsidiaries that are under additional regulations as natural monopolies are found failing to comply with the law on procurement process, *inter alia* in case of collective tendering with us, our subsidiaries could be subject to certain liability measures, according to Russian legislation. See also “—Risks Relating to Our Business— If we are found to have a dominant position in the markets where we operate and are determined to have abused this position and/or concluded anti-competitive agreements, or found to have committed concerted actions, the FAS may be entitled to impose fines as well as regulate our subscriber tariffs and impose certain restrictions on our operations.”

Russian and foreign legislation on personal data and information security in information systems and communication networks may turn out to be hard to implement and require significant resources. Inability to comply with the requirements may lead to sanctions.

Communication operator activity in the sphere of information security in the Russian Federation is governed by various federal laws and by-laws. The main risks posed by processing and providing security of personal data include the following:

- ambiguity as to how regulation applies to different overlapping categories of data;
- responsibility of personal data operators for the actions of the third parties processing personal data on their behalf;
- requirements to follow prescribed compliance procedures and associated costs;

- replacement of the existing means of information protection with the ones, certified by FSTEC and FSS of Russia, including certification measures; and
- in case of failure to comply with requirements for confirmation of licenses for the technical and cryptographic protection activity of confidential information by FSTEC of Russia or FSS of Russia, the company would not be able to provide the corresponding commercial services to the third parties.

In addition, recent legislation (152-FZ) introduces new requirements for the content of requests to process personal data, including the need to describe the purposes of personal data processing, the list of personal data, actions (operations) performed with personal data and terms of their processing, including obligations to inform personal data operators and Roskomnadzor about data transfers and violations, among other measures.

These changes could materially affect our business, financial condition, results of operations, including through additional compliance measures, associated costs and potential sanctions for non-compliance.

On December 29, 2022 the Federal Law No. 572 came into force (excluding certain provisions) and governs identification or authentication of individuals with use of biometric personal data via the Unified Biometric System (“UBS”) or with use of the UBS vectors. The law prohibits processing of biometric personal data for identification or authentication in information systems of organizations excluding certain cases addressed the law. Adoption of this law and other regulations provided for by it could require additional expenses on means of information protection to provide secure integration with the Unified biometric system.

With effect from May 25, 2018, the General Data Protection Regulation came into force in the European Union which imposes various new data protection and privacy measures and remedies with which we must comply.

In case of non-compliance with information security and personal data protection legislation, we may be subject to penalties by regulatory bodies (including penalties based on our turnover), confiscation of uncertified means of information protection, suspension of business processes for 90 days as well as suspension or withdrawal of the license for the provision of communication services, technical and cryptographic protection of confidential information.

In addition, it is possible that subscribers will file legal claims, seeking reimbursement for tangible and moral damage in connection with the violation of the legislation requirements.

If the resources required to maintain, develop and implement data protection and information security systems meeting applicable legislative requirements are greater than expected, or we fail to comply with the data protection laws despite our best efforts to do so, our business, financial condition and results of operations could be materially adversely affected.

The Russian taxation system is underdeveloped and any imposition of significant additional tax liabilities could have a material adverse effect on our business, financial condition or results of operations.

In general, taxes payable by Russian companies are substantial and numerous. These taxes include, among others, corporate income tax, value added tax, property taxes, excise duties, payroll-related taxes and other taxes.

In addition, intercompany dividends are subject to a withholding tax of 0% or 13% (depending on whether the recipient of dividends qualifies for Russian participation exemption rules), if being distributed to Russian companies, and 15% (or lower, subject to benefits provided by relevant double tax treaties), if being distributed to foreign companies.

Lately the Russian government has taken measures aimed at revising the existing structure and practice of applying agreements on avoidance of double taxation in order to limit the taxpayer’s ability to apply reduced rate (exemptions) when paying dividends and interest in certain jurisdictions. The terms of the agreements have already been revised with a number of jurisdictions in order to increase tax rate on dividends and interest, and are being revised with other ones. Limitation of the taxpayer’s ability to apply reduced rate (exemptions) might lead to higher tax rates, and thus increase our costs.

The Russian tax authorities may take a more assertive position in their interpretation of the legislation and assessments, and it is possible that transactions and activities that have not been challenged in the past may nonetheless be subject to challenges in the future. The foregoing factors raise the risk of the imposition of arbitrary or onerous taxes on us, which could adversely affect the value of our shares.

Current Russian tax legislation is, in general, based upon the formal manner in which transactions are documented, looking to form rather than substance. However, the Russian tax authorities are increasingly taking a “substance and form” approach, which may cause additional tax exposures to arise in the future. Moreover, the Russian Tax Code was amended with direct provisions which prohibit tax benefits, if achieved without real business activities, or the main aim of the transaction was tax benefits. Additional tax exposures could have a material adverse effect on our business, financial condition, results of operations and prospects.

It is expected that Russian tax legislation will become more sophisticated, which may result in the introduction of additional revenue raising measures. Although it is unclear how any new measures would operate, any such introduction may affect our overall tax efficiency and may result in significant additional taxes becoming payable. Additional tax exposures could have a material adverse effect on our business, financial condition, results of operations and prospects.

In addition to the usual tax burden imposed on Russian taxpayers, these conditions complicate tax planning and related business decisions. For example, tax laws are unclear with respect to deductibility of certain expenses. This uncertainty could possibly expose us to significant fines and penalties and to enforcement measures, despite our best efforts at compliance, and could result in a greater than expected tax burden.

See also “Item 8. Financial Information—A. Consolidated Statements and Other Financial Information—7. Litigation—Tax Audits and Claims.”

Lack of law enforcement practice of the Russian anti-offshore policy may have an adverse impact on our business, financial condition and results of operations.

In the past few years, the Russian Federation like a number of other countries in the world has been actively involved in a discussion of measures against tax evasion by the use of low tax jurisdictions as well as aggressive tax planning structures.

The rules of controlled foreign companies (CFC) came into force on January 1, 2015. The rules oblige Russian taxpayers being controlling persons of a foreign company to submit to the tax authorities both standard notifications on participation in CFC and tax declarations in certain cases. Profit generated commencing in 2015, including retained earnings, is subject to taxation in the Russian Federation. The innovations could impose additional tax on the undistributed profits of any foreign entity controlled by us (in proportion to such controlling stake) at the rate of 20%. These innovations caused amendments to the Tax Code providing for liability in case of non-disclosure or incomplete disclosure of information on CFCs and the non-payment or underpayment of relevant tax.

In addition, implementation of new concept of beneficial ownership, with regard to taxation of payment of passive income (dividends, royalty, interest, capital gain), may negatively affect possibility to apply benefits set by the double tax treaties, in case such payments pass through intermediary entities. This may potentially lead to increase of tax burden with regard to such payments.

Lack of law enforcement practice may cause difficulties in interpreting the above-mentioned laws by the Russian tax authorities. It is also currently unclear how the enacted laws could affect our counterparties, which may be registered in offshore jurisdictions.

In case the impact of legislative initiatives is significant for some of our counterparties it may also impact our results of operations.

Vaguely drafted Russian transfer pricing rules, and lack of reliable pricing information may impact our business and results of operations.

Updated transfer pricing rules became effective on January 1, 2012. The implementation of changed rules should have helped to align domestic rules with OECD principles. These rules considerably toughened the previously effective law by, among other things, effectively shifting the burden of proving market prices from the tax authorities to the taxpayer and obliging the taxpayer to keep specific documentation.

Changed transfer pricing rules may increase the risk of transfer pricing adjustments being made by the tax authorities. In addition to the usual tax risks and tax burden imposed on Russian taxpayers, the uncertainties of the transfer pricing rules complicate tax planning and related business decisions. It also requires us to ensure compliance with the specific transfer pricing documentation requirements imposed in such rules. Tax authorities could impose additional tax liability as well as 40% penalties on the underpaid tax in case the prices or profitability are outside the market range and if the required transfer pricing documentation has not been prepared, which could have a material adverse effect on our results of operations and financial condition.

The regulatory environment for telecommunications in Russia and other countries where we operate or may operate in the future is uncertain and subject to political influence or manipulation, which may result in negative and arbitrary regulatory and other decisions against us on the basis of other than legal considerations and in preferential treatment for our competitors.

We operate in an uncertain regulatory environment. The legal framework with respect to the provision of telecommunications services in Russia and the other countries where we operate or may operate in the future is not well developed, and a number of conflicting laws, decrees and regulations apply to the telecommunications sector.

Moreover, regulation is conducted largely through the issuance of licenses and instructions, and governmental officials have a high degree of discretion. In this environment, political influence or manipulation could be used to affect regulatory, tax and other decisions against us on the basis of other than legal considerations. In addition, some of our competitors may receive preferential treatment from the government, potentially giving them an advantage over us.

We are subject to currency control regulations.

The Currency Control Law provides a framework and establishes general rules within which the government of Russia and the Bank of Russia are authorized to introduce certain measures of currency regulation, in connection with which there may be some uncertainty in the process of our implementation of foreign exchange operations when importing equipment.

The change in the currency regulation may negatively affect our performance of obligations under contracts previously concluded with Russian and foreign counterparties, requiring us to make payments on them in foreign currency and necessitating the conclusion of additional agreements in relation to the relevant contracts. As a result, we are exposed to the risks of changes in the currency regulation and foreign exchange control in Russia. See also “—Political and Social Risks—Geopolitical situation and sanctions imposed as a result of current political environment could materially adversely affect our business, financial condition, results of operations, prospects and the value of our shares.”

The regulation of critical information infrastructure in the Russian Federation may lead to additional costs which could have a material adverse effect on our business, financial condition, results of operations and prospects.

Federal Law No. 187 “On the Security of the Critical Information Infrastructure of the Russian Federation” which came into force on January 1, 2018 (the “**Law on CII**”) provides for the creation of a register of significant critical information infrastructure (CII) objects, to which the communication networks elements may be assigned (after the classification of CII objects). Both state-owned and non-state-owned organizations are classified as subjects of the CII.

The law envisages criminal penalties if the security requirements in respect of such significant CII objects are not met and damage is incurred. CII subjects, including communication operators, are required to, among other things:

- categorize CII objects;
- sent the results of CII objects categorization with the authorized bodies;
- create a security system for significant CII objects and implement measures targeted at significant CII protection and protection of information, belonging to the corresponding category;
- set up and provide the operations of means for attacks search on the communication network with the transfer of management to the authorized body; and

- organize transfer of information about computer incidents on the CII to the authorized body.

The by-laws envisage measures aimed at CII objects protection, which are difficult to implement, especially as regards the implementation of information protection measures that are not provided by such communication standards as 3GPP, ETSI, etc., which may lead to incompliance with the regulatory requirements. The implementation of these requirements will require additional costs to be incurred. Requirements of Federal Service for Technology and Export Control of the Russian Federation and the Ministry of Communications (orders No. 239 and No. 582) restrict remote access to CII objects, which may affect possibility to provide warranty and technical support of communication infrastructure by foreign vendor agents.

The Decree of the President of the Russian Federation No. 166 «On economic measures to ensure technological independence and security of critical information infrastructure objects» dated March 30, 2022 provides an obligation of operators to use only Russian equipment and software at CII objects.

The Decree of the President of the Russian Federation No. 250 dated May 5, 2022 introduced personal liability of heads of the CII subjects in order to ensure the information security of organizations. Starting from 2025, CII subjects are prohibited to use information security means created in certain foreign states.

Compliance with the requirements of the laws and regulations or introduction of similar regulations may require additional costs to be incurred by us or otherwise negatively affect us and could have a material adverse effect on our business, financial condition, results of operations and prospects.

Risks Relating to the Shares and ADSs and the Trading Market

ADS holders who have not yet converted their ADSs into shares may face difficulties (including a loss of value) in converting their ADSs into shares or may even be unable to do so.

The Federal Law No.114 dated April 16, 2022 “On Amendments to the Federal Law “On Joint Stock Companies” and certain legislative acts of the Russian Federation” requires termination of foreign depository programs, under which the depository receipts of such companies (including the Company) are listed on foreign stock exchanges programs. As a result of these legislative acts, on June 9, 2022 the Company terminated the Deposit Agreement with J.P. Morgan Bank International, who was the Russian depository which accounted for the ADSs under the Company’s ADS program held by JPMorgan Chase Bank, N.A. In light of the Company’s termination of the Deposit Agreement, on July 13, 2022 the Company’s ADSs ceased trading and were subsequently delisted from the NYSE on August 8, 2022.

Pursuant to the unwinding of the ADS program, an automatic conversion process applied to Russian depositories that accounted for ADSs where such ADSs were written off from the holders’ accounts and shares in the Company were credited instead. This process was commenced around August 16, 2022 and concluded about three weeks later. If the receipts are held on the holder's account with a foreign broker (custodian), with blocking sanctions imposed on the holder of the receipts, the broker (custodian) or the custodian in the chain of nominal holdings (in particular, NSD) the conversion was possible through a forced conversion mechanism. The deadline for submitting forced conversion applications expired on November 11, 2022. Under the terms of the Deposit Agreement, the period guaranteed for converting ADRs into ordinary shares ended on January 12, 2023 (inclusive), whereafter, as we understand, the depository may continue to convert ADRs into ordinary shares and/or sell unconverted ordinary shares to distribute the proceeds of sale among ADRs holders. In all the types of conversion processes, ADSs were converted into shares at a ratio of 1 ADS to 2 shares. ADS holders who failed to convert their ADSs into shares by the deadline may now face difficulties (including a loss of value) in converting their ADSs into shares or may even be unable to do so. The ability to convert ADSs into shares and the allotment of the resulting shares to persons who hold the ADS depends on the structure through which the ADSs are held. For example, conversion may not be possible where blocking sanctions are imposed on the holder of the ADSs, the broker (custodian) or the custodian in the chain of nominal holdings. In particular, the chain of holding includes the NSD.

In addition, there may be other adverse implications arising from the conversion process. For example, when ADSs belonging to certain non-residents are converted into shares, the resulting shares are to be credited to a C-type depository account for which restrictions on transactions were imposed. ADS holders may also face challenges in seeking to claim unpaid dividends from July 13, 2022 and until the conversion of the ADSs into shares.

Under the terms of the ADS unwinding program, after January 13, 2023, J.P. Morgan Bank International as depositary commenced a process pursuant to which it is currently endeavoring to sell any shares represented by the ADSs that have not been cancelled as a result of the conversion. The resulting proceeds from such sales shall be held for the benefit of the ADS holders (in proportion to the rights of each such holder and without liability to accrue interest). However, there are risks and challenges associated with this sales process. In particular, there is no guarantee that J.P. Morgan Bank International will be able to sell such shares for their full value and what the timing of such sale shall be. Accordingly, ADS holders who have not yet converted may not realize the full value of their underlying shares, for example, if J.P. Morgan Bank International needs to sell such shares at a discount. See also “Item 10. Additional Information – B. Charter and Certain Requirements of Russian Legislation – Registration and Transfer of Shares”. In addition, the current legislative measures of the Russian Federation contain certain restrictions on the sale of shares by depositaries. Accordingly, it is difficult for the Company to anticipate the exact consequences for those holders who failed to convert their ADSs by the deadline.

Finally, the Company is of the view that the regulatory landscape is highly volatile and legislative measures affecting the holders of ADSs and shares are rapidly changing in response to the current geopolitical environment. In addition, the specific circumstances of an ADS holder may impact the particular challenges faced by that ADS holder. Accordingly, there may be other implications or challenges facing ADS holders in addition to those mentioned in this document.

The market price of our shares has been and may continue to be volatile.

The market price of our shares has experienced, and may continue to experience, significant volatility. Volatility continued to increase over the past year, including as trading in our ADSs on NYSE was suspended on 28 February 2022, following the suspension of all trading on the Moscow Exchange on the same day. See also “—Political and Social Risks—Geopolitical situation and sanctions imposed as a result of current political environment could materially adversely affect our business, financial condition, results of operations, prospects and the value of our shares.”

Numerous factors, including many over which we have no control, may have a significant impact on the market price of our shares, including, among other things:

- geopolitical situation;
- periods of regional or global volatility, including macroeconomic volatility;
- announcements of technological or competitive developments;
- governmental policies and regulatory developments in our target markets affecting us, our customers or our competitors;
- actual or anticipated fluctuations in our quarterly operating results;
- changes in financial estimates or other material comments by securities analysts relating to us, our competitors or our industry in general;
- foreign exchange fluctuations;
- change of the key interest rates by world banks;
- announcements by other companies in our industry relating to their operations, strategic initiatives, financial condition or financial performance or to our industry in general;
- announcements of acquisitions or consolidations involving industry competitors or industry suppliers;
- sales or perceived sales of additional ordinary shares by us or our significant shareholders; and
- impact and development of any investigation or lawsuit, currently pending or threatened, or that may be instituted in the future.

In addition, the stock market in recent years has experienced extreme price and trading volume fluctuations that often have been unrelated or disproportionate to the operating performance of individual companies. These broad market fluctuations may adversely affect the price of our shares, regardless of our operating performance.

Shareholders may be unable to repatriate distributions made on the shares.

We anticipate that any dividends we may pay in the future on the shares will be declared and paid in rubles. See also “Item 10. Additional Information — B. Charter and Certain Requirements of Russian Legislation — Dividends.” A shareholder’s ability to convert rubles into U.S. dollars or other currencies is subject to the availability of U.S. dollars or such other currency in Russia’s currency markets.

Although there is an existing, albeit limited, market within Russia for the conversion of rubles into U.S. dollars and other currencies, including the interbank currency exchange and over-the-counter and currency futures markets, the further development of this market is uncertain. At present, there is a limited market for the conversion of rubles into foreign currencies outside of Russia and limited market in which to hedge ruble and ruble-denominated investments.

If we were classified as a “passive foreign investment company” (a “PFIC”) for U.S. federal income tax purposes, U.S. holders of our shares could be subject to adverse U.S. federal income tax consequences.

In general, we will be a PFIC for any taxable year in which either: (i) at least 75% of our gross income for such taxable year consists of passive income (e.g., dividends, interest, capital gains, rents, and royalties, other than rents or royalties derived in the active conduct of a trade or rental business); or (ii) at least 50% of the value of our assets (generally determined on the basis of a quarterly average) is attributable to assets that produce, or are held for the production of, passive income. Our PFIC status is an annual determination that can be made only after the end of each taxable year, and will depend on the composition of our income and assets and the value of our assets from time to time, including goodwill (which may be determined by reference to the market value of our shares, which may fluctuate), and the manner in which we operate our business. Recent volatility in the global capital markets could increase the risk that we might be classified as a PFIC in the current taxable year or in future taxable years. Accordingly, there can be no assurance that we will not be a PFIC for any taxable year.

If we were classified as a PFIC for any year in which a “U.S. Holder” (as defined under “Certain United States Federal Income Tax Consequences”) owns our shares, the U.S. Holder could be subject to adverse U.S. federal income tax consequences. For any year during which a U.S. Holder held the shares, we will continue to be treated as a PFIC with respect to that U.S. Holder for all succeeding years during which the U.S. Holder held the shares, unless we cease to be a PFIC and the U.S. Holder has made certain “purging” elections with respect to the shares. Each U.S. Holder of the shares should consult its tax advisor regarding the PFIC rules and should read the discussion below under “Certain United States Federal Income Tax Consequences — Passive Foreign Investment Company Considerations.”

Capital gain from the sale of shares may be subject to Russian income tax.

Income received by a foreign company from the sale, exchange or other disposal (assuming that such income is not related to a permanent establishment of a foreign company in Russia) of shares (participation interest) in an organization in which over 50% of the assets consist of immovable property located in Russia, as well as financial instruments derived from such shares, is treated as income derived from a source in the Russian Federation and is subject to withholding tax at a rate of 20%. However, gains arising from the disposition of the securities, which are traded on an organized stock exchange, are not treated as Russian-source income, and should not be subject to taxation in Russia.

The amount of such income is typically determined as the sales price of shares (participation interest). However, if documentary support for the acquisition cost of the shares (participation interest) is available, the tax may instead be assessed on the basis of the difference between the sales price and the acquisition cost (including other related costs) if documentary evidence of such costs is submitted to the tax agent. The Russian Tax Code also establishes special rules for calculating the tax base for the purposes of transactions with securities. However, an exemption applies if immovable property located in Russia constitutes more than 50% of a company's assets and the securities are traded on a foreign stock exchange. The determination of whether more than 50% of our assets consist of immovable property located in Russia is inherently factual and is made on an on-going basis and the relevant Russian legislation and regulations in this respect are not entirely clear. Hence, there can be no assurance that immovable property owned by us and located in Russia does not currently and will not constitute more than 50% of our assets as at the date of the sale of shares by non-residents.

Where the shares are sold by legal entities or organizations to persons other than a Russian company or a foreign company or an organization with a registered permanent establishment in Russia, even if the resulting capital gain is considered taxable in Russia, there is currently no mechanism under which the purchaser will be able to withhold the tax and remit it to the Russian budget.

Under the United States / Russia income tax treaty, capital gains from the sale of shares by eligible U.S. holders should be relieved from taxation in Russia, unless 50% or more of our assets (the term "fixed assets" is used in the Russian version of the treaty) were to consist of immovable property located in Russia.

The taxation of income of non-resident individuals depends on whether this income is received from Russian or non-Russian sources. Russian tax law does not give a definition of how the "source of income" should be determined with respect to the sale of securities, other than that income from the sale of securities, which takes place "in Russia" should be considered as Russian source income. As there is no further definition of what should be considered to be a sale "in Russia," the Russian tax authorities have a certain amount of freedom to conclude what transactions take place in or outside Russia, including looking at the place of the transaction, the place of the issuer of the shares, the location of the registrar recording the transfer of legal title to the relevant securities or other similar criteria.

Non-residents who are individuals are taxable on Russian-source income. Provided that gains arising from the disposition of the foregoing types of securities and derivatives outside of Russia by U.S. holders who are individuals not resident in Russia for tax purposes will not be considered Russian source income, then such income should not be taxable in Russia. However, gains arising from the disposition of the same securities and derivatives "in Russia" by U.S. holders who are individuals not resident in Russia for tax purposes may be subject to tax either at the source in Russia or based on an annual tax return, which they may be required to submit with the Russian tax authorities. See also "Item 10. Additional Information—E. Taxation."

The lack of a central and rigorously regulated share registration system in Russia may result in improper record ownership of our shares.

Ownership of Russian joint-stock company shares (or, if the shares are held through a nominee or custodian, then the holding of such nominee or custodian) is determined by entries in a share register and is evidenced by extracts from that register. Currently, there is no single central registration system in Russia. Share registers can be maintained only by licensed registrars located throughout Russia. Regulations have been adopted regarding the licensing conditions for such registrars, as well as the procedures to be followed by licensed registrars when performing the functions of registrar. In practice, however, these regulations have not been strictly enforced, and registrars generally have relatively low levels of capitalization and inadequate insurance coverage. Moreover, registrars are not necessarily subject to effective governmental supervision. Due to the lack of a central and rigorously regulated share registration system in Russia, transactions in respect of a company's shares could be improperly or inaccurately recorded, and share registration could be lost through fraud, negligence or oversight by registrars incapable of compensating shareholders for their misconduct. This creates risks of loss not normally associated with investments in other securities markets. See "Item 10. Additional Information — Charter and Certain Requirements of Russian Legislation — Registration and Transfer of Shares." and "—ADS holders who have not yet converted their ADSs into shares may face difficulties (including a loss) in converting their ADSs into shares or may even be unable to do so."

Foreign judgments may not be enforceable against us.

Our presence outside the United States may limit your legal recourse against us. We are incorporated under the laws of the Russian Federation. Substantially all of our directors and executive officers named in this document reside outside the United States. All or a substantial portion of our assets and the assets of our officers and directors are located outside the United States. As a result, you may not be able to effect service of process within the United States on us or on our officers and directors. Similarly, you may not be able to obtain or enforce U.S. court judgments against us, our officers and directors, including actions based on the civil liability provisions of the U.S. securities laws.

In addition, it may be difficult for you to enforce, in original actions brought in courts in jurisdictions outside the United States, liabilities predicated upon U.S. securities laws.

There is no treaty between the United States and the Russian Federation providing for reciprocal recognition and enforcement of foreign court judgments in civil and commercial matters. These limitations may deprive you of effective legal recourse for claims related to your investment in our shares. The Russian Federation is a party to the United Nations (New York) Convention on the Recognition and Enforcement of Foreign Arbitral Awards, but it may be difficult to enforce arbitral awards in the Russian Federation due to a number of factors, including the inexperience of Russian courts in international commercial transactions, official and unofficial political resistance to enforcement of awards against Russian companies in favor of foreign investors and Russian courts' inability to enforce such orders and corruption. Current geopolitical situation may increase the likelihood of these challenges when seeking to enforce foreign judgments.

Risks Relating to our Financial Condition

We may be adversely affected by the current economic environment.

Macroeconomic challenges, resulting from a number of reasons, including but not limited to, the geopolitical developments, the COVID-19 pandemic, credit market crisis (including uncertainties with respect to financial institutions and the global capital markets), volatility of prices for major export commodities (including oil and metals), microchip shortages and other factors, currently affecting many of the markets in which we operate, may negatively impact our clients' disposable incomes and our vendors' cash flows. See also “—Ruble volatility and regulatory changes in foreign currency regulation could increase our costs, decrease our available funds or make it more difficult for us to comply with financial covenants and to repay our debts and would affect the value of dividends received by holders of shares”.

Consequently, customers may modify or decrease their usage of our services and products or fail to pay the outstanding balances on their accounts, and vendors may significantly increase their prices, eliminate vendor financing, reduce their output, decrease quality or fail to supply equipment, subscriber devices and services on a timely basis.

We may also experience increases in accounts receivable and bad debt among corporate subscribers, some of whom may face liquidity problems and potential bankruptcy, as well as the potential bankruptcy of our corporate partners. The deterioration of economies in the countries of our operation may lead, inter alia, to insolvency of financial institutions, which in turn may affect our business and financial condition.

A decline in subscriber usage, an increase in bad debts, material changes in equipment pricing or financing terms or the potential bankruptcy of our corporate subscribers or partners may have a material adverse effect on our business, financial condition, results of operations and prospects.

In addition, a further deterioration in macroeconomic conditions could require us to reassess the value of goodwill on certain of our assets, recorded as a difference between the fair value of the assets of business acquired and its purchase price. This goodwill is subject to impairment tests on an ongoing basis. The weakening macroeconomic conditions in the countries in which we operate and/or a significant difference between the performance of an acquired company and the business case assumed at the time of acquisition could require us to write down the value of the goodwill or portion of such value. Future write-downs relating to the value of the goodwill or portion of such value could have a material adverse effect on our financial condition and results of operations. Likewise, the current geopolitical situation might also have an impact on the value of our business goodwill. See also “—Political and Social Risks—Geopolitical situation and sanctions imposed as a result of current political environment could materially adversely affect our business, financial condition, results of operations, prospects and the value of our shares.”

Continued turmoil in the credit markets could cause our business, financial condition, results of operations and the value of our shares to suffer.

Sanctions introduced by the United States, European Union, Switzerland, United Kingdom and other countries with respect to the Russian Federation coupled with an economic downturn caused a significant capital outflow, ruble depreciation, a rise of credit rates in the domestic market and a lack of available financing.

In February 2022, the Bank of Russia raised the key rate from 8.5% to 20%, and starting from April 2022 gradually reduced the rate down to 7.5% by September 2022. Growth of the key rate may negatively affect the cost of funding. See also “—Political and Social Risks—Geopolitical situation and sanctions imposed as a result of current political environment could materially adversely affect our business, financial condition, results of operations, prospects and the value of our shares.”

A continuation or repetition of the downturn in the global or regional financial markets as well as a toughening or extension of international sanctions against Russia and the resulting volatility of the trading price of our shares may negatively impact our ability to obtain financing on commercially reasonable terms, either domestically or overseas, and could have a material adverse effect on our business, financial condition, results of operations and prospects.

Our inability to generate sufficient free cash flow to satisfy our debt service obligations, or to refinance debt on commercially reasonable terms, could materially adversely affect our business, financial condition, results of operations and prospects.

We have an amount of outstanding indebtedness, primarily consisting of the obligations we entered into in connection with our notes and bank loans. Also see Note 28 to our audited consolidated financial statements. For information about our debt and finance cost, see “Item 5. Operating and Financial Review and Prospects—A. Operating Results.”

Our ability to service, repay and refinance our indebtedness and to fund planned capital expenditure will depend on our ability to generate cash in the future. This, to a certain extent, is subject to general economic, financial, competitive, legislative, regulatory and other factors that are beyond our control. If we are unable to generate sufficient cash flow or otherwise obtain funds necessary to make required payments, we may default under the terms of our financial indebtedness, and the holders of our indebtedness would be able to accelerate the maturity of such indebtedness, potentially causing cross-defaults under and acceleration of our other indebtedness. The existing debt servicing is becoming more difficult due to our dependence on floating interest rates in the financial markets.

We may not be able to generate sufficient cash flow or access domestic or international capital markets, or incur additional loans to enable us to service or repay our indebtedness or to fund our other liquidity needs. We may be required to refinance all or a portion of our indebtedness on or before maturity for a number of reasons. This, in turn, may force us to sell assets, reduce or delay capital expenditure or seek additional capital. Refinancing or additional financing may not be available on commercially reasonable terms or at all, and we may not be able to sell our assets or, if sold, the proceeds therefrom may not be sufficient to meet our debt service obligations. Our inability to generate sufficient cash flow to satisfy our debt service obligations, or to refinance debt on commercially reasonable terms, would materially adversely affect our business, financial condition, results of operations and prospects. See “Item 5. Operating and Financial Review and Prospects—B. Liquidity and Capital Resources.”

Ruble volatility and regulatory changes in foreign currency regulation could increase our costs, decrease our available funds or make it more difficult for us to comply with financial covenants and to repay our debts and would affect the value of dividends received by holders of shares.

Recent ruble volatility can be explained by external geopolitical factors, limited financial markets, change in oil prices, change in internal consumption and other factors.

As of December 31, 2020, ruble amounted to 73.88 per one U.S. dollar. As of December 31, 2021 and December 31, 2022, the ruble exchange rate was RUB 74.29 per 1 U.S. dollar and RUB 70.34 per 1 U.S. dollar, respectively. During 2022, the ruble hit a low of 120.38 per US dollar. See also “—Fluctuations in the global economy may materially adversely affect the economies of the countries where we operate and our business in these countries.” and “—Political and Social Risks—Geopolitical situation and sanctions imposed as a result of current political environment could materially adversely affect our business, financial condition, results of operations, prospects and the value of our shares.”

See also “—Changes in the exchange rate of local currencies in the countries where we operate against the Russian ruble, as well as changes in the exchange rate of the Russian ruble and local currencies against the U.S. dollar and/or euro could adversely impact our financial results.”

The stability of the ruble will depend on many political and economic factors. These include the ability of the government to finance the deficit of the state budget without recourse to monetary emissions and to control the level of interest rates and inflation. Furthermore, changes in foreign currency regulation may affect our ability to fund payments denominated in foreign currency and result in us entering into supplementary agreements with our foreign counterparts.

A significant portion of our capital expenditure and liabilities are either denominated in or tightly linked to the U.S. dollar. Conversely, a majority of our revenues are denominated in rubles. As a result, devaluation of the ruble against the U.S. dollar can adversely affect us by increasing our costs in rubles, both in absolute terms and relative to our revenues, and make it more difficult to comply with the financial ratios contained in our various loan agreements or fund cash payments on our indebtedness on time. It also reduces the U.S. dollar value of tax savings arising from tax incentives for capital investment and the depreciation of our property, plant and equipment, since their basis for tax purposes is denominated in rubles at the time of the investment. Increased tax liability would also increase total expenses, which would have an adverse impact on our results.

We also anticipate that any dividends we may pay in the future will be declared and paid in rubles. See also “—Risks Relating to the Shares and ADSs and the Trading Market—Shareholders may be unable to repatriate distributions made on the shares”. Any further depreciation of the ruble against the U.S. dollar or other foreign currencies could therefore materially adversely affect our financial condition, results of operations and prospects and the value of our shares. See also “Item 11. Quantitative and Qualitative Disclosures about Market Risk—Foreign Currency Risk.”

Changes in the exchange rate of local currencies in the countries where we operate against the Russian ruble, as well as changes in the exchange rate of the Russian ruble and local currencies against the U.S. dollar and/or euro could adversely impact our financial results.

Our expenditure, including capital expenditure, is denominated in, or closely linked to, the Ruble, the U.S. dollar, euro and/or yuan, while substantially all of our revenues are denominated in local currencies of the countries where we operate. The devaluation of local currencies against the Russian ruble can adversely affect our revenues reported in Russian rubles and increase our costs in terms of local currencies. In addition, local regulatory restrictions on the purchase of hard currency in the majority of countries where we operate may delay our ability to purchase equipment and services necessary for network expansion which, in turn, may cause difficulty in expanding our subscriber base in those countries. Further, a portion of our cash balances is held in jurisdictions outside Russia, and as a result of currency exchange controls in those jurisdictions, these cash balances may not always be readily available for our use.

In addition, a portion of our liabilities and borrowings (including our U.S. dollar denominated notes) are also either denominated in or tightly linked to the U.S. dollar or euro. A significant part of these is hedged through financial instruments with various banks, though the risk that such hedging is not fully effective remains.

The possible devaluation of the Belarusian ruble in the future may also adversely affect our revenues from this market.

See also “—Inflation could increase our costs and adversely affect our results of operations” and “Item 11. Quantitative and Qualitative Disclosures about Market Risk—Foreign Currency Risk.”

If we are unable to obtain adequate capital, we may have to limit our operations substantially, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

We have to make significant capital expenditure, particularly in connection with the development, construction and maintenance of, and the purchasing of necessary software for, our mobile and fixed-line networks. For information about our capital expenditures, see “Item 4. Information on Our Company—A. History and Development—Capital Expenditure.” Further, the acquisition of 3G and 4G licenses and frequency allocations and the build-out of our 3G, 4G, 5G and broadband Internet networks will require additional capital expenditure.

However, future financings and cash flow from our operations may not be sufficient to meet our planned needs in the event of various unanticipated potential developments, including the following:

- a lack of external financing sources;
- changes in the terms of existing financing arrangements;
- construction of the wireless networks at a faster rate or higher capital cost than anticipated;
- pursuit of new business opportunities or investing in existing businesses that require significant investment;
- acquisitions or development of any additional wireless licenses;
- slower than anticipated subscriber growth;
- slower than anticipated revenue growth;
- regulatory developments;
- changes in existing interconnect arrangements; or
- a deterioration in the economies of the countries where we operate.

International economic sanctions may also adversely affect our ability to gain external funding. See also “—Political and Social Risks—Geopolitical situation and sanctions imposed as a result of current political environment could materially adversely affect our business, financial condition, results of operations, prospects and the value of our shares.”

Our indebtedness and the limits imposed by covenants in our debt obligations could limit our ability to obtain additional financing and thereby constrain our ability to invest in our business and place us at a possible competitive disadvantage. If we cannot obtain adequate funds to satisfy our capital requirements, we may need to limit our operations significantly, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

Inflation could increase our costs and adversely affect our results of operations.

The Russian economy has been characterized by high rates of inflation, which over the past few years have been mainly driven by weakening of national currencies, restrictions on foreign trade and acceleration in food prices.

According to the Bank of Russia, the inflation rate in Russia reached 11.9% in 2022. On January 11, 2023, the Ministry of Finance announced the resumption of foreign currency sale as part of the budget rule mechanism. This resulted in weak pro-inflationary effects to occur due to the budget deficit. According to the forecast of the Bank of Russia, annual inflation may decline to 5.0-7.0% in 2023.

In 2022, the annual rise of consumer prices published by the National Bank of the Republic of Belarus amounted to 12.8%.

High rates of inflation in Russia and other countries of our operation could increase our costs and decrease our operating margins. See also “Item 5. Operating and Financial Review and Prospects—A. Operating Results—Certain Factors Affecting our Financial Position and Results of Operations—Inflation.” and “—Political and Social Risks—Geopolitical situation and sanctions imposed as a result of current political environment could materially adversely affect our business, financial condition, results of operations, prospects and the value of our shares.”

See also “—Changes in the exchange rate of local currencies in the countries where we operate against the Russian ruble, as well as changes in the exchange rate of the Russian ruble and local currencies against the U.S. dollar and/or euro could adversely impact our financial results” and “Item 11. Quantitative and Qualitative Disclosures about Market Risk—Foreign Currency Risk.”

Indentures relating to some of our notes contain, and some of our loan agreements contain, restrictive covenants, which limit our ability to incur debt and to engage in various activities.

Covenants in the loan agreement relating to MTS-23 Eurobonds (ISIN XS0921331509) due 2023 limit our ability to create liens on our properties, merge or consolidate with another person or convey our properties and assets to another person. Pursuant to the terms of the Extraordinary Resolution passed on December 13, 2022, amongst other things, Amended Payment Mechanics was introduced allowing for the coupon payment and repayment of Eurobonds principal amount to be made in Rubles at the Central Bank of Russia foreign exchange rate.

Some of our loan agreements contain similar and other covenants, including, in relation to the incurrence of indebtedness, creation of liens and disposal of assets. We may also incur additional credit obligations providing for similar covenants. Failure to comply with these covenants may cause a default and result in the debt becoming immediately due and payable, which would materially adversely affect our business, financial condition and results of operations.

A material adverse effect on our financial condition and results of operations could occur if redemption rights of our noteholders are invoked.

Under the terms of the notes, upon occurrence of the circumstances described below, noteholders will have the right to require us to redeem notes not previously called for redemption. The price upon such event will be 101% of the principal amount of the notes, plus interest accrued prior to the redemption date. Such redemption scenario could be triggered, with respect to the notes due 2023, if any person (with certain exceptions) acquires beneficial or legal ownership of, or control over, more than 50% of our issued shares, ownership of or control over more than 50% of the voting interests in our share capital or obtains the power to elect not less than half of our directors.

Some of our loan agreements contain similar redemption provisions triggered by occurrence of similar events. If such events occur, and our noteholders and other debt holders exercise their right to require us to redeem all of their notes or debt, such event could have a material adverse effect on our financial condition and results of operations.

In addition, under certain of our debt agreements, an event of default may be deemed to have occurred and/or we may be required to make a prepayment if Sistema disposes of its stake in our company and a third party takes a controlling position in our company. The occurrence of any such event of default or failure to make any required prepayment, which leads to an event of default, could trigger cross default / cross acceleration provisions under certain of our other debt agreements. In such event, our obligations under one or more of these agreements could become immediately due and payable, which would have a material adverse effect on our business and our shareholders' equity.

However, until July 1, 2023, in accordance with Article 27 of Federal Law No. 519-FZ of 19.12.2022 "On Amendments to Certain Legislative Acts of the Russian Federation and Suspension of Certain Provisions of Legislative Acts of the Russian Federation" (hereinafter referred to as FZ of 19.12.2022 No. 519-FZ), the creditor cannot demand early repayment bonds in the event that:

- the issuer of the bonds fulfills its obligations in accordance with the temporary procedure for fulfilling obligations to certain creditors;
- non-fulfillment or improper fulfillment of obligations by the issuer of bonds is caused by non-financial circumstances that could not be prevented by the issuer.

The rules apply both to bonds issued under the law of the Russian Federation and under foreign law. Similar rules apply to loan obligations.

Risks Relating to Business Operations in Emerging Markets

Emerging markets such as the Russian Federation and other CIS countries are subject to greater risks than more developed markets, including significant legal, economic, social, regulatory, tax and political risks.

Investors in emerging markets such as the Russian Federation, Armenia, Belarus and other CIS countries should be aware that these markets are subject to greater risk than more developed markets, including in some cases, significant legal, economic, social, regulatory, tax and political risks. Investors should also note that emerging economies such as the economies of the Russian Federation and other CIS countries are subject to rapid change and that the information set out herein may become outdated relatively quickly.

There are a number of risks associated with investing in emerging markets, including the following:

- volatility of emerging markets (for more information, see “—Risks Relating to Economic Risks in Our Countries of Operation” and “—Legal Risks and Uncertainties”);
- high volatility of national currencies (for more information, see “—Risks Relating to our Financial Condition”);
- possible geopolitical disputes (for more information, see “—Political and Social Risks”); and
- possible liquidity constraints (for more information, see “—Risks Relating to Economic Risks in Our Countries of Operation” and “—Risks Relating to our Financial Condition”).

For example, in September 2020, martial law was declared in Armenia due to escalation of the conflict in Nagorno-Karabakh. As of the end of 2022, the situation in the region remained tense. Political environment could have a negative effect on the Armenian economy as well as our business, financial position and results of operations. See also “—Political and Social Risks—Geopolitical situation and sanctions imposed as a result of current political environment, could materially adversely affect our business, financial condition, results of operations, prospects and the value of our shares.”

Accordingly, investors should exercise particular care in evaluating the risks involved and must decide for themselves whether, in light of those risks, their investment is appropriate. Generally, investment in emerging markets is suitable for sophisticated investors who fully appreciate the significance of the risks involved and investors are urged to consult with their own legal and financial advisors before making an investment in our securities.

Risks Relating to Our Business

The telecommunications and digital services market is characterized by rapid technological change, which could render our services obsolete or non-competitive and result in the loss of our market share and a decrease in our revenues.

The telecommunications industry as well as the digital services sector are subject to rapid and significant changes in technology and are characterized by the continuous introduction of new products and services. The mobile telecommunications and digital services industries in Russia are also experiencing significant technological change, as evidenced by the constant technological evolution of standards for radio telecommunications, such as Long Term Evolution (“LTE”), 5G, as well as ongoing improvements in the capacity and quality of communications, shorter development cycles for new products and enhancements and changes in customer requirements and preferences. Such continuing technological advances make it difficult to predict the extent of the future competition we may face and it is possible that existing, proposed or as yet undeveloped technologies will become dominant in the future and render the technologies we use less profitable or even obsolete. New products and services that are more commercially effective than our products and services may also be developed. Furthermore, we may not be successful in responding in a timely and cost-effective way to keep up with these developments. Changing our products or services in response to market demand may require the adoption of new technologies that could render many of the technologies that we are currently implementing less competitive or obsolete. To respond successfully to technological advances and emerging industry standards, we may require substantial capital expenditure and access to related or enabling technologies in order to integrate the new technology with our existing technology.

We face increasing competition in the markets where we operate, which may result in reduced operating margins and loss of market share, as well as different pricing, service or marketing policies.

The telecommunication and digital services markets where we operate are highly competitive, particularly in Russia.

Competition is generally based on price, product functionality, range of service offerings and customer service.

Generally, increased levels of competition, including potential entry of new companies, particularly new mobile operators, government-backed operators, mobile virtual network operators, operators of satellite TV and alternative fixed line operators, as well as the strengthening of existing companies, increased use of IP-telephony and other services provided via the internet, may adversely affect our ability to keep the level of revenue which we receive from our operations on the telecom and other digital markets. This in turn could result in reduced operating margins and a loss of market share and may have a material adverse effect on our business, financial condition and results of our operations.

Competition in the Russian market

Our principal wireless competitors in Russia are Public Joint Stock Company “Vimpel-Communications” (“VEON”), Public Joint Stock Company MegaFon (“MegaFon”), as well as the federal cellular operator established in 2014 by the combination of Tele2 Russia and the mobile assets of Public Joint Stock Company “Rostelecom” (“Rostelecom”). We also face competition from several regional operators. In addition, we face competition in the fixed line telecommunications business, in particular from Rostelecom.

In the area of digital services, we compete with Russian technological companies which are focused on developing digital services, as part of either new or existing core elements of their business. Digital markets are growing strongly, driven both by a natural trend and other factors, which has dramatically increased online consumption and the importance of digital sales channels. Due to these market dynamics, current positions of market participants are subject to significant change in the near to medium term.

See also “—If we cannot interconnect cost-effectively with other telecommunications operators, we may be unable to provide services at competitive prices, which may diminish our market share and result in a loss of revenues and margins” below.

Competition in the foreign markets of our operation

In Belarus, our associate, MTS Belarus, while maintaining its leadership in the market in 2022, faced increasing competition and aggressive pricing from the main competitors – Best CJSC, a subsidiary of Turkcell İletişim Hizmetleri A.Ş. (“Turkcell”), which operates in Belarus under the “life:” brand and A1 (a subsidiary of A1 Telekom Austria Group) which actively promotes convergent services. The Belarus government has made several attempts to privatize its 51% stake in MTS Belarus, but future efforts in this regard are uncertain. If such stake is again offered for sale and we are unable to acquire this ownership interest at a commercially reasonable price, or if it is acquired by one of our competitors, it may impact our competitive position and results of operations in Belarus.

The change in ownership structure of Belarusian Cloud Technologies LLC (beCloud brand), which is the unified 4G infrastructure operator in Belarus, was effected at the end of 2021. The state acquired full control over the beCloud operation: Republican unitary enterprise “National traffic exchange center” increased its ownership to 60%, the Republican Unitary Enterprise Beltelecom (owns 51% stake in Mobile TeleSystems JLLC) acquired a 40% stake. In January 2022, Beltelecom gained a license to provide mobile communications services, which will allow the company to compete in the mobile communications market. In March 2022, the Belarusian operator BeST CJSC (brand name – “life”) signed an investment agreement, which assumes some state preferences and benefits.

We also face competition in Armenia. In October 2020, VEON telecommunications holding (under the Beeline brand) reached an agreement to sell its business in Armenia to the local telecommunications company Team LLC. In the beginning of 2022, the Public Service Regulatory Commission of Armenia approved the sale of 100% of the shares of Filor Ventures Limited, the only stockholder of Rostelecom Armenia, (GNC-Alfa, subsidiary of Rostelecom). Details and further course of the transaction were not disclosed. If one of our competitors buys this asset, it could have negative effect on our business, financial condition and results of operations in Armenia. In 2022, both in Armenia and in Belarus our competitors actively promoted converged products based on their own fixed networks, which may adversely impact our subsidiaries’ subscriber churn in these countries.

We are subject to anti-corruption laws in the jurisdictions in which we operate, including anti-corruption laws of Russia and the US Foreign Corrupt Practices Act (the “FCPA”), and we may be subject to the UK Bribery Act 2010 (the “UK Bribery Act”). Our failure to comply therewith could result in penalties which could harm our reputation and have a material adverse effect on our business, financial condition and results of operations.

We are subject to the FCPA, which generally prohibits companies and their intermediaries from making improper payments to foreign officials for the purpose of obtaining or keeping business and/or other benefits, along with various other anti-corruption laws. We may also be subject to the UK Bribery Act. The UK Bribery Act is broader in scope than the FCPA in that it directly addresses commercial bribery in addition to bribery of public officials and it does not recognize certain exceptions, notably facilitation payments that are permitted by the FCPA.

We operate primarily in Russia and other countries of the former Soviet Union, many of which pose elevated risks of corruption violations. We and certain of our subsidiaries are in frequent contact with persons who may be considered “foreign public officials” under the FCPA and UK Bribery Act, and, therefore, are subject to an increased risk of potential FCPA and UK Bribery Act violations. If we or any third party acting on our behalf or in our interests are not in compliance with the FCPA, the UK Bribery Act and other laws governing the conduct of business with government entities (including local laws), we may be subject to criminal and civil penalties and other remedial measures, which could have an adverse impact on our business, results of operations, financial condition and liquidity.

As disclosed in our public filings, in March 2014, we received requests for the provision of information from the United States Securities and Exchange Commission (“SEC”) and the United States Department of Justice (“DOJ”) relating to an investigation of the Group’s former subsidiary in Uzbekistan. See also Note 33 to our audited consolidated financial statements. In February 2019, the Group reached a resolution with the SEC and the DOJ relating to the previously disclosed investigation of our former subsidiary in Uzbekistan. We consented to the entry of an administrative cease-and-desist order (the “Order”) by the SEC.

The United States District Court for the Southern District of New York approved a deferred prosecution agreement (“DPA”) entered by the Group and a plea agreement entered into by our subsidiary in Uzbekistan. Under the agreements with the DOJ, we agreed to pay a total criminal penalty of USD 850 million (RUB 59.1 billion as of December 31, 2018) to the United States. We provided a provision of USD 850 million (RUB 55.8 billion as of the date of accrual), which was recognized as a part of discontinued operations in the consolidated statement of profit or loss for the year ended December 31, 2018.

See also “—We have incurred and are continuing to incur costs and related management oversight obligations in connection with our obligations under the DPA and the SEC Order,” “—We could be subject to criminal prosecution or civil sanction if we breach the DPA and the SEC Order, and we may face other potentially negative consequences relating to the investigations by, and agreements with, the DOJ and SEC and other authorities, including additional investigations and litigation” and “Item 8. Financial Information—A. Consolidated Statements and Other Financial Information—7. Litigation—Compliance monitoring.”

We have incurred and are continuing to incur costs and related management oversight obligations in connection with our obligations under the DPA and the SEC Order.

We are subject to the DPA with the DOJ and the SEC Order. See “Item 8. Financial Information—A. Consolidated Statements and Other Financial Information—7. Litigation— Compliance monitorship” and Note 33 to our audited consolidated financial statements included elsewhere in this Annual Report. In conjunction with the DPA and pursuant to the SEC Order, we are required to retain, at our own expense, an independent compliance monitor. Pursuant to the DPA and the SEC Order, the monitorship was initially due to continue for a period of three years from the date of appointment and the term of the monitorship could be terminated early or extended depending on certain circumstances, as ultimately determined and approved by the DOJ and the SEC. We have not received notice from the SEC, the DOJ or the monitor of any breach of the terms of the DPA or the SEC Order. However, given a variety of factors, including the COVID-19 pandemic, we agreed to a one-year extension of the DPA and the monitorship with the DOJ and the SEC to (i) provide us with adequate time to implement necessary enhancements to certain critical components of our anti-corruption compliance and ethics program and (ii) allow the monitor sufficient time to be able to complete its review of our remedial efforts, including our implementation of the monitor’s recommendations and an assessment of the sustainability of our remedial actions. The term of the monitorship will continue until September 2023. The monitor assesses and monitors our compliance with the terms of the DPA and the SEC Order as well as reviews and evaluates the effectiveness of our policies, procedures, practices, internal accounting controls, record keeping and financial reporting as they relate to our current and ongoing compliance with the anti-bribery, books and records and internal accounting controls provisions of the FCPA and other applicable anti-corruption laws, and makes recommendations reasonably designed to improve the effectiveness of our internal accounting controls and FCPA corporate compliance. See also “—We are subject to anti-corruption laws in the jurisdictions in which we operate, including anti-corruption laws of Russia and the US Foreign Corrupt Practices Act (the “FCPA”), and we may be subject to the UK Bribery Act. Our failure to comply therewith could result in penalties which could harm our reputation and have a material adverse effect on our business, financial condition and results of operations.”

We have incurred significant costs in connection with the disposition of the matters covered in the DPA and SEC order, including retention of legal counsel and other advisors and other costs related to the investigations undertaken in connection with these matters. We currently cannot estimate additional costs that we are likely to incur in connection with compliance with the DPA and the SEC Order, including the ongoing obligations relating to the monitorship, our obligations to cooperate with the agencies regarding their investigations of other parties, and the costs of implementing the changes, if any, to our internal controls, policies and procedures required by the monitor. However, such costs could be significant. See also “—We could be subject to criminal prosecution or civil sanction if we breach the DPA and the SEC Order, and we may face other potentially negative consequences relating to the investigations by, and agreements with, the DOJ and SEC and other authorities, including additional investigations and litigation.”

We could be subject to criminal prosecution or civil sanction if we breach the DPA and the SEC Order, and we may face other potentially negative consequences relating to the investigations by, and agreements with, the DOJ and SEC and other authorities, including additional investigations and litigation.

Failure to comply with the terms of the DPA, whether such failure relates to alleged improper payments, internal controls failures, or other non-compliance, could result in criminal prosecution by the DOJ, including for the matters addressed in the DPA. Under such circumstance, the DOJ would be permitted to rely upon the admissions and the waiver of certain defenses we made in the DPA. Similarly, breach of the SEC Order could result in additional penalties against the Company.

Criminal prosecution by the DOJ as a result of a breach of the DPA or penalties imposed as a result of noncompliance with the SEC Order could subject us to penalties and other costs and could have a material adverse effect on our business, financial condition, results of operations, cash flows or prospects.

We may also face other potentially negative consequences relating to the investigations by, and agreements with, the DOJ, SEC, and other authorities. None of the DPA and the SEC Order prevents these or any other authorities from carrying out certain additional investigations with respect to the facts not covered in the agreements or in other jurisdictions, or prevents authorities in other jurisdictions from carrying out investigations related or unrelated to the matters which being investigated. Additionally, on March 19, 2019, a proposed class action complaint, captioned Salim v. Mobile TeleSystems PJSC et al., case number 1:19-cv-01589, was filed in the United States District Court for the Eastern District of New York against us and certain of our managers. On March 1, 2021 the United States District Court of Eastern District of New York granted MTS's motion to dismiss with prejudice and dismissed the complaint in full. The plaintiff filed an appeal of the dismissal by the Eastern District Court of New York. On March 31, 2022, the United States Court of Appeals for the Second Circuit affirmed the dismissal by the Eastern District Court of New York and determined that the plaintiff's claims are without merit.

Any collateral investigations, litigation or other government or third-party actions resulting from these, or other, matters could have a material adverse effect on our business, financial condition, results of operations, cash flows or prospects. In addition, any ongoing media and governmental interest in the investigations, the agreements and claims could impact the perception of us and result in reputational harm.

COVID-19 and potential variations or escalations thereof may have a material adverse effect on our business, financial condition, results of operations and prospects

A novel strain of the coronavirus, COVID-19, was discovered in Wuhan, China in December 2019 and on 11 March 2020, was declared by the World Health Organization to be a global pandemic. It has adversely affected and continues to affect the economies and financial markets of many countries, including Russia and CIS and has resulted in a series of measures implemented by governments around the world aimed at mitigating the further spread of the virus. There is still significant uncertainty regarding the impacts and duration of the COVID-19 pandemic. If the spread of COVID-19 persists for a significant period or the infection rates stagnate or increase, this could lead to renewed nationwide lockdowns or other potentially unforeseen impacts, which could have a material negative impact on the global and Russian economies.

The impact of COVID-19 on the Group is limited so far. However, due to the uncertainty of the duration and degree of impact of the COVID-19 pandemic, we continue to evaluate various scenarios and their potential impacts on Group financials. We have also carried out risk assessments for each of our business units, considering potential strategic, operational and regulatory related impacts.

We have a significant shareholder, which may limit your ability to influence corporate matters and may give rise to conflicts of interest.

Sistema, which is a public company, owns approximately 42% of the Company's ordinary shares. As a result, Sistema may exert influence over us and any action requiring the approval of the holders of our ordinary shares. Sistema can take actions that may conflict with the interests of other security holders. Furthermore, our international, credit, investment and other ratings, which determine, inter alia, peculiarities of our operations, terms of raising debt financing and our other activity could be affected by Sistema's activity and (or) its ratings. See also "Item 5. Operating and Financial Review and Prospects—B. Liquidity and Capital Resources—Credit Rating Discussion."

Sistema, as well as other our shareholders, have a right regulated by applicable law to receive dividends at the amount proportionate to the number of our shares belonging to a respective shareholder. For information about dividends see "Item 5. Operating and Financial Review and Prospects—B. Liquidity and Capital Resources—Capital Requirements." The indentures relating to our outstanding notes and other debt do not restrict our ability to pay dividends. As a result of paying dividends, our reliance on external sources of financing may increase, our credit rating may decrease, and our cash flow and ability to repay our debt obligations, or make capital expenditure, investments and acquisitions could be materially adversely affected.

Moreover, if Sistema were to dispose of its stake in us, we may be deprived of the benefits and resources that we derive from Sistema, which could harm our business.

Difficulties with operational management of acquired businesses could hamper our continued growth and profitability.

Our continued growth depends, in part, on our ability to identify attractive opportunities in markets that will grow and on our ability to manage the operations of acquired or newly established businesses. Our acquisitions may occur in countries and regions that represent new operating environments for us. We therefore may have less control over their activities. We may also face uncertainties with respect to the operational and financial needs of those businesses and may, in the course of our acquisitions, incur additional debt to finance the acquisitions and/or take on substantial existing debt of the acquired companies. In addition, it is possible that our activities in the countries of our current presence and countries into which we may expand may be associated with greater political, economic, social and legal risks.

For example, see “—Legal Risks and Uncertainties—An outcome of the proceedings relating to sustaining operations of our subsidiary in Turkmenistan is unpredictable” and “—Any inability of our subsidiaries in the countries in which we are present to maintain control over their operations and assets may adversely affect our business, financial condition and results of operations.” Our failure to identify attractive opportunities for expansion into new markets and to manage the operations of acquired or newly established businesses in these markets could hamper our continued growth and profitability, and have a material adverse effect on our financial condition, results of operations and prospects.

Acquisitions and mergers may pose significant risks to our business.

We have expanded our business through a number of acquisitions. We will continue to evaluate opportunities to acquire, invest in or merge with other existing operators or license holders, as well as other complementary businesses. In 2017-2022, our acquisitions focused on various segments, including communication and software development companies, providers of cloud services, as well as management investment and other non-telecom companies.

These and other business combinations entail a number of risks that could materially and adversely affect our business, financial condition, results of operations and prospects, including the following:

- assumption of the acquired target’s liabilities and contingencies;
- failure to realize any of the anticipated benefits or synergies from any acquisitions or investments we complete;
- problems connected with integrating the acquired businesses, technologies or products into our operations;
- incurrence of debt to finance acquisitions and higher debt service costs related thereto;
- difficulties in retaining business relationships with suppliers and customers of the acquired companies;
- risks associated with businesses and markets in which we lack experience, including political, economic, social, legal and regulatory risks and uncertainties;
- competition risks;
- potentially incorrect assessment of the value of any acquired target resulting from the facts we could not have known at the time of evaluation (subsequently discovered facts);
- more onerous government regulation;
- potential loss of key assets of the acquired company;
- potential loss of key employees of the acquired company;
- potential write-offs of acquired assets; and

- lawsuits arising out of disputes over ownership of acquired assets and/or the enforcement of indemnities relating to the title to such assets.

See also “—Legal Risks and Uncertainties—Any inability of our subsidiaries in the countries in which we are present to maintain control over their operations and assets may adversely affect our business, financial condition and results of operations” and “—Risks Relating to our Financial Condition—We may be adversely affected by the current economic environment.”

In addition, companies that we acquire may not have internal policies, including accounting policies and internal control procedures that are compatible, compliant or easily integrated with ours.

If any of our future business combinations is structured as a merger with another company, or we merge with or absorb a company subsequent to its acquisition by us, such a merger would be considered a corporate reorganization under Russian law. This would entitle our creditors to file a claim seeking to accelerate their claims or terminate the respective obligations and seek damages. The creditors would need to prove in court that we will not perform our obligations in due course and the amount of damages suffered. Secured creditors would also be required to prove that the security provided by our shareholders, any third parties or us is not sufficient to secure our obligations. Creditors whose claims are secured by pledges do not have the right to claim additional security.

In 2019-2022, we also acquired certain companies such as Gulfstream JSC, Webinar ecosystem, Bronevik Group, VisionLabs, United Russian Studios JSC, JUST AI Limited, Zelenaya Tochka Group and others. See “Item 4. Information on Our Company—A. History and Development” for further information.

These acquisitions have allowed us to diversify our business. However, additional risks relating to acquired companies’ liabilities and non-achievement of initial financial and operational targets may arise in connection with these acquisitions. See also Note 4 to our audited consolidated financial statements.

We may also be involved in various litigation to protect our title or other rights related to acquired businesses and incur loss.

In addition, a merger or any corporate reorganization or business combination that constitutes a “major transaction” under Russian law would trigger the right of our shareholders who abstain from voting on or vote against such reorganization or transaction to sell, and our obligation to buy, their shares in an amount representing up to 10% of our net assets as calculated under Russian Accounting Standards. See “—Legal Risks and Uncertainties—Shareholder rights provisions under Russian law could impose additional obligations and costs on us, which could have a material adverse effect on our business, financial condition, results of operations and prospects.”

If we cannot successfully develop our network or integrate the acquired companies, we will be unable to expand our subscriber base and maintain our profitability.

Our ability to increase our subscriber base depends upon the success of our network expansion (including fixed-line networks).

We have expended considerable amounts of resources to enable both organic expansion and expansion through acquisitions, and we plan to continue to do so. Limited information regarding the markets into which we have expanded or are considering expanding, through either acquisitions or new licenses, complicates accurate forecasts of future revenues from those regions, increasing the risk that we may overestimate these revenues. In addition, we may not be able to integrate previous or future acquisitions successfully or operate them profitably. Any difficulties encountered in the transition and integration process and in the operation of acquired companies could have a material adverse effect on our results of operations.

The build-out of our network is also subject to risks and uncertainties, which could delay the introduction of services in some areas and increase the cost of network construction, including difficulties in obtaining base station sites on commercially attractive terms. Further, telecommunications equipment used in Russia and other CIS countries is subject to governmental certification and periodic renewals of the same. We are also required to obtain permits and governmental certification for the operation of telecommunications equipment and/or permission for the import and export of certain network equipment, which can result in procurement delays and slower network development. The failure of any equipment we use to receive timely certification or re-certification, as applicable, could hinder our expansion plans. See also “—Risks Relating to our Financial Condition—If we are unable to obtain adequate capital, we may have to limit our operations substantially, which could have a material adverse effect on our business, financial condition, results of operations and prospects.”

For example, the import and export of products containing cryptographic hardware is subject to special documentation requirements and approvals. As telecommunications networks comprise various components with cryptographic hardware, we must comply with these requirements in order to import such components. Moreover, where imported equipment does not contain cryptographic hardware, the federal customs service requires manufacturers to provide written confirmation regarding the absence of such hardware. The range of goods requiring the provision of such “certificates of conformance” by suppliers and manufactures prior to their import into Russia has also been expanded to cover most of our key network components, and imported radioelectronic equipment is required to be licensed by the Russian Ministry of Industry and Trade.

See also “—Political and Social Risks—Geopolitical situation and sanctions imposed as a result of current political environment could materially adversely affect our business, financial condition, results of operations, prospects and the value of our shares.”

If we are unable to develop additional sources of revenue and competitive services, it could have a material adverse effect on our business, financial condition, results of operations and prospects.

Until recently, customer growth has been our principal source of revenue growth. Currently, however, increasing competition, market saturation and technological development lead to the increased importance of digital services based on mobile Internet, smart home, artificial intelligence, cloud services, big data solutions, Internet of things and media services. As a result, we will need to focus on the development of new services based on the abovementioned technologies. We invest in new businesses, such as artificial intelligence, financial technologies, big data, IoT, cloud services and others. Decreases in or absence of demand for new services, as well as competition increase on current markets, new companies’ entries, or lack of access to advanced technologies may lead to revenue decrease and necessity to revise our strategy regarding new businesses, which may require additional investments. Our inability to develop additional sources of revenue could have a material adverse effect on our business, financial condition, results of operations and prospects.

In addition, in September 2021 our shareholders approved the separation of our passive infrastructure as well as a significant share of our active network and digital infrastructure into the wholly-owned subsidiaries. An inability to realize the anticipated benefits of this separation could have an adverse effect on our business, financial condition, results of operations and prospects.

If we cannot interconnect cost-effectively with other telecommunications operators, we may be unable to provide services at competitive prices, which may diminish our market share and result in a loss of revenues and margins.

Our ability to provide commercially viable services depends on our ability to continue to interconnect cost-effectively with zonal, intercity and international fixed-line and mobile operators in Russia and other countries in which we operate. Interconnect fees are established by agreements with network operators and vary depending on the network used, the nature of the call and the call destination.

Although Russian legislation requires that operators of public switched telephone networks that are deemed to be “substantial position operators” cannot refuse to provide interconnect services or discriminate against one operator over another, we believe that, in practice, some operators attempt to impede wireless operators by delaying interconnect applications and establishing technical conditions for interconnecting that can be met only by certain operators.

Any difficulties or delays in interconnecting cost-effectively with other networks could hinder our ability to provide services at competitive prices, or at all, causing us to lose our market share and revenues, which would have a material adverse effect on our business and results of operations. See also “—If we or any of our mobile network operator subsidiaries operating in Russia are identified as an operator occupying a “substantial position,” the regulator may reduce our interconnect tariffs which, in turn, may have a material adverse effect on our financial condition and results of operations.”

We may not realize the benefits we expect to receive from our investments in 4G and 5G wireless services and Internet of Things (IoT) technologies, which could have a material adverse effect on our business and results of operations.

Russian legislation regarding 4G and 5G wireless services and Internet of Things (IoT) technologies are subject to change, particularly:

- in 2017 the State Commission for Radio Frequencies (“the Commission”) issued a decision allowing the use of frequency bands previously allocated for LTE mobile communications for NB IoT technology.
- in 2018-2020 the Commission awarded additional frequencies for the use of radio electronic means, operating in the range of 800 MHz under LPWAN group of standards (Low-power Wide-area Network) relating to IoT technology;
- in 2020 the Commission allowed indefinite range of persons and entities to use the 24.25-24.65 GHz frequency band under the 5G standard for radio electronic means. This decision allows the construction of local communication networks under the 5G/IMT-2020 standard, which could lead to increased competition. Later the terms regarding mandatory use of equipment of Russian origin were approved, which may affect the possibility of using these frequencies.
- in 2021 the Commission prolonged permits to use the frequencies of 700 MHz, 800 MHz, and 2600 MHz for LTE networks for another 10-year term. The main conditions for the prolongation includes:
 - for 800 MHz, and 2600 MHz range: operators must provide network coverage of settlements with a population of more than 1,000 persons and federal highways until September 2031 in accordance with the schedule;
 - for 700 MHz range in case of its reallocation for mobile telecommunication services: operators must provide network coverage of settlements with a population of more than 500 persons and regional highways until the end of 2031 in accordance with the schedule;
 - starting from 2023, operators will have to use local equipment.

In 2022 the Commission postponed the fulfilment of the above-mentioned obligations for one year, except the deadline for obligatory use of local equipment, which will prolonged till 2028. At the same time the annual plan of local equipment deployment has to be fulfilled starting from 2025. The aforementioned changes, on the one hand, allow operators to use the necessary radio frequency resources, and on the other hand, could require additional costs for network construction.

4G wireless services provide faster, higher quality data transfer and/or streaming capabilities, as compared to 2G and 3G, and 5G wireless services pose a similar advantage over 4G. Historically, mobile operators that are developing 4G networks experienced various difficulties and challenges, including a limited supply of compatible handsets, limited international roaming capabilities, as well as various software and network related problems. We may experience similar problems or encounter new difficulties when developing our 4G and 5G networks (including NB- IoT) and may be unable to fully resolve them. For example, we cannot be certain that:

- we will be able to build-out our 4G (including NB-IoT) and 5G networks in a timely manner or within the time frame stipulated by the license terms;
- our 4G (including NB-IoT) and 5G networks will deliver the quality and level of service that our customers demand or expect;

- we will be able to provide all contemplated 4G services (including NB-IoT) and 5G at reasonable prices and within a reasonable timeframe;
- manufacturers and content providers will develop and offer new marketable products and services for our 4G and 5G networks (including NB-IoT) on a timely basis;
- demand for our 4G services (including NB-IoT) will not be lower than expected;
- our 4G and 5G networks will be commercially viable in all of the locations we are required to operate pursuant to our licenses, approvals, authorizations and permits;
- our competitors will not offer similar services at lower prices; and
- changes in governmental policies, rules, regulations or practices will not affect our network rollout or our business operations.

See also “—If we cannot successfully develop our network or integrate the acquired companies, we will be unable to expand our subscriber base and maintain our profitability.”

In addition, Russian authorities also use frequencies in the 4G and 5G spectrum, which may limit the availability of 4G and 5G frequencies for commercial use in certain areas. During the construction of our networks, there is also a risk that the frequencies assigned to us for commercial use may overlap with those used by the Russian authorities. If such conflict were to occur, it could cause problems or delays in the development and operation of our 4G and 5G networks in Russia.

Potential competition from other 4G and LPWAN providers, together with any problems relating to the rollout of our 4G and 5G networks and provision of 4G and 5G services in the future, could materially adversely affect our business, financial condition and results of operations.

The State Commission for Radio Frequencies has imposed certain obligations on network operators. For example, in case of using frequencies on the terms of technological neutrality principle, we are, *inter alia*, obliged to provide network coverage to settlements with lower subscriber numbers, where the commercial rationale for doing so may otherwise be limited. Such changes lead to additional costs for the construction of our 3G and 4G wireless networks and may therefore adversely affect our business, financial condition and results of operations. Moreover, the rules on the Russian-produced telecommunication equipment usage, which require to operate only equipment included in the Unified Register of the Russian radio-electronic products, could affect implementation of the Internet of things (IoT) technology and 5G networks deployment.

If we are unable to successfully develop and/or deploy 4G and 5G wireless services in the countries in which we operate, or if any operators in those markets obtain a significant technological and/or commercial advantage over us in 4G and 5G wireless services, it may have a material adverse effect on our business and results of operations in the long term.

Currently, the ability to develop 4G/LTE and 5G networks is one of the key factors of an operator’s competitiveness in the market for mobile services in Russia and other countries where we operate. The cost of 4G/LTE and 5G network deployment and quality of services (including data speed and quality of radio coverage) depends on the band and the width of frequency range given to an operator.

In 2012 outside of the auction process, the State Commission for Radio Frequencies granted Scartel (operating the “Yota” retail brand) a paired range of LTE frequencies (2x30 MHz) in the 2.5-2.7 GHz band for use in the entire territory of Russia. The remaining frequencies, 40 MHz of the 2.5-2.7 GHz band, were allocated evenly during the auction among four major market participants (VEON, MegaFon, Rostelecom and us). On October 1, 2013, MegaFon acquired Scartel. As a result of this transaction, MegaFon obtained a competitive advantage in terms of LTE network development costs and may also obtain an advantage in LTE network performance.

Significant material resources for the introduction of such technologies may be required, which could have a material adverse effect on our business and results of operations. Furthermore, the limited number of available frequencies may prevent us from realizing the full benefits we expect to receive from the development of a 4G or 5G network, because our network capacity would be constrained and our ability to expand limited.

In 2019, Rostelecom PJSC received a LTE frequency in the 2.3-2.4 GHz band outside of the auction process. In July 2020, the State Commission for Radio frequencies allowed Rostelecom PJSC to share this frequency band with T2 Mobile LLC (Tele2), which gave an advantage to these operators. However, in December 2020, the State Commission for Radio frequencies changed its decision relating to permission for the commercial use of this range. These developments reflect ongoing discussions on allocation frequencies in order to construct 5G network in Russia, deployment of which has been actively negotiated by operators and regulators since 2017. The greater part of frequency spectrum suitable for 5G network in Russia, is partially or fully occupied by other users (for example, satellite communication companies use the most suitable frequencies for 5G in 3.5 GHz band), including state-owned companies. Significant expenses and time may be required to clear frequencies, however the frequency conversion mechanism has not been fully defined yet and if it will be realized, there is no assurance that sufficient frequencies optimal for 5G deployment will be cleared in low- band spectrum (“sub-6”).

As a solution, the regulator is considering creation of a Single Infrastructure Operator, which will be assigned with the 5G frequencies, and, as one of the discussed variants, will construct a single 5G network in Russia mainly using equipment produced in Russia and will maintain this network. It is planned that the Single Infrastructure Operator will operate as a technological platform based on which independent market players will develop and provide a wide range of services to clients. According to market players and certain industry experts, this solution has variety of advantages as well as some disadvantages and risks as compared to traditional network deployment by operators on a free and non-discriminatory basis.

Final regulator decision on frequency allocation for 5G will significantly affect the development of the mobile communication market and may lead to certain difficulties, including extension of time needed for putting 5G network into operation, increases in capital and operating expenditures, failure to realize all 5G technological advantages caused by separation of 5G and earlier generation network infrastructure, realization of market advantages by certain players due to non-equal frequency allocation or obtaining of other technological advantages connected with frequency allocation. All of these factors may affect our ability to develop 5G network, which in turn may have a material adverse effect on our business.

Moreover, if we cannot develop and maintain commercially viable 4G and 5G networks, and one of our competitors does, that competitor would have an advantage over us, which in turn may have a material adverse effect on our business.

In July 2022, we entered a joint venture of mobile operators, New Digital Solutions LLC (NRC). Earlier in November 2021, the State Commission on Radio Frequencies granted a 4500-4555 MHz and 4630-4990 MHz bands to NRC for testing 5G networks. The goal of this joint venture is frequency conversion and clearing of the spectrum for the further 5G technology development. The regulator will make a decision on possible frequency allocation in the 4500-4990 MHz band, *inter alia*, after clearing of this frequency spectrum. The operators’ business model of 5G services development will depend on this decision.

New requirements and technologies will require significant material resources from operators, which could have a material adverse effect on their business and results of operations.

Disruptions on our networks and information systems could lead to a loss of subscribers, damage to our reputation, violations of the terms of our licenses and subscriber contracts, penalties and have a material adverse effect on our business and financial condition.

We are able to maintain our operations only to the extent that our network infrastructure, information systems and data processed therein is protected from unlawful actions, including hacker and targeted attacks, technical malfunctions, power failures and natural disasters. Any failure, accident or network or information systems security breach, that causes interruptions in our operations could impair our ability to provide services to our customers or may influence other business processes, any of which could materially adversely affect our reputation, business and results of operations.

In addition, to the extent that any disruption or network or elements of information systems security breach results in a loss of or damage to customers’ personal data, or inappropriate disclosure of confidential information, we may incur liability as a result, including costs to remedy the damage caused by these business-interruptions or elements of information systems security breaches.

While we maintain backup systems for our telecommunications and infrastructure equipment, network and data management, operations and maintenance systems, these systems may not ensure recovery in the event of a network or information systems failures. In particular, in the event of extensive software and/or hardware failures, significant disruptions to our systems could occur, leading to our inability to provide services in full. The quality of our services in roaming (including roaming between networks) also depends, inter alia, on the network quality of our roaming partners, which is out of our control. Disruptions in our provision of services could lead to a loss of subscribers, damage to our reputation, violations of the terms of our licenses and subscriber contracts and penalties.

Our computer and communications hardware is protected through physical and software safeguards. However, it is still vulnerable to fire, storm, flood, loss of power, telecommunications failures, physical or software break-ins, viruses and similar events. Although our computer and communications hardware is insured against fire, storm and flood, we do not have business interruption insurance to protect us in the event of a catastrophe, even though such an event could have a material adverse effect on our business.

Failure to fulfill the terms of our licenses could result in their suspension or termination, which could have a material adverse effect on our business and results of operations.

Each of our mobile licenses requires service to be offered by a specific date and some contain further requirements as to territorial coverage to be reached by specified dates.

In addition, all of our mobile licenses require us to comply with various telecommunications regulations relating to the use of radio frequencies and numbering capacity allocated to us, network construction, interconnect rules and technical requirements relating to compliance with law enforcement authorities' requests, among others. If we fail to comply with the requirements of Russian or other applicable legislation or meet any terms of our licenses, our licenses and other authorizations necessary for our operations may be suspended or terminated, which could significantly limit our operations. In addition to the impact on our operations, the suspension or loss of certain licenses could also constitute an event of default under certain of our debt obligations and cause certain of our debt to be accelerated.

The Russian government enacted its Decree No. 2385 dated December 30, 2020, as amended, which came into force starting from January 1, 2021. It replaced the previously existing regulation on licensing activities in the communication services sector and introduced certain new mandatory licensing requirements and grounds for license termination.

The Federal Law No. 356 dated 14.07.2022 obliges operators to report annually on their activities to Roskomnadzor from December 2022. Failure to submit such report, or submitting of a report containing deliberately false or incomplete information, may be a basis for license termination.

A suspension or termination of our licenses or other necessary governmental authorizations, as well as regulatory changes of licensing requirements could therefore have a material adverse effect on our business and results of operations.

Failure to renew our licenses, or receive renewed or new licenses with similar terms to our existing licenses, could have a material adverse effect on our business and results of operations.

Our telecommunications licenses have their expiration dates in various years. These licenses may be renewed upon application to the relevant governmental authorities. Government officials in Russia and the other countries in which we operate consider the compliance with license requirements and the conditions of using the allocated frequency range when deciding whether to renew a license.

Additionally, new mandatory conditions, which relate to the need for further development of the communication network in order to provide licensed communication services for potential users of the communication service in sparsely populated residential areas, may be introduced when deciding whether to renew a license. These new conditions will require additional investment. Moreover, we may be subject to penalties or our licenses may be suspended or terminated for non-compliance with any such new license requirements. The suspension or loss of certain licenses could significantly limit our operations and cause certain of our debt to be accelerated.

If frequencies currently assigned to us are revoked, or if we fail to obtain renewals of our frequency allocations, our network capacity will be constrained and our ability to expand limited, resulting in a loss of market share and revenues.

There is a limited radio frequency spectrum available for wireless operators in each of the regions in which we operate or hold licenses to operate. We are dependent on access to adequate spectrum allocation in each market in which we operate in order to maintain and expand our subscriber base. If frequencies are not allocated to us in the future in the required quantities, with the geographic span and for time periods that would allow us to provide wireless services on a commercially feasible basis throughout all of our license areas, our business, financial condition, results of operations and prospects may be materially adversely affected.

According to the decision of the State Commission for Radio Frequencies No. 13-22-01 dated December 11, 2013, the terms of radio frequency bands usage by radio electronic facilities for mobile communication include a requirement for the dynamics of network deployment in the settlements of over 1,000 people (depending on the used frequency range and radio technology). If we are not able to fulfill these requirements, our authorizations for the use of radio frequency spectrum might be either terminated or not prolonged in extrajudicial procedure.

A loss of allocated spectrum, which is not replaced by other adequate allocations, could also have a substantial adverse impact on our network capacity. In addition, frequency allocations are often issued for periods that are shorter than the terms of the licenses, and such allocations may not be renewed in a timely manner, or at all. If our frequencies are revoked, or if we are unable to renew our frequency allocations, our network capacity would be constrained and our ability to expand limited, resulting in a loss of market share and revenues.

An increase in the fees for frequency spectrum usage could have a negative effect on our financial results.

The Russian and the CIS legislation requires us to make payments for frequency spectrum usage. The fees for frequency spectrum usage are calculated based on the total frequency band allocated to each operator in each region with such frequency spectrum usage determined with reference to the decision of the State Commission for Radio Frequencies, frequency allocation decisions or to the license conditions.

The rates and coefficients used for calculating fees for frequency spectrum, are subject to revision at least once every two years. The Ministry of Communications developed and circulated for discussion a draft order “On Amendments to the Methodology for establishing of single fee and annual fee for the use of radio frequency spectrum in the Russian Federation”. The order provides for, inter alia, imposition of payment for radio frequency spectrum usage for 5G technology. Currently, key coefficients, which define the payment amount for using 5G technology, have not been approved. In case of the exchange of radio frequency spectrum between operators in the ranges with high fragmentation (GSM 900/1800) operators are obliged to change coefficients used for calculating the fee for the spectrum that may lead to significant additional expenses.

Any significant increase in the fees payable for the frequency channels that we use or additional frequency channels that we need in Russia or the CIS could have a negative effect on our financial results.

If we are unable to maintain our favorable brand image, we may be unable to attract new subscribers and retain existing subscribers, which may lead to a loss of market share and revenues.

Developing and maintaining awareness of our brands is critical to informing and educating the public about our current and future services and is an important element in attracting new subscribers.

We believe that the importance of brand recognition is increasing as our markets become more competitive. Successful promotion of our brands will depend largely on the effectiveness of our marketing efforts and on our ability to provide reliable and useful products and services at competitive prices. Brand promotion activities may not yield increased operating revenues and, even if they do, such operating revenues may not offset the operating expenses we incur in building our brands.

Furthermore, our ability to attract new subscribers and retain existing subscribers depends, in part, on our ability to maintain what we believe to be our favorable brand image. Negative publicity or rumors regarding our company, our shareholders and affiliates or our services could negatively affect our brand image, which could lead to a loss of market share and revenues. Failure to successfully and efficiently promote and maintain our brands may limit our ability to attract new subscribers and retain our existing subscribers and materially adversely affect our business and results of operations.

MTS Bank's business entails regulatory and operational risks.

MTS Bank's operations are subject to regulation by various government and banking authorities in connection with obtaining and renewing various licenses and permits, as well as with ongoing compliance with existing laws and regulations and with the terms and conditions of MTS Bank's licenses and permits. MTS Bank has the required license in connection with its banking activities issued by the CBR.

Requirements imposed by regulators, including capital adequacy requirements, which are designed to ensure the integrity of the financial markets and to protect customers and other third parties with whom MTS Bank deals, may limit MTS Bank's activities, including its lending, and may increase MTS Bank's costs of doing business, or require MTS Bank to seek additional capital in order to maintain CBR capital adequacy requirements or different varieties of funding to satisfy the CBR's liquidity requirements. The CBR may also amend the capital adequacy requirements and increase the capital adequacy ratios applicable to Russian banks at any time and, in such circumstances, MTS Bank may be forced to seek additional capital or alternative sources of financing to comply with these requirements. Such additional capital or alternative sources of financing may not be available or may only be available on commercially unacceptable terms.

If MTS Bank's capital position were to decline below the minimum statutorily required levels of capital adequacy, its banking licenses could be suspended or revoked and it could encounter difficulties in continuing to operate its business and obtaining funding, which could materially adversely affect its business, financial condition, results of operations and prospects. MTS Bank's capital adequacy level may decrease organically with the growth of business or the payment of dividends. In addition, any breach of regulatory requirements in the Russian Federation could expose MTS Bank to potential liability and other sanctions, including the loss of general banking license. If the CBR were to suspend or revoke MTS Bank's general banking license, then this would render MTS Bank unable to perform any banking operations and/or would lead to winding-up of its business. Our shareholding in MTS Bank may require us to make subsequent investments in the share capital of the bank in order to sustain growth of MTS Bank's business as well as to comply with the capital adequacy requirements and relevant banking regulations. See also “—Political and Social Risks—Geopolitical situation and sanctions imposed as a result of current political environment could materially adversely affect our business, financial condition, results of operations, prospects and the value of our shares.” and “—Political and Social Risks—The imposition of sanctions on MTS Bank and the potential for further international sanctions and export restrictions affecting the Group may have a material adverse impact on our business, financial condition and result of operations.”

Uncertainty in the international financial markets, possible further tightening in credit conditions and contraction of the global economy and markets in which MTS Bank operates (including the impact of COVID-19), could adversely impact, should the market conditions continue to worsen, MTS Bank's business and operating results due to:

- decreases in MTS Bank's net interest income as well as fee and commission income;
- decreases in the demand for MTS Bank's credit products as a result of higher interest rates;
- significantly increased non-performing loans and loan provision charges, loan losses and write-offs;
- decreases in the business activity of Russian companies and the credit-worthiness of Russian companies and individuals;
- increases in borrowing costs and reduced, or zero, access to the capital markets due to unfavourable market conditions;
- currency volatility;
- liquidity constraints;
- outflows of deposits from accounts;
- significant declines in the market values of securities held in MTS Bank's trading and available for sale portfolios; and
- deterioration of capital adequacy.

Any of the factors discussed in the preceding paragraphs could adversely affect the financial condition of MTS Bank and its customers and may result, among other things, in a reduction in MTS Bank's capital adequacy ratios and profits, pressure on credit risk concentration levels, an increase in exchange rate risk and losses, higher funding costs, a change in the strategy of MTS Bank or curtailment of some business operations due to increased risks. Moreover, any of these factors may cause a decrease in customer funds, a reduction in the demand for loans, foreign currency, investment and other banking transaction services that customers carry out with MTS Bank, as well as a general deterioration in the quality of MTS Bank's loan book and/or a reduction in the market values of securities or other assets held on MTS Bank's balance sheet, leading to possible defaults of such loans and/or the need for increased loan provisions. Should any of this take place, this could materially adversely affect our business, financial condition and results of operations.

Failure to monitor, manage and prevent MTS Bank's operational and technological risks could have a material adverse effect on our business, financial condition and results of operations.

MTS Bank is exposed to technological risks as banking business requires the development of sufficient communication channels and software, the creation of large automated systems and considerable computer capacity located throughout the Russian Federation. MTS Bank invests considerable time and money in order to upgrade its technologies in a timely manner, centralize its information systems, create appropriate reserves and duplicate capacities, develop internal audit functions and control the operation of its hardware and software, however MTS Bank's IT systems are significantly less developed in certain respects than those of banks in more developed countries. The lack of immediately available consolidated financial and operating data may hinder the ability of MTS Bank's management to make decisions, to react promptly to changes in market conditions and to detect fraud and non-compliance with internal procedures. In addition, insufficient integration of the IT system increases MTS Bank's operational risks and the costs of further business development.

MTS Bank's ability to operate its business depends on its ability to protect the computer systems and databases which MTS Bank operates and uses from the intrusion of third parties who may attempt to gain access to MTS Bank's computer systems, networks or databases through the Internet or otherwise. In addition, MTS Bank is exposed to risk of fraud by employees or outsiders, mismanagement, unauthorized transactions by employees and operational errors, including clerical or record keeping errors or errors resulting from faulty computer or telecommunications systems. Given MTS Bank's high volume of transactions, errors may be repeated or compounded before they are discovered or rectified. In addition, a number of transactions at MTS Bank are processed manually, which may further increase the risk that human error or employee tampering or manipulation will result in losses that are difficult to detect. There can be no assurance that MTS Bank will be able at all times to successfully monitor, prevent and manage its operational and technological risks in the future. Any failure to do so could materially adversely affect our business, financial condition and results of operations.

MTS may potentially enter into agreements with companies of the Sistema group (i.e. related parties transactions) on terms which are different from those that would be obtainable on an arm's length basis.

We have purchased interests in certain companies from Sistema, for example, United Russian Film Studios JSC and MTS Bank PJSC. We enter into agreements from time to time with other companies within the Sistema group for supply of switching and subscriber network equipment, power supply devices, medical services, license agreements, agreements on providing access to the infrastructure for installation of communication equipment, leasing of non-residential real-estate, rent of cloud services and other services. According to the applicable Russian legislation, and MTS's control procedures in respect of related parties transactions, we seek to verify that such transactions comply with market terms, and require that related parties transactions with the companies within the Sistema group are reviewed by the Audit Committee of the Board of Directors in accordance with our corporate governance procedures. Nevertheless, a number of transactions with the companies within the Sistema group may potentially be concluded on terms, which are different from those that would be obtainable on an arm's length basis.

See "Item 7. Major Shareholders and Related Party Transactions—B. Related Party Transactions" and Note 31 to our audited consolidated financial statements.

In the event that our past or future interested party transactions are successfully challenged, our business, financial condition, results of operations and prospects could be materially adversely affected.

We own less than 100% of the equity interests in some of our subsidiaries. In addition, certain of our wholly owned subsidiaries have had other shareholders in the past. We and our subsidiaries in the past have entered into, and continue to enter into, transactions that may be considered to be “interested party transactions” for the purposes of Russian law, requiring in some cases consent or approval by disinterested directors, disinterested independent directors, disinterested shareholders or owners of voting shares, depending on the nature of the transaction and parties involved. It is possible that our and our subsidiaries’ interpretation and application of these provisions could be subject to challenge. Any such challenge, if successful, could result in the invalidation of transactions, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

Moreover, following a recent legislative change, dated December 2022, until December 31, 2023 only shareholders holding alone or with other holders 5% or more of the voting shares have the right to appeal to the court with claims to challenge major and interested party transactions, as well as claims against a member of the Board of Directors or a member of any executive body of the Company. Before the adoption this Federal Law, shareholders holding alone or with other holders 1% or more of the voting shares had the right to file such lawsuits.

In the event that our minority shareholders or the minority shareholders of our subsidiaries do not consent to or approve certain transactions or other matters requiring their consent or approval we could be limited in our operational flexibility, and our business, financial condition, results of operations and prospects could be materially adversely affected.

Russian law requires a three-quarters majority vote of the holders of voting stock present at a shareholders’ meeting to consent to or approve certain transactions and other matters, including, for example, charter amendments, major transactions involving assets in excess of 50% of the total assets of the company, purchase of offered shares by the company and certain share issuances. In addition, a 95% or a unanimous vote is required to approve certain matters, for example, certain charter amendments regarding shareholders’ rights. A majority of disinterested shareholders participating in the voting is required to consent to or approve an “interested party transaction” in certain cases. In the event that our minority shareholders or minority shareholders of our subsidiaries do not consent to or approve such transactions or other matters requiring their consent or approval, we could be limited in our operational flexibility, and our business, financial condition, results of operations and prospects could be materially adversely affected.

Our competitive position and future prospects depend on our senior managers and other key personnel and our inability to attract, retain and motivate qualified personnel and embrace their well-being could have a material adverse effect on our business, financial condition and results of operations.

Our ability to maintain our competitive position and to implement our business strategy is dependent to a large degree on the services of our senior management team and other key personnel.

Moreover, competition in Russia and in the other countries where we operate for personnel with relevant expertise is intense due to the relatively small number of qualified individuals. The loss of any of our senior management team members or an inability to attract, retain and motivate qualified personnel and embrace their well-being could have a material adverse effect on our business, financial condition and results of operations. We structure our compensation packages in a manner consistent with the evolving standards of the labor markets in these countries. We are not insured against the detrimental effects to our business resulting from the loss, dismissal, or unavailability of our key personnel. In addition, it is not common practice in Russia and the other countries where we operate to purchase key-man insurance policies, and we do not carry such policies for our senior management and other key personnel.

The entry of mobile virtual network operators into the Russian mobile communications market could increase competition and subscriber churn, resulting in a possible loss of our market share and decreased revenue.

Mobile virtual network operators (“MVNOs”) are companies that provide mobile communications services but do not own the radio frequencies and, in some cases, the network infrastructure required to do so. According to Russian regulation, MVNOs in Russia must be licensed, and their use of frequencies and infrastructure and rendering of services is to be done pursuant to agreements entered into between MVNOs and existing frequency holders. However, existing frequency holders are under no obligation to enter into such agreements with the MVNOs.

The existing frequency holders, including us, may receive revenues from MVNOs for the use of our frequencies and network infrastructure. However, in the event we lose either subscribers to MVNOs that lease their frequencies and infrastructure from other operators or MVNOs that lease their frequencies and infrastructure from us, we will be deprived of the revenue streams from both the subscribers and the MVNOs. The MVNOs may also establish aggressive tariffs, which could result in increased subscriber churn and/or driving down the tariffs of all mobile operators.

The emergence of new MVNOs in the market or any of the foregoing trends might affect market competition and subscriber churn, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

A finding by the FAS that we have acted in contravention of antimonopoly legislation could have a material adverse effect on our business, financial condition and results of operations.

Our businesses have grown substantially through the acquisition and formation of companies, many of which required the prior approval of, or subsequent notification to, the FAS or its predecessor agencies.

Relevant legislation restricts certain acquisitions or formation of companies by groups of companies or individuals acting in concert without such prior the FAS approval. While we believe that we have complied with the applicable legislation for our acquisitions and formation of new companies, this legislation is sometimes vague and subject to varying interpretations. If the FAS were to conclude that our acquisition or formation of a new company was done in contravention of applicable antimonopoly legislation, which has led or may lead to restriction of competition, including emergence or strengthening of the company's dominant position, or find prescriptions of the FAS, issued as part of the transaction approval, not fulfilled, it could file a claim to liquidate or reorganize in the form of separation or division of an acquired or established company. Moreover, the FAS may impose administrative sanctions for non-compliance with antimonopoly law when acquiring or creating a company. These could have a material adverse effect on our business, financial condition and results of operations.

In recent years, the FAS has been investigating mobile operators, including MTS, for suspected violations of antimonopoly laws. For example, see "Item 8. Financial Information—A. Consolidated Statements and Other Financial Information—7. Litigation—Antimonopoly Proceedings" and "—Changes to the rules and regulations involving roaming charges in Russia may adversely affect our financial condition and results of operations."

If the FAS finds that we have violated or otherwise acted in contravention of antimonopoly legislation, this could have a material adverse effect on our business, financial condition, results of operations and prospects.

If we are found to have a dominant position in the markets where we operate and are determined to have abused this position or found to have committed concerted actions and/or concluded anti-competitive agreements, the FAS may be entitled to impose fines as well as regulate our tariffs and impose certain restrictions on our operations.

Under Russian legislation, a company controlling over 35% of a market may be found by the FAS to hold a dominant position in such market. In case of collective dominance of legal entities and in certain instances provided by law, a company could be also categorized by the FAS as dominant under certain conditions even if its share of the corresponding market is less than 35%, but equals to or is higher than 8%. Current Russian legislation does not clearly define "market" in terms of the types of services or the geographic area. In 2016, as a result of certain amendments to the Federal Law No. 135 "On the Protection of Competition," the register of business entities having more than 35% of a certain commodity market or otherwise occupying a dominant position in the markets in which they operate, which previously listed MTS as occupying a dominant position in certain markets, was repealed. At the same time, the FAS continues to conduct market analysis in order to identify entities holding a dominant position in the markets in which they operate.

Companies recognized as natural monopolies are also considered to have a dominant position in their respective markets. One of our subsidiaries, MGTS, is categorized as a natural monopoly in the Moscow telecommunications market. As a result, MGTS' tariffs are now subject to regulation by the FAS. In addition, as a natural monopoly, MGTS is obliged to comply with the rules of non-discriminatory third party access to its infrastructure. See also "—Change of regulated tariffs may lag behind MGTS' real expenses growth, which may negatively impact profitability of our business."

In the event that we are found in the future to have a dominant position in the markets where we operate and are either determined to have abused the dominant position or found to have committed concerted actions in the market and/or concluded anti-competitive agreements, the FAS will have a right to impose certain restrictions on our operations in such markets. See “Item 4. Information on Our Company—B. Business Overview—Regulation of Telecommunications in the Russian Federation—Regulation in the Russian Federation—Competition, Interconnect and Pricing” for additional information.

If we are found to have violated antimonopoly legislation, an order requiring us to transfer any illegally obtained revenue to the federal budget may be issued in relation to such violations.

According to the Code of Administrative Offences of the Russian Federation, a company may be subject to either fixed penalty fine up to RUB 1 million or fine based on total turnover in the market where the violation is conducted, depending on the nature of violation of antimonopoly legislation. The level of fine ranges from 3% to 15% of revenue in the market where the violation is conducted for cartel agreements, from 1% to 15% of revenue for abuse of dominant position, from 1% to 5% of revenue for other anticompetitive agreements and from 1% to 3% of revenue for coordinated actions. Moreover, if the FAS finds actions of a company insufficient to rectify past violations of antimonopoly laws, it could file a claim for liquidation of this company or its reorganization in the form of division or separation.

If we or any of our subsidiaries were found by the competition authority to be business entities occupying a dominant market position, the competition authority would have a power to impose certain restrictions on our or our subsidiaries’ businesses. In particular, the authorities may impose on us tariffs at levels that could be competitively disadvantageous. If we or any of our subsidiaries were found by the FAS to be business entities occupying a dominant market position with a market share exceeding 70% and determined to abuse such dominant position, the Russian government would have a right to determine the rules of non-discriminatory access to goods or services offered by us. Additionally, geographic restrictions on our expansion could reduce our subscriber base and prevent us from fully implementing our business strategy, which may materially adversely affect our business, financial condition, results of operations and prospects.

If we or any of our mobile network operator subsidiaries operating in Russia are identified as an operator occupying a “substantial position,” the regulator may reduce our interconnect tariffs which, in turn, may have a material adverse effect on our financial condition and results of operations.

In addition to the regulation of dominant operators by the FAS, the Federal Law on Communications provides for the special regulation of telecommunications operators occupying a “substantial position” (i.e., operators which, together with their affiliates, have 25% or more of installed capacity or capacity to carry out transmission of not less than 25% of traffic in a geographically defined zone within the Russian Federation). These regulations provide for governmental regulation of the key terms of such operators’ interconnect agreements, including the interconnect tariffs. In addition, such operators are required to develop standard key terms of interconnect agreements and publish them as a public offer made to all operators who intend to interconnect to the networks of those operators. Refusal of such operators to conduct an interconnect agreement is prohibited, except in cases where such agreement would contradict the terms of their license or other regulatory acts in respect of the unified communications network in the Russian Federation.

For additional information, see “Item 4. Information on Our Company—B. Business Overview—Regulation of Telecommunications in the Russian Federation—Regulation in the Russian Federation.”

At present, the foregoing regulations apply only to fixed-line operators in Russia, including our fixed-line business. If any legislation that extends the foregoing regulations to mobile operators is adopted, and we and any of our mobile network operator subsidiaries operating in Russia are identified as operators occupying a “substantial position,” regulators may reduce our interconnect tariffs which, in turn, may have a material adverse effect on our revenues, financial condition and results of operations.

In addition, MGTS is categorized as fixed-line operator occupying a substantial position in the Moscow telecommunications market and its interconnect tariffs are therefore subject to state regulation. In February 2013, Comstar-UTS was removed from the list of “substantial operators” in Moscow and MTS was not included therein. There is however a possibility that we could be categorized as fixed-line operator occupying a “substantial position” in Moscow due to our affiliation with MGTS and because of our integration with Comstar-UTS. As a result of the state regulation of the relevant interconnect rates, we, as “substantial operators,” may be unable to increase these in line with economic developments or any increases of our relevant costs, resulting in a material adverse effect on our financial condition and results of operations. See also “—Change of regulated tariffs may lag behind MGTS’ real expenses growth, which may negatively impact profitability of our business.”

Change of regulated tariffs may lag behind MGTS’ real expenses growth, which may negatively impact profitability of our business.

In addition to holding a “substantial position” in the Moscow telecommunications market, MGTS is included in the register of natural monopolies in the telecommunications market. Consequently, tariffs for basic services rendered to public switched telephone networks subscribers (fees for providing access to a local telecommunications network, monthly fees for granting subscriber line in a constant use and monthly fees for providing a local telephone connection) are subject to regulation.

Although MGTS is permitted to petition the FAS for increases in tariffs based on such criteria as inflation, increased costs and the need for network investments, it is possible that future requested increases may not be granted or that the FAS may not adequately take such factors into account in setting tariffs. If the permissible tariffs applicable to MGTS do not adequately compensate MGTS for the costs of providing services, our business and results of operations could be materially adversely affected. See also “—If we or any of our mobile network operator subsidiaries operating in Russia are identified as an operator occupying a “substantial position,” the regulator may reduce our interconnect tariffs which, in turn, may have a material adverse effect on our financial condition and results of operations.”

Changes to the rules and regulations involving roaming charges in Russia may adversely affect our financial condition and results of operations.

In September 2018, the Board of sectoral ministries of communications of the Russian Federation and the Republic of Belarus approved a Roadmap aimed at reducing roaming charges between two countries. In December 2018, the Russian party drafted a new project of the Roadmap aimed at cancellation of international roaming in the territory of the Union State in 2019. Later, as a result of negotiations between Russia and Belarus a new project of Roadmap, which assumes cancellation of roaming charges in the territory of the Union State in 2020, was developed. In December 2019, a new version of Roadmap was approved, according to which, cancellation of roaming charges in the territory of the Union State will take place in September 2020. In order to implement the Roadmap, we significantly reduced roaming charges in November 2020. This affected our revenues from roaming charges in Belarus.

An action plan to establish conditions necessary for setting fair tariffs for international roaming services on the territories of the Eurasian Economic Union states in the first quarter of 2025 was adopted by the Decree No.19 of the Eurasian Economic Commission Board dated October 29, 2021. Although it is currently unclear how the Decree and its implementation might affect our operations, it could have a material adverse effect on our business, financial condition, results of operations and prospects. Any material fines imposed on us or changes to the roaming charges may adversely affect our financial condition and result of operations.

Compliance with the new regulations on IMEI numbers may present us with technical difficulties and may lead to the expenditure of significant resources.

Federal Law No. 533 dated December 30, 2020, which came into force starting from June 1, 2021, introduced amendments to the Law “On Communications”, including the concept of International Mobile Equipment Identity (“IMEI”). According to the law, the subscriber has a right to add information on his number and/or the IMEI in the Integrated Identification and Authentication System (IIAS). If the subscriber lost his device, he may report this to the operator through the IIAS. Subject to the confirmation of an IMEI number, the operator should stop providing services for such device.

Currently, there are no practical ways to confirm the uniqueness of the equipment identifier because an IMEI number may be used by several mobile manufacturers. It is currently unclear how these amendments might affect our activities, but this could have a material adverse effect on our business, financial condition and results of operations.

We may be required to make significant investments beyond those that are currently planned to preserve our competitive advantage in response to the rapid evolution of fixed network technology.

One of our subsidiaries, MGTS, has devised a number of projects aimed at developing communications networks and expanding availability of telecommunications services for customers. The likely shortage of free cash flow during the current economic downturn could halt such investment programs for the development of new products and services, and possibly lead to a decrease in the number of projects and cutbacks in development programs in the New Moscow and Moscow regions.

The company completed its project on connection of its subscribers to broadband optical networks employing the Gigabit-capable Passive Optical Network (“GPON”) technology in Moscow, however, the network development still continues in Moscow and Moscow region. See “Item 4. Information on Our Company—A. History and Development—Capital Expenditure” for further information. The lack or limited access to residential buildings may affect these projects on construction and modernization of fixed-line network.

We engage contractors for the construction and upgrade of our network. Due to the currently unfavorable market conditions, some of our contractors may face a lack of own current assets and/or external finance sources, as well as other reasons, which may lead to the contractor’s inability to fulfill contract obligations or, in some cases, lead to bankruptcy. This may negatively affect the terms of our projects’ implementation and lead to higher costs. If we are not able to expand and upgrade our network infrastructure in a timely manner and offer new services, or if it is required to make significant investments beyond those that are currently planned, our business, financial condition, results of operations and prospects could be materially adversely affected.

Our intellectual property rights are costly and difficult to protect.

We regard our copyrights, trademarks, patents and similar intellectual property rights, including our rights to certain domain names, as essential to our continued success. We rely upon legislation on intellectual property, trade secret protection laws, as well as confidentiality and/or license agreements or contracts with our employees, customers, partners and others, to protect our proprietary rights. Nonetheless, intellectual property rights are particularly difficult to protect in the markets where we operate. In these markets, the regulatory agencies responsible for the protection of intellectual property rights are inadequately funded, legislation is underdeveloped, piracy and infringement are commonplace, and enforcement of court decisions is problematic.

Litigation may be necessary to enforce our intellectual property rights, to determine the validity and scope of rights of others, or to defend against claims of infringement. Any such litigation may result in substantial costs and diversion of resources and, if decided unfavorably to us, could have a material adverse effect on our business. We also may incur substantial acquisition or settlement costs to the extent that it would strengthen or expand our intellectual property rights or limit our exposure to intellectual property claims of third parties.

Breach of information confidentiality, integrity and availability may lead to interruption of business-critical processes, a loss of market share and claims from subscribers, regulators, and partners which could materially adversely affect our reputation, business, financial condition, results of operations and prospects.

We ensure the security of restricted information processing in corporate information systems, including when working remotely (for example, distant work period). However, unauthorized actions of our employees and partners that violate information security policy, as well as illegal actions of third parties may lead to breach of information confidentiality, integrity and availability, including subscriber data leakage, and, as a result, to interruption of business-critical processes, a loss of market share, claims from subscribers, regulators, and partners what could materially adversely affect our reputation, business, financial condition, results of operations and prospects.

Despite the measures taken, we cannot completely exclude the possibility of such incidents occurring in the future. See also “—Legal Risks and Uncertainties—Russian and foreign legislation on personal data and information security in information systems and communication networks may turn out to be hard to implement and require significant resources. Inability to comply with the requirements may lead to sanctions.”

Alleged medical risks of cellular technology may subject us to negative publicity or risk of litigation, decrease our access to base station sites, diminish subscriber usage and hinder access to additional financing.

Electromagnetic emissions from transmitter masts and mobile handsets may harm the health of individuals exposed for long periods of time to such emissions. The actual or perceived health risks of transmitter masts and mobile handsets could materially adversely affect us or our subsidiaries by reducing subscriber growth, reducing usage per subscriber, increasing the number of product liability lawsuits, increasing the difficulty of obtaining or maintaining sites for base stations and/or reducing the financing available to the wireless communications industry. Each of these potential risks may adversely affect our business, financial condition, results of operations and prospects.

Effects of climate change may impose risk of damage to our infrastructure, our ability to provide services, additional costs and have a material adverse effect on our business and financial condition.

Extreme weather events precipitated by long-term climate change have the potential to directly damage network facilities or disrupt our ability to build and maintain portions of our network and could potentially disrupt suppliers' ability to provide products and services required to provide reliable network coverage. Any such disruption could delay network deployment plans, interrupt service for our customers, increase our costs and have a negative effect on our operating results, financial condition and our business. The potential physical effects of climate change, such as increased frequency and severity of storms, floods, fires, freezing conditions, sea-level rise, and other climate-related events, could adversely affect our operations, infrastructure, and financial results. Operational impacts resulting from the potential physical effects of climate change, such as damage to our network infrastructure, could result in increased costs and loss of revenue. We could incur significant costs to improve the climate resiliency of our infrastructure and otherwise prepare for, respond to, and mitigate such physical effects of climate change. We are not able to accurately predict the materiality of any potential losses or costs associated with the physical effects of climate change.

Effects of climate change may lead to regulatory changes and additional requirements from regulators, customers, investors and other stakeholders that may have a negative effect on our business, financial condition, results of operations and reputation.

Due to the nature of our operations, we may be impacted by regulatory developments related to climate change, including, for example, the introduction of national carbon regulation, and the revision of plans for the contract on the provision of renewable energy capacity, which may lead to an increase in the price of purchased electricity. In addition, the introduction of carbon pricing in various jurisdictions may lead to an increase in the prices of purchased equipment and the lack of a public position regarding the setting of decarbonization goals and the development of appropriate action plans may lead to a deterioration of market positions and a decrease in the confidence of interested parties. In addition, in case of the lack of response to customer requirements regarding the company's decarbonization goals and the availability of low carbon telecommunications solutions it may lead to a decrease in revenue.

Further, customers, consumers, investors and other stakeholders are increasingly focusing on environmental issues, including climate change, water use, deforestation, plastic waste, and other sustainability concerns. Concern over climate change or other environmental, social and governance (ESG) matters may result in new or increased legal and regulatory requirements to reduce or mitigate impacts to the environment and reduce the impact of our business on climate change.

Climate change regulations (such as in relation to emissions of pollutants into the atmospheric air, waste management, impact on water resources) may require us to alter our proposed business plans or increase our operating costs due to increased regulation or environmental considerations. Non-compliance with regulations related to environmental protection could adversely affect our reputation and lead to fines.

Other Risks

We have not independently verified information we have sourced from third parties.

We have sourced certain information contained in this document from third parties, including private companies and Russian government agencies, and we have relied on the accuracy of this information without independent verification. The official data published by Russian federal, regional and local governments may be substantially less complete or researched than those of more developed countries. Official statistics may also be produced on different bases than those used in Western countries. Any discussion of matters relating to Russia in this document must, therefore, be subject to uncertainty due to concerns about the completeness or reliability of available official and public information. In addition, the veracity of some official data released by the Russian government may be questionable.

Because no standard definition of an average monthly service revenue per user (“ARPU”), average monthly usage per user (“MOU”) or churn exists in the telecommunications industry, comparisons between certain operating data of different companies may be difficult to draw.

The methodology for calculating subscriber numbers, ARPU, MOU and churn varies substantially in the telecommunications industry, resulting in variances in reported numbers from that which would result from the use of a uniform methodology. Therefore, comparisons of certain operating data between different telecommunications companies may be difficult to draw.

Factors over which we have little or no control may affect our revenues.

Our business activities depend on a number of factors which are outside of our control, including natural disasters, imposition of a state of emergency in the countries of our operations, strikes and global and regional economic conditions. Any of these factors could result in deterioration of our revenues, which could have a material adverse effect on our results of operations, financial condition, prospects and the price of our shares.

Item 4. Information on Our Company

A. History and Development

Corporate information

Our legal name is Mobile TeleSystems Public Joint Stock Company (MTS PJSC, MTS) and we are incorporated under the laws of the Russian Federation. Our head office is located at 5 Vorontsovskaya Street, Bldg. 2, Moscow 109147, Russian Federation, and the telephone number of our investor relations department is +7 495 223-2025. The address of our incorporation is 4 Marksistskaya Street, Moscow 109147, Russian Federation. We maintain a website at <https://ir.mts.ru/home>. The information on our website is not a part of this report. The SEC maintains an Internet site (<http://www.sec.gov>) that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC.

Our predecessor, Mobile TeleSystems CJSC (“MTS CJSC”), was formed in 1993. The founding shareholders included MGTS and three other Russian telecommunications companies, which collectively held 53% of our original share capital, and two German companies, Siemens AG and T-Mobile Deutschland GmbH, an affiliate of Deutsche Telekom AG, which collectively held the remaining 47%. Sistema currently owns 42.085% of our share capital (effective ownership as of April 10, 2023 - 49.73%). See “Item 7. Major Shareholders and Related Party Transactions—A. Major Shareholders.”

Mobile TeleSystems Open Joint Stock Company (MTS OJSC) was created on March 1, 2000, through the merger of MTS CJSC and RTC CJSC, a wholly owned subsidiary. The name of MTS OJSC was then changed to our current name, Mobile TeleSystems Public Joint Stock Company. Our charter was registered with the State Registration Chamber on March 1, 2000, which is our date of incorporation, and with the Moscow Registration Chamber on March 22, 2000. Our initial share issuance was registered by the Russian Federal Commission on the Securities Market on April 28, 2000.

We completed our initial public offering on July 6, 2000, and listed our shares of common stock, represented by ADSs on the New York Stock Exchange (the “NYSE”) under the symbol “MBT.” Each ADS represents two underlying shares of our common stock. Prior to May 3, 2010, each ADS represented five shares of our common stock.

On February, 28, 2022 trading in the Company's ADSs on the NYSE was suspended.

In April 2022, Russian Federal Law No. 114-FZ dated April 16, 2022 (the "Delisting Law") came into force which required Russian companies to terminate their depositary receipt programmes unless granted an exemption by the Russian Government Commission on Monitoring Foreign Investment. MTS submitted an application for such exemption, and in May 2022 received permission to maintain ADR Program until July 12, 2022.

In June 2022, MTS informed JPMorgan Chase Bank, N.A., the depositary under the existing MTS ADR program, of its intention to terminate the Deposit Agreement, effective as of July 13, 2022.

In August 2022, MTS received confirmation from the NYSE that the Company's ADSs had been delisted from the NYSE effective August 8, 2022. The existing ADSs could be converted into MTS' ordinary shares at the ratio of 1:2. The guaranteed period for depositary receipts conversion was completed on January 12, 2023 (inclusive).

Recent acquisitions

In 2022, our acquisitions included:

- 100% of VisionLabs B.V., a renowned developer of products based on machine learning (February);
- 11.78% of UrentBike.ru, LLC, a leader on the Russian micro-mobility short-term rental market, including being Russia's largest electric scooter rental operator (February);
- 36.56% of the MTS Venture Fund in Bartello, an online food and beverage ordering service (April);
- 58.38% of Renninga Holdings Limited, whose wholly owned subsidiary Gulfstream Security Systems JSC is one of Russia's leading providers of digital safeguard systems for residential households, automobiles, and commercial real estate (April), together with 19.5% of Vorsicher Holding Limited, an owner of Gulfstream European divisionas well as call and put option agreements to purchase the remaining 41.62% stake in Gulfstream, exercisable starting 2025;
- 100% of Bronevik Online LLC and Bronevik Company LLC (Bronevik Group, one of the market leaders in online hotel booking), with the aim of developing a new business line, MTS Travel, in the tourism industry (July);
- 75.5% of Riandele Ltd, which owns Webinar LLC and Webinar Technologies LLC, the largest Russian developer of services for online meetings, events, training and webinars (July) (subsequently increasing our stake to 84.25% in September 2022 following the exercise of call options; with remaining options under call and put option agreements exercisable in 2024 and 2025);
- 25% of New Digital Solutions LLC, a joint venture to develop 5G technology, which brings together Russia's largest telecom operators with the goal of acquiring radio frequency resources to build 5G mobile networks in Russia (July);
- an investment by the MTS Corporate Venture Fund in the Belarusian start-up LogicLike, an online educational platform for the development of logic and reasoning in children, with LogicLike's interactive courses and games for children's comprehensive educational development now available to both new and existing subscribers of MTS's 'NETARIF' Junior (August); and
- 50.85% of Navitel Group, a Russian provider of navigation and cartographic solutions, together with call and put option agreements to purchase the remaining stake in Navitel Group, in order to create our own geo-services platform for the development of an ecosystem of services and transport solutions (October).

In December 2022, the spin-off of tower assets from MTS PJSC into Tower Infrastructure Company LLC ("TIC"), a 100% subsidiary of MTS, was closed. Given the tower footprint, it is hoped that TIC could become a partner of choice for other mobile network operators for network equipment installation. It is hoped that increasing tower tenancy could enable TIC to grow incremental revenue and further drive business performance.

Purchase prices of the recent acquisitions are disclosed in Item 5. Operating and financial review and prospects—A. Operating Results—Acquisitions.

Capital Expenditures

We spent in total RUB 112,581 million in 2022 for network development in Russia and the other countries where we operate, which included RUB 70,624 million in cash expenditures on property, plant and equipment, and RUB 41,957 million for the purchase of intangible assets. In 2023 we plan on spending for further network expansion, special projects relating to the development of big data, media, artificial intelligence and ecosystem products, fixed network modernization, further construction of radio subsystem and additional storage, processing and indexing centers to comply with requirements of “Yarovaya Ozerov bundle of laws,” maintenance capital expenditures, construction of new sites and purchase of software for network managing in Armenia and other initiatives. We plan to finance our capital expenditures primarily through operating cash flows, and to the extent necessary, through additional external financing. The actual amount of our capital expenditures for 2023 may vary depending on subscriber growth, demand and network development, as well as currency volatility, vendor terms and the availability of external financing. Please see also “Item 3. Key Information—D. Risk Factors — Risks Relating to Economic Risks in Our Countries of Operation —Further deterioration in geopolitical situation and sanctions imposed as a result thereof could materially adversely affect our business, financial condition, results of operations, prospects and the value of our shares” for the risks connected with sanctions.

A breakdown of our capital expenditures in 2022 by country is set forth below.

We spent RUB 13,948 million, 10,186 million and 262 million in 2022, 2021 and 2020, respectively, for acquisitions of subsidiaries, net of cash acquired from third parties.

Russia

We spent RUB 110,858 million in 2022 for network development in Russia, including RUB 69,580 million in cash expenditures on property, plant and equipment, and RUB 41,278 million for the purchase of intangible assets.

Armenia

We spent RUB 1,648 million in 2022 for network development in Armenia, including RUB 969 million in cash expenditures on property, plant and equipment, and RUB 679 million for the purchase of intangible assets.

Czech Republic

We spent RUB 75 million in 2022 for machinery and equipment in the Czech Republic, including RUB 75 million in cash expenditures on property, plant and equipment, and null for the purchase of intangible assets.

Belarus

MTS Belarus spent RUB 1,414 million in 2022 for network development, including RUB 1,026 million in cash expenditures on property, plant and equipment, and RUB 388 million for the purchase of intangible assets. We do not include the capital expenditures of MTS Belarus in our capital expenditures described above as its results are not consolidated in our financial statements.

B. Business Overview

We are digital ecosystem and a leading telecommunication services provider in Russia and the CIS, providing a wide range of mobile and fixed line voice and data telecommunications services, including data transfer, broadband, pay-TV and various value-added services, including Big Data, IoT, cloud services, banking services, e-commerce, as well as selling equipment, accessories and software.

In 2022, we offered fixed line communications services in 60 regions across Russia, covering a population of about 30 million households.

Our Moscow fixed line operations contemplate communications services provided through incumbent operator MGTS. MGTS holds licenses and regulatory approvals to provide local telephony, DLD/ILD voice telephony, interconnect to other operators, Internet and data transmission and other services.

Our other fixed line operations include the following communication services: voice, data and broadband Internet and pay TV services for corporate and residential subscribers, as well as the provision of interconnect services to other communications operators and numbering capacity to their subscribers. We also operate in Armenia, where we provide digital telephony communications services, data transmission, Internet access and the renting of channels.

We provide fixed-line communications services to corporate, operator and residential subscribers in 60 regions throughout Russia. Specifically, we offer local voice, DLD/ILD voice, data and Internet and pay TV services to our subscribers. Some of the interconnect tariffs we charge other telecommunications operators for in Moscow and certain other cities are regulated by the Russian government.

We have also continued to develop our proprietary sales and distribution network organically.

To maintain and increase our market share and brand awareness, we use a combination of print media, radio, television, direct mail and outdoor advertising, focusing on brand and image advertising, as well as promotion of particular tariff plans.

Business Strategy

Starting from 2019, MTS has followed the strategy called “Customer Lifetime Value 2.0” (“CLV 2.0”) which is aimed at building substantial digital business on the top of our telecommunication business. Our strategy is focused on prolonging customers’ lifetime by increasing emotional attachment to the brand together with level of satisfaction and loyalty. We are also shifting from single business line telecom centric ideology to a multi product digital services provider approach which should enable us to maximize value across the whole product portfolio.

We believe that extension from telecommunication into adjacent markets such as financial services and entertainment supported by digital capabilities like Big Data and AI is the first step to our convergence into multi service digital company. We intend not to rely on development of our own products portfolio solely, but rather build partnerships with independent services providers. Collaboration with such projects should enable us to offer more innovative, various and convenient services to our clients and bring more value to their life. The key priorities of our partnership program are: increase the number of partnerships, boost our partnership capabilities and value proposition them in order to become ultimate preferred choice for our potential partners.

The Russian market of digital services is quite unique due to the fact that in most segments local projects retain lead positions and compete successfully against global players. This situation is due to multiple fundamental reasons ranging from customer’s behavior and language specifics to regulatory requirements and the structure of capital markets. This allows major Russian business groups from banking, retail, high tech, and telecom sectors to aggressively develop multiple lines in digital businesses and adopt ecosystem approaches in their business strategies. At the moment a number of big local companies from TMT, fintech and digital industries are moving this direction, expanding their businesses outside of their core sectors and entering the market with ecosystem propositions. Recent geopolitical tensions provoked the withdrawal or radical weakening of global digital players in the Russian market, turning it into a field of competition of mostly local companies and business groups.

We believe that we are well positioned for this type of competition. Our strong brand and deep knowledge of our clients supported by powerful analytical capabilities (Big Data and AI based) allow us to provide our clients with seamless, deeply customized and personalized digital experience for wide portfolio of different services. We have already experienced substantial synergies between telecommunication, banking and media services which allow us effectively utilize our online and offline marketing capabilities and deep customer knowledge. We clearly see that customers who use a few different services from us bring higher value and have high level of brand loyalty and services satisfaction. Our key priorities in terms of the ecosystem development for the next few years are: growing the ecosystem client base, developing high-quality digital products, expanding the pool of partner companies.

In 2022 on top of the transition to the full scale operational model within CLV 2.0 concept we have also focused the efforts of senior management and corporate governance bodies on the issues of the optimal “format” of key business areas and appropriate distribution of financing among them to intensify their development and reach fair evaluation.

As a result of a comprehensive analysis, we came to the conclusion that some of our business areas have reached such a scale and a level of maturity that they can become a driver of an increased fundamental value of MTS Group. Therefore, we started to gradually separate such areas into independent structures and independent companies that in the future will operate freely on the market, attract external financing on their own and have potential to become full-fledged entities with separate and attractive investment story for the investment community.

We believe that this approach will provide high motivation for the teams of business areas, will allow them to set up their business processes in an optimal way, considering the specifics of each area, and will simplify the process of attracting additional financial resources. As a result, this will ensure the high dynamics of products development and keeping their quality at the level of the market leaders. In addition, we hope that new promising businesses will be freed from traditional telecom multiples and will be able to fully unlock the potential for the growth of shareholder value. In this sense, we are striving to move from the investors' perception of the Group as a single and indivisible entity to the perception of the "sum of the parts", where each of the parts is evaluated fairly in accordance with its own performance and multiples accepted on the market for each specific type of business.

In 2022 we adopted a new logic for structuring the MTS Group's business into "Core" and "Growth areas". The first element of the structure is the Core, which includes a number of areas: B2C and B2B telecom (our historical competency) and corresponding telecom and cloud infrastructure, ecosystem digital products and functions that ensures unity and proper interactions of the ecosystem elements and joins. The Core is an indivisible whole, which in our vision will stay under our direct control in the long term. As for second structural element, we identified 10 product lines of various sizes and levels of maturity working at the adjacent and complementary to the Core markets, which we consider as growth and value creation points. Young areas (for example, Smart Home and Travel) have great growth potential, but at the current stage, they are not yet material for the Group. The larger areas (for example, Fintech and Media) are already material and have an independent value for investors. In the next several years depending on the situation on financial markets, we aim to bring to the investment market MTS Bank, which has been demonstrating high dynamics over the past years, approaching the sector leaders not only by size, but, which is even more important, in terms of a product portfolio and degree of business digitalization. Other businesses of MTS Group (e.g. Retail, Media, Cloud & Infrastructure or Entertainment) in long term can also potentially follow this track of attracting co-investors on the market or through strategic partnerships.

We want to underline that shifting to the logic of "sum of the parts" does not mean our transformation into a holding of loosely connected businesses. We remain a Group and maintain strong ecosystem connections between areas. The main connecting forces in our opinion are: ecosystem marketing and brand management (not necessarily a unified brand); sharing knowledge about the client and following the unified CLV logic; centrally developed and managed capabilities. All of them are supported by clear and detailed agreements on interaction between the companies and parts of the Group.

It also must be emphasized that to enjoy synergies and effective interactions within the Group, besides ecosystem connections, we need also mutual reinforcement (from business to business and from Corporate Center to businesses) through strong / unique competencies and capabilities. Strong capabilities in digital, IT and adjacent areas in modern world are obviously sources of strategic competitive advantages. So we are going to pay special attention towards cultivation of competencies and capabilities necessary for developing digital products and overall ecosystem.

We carefully monitor the dynamics of internal conditions in our target markets in Russia, including economic, legal and regulatory, as well as the impact on our business of external factors related to access to technological equipment, securing financing and debt servicing and meeting obligations to external and internal counterparties. In this context, we consider our strategy relevant to the current moment. Nevertheless, we pay increased attention to risk mitigation, and on the other hand, we are ready to use dynamically opening windows of opportunities. Such opportunities include, in particular, a significant weakening of the positions of foreign players in Russia, a general decrease in competitive pressure, an expanding field of M&A activity, and an increase in mobility of personnel. It is worth noting that, given the current conditions, the fundamental role of partnerships in the formation and development of the product content of the ecosystem offer becomes even more obvious to us. We will strive to ensure the long-term sustainability of partnerships with products we consider to be the most significant for our ecosystem offering. In order to achieve this we are going to make investments in partner companies, participating in them as a minority shareholder.

Implementation of the strategy is subject to a number of risks. See "Item 3. Key Information—D. Risk Factors" for a description of these and other risks we face, in particular "Item 3. Key Information—D. Risk Factors — Risks Relating to Economic Risks in Our Countries of Operation — Further deterioration in geopolitical situation and sanctions imposed as a result thereof could materially adversely affect our business, financial condition, results of operations, prospects and the value of our shares".

Subsidiaries

For a list of our major subsidiaries and our ownership percentages in these subsidiaries, see “Item 4. Information on our Company—C. Organizational Structure.”

Mobile Operations

Network Infrastructure—Mobile Core

As of December 31, 2022 MTS Mobile core network in Russia includes the following nodes:

- Mobile switching centre-server (MSC-S): 117 nodes, servicing 62.5 million subscribers;
- Media gateway (MGW): 110 nodes, maximum capacity 3.3 million Erl.;
- Subscriber Data Management (SDM) includes 21 nodes (Home Location Register (HLR) / Home Subscriber Server (HSS));
- 119 Serving GPRS Support Node/Mobility Management Entity (SGSN/MME) and Serving/Packet Data Network—Gateway (S/P-GW) nodes are used to handle packet data services;
- 16 Signalling Relay Function (SRF) nodes deployed on network for handling Mobile Number Portability (MNP) services.

The following network expansion and modernization projects were executed during the course of 2022:

- Installation of geo-redundant MSC-S/MGW nodes in the cities of Vladivostok, Nizhny Novgorod and Izhevsk to improve network reliability.
- Installation of additional geo-redundant Serving/Packet Data Network—Gateway (S/P-GW) in the cities of Moscow, Saint Petersburg, Nizhny Novgorod, Ufa and Vladivostok to serve additional data traffic.
- SWAP of obsolete HLR/HSS Ericsson equipment in the cities of Ekaterinburg and Krasnodar with a new virtual HLR/HSS Ericsson, providing connection for new IMS subscribers in the Ural macro-region and the South macro-region.
- Expansion of IMS Core Network. VoLTE launched in 81 regions.

Services Offered

Network Access

We primarily offer mobile cellular voice and data communication services to our subscribers on the basis of various tariff plans designed for different market segments. In general, most of our tariff plans combine voice and data usage for a fixed monthly charge. See “Item 4. Information on Our Company—B. Business Overview—Mobile Operations—Tariffs.”

Automatic Roaming

Roaming allows our customers, both subscribers and guest roamers, to receive and make international, local and long distance calls while traveling outside of their home network. Roaming is provided through the agreements between us and other operators.

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As of December 31, 2022, we had bilateral roaming contracts with 876 wireless operators/networks in 232 countries, including 15 regional operators/networks in Russia. We continually seek to expand our roaming capability and are currently in negotiations with additional operators.

Value-Added Services

We offer various value added services to our customers. These services may be included in the tariff plan selected by the subscriber, or subscribers may pay additional monthly charges and, in some cases, usage charges for them. These basic value added services range from matters such as basic telephony, messaging, mobile internet, customer care and other services (e.g. GEO services).

We also provide many voice and SMS-based value-added services in cooperation with various content providers.

GPRS, EDGE services

We continue supporting and modernizing our 2G network and we put the prime focus at the development of our LTE networks in order to provide our subscribers with high speed broadband wireless services.

As of December 31, 2022, we provided GSM, GPRS and EDGE services with 59,815 2G BTS over the geographic area with more than 96% of population of Russia.

3G Technology

Since April 2007, we have operated under a nationwide 3G/UMTS (Universal Mobile Telecommunications System) license in Russia which is currently valid until May 21, 2027. Currently we have commercial 3G networks launched in all regions of Russia. As of December 31, 2022, we installed 52,489 3G base stations over the geographic area with more than 86% of population of Russia.

In 2010, we started implementation of a high speed technology known as HSPA+ on our 3G network. This technology supports up to 21 Mbit/s per carrier data transmission speed. In addition, we launched second and third 3G carriers to improve capacity and activated Dual Carrier technology, which supports up to 42 Mbit/s data transmission speed.

Since 2011, we use 3G femtocell network. Femtocells are small low power wireless base stations in the licensed 2100 MHz spectrum. They connect to a mobile operator's network using residential DSL or cable broadband connections and can support 3G/HSPA+ mobile devices. We use femtocells to deliver a 3G/HSPA+ services inside building for business clients. In 2016, we launched offer of femtocells for consumers at B2C market segment. As of December 31, 2022, we installed 8,439 3G femtocell.

Frequencies for 3G services were allocated to MTS Armenia in October 2007, and the commercial UMTS network was launched in 2009. From 2011 MTS Armenia started to provide telecommunications services based on HSPA+ technology with QAM64 and Dual Carrier features making it available to almost 99% of the Armenian population. In 2018 during a major network upgrade project, frequency refarming was done in 900 MHz band to allocate bandwidth for UMTS900 operation which led to UMTS network capacity and coverage significant improvement. Also 2 pairs of RNCs-in-pool were put in operation in 2019 increasing UMTS network reliability.

LTE Technology

In December 2011 we obtained an LTE TDD license in 2595 2620 MHz frequency band for Moscow only. In July 2012, we obtained a nationwide LTE FDD license in the following frequencies: 720 727.5 / 761 768.5 MHz, 798.5 806 / 839.5 847 MHz and 2540 2550 / 2660 2670 MHz. Since September 2012, we have offered LTE based commercial service in the Moscow region. As of December 2022, we had 3,423 LTE TDD and 20,910 LTE FDD base stations in the Moscow region.

In 2014, we started DCS 1800 spectrum re farming to LTE and deployment of LTE 1800 network, while expanding LTE 800/2600 coverage. In February 2016, MTS obtained a nationwide LTE TDD license and obtained LTE TDD frequencies in the following bands: 2595 2620 MHz for the whole territory of Russia, except Moscow region (obtained earlier). We are using LTE TDD as a capacity layer to cope with increasing network utilization due to growing data traffic. Our license for frequencies 798.5-806 / 839.5-847 MHz and 2540-2550 / 2660-2670 MHz is valid till 2031.

As of December 2022, we implemented Carrier Aggregation functionality at 51% of our LTE sites.

As of December 2022, LTE 2100 networks are deployed in more than 22 regions of Russia. In 2023 we plan to continue rolling out LTE2100 in Moscow and other regions of Russia.

As of December 2022, we had 17,946 LTE TDD and 105,182 LTE FDD base stations over the geographic area with more than 84% of population of Russia.

MTS is the IoT leader in the Russian market, with large scale narrow band coverage provided by 53,351 base stations over all of Russia.

First LTE base stations were launched in MTS Armenia network in 2011 in 2600 MHz band. In 2019 MTS Armenia obtained frequencies to operate LTE network in 800 MHz band, as well as additional spectrum in for 1800 MHz band to increase L1800 network capacity. More than 210 new LTE base stations were launched in 2022. By the end of 2022 the number of L800/L1800/L2600 base stations in operation is more than 2310, providing LTE services all over Armenia. As of the end of 2022 in Armenia we had 1248 base station sites equipped with LTE, 1287 sites with UMTS and 1260 sites with GSM base stations.

Due to longer than expected vendor selection process MTS-Armenia was slightly behind schedule with its IMS upgrade project which is now planned for completion in the second quarter of 2023.

5G

5G is the next major step for telecommunication companies.

Artificial Intelligence

The key focus of our artificial intelligence center is the development of virtual assistants, as well as products in the areas of customer service, medicine, law, among others.

In June 2019, we started selling customer service robots—automated dialogue systems that allow you to interact with a client without human involvement. The solution, based on artificial intelligence technologies, processes any typical requests—for example, talks about products and services, answering popular questions, connecting and disconnecting services.

In November 2019, we, together with other major companies, developing artificial intelligence, established an artificial intelligence alliance that will develop AI technologies in Russia. To develop solutions based on speech technologies, we have also opened a research center in Skolkovo to create the largest voice database in Russian.

In 2021, we focused on the consolidation of AI properties such as competences, products and R&D, concentrating on two major product directions—conversational AI and video computer vision merged with video surveillance.

By the end of 2021, we released MVPs of three major cloud-based B2B platforms:

- 1) a voice platform (the so-called “Audiogram” TM), which recognizes and synthesizes speech;
- 2) an NLP (natural language processing) platform, which allows users to create multimodal bot (both voice-based and text-based) scenarios via low-code design tools and manage bots to automate customer service, employee onboarding and CX across digital channels;
- 3) a VSaaS (video surveillance as a service) platform (the so-called “TenVision”), which allows for the implementation of video surveillance and AI analytics into other digital products.

We have continued working with leading Russian universities in the field of AI technologies, which has resulted in the development of USB cards. Such a device can be used by students to learn AI basics and in cloud video surveillance.

In 2022, we completed the commercial launch of our VSaaS platform (the so-called “TenVision”), which allows for the implementation of video surveillance and AI analytics into other digital products. We also increased the penetration of our voice platform (the so-called “Audiogram” TM) — a service that recognizes and synthesizes speech — into the company’s products, began piloting this platform in the international market, and released an MVP of the platform for AI analytics of text and voice communications.

We continued developing our Accelerator platform (for creating start-up projects), the main goal of which is to gather start-ups and offer them resources for development—training, investments and technologies.

In 2023, we will be developing and commercializing VSaaS products (the so-called “TenVision”), in external markets and creating and commercializing industry-specific customer service robots for text and voice channels based on a bundle of conversational AI products, including the launch of a Virtual Assistant product for the ecosystem.

Banking Services

In July 2018, we started providing banking services made possible by the acquisition of MTS Bank. MTS Bank has accelerated the sale of its retail product with the help of MTS’ Big Data capabilities and MTS’ digital sales channels. The bank’s financial products are complementary to our core business and fully integrating the services under the Group umbrella allows us to offer our customers new integrated services, unlocking new revenue streams and consolidating our brand in the wider consumer space.

MTS Bank carries out its activities in the following areas:

- Retail business. Serving individuals, including maintaining current accounts, receiving deposits, providing saving and investment products, custody services, servicing credit and debit cards, consumer and mortgage lending.
- Small and medium-sized businesses. Serving small and medium-sized businesses, including maintaining current accounts, accepting deposits, providing overdrafts and lending services.
- Corporate business. Serving corporate clients, including cash settlement, maintaining current accounts, accepting deposits, lending, including overdrafts, providing documentary products, including guarantees, letters of credit.
- Investment business. Providing investment banking services, including trading in shares and bonds, precious metals and derivative financial instruments, placement of fixed income securities, issuing debt securities and attracting subordinated loans, operations with foreign currency.

Other Services

In addition to cellular communication services, we offer corporate clients a number of telecommunications services such as design, construction and installation of local voice and data networks capable of interconnecting with fixed line operators, installation and maintenance of cellular payphones, lease of digital communication channels, access to open computer databases and data networks, including the Internet, and provision of fixed, local and long- distance telecommunications services, as well as video conferencing.

We also developed our ecosystem to offer our customers quality services in related sectors such as Telecom, Media, Fintech.

In 2022, we paid attention to new areas: the development of products based on computer vision and natural language processing technologies, the development of solutions for the tourism industry, the development of navigation and cartographic solutions for vehicles.

Sales and Marketing

Target Customers

Our service model is based on the provision of services to customers to meet the needs of distinctive customer segments. Our strategy is to build an ecosystem brand which provides digital services and innovative products in different product segments. We continued to work with mass and youth audiences using relevant channels and creative language.

In 2022, we focused our efforts on the following:

- Building knowledge about MTS as an ecosystem
- Continuing to build knowledge about MTS as an innovative and technological company with state-of-the-art solutions, including in the main business — telecom
- Promoting ecosystem subscription on digital services
- Launching digital products outside the telecom scope
- Promoting the MTS Bank with different offers
- Promoting strategic partnerships and retail with special operator offers
- Promoting our services aimed at the youth audience
- Promoting B2B offers

Advertising and Marketing

The key subjects for our advertising ecosystem campaigns in 2022 included promotion of the MTS Premium – ecosystem subscription, digital services special outside the telecom scope, financial offers and technologies of MTS Bank and B2B offers. In addition, in 2022, MTS continued to develop subscriptions instead of billing plans to communicate our ecosystem services.

In order to build brand awareness and stimulate demand, we used a combination of various advertising formats, including television, outdoor, retail and radio. We also coordinate the advertising approach of all our products, dealers, partners and retail to capitalize on the increased volume of joint advertising and preserve the integrity and high-quality image of the MTS brand.

In line with our strategy to find new ways to communicate effectively we used wide range of digital channels, social media, banners, pre-rolls, bloggers, branded content and launched special activations with partner websites and collaborations with popular Russian bloggers, trending Internet shows and other formats of online advertising in 2022 campaigns.

In 2022, we focused on advertising various products of our ecosystem using all available communication channels proved to be effective.

Youth audience

As part of our engagement with the younger audience (ages 14-24), we launched two new products:

1. Stroki - service for digital books with the intellectual data mining system.
2. MTS Defender - intellectual system which blocks spam based on Big Data analysis.

B2B offers

MTS continued supporting the SME & BB segment with the smart advertising platform “MTS Marketolog”, which helps companies to launch advertising and marketing campaigns without agencies and being on full high control of all the process and budgets. The product was promoted in digital media and radio in 2 flights per year.

Sales and Distribution

In 2022, MTS continued development of our own digital ecosystem as a base of digital leadership strategy. Connected sales are one of the points of our own ecosystem. In 2022, we increased the share of convergent sales by focusing on convergent products.

We continued to develop the Franchising sale channel. We have implemented a unified software for the Franchise network and scaled it to the regions. We launched operator mechanics in our own and partner sale channels and organized the supply of hardware to the Franchise network.

This significantly increased the share of online sales, having implemented projects that allowed us to increase the expansion of online sale channels: we developed a federal SIM card that is not tied to a specific region and does not have a preset tariff and mobile phone number, introduced a subscription to a “Device + SIM” bundle. Launching of the operator mechanics such as bundling with devices provided us with an increase of basic telecom products sales in the online channel.

In 2023, we plan to maintain the leadership in converged products among telecom companies by increasing penetration and geography. Further development of the online channel is planned: bundles with new ecosystem products, bundles with equipment on marketplaces, launch of a new communication compensation mechanic.

Competition

The Russian wireless telecommunications market

Until 1998, mobile communications developed slowly, penetration was less than 0.5%. However, this changed, as a result of explosive demand in 2006, the number of subscribers registered in networks exceeded the country’s population. Three market leading operators, MTS, Beeline and Megafon, served 85% of the subscriber base. Over the past decade, the Russian market has stabilized; further growth is associated with the development of the IoT services market and M2M devices. As of December 31, 2022, overall wireless penetration in Russia was about 175%, or approximately 256 million subscribers.

The following table sets forth key data on Russia’s wireless telecommunications market as of the dates indicated:

	As of December 31,		
	2022	2021	2020
Subscribers ⁽¹⁾	256.2	258.5	252.2
Subscriber penetration (%)	175	178	172

According to AC&M-Consulting data and our estimates based on our subscriber data and reports of other national operators.

- (1) Based on registered subscribers (SIM cards only) including MVNO networks. There is no uniform definition of active subscribers in the Russian wireless market.

The primary mobile providers in Russia include us, MegaFon, VEON (VimpelCom) and Tele2, each of which has effective national coverage in Russia. Competition is based on network coverage and quality, the level of customer service provided, roaming and international tariffs, local tariff prices and the range of services offered. For a description of the risks we face from increasing competition, see “Item 3. Key Information—D. Risk Factors—Risks Relating to Our Business—We face increasing competition in the markets where we operate, which may result in reduced operating margins and loss of market share, as well as different pricing, service or marketing policies.”

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The following table illustrates the number of wireless subscribers for each network operator in Russia as of December 31, 2022, 2021 and 2020:

Operator	As of December 31,		
	2022	2021	2020
	(amounts in millions)		
MTS	80.0	80.4	78.5
MegaFon	74.5	74.4	70.4
VEON Ltd. (Beeline)	44.8	49.4	49.9
T2 RTK Holding (Tele2+Rostelecom)	48.3	47.5	46.6
Others & MVNO	8.7	8.7	6.8

According to AC&M-Consulting and operators' press releases.

MegaFon. MegaFon, which operates GSM 900/1800, UMTS (3G) and LTE (4G) networks, is one of our primary competitors in Russia, and it is the second largest GSM wireless operator in Russia in terms of subscribers. The operator changed the method of calculating the subscriber base in the fourth quarter of 2020 and applied stricter requirements for monitoring customer activity. MegaFon had a subscriber base of approximately 74.5 million subscribers in Russia, which represented a 29% market share as of December 31, 2022.

VEON (Beeline). In addition to MegaFon, we also compete with VEON (Beeline), which is the third largest GSM 900/1800/UMTS (3G)/LTE (4G) wireless operator in Russia in terms of subscribers.

According to its own estimates, VEON (Beeline) had a subscriber base of approximately 44.8 million in Russia at December 31, 2022. At December 31, 2022, VEON (Beeline) had a 18% market share of total wireless subscribers in Russia, based on the number of subscribers disclosed by VEON (Beeline) and our estimate of total number of subscribers.

T2 RTK Holding. In February 2014, Tele2 and Rostelecom announced a merger which created a new federal wireless provider. The license portfolio of the new company covers all Russia which effectively permits the roll out of federal-scale networks. The most important event for operator was the launch of 3G/4G network in Moscow region in October 2015. The operator's services are now available on the territory where 97% of Moscow Region residents live. In 2018 - 2019, Tele2 have actively rolled out 3G and 4G networks, launched new tariffs, options and services which enabled to provide customers with services similar to those of the market leaders. By the end of 2022, Tele2 LTE networks were launched in all 69 regions.

Tele2 had a subscriber base of approximately 48.3 million in Russia and 19% market share as at December 31, 2022.

Other Operators. The number of subscribers of other operators, including MVNO operators, which were not indicated above is about 8.7 million customers as of December 31, 2022.

The Armenian wireless telecommunications market

At the end of the reporting year of 2022 the wireless penetration in Armenia was around 131% for the population of 2.97 million (2011 Census, published by Statistical Committee of RA in October 2022). Total number of active users of mobile services in RA was about 3.88mln.

The following table illustrates number of 3-month active subscriber bases and the coverage area of MTS Armenia and competitors – Team (Telecom Armenia) and Ucom, as of indicated dates.

Operator	As of December 31,		
	2022	2021	Coverage Area
	(amounts in thousands)		
MTS Armenia	2,266.98	2,231.84	Nationwide
Team*	952.45	915.53	Nationwide
Ucom*	663.45	593.06	Nationwide

Source: telecomarmenia.am; ucom.am; mts.am

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MTS Armenia saw an increase of 3-month active subscriber base by 1.57%, year-on-year. The operator reported about 58.4% market share at the end of 2022.

Tariffs

We customize our marketing efforts and pricing policies in each region of Russia and our other countries of operation by considering such factors as average income levels, the competitive environment and subscriber needs, all of which vary from region to region. Consistent with our marketing strategy, we have developed tariff plans to appeal to a broader market. The following table shows the mix between prepaid and other subscribers, such as contract and corporate customers, for Russia for the periods indicated:

	As of December 31,		
	2022	2021	2020
Russia			
Prepaid	21 %	24 %	28 %
Contract and corporate	79 %	76 %	72 %

We currently have a unified system of tariff plans offered to subscribers throughout Russia. The unified system is aimed at achieving such benefits as clarity, simplicity and transparency for prospective subscribers by offering the same set of tariff categories throughout Russia. Under each tariff category, we offer different tariff plans with different connection fees, per minute call charges and a wide range of value-added services.

By advertising on a national rather than regional or local level, we have been able to streamline and reduce our advertising and marketing expenses through unified advertising campaigns throughout Russia. Furthermore, we are able to convey to consumers a more uniform perception of our brand and services.

Tariff Plans in Russia

Currently, each of our tariff plans in Russia combines per minute usage charges, value-added services in packages and different monthly network access fees (with the exception of the prepaid tariff plans) designed for different market segments. Our tariff plans are currently divided into several categories - "Prepaid," "Smart," "Premium," "Data," "IoT", "Corporate" and "Convergent" - with each category designed to target specific segments.

Customer Payments and Billing

We enroll new prepaid subscribers in an advance payment program. As of December 31, 2022, 72% of our consolidated subscriber base was enrolled in the advance payment program and 28% used a credit based system.

Our advance payment system monitors each subscriber account and sends an advance warning on the subscriber's mobile telephone when the balance on the subscriber's account decreases below a certain threshold.

Under the credit payment system, customers are billed monthly in arrears for their network access and usage. We limit the amount of credit extended to customers based on the customer's payment history, type of account and past usage. As of December 31, 2022, subscribers using the credit system of payment had credit limits of up to RUB 2.87 million for key corporate customers in Russia. When a credit limit is reached, we block the telephone number until the balance is settled. There are no credit limits established for certain exceptional, high loyalty customers.

We provide "in full confidence" service, which allows our prepaid customers who subscribe to this service to continue using services when the balance on the subscriber's account becomes negative. As of December 31, 2022, subscribers using the "limit on communication" service had a maximum credit limit of RUB 3 million. Customer service representatives can set individual credit limits for subscribers based on their payments and charge history (i.e., average balance usage) during the prior three months. When the credit limit is reached, our billing system blocks the phone number until the balance is settled. Similar to the credit payment system, the subscribers are billed monthly in arrears for usage. The invoice, which can be delivered to the customer by e mail, fax, regular post and Internet, should be settled within 24 days. If the invoice is not paid five to seven days prior to the due date, the system sends an additional reminder. The telephone number is blocked on the 25th day if the invoice is not settled.

In Russia, we offer our subscribers various ways to pay for our services, including cash or credit card, wire transfer, prepaid cards and express payment cards.

We implemented Foris billing system in Russia in 2008. The Foris billing system allows us to offer all of our subscribers a uniform and consistently high level of service. It also supports the monitoring of account usage in real time. In addition, the system provides us with the ability to offer flexible tariff plans with various usage discounts and subscriber loyalty bonuses. Furthermore, we are able to provide our corporate subscribers with more sophisticated customized billing solutions. For example, our corporate subscribers who use multiple phone numbers in different regions of Russia receive a single invoice.

In Armenia, we use the “Eskadenia” billing system.

Customer Service

Russia

In 2022, we actively developed tools for the work of the Company’s employees and self-service for customers. We continue following this trend with a greater focus on the ecosystem, omnichannel and seamless customer journey.

We have already created an ecosystem seamless service at all points of contact between the customer and the Company. We have implemented a seamless service when transferring calls. A customer is no longer required to introduce himself and repeat his question when making a transfer call within the Company. With respect to most procedures, a remote receipt of missing information from a customer has been launched. Now customers need to visit the Company’s offices less often. Moreover, we have started to develop the Unified Ecosystem MTS Customer Card. This workplace of an employee will be a convenient and user-friendly tool for MTS ecosystem customer service. The information about products will be provided in one place, thus helping to enhance customer service. An employee will make less tab stops and see the information requisite for resolving a customer’s issue.

In 2022, we implemented speech and text analytics tools for customer service. The implementation of these tools helped to increase a share of analyzed dialogs to 20% (previously, it was less than 1%). We already see a positive impact on the customer service indicators: the operator tNPS has increased by 3 p.p. in average. Early in 2023, we plan to increase the share of the analyzed dialogs up to 100%. In 2022, we finalized the operators’ working tools for secure remote work of employees. At the moment, about 50% of employees work totally remotely. In 2022, we switched to Zoom allowing us to safely and effectively train and mentor our employees. In 2022 we have also faced the SMS traffic transfer to a paid service ensuring delivery to customers’ numbers of other operators. This made it possible to reduce the share of repeated requests by 1 p.p. We continued developing actively our Knowledge Base – Knowledge Management System. Over 20 000 employees use the KMS every month, enjoying advantages of parametric scenarios and updated search.

In 2022, we continued developing customer service in MTS stores. We have launched a pilot project of providing service in stores using biometrics. Early in 2023, we will launch a pilot project on speech analytics in MTS stores. The implementation of intelligent tools is designed to improve the customer experience in MTS stores.

In 2022, in conjunction with MTS AI Center, we launched a Voice Bot in pilot regions of mobile and fixed business. Currently, we are updating recognition models and launching a new empathic voice. In 2023, we plan to roll out the Voice Bot for the whole customer service. At the same time, the Voice Bot will be a real assistant to the Call Center operators, redirecting customers’ questions to the operator.

2022 saw an active development of intelligent Smarty Chat Bot that resolves certain issues and serves customers without a referral to the chat operator. We have implemented a notification of customers of the status and timeline of settlement of the previously registered requests/incidents/claims. We have automated the provision of bonuses to customers suffered from failures in the network. In 2023, in conjunction with the AI Center, we plan to transfer the chat bot to the updated NLP platform; this enabling us to reduce the time-to-market implementation of new service scenarios and enhance ecosystem customer experience.

In 2022, we continued developing actively a tool of technical diagnostics of Russian fixed communication customers (Inetcore). Inetcore has become a tool for diagnosing not only the CSC employee, but also the Customer directly. We have configured integration with key SSS: IVR, Voice and Chat Bots. Now a customer can receive a technical advice and register a single incident in case of problems in the network without applying to the specialists.

Thus, in 2022, we continued improving the quality of customer services, this contributing to implementation of the Company's CLV 2.0 strategy.

Network Infrastructure—Technology Strategy

Our primary goal is to launch Cloud RAN, migrate core network platforms to the cloud and further increase fiber penetration.

To manage the unified infrastructure, we are developing the Infrastructure Platform - an artificial intelligence platform that analyses infrastructure elements, subscribers and their behavior as well as manages traffic, network configuration and field service.

LTE is our top priority while deploying Radio Access Network and 2G/3G investments are gradually decreasing in line with changes in network UE penetration structure and traffic migration.

According to the Technology Strategy, in 2022 we continued to re-farm frequencies in 1800 MHz, 2100 MHz and 900 MHz bands from 2G/3G to the most efficient technology—LTE. In addition, we use Carrier Aggregation, 256 QAM, high-order MIMO, and other technologies to provide a better user experience for our customers.

5G is the next major step for telecommunication companies. In 2022 our subscribers could test 5G-capabilities through the Russia's first distributed 5G pilot network.

Network Infrastructure—Site Construction and Sharing

In October 2014, MTS and VEON Ltd. (VimpelCom) had signed a contract about shared LTE networks deployment and operation. According to this contract, one shared LTE network should be deployed for servicing subscribers of both companies in several regions of Russia.

By the end of 2022 we had 11,424 LTE base stations shared with VEON Ltd. (VimpelCom) in 22 regions and VEON Ltd. (VimpelCom) had 5,242 LTE base stations shared with MTS in other 20 regions of Russia. Total amount of shared infrastructure nodes is 16,666 base stations servicing in 800 MHz, 1800 MHz and 2600 MHz bands FDD&TDD networks.

In addition to network deployment investments and operational costs savings target architecture of the site sharing project includes frequency resources shared usage: by the end of 2022 networks in 34 regions of Russia ran in shared 2600 band spectrum usage mode (MOCN concept). The project is being completed in 7 regions.

Network Infrastructure and Frequency Allocation

We use switching and other network equipment supplied by Nokia Solutions and Networks, Ericsson, Huawei, Alcatel Lucent, Samsung and other major network equipment manufacturers.

In Moscow and Moscow region license area, we have been allocated frequencies spanning 2×12 MHz of spectrum in the 900 frequency band and 2×24.8 MHz of spectrum in the 1800 frequency band for operation of a dual GSM 900/1800 network and UMTS900 network, LTE900 and LTE1800 networks. In St. Petersburg and the Leningrad region, we have been allocated frequencies spanning 2×9.8 MHz of spectrum in the 900 frequency band (including 2×1.6 MHz in the E-GSM band) and 2×18.6 MHz of spectrum in the 1800 frequency band for operation of a dual GSM 900/1800 network, UMTS900 network, LTE900 and LTE1800 networks.

We have different amounts of spectrum in the 900 MHz band for GSM 900 and UMTS and LTE networks and in the 1800 MHz band for GSM and LTE networks in almost every region of the Russian Federation.

We have been allocated frequencies 1950-1965 MHz, 2015-2020 MHz and 2140-2155 MHz for UMTS and LTE network deployment for the entire territory of the Russian Federation, excluding territories that became part of the Russian Federation after 2014.

In addition, we have been allocated frequencies 453-457,4 MHz/463-467,4 MHz for IMT MC and LTE networks and 1920-1935 MHz/2110-2125 MHz for UMTS and LTE networks in Khanty Mansi Autonomous Okrug and Republic of Bashkortostan.

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We have been allocated frequency bands 2540-2550 MHz and 2660-2670 MHz spanning 2×10 MHz and frequency bands 798.5-806 MHz and 839.5-847 MHz spanning 2×7.5 MHz for LTE FDD network deployment for the entire territory of the Russian Federation. In addition, we have been allocated frequency band 2595-2620 MHz spanning 25 MHz for LTE TDD network deployment for the entire territory of the Russian Federation, excluding territories that became part of the Russian Federation after 2014.

We believe that we have been allocated adequate spectrum in each of our license areas.

Network Infrastructure—Virtual Infrastructure

We launched various virtual network infrastructure projects throughout 2022. In addition, we commenced the design stage of the data-centers construction project in Ekaterinburg and Rostov and construction of a new module of data-center in St-Petersburg.

Network Infrastructure—Energy Infrastructure

In 2022 we deployed the Hardware and Software Complex (HSC) of power storage based on Li-Ion battery packs for base stations. The purpose of this Complex is to switch power supply from an external power source to a Li-Ion battery pack during the time when an electrical power has the most expensive cost and to charge up the batteries in those hours when an electrical power has the least expensive cost.

Besides that the HSC also serves as a power reserve system that can supply base stations with an electric energy in case of emergencies on an external power source.

Throughout 2022 more than 1000 base stations were provided with the Hardware and Software Complex. Complexes are already implemented and in a fully functional state. Introduction of the HSC allows to reduce electricity payments and to reduce operational costs. Data shows that depending on the region payments decreased by 8-15%.

Development and maintenance of the network

In Russia, we have used special radio planning tool Atoll supplied by Forsk to assess new sites so that the network design and site development are coordinated. This software could create digital cellular coverage maps of our licensed areas, taking into account the specifics of the urban landscape, including the reflection of radio waves from buildings and other obstacles. In addition we continued improving our customized tool SOCRAT for investment planning to speed up the process of RAN development planning and make it more accurate. Used together, these software tools enable us to plan base station sites without the need for numerous field trips and on-site testing, saving us considerable time and money in our network build-out.

We also continued employing the functionality that allowed us to increase the speed of data transmission and improve customer experience for our subscribers. The carrier aggregation functionality is activated at 98.6% of base stations where it is technically possible. It accounts for 51% of the MTS entire network base stations.

We continued our work of refarming the frequency spectrum to reform the remaining regions in 1800 band along with expanding already reframed LTE channels from 10 to 15 MHz bandwidth. The refarming of 2100 band is carried out gradually, starting from the most strategic regions, following the market demand and customer base migration from 3G to LTE-based services and took place at 21% of all our UMTS base stations.

In 2022, we continued expanding our network coverage. At the end of 2022 the 2G network coverage was provided for 96% of the population, 3G for 86% of the population, 4G for 84% of the population and IoT coverage was provided for 88% of the population of Russia. Small decrease in percent by comparison of previous year is due to using new propagation model and improving accuracy of network data in the planning tool.

Network Monitoring Equipment

We constantly control and monitor the performance of our network, calls setup ratio and other major key performance indicators and key quality indicators. These processes are centralized on several Network Operation Centers.

We have a Global Network Operations Center (“GNOC”) in Krasnodar that serves all MTS regional branches in Russia. GNOC allows us to centralize functions such as equipment monitoring and network control, planning and optimization, as well as help resolve incidents related to service outages or reduced quality of services.

The Global Fixed Network Operation Center (“GFNOC”) in Nizhny Novgorod covers 55 regions of Russia where we offer broadband Internet access, TV and fixed line telephony services. For the subscribers connected to these services the GFNOC acts as a single entry point for technical support. We have a centralized unit in the GFNOC, which is responsible for the quality of the services provided to corporate customers with mobile and fixed communication services. Our subsidiary company MGTS performs these functions in Moscow region of Russia.

We have also Operation and Maintenance Center TV in Moscow, which is used for monitoring TV head-end station and ours satellite TV services.

Our networks in Armenia and Belarus are monitored by our local operation and maintenance centers in each country.

The handling of any significant network problems and outages are monitored and coordinated at our headquarters, where we also manage the cross functional coordination of our networks in all countries of operation.

All of our equipment is supplied through authorized dealers. We have agreements with different suppliers for technical support services that allow us to obtain their assistance in trouble shooting and correcting problems with our network within the warranty period.

Please see also “Item 3. Key Information—D. Risk Factors — Risks Relating to Economic Risks in Our Countries of Operation — Further deterioration in geopolitical situation and sanctions imposed as a result thereof could materially adversely affect our business, financial condition, results of operations, prospects and the value of our shares” for the risks connected with sanctions.

The sanctions may adversely affect the ability of dealers to provide technical support due to the restrictions on access to the necessary tools and the knowledge bases of the manufacturers of the equipment we use.

Interconnect Arrangements and Telephone Numbering Capacity

We operate various types of communications networks, including mobile cellular, DLD/ILD and local fixed line and zonal fixed line networks.

Cellular operators must interconnect with fixed zonal, wireless, long distance and international telephone operators to obtain access to their networks and, via these operators, to the networks of other operators around the world. Cellular and fixed line operators must also obtain telephone numbering capacity to allocate to their subscribers. There are two categories of telephone numbers: “federal” 11 digit numbers (non-geographical numbering plan for cellular operators) and “local” seven digit numbers (geographical numbering plan for fixed line operators which can also be used as additional numbering capacity for mobile operators). In Moscow, both “federal” and “local” numbers have been used in the 11 digit format since the beginning of 2011. We have entered into various agreements for the provision of local telephone numbering capacity with several local telecommunications operators in Moscow and in other regions of Russia. We have also built our own local networks in certain cities within Russia (including Moscow) to provide local telephone numbering capacity to our subscribers. Telephone numbering capacity is allocated by the government and we provide interconnect services to other operators in all regions of Russia. Our fixed line zonal and local networks in Russia are interconnected with other operators. Zonal/local interconnect typically entails payment of a one-off connection fee per each point of interconnect (“E1”) and a usage charge based on minutes of traffic. Operators with a substantial market power may also charge a guarantee monthly usage fee in case traffic is less than 30 kmin per E1.

The Ministry of Communications and Mass Media has allocated special numbering codes for federal 11 digit telephone numbers on a non-geographical basis to all the cellular operators. We believe that sufficient numbering capacity has been allocated to us for the development of our network. However, a combination of regulatory, technological and financial factors has led to the limited availability of local 7 digit telephone numbering capacity in Moscow and the Moscow region. Moscow’s “495” code and the Moscow region’s “496” code have already reached numbering capacity limits. As a result, the new “499” code was introduced in order to increase the Moscow numbering capacity, the “498” code was introduced to increase Moscow region numbering capacity and since 2011 “local” numbers have been used in Moscow in 11 digit format.

To meet subscriber's demand and provide for an adequate inventory of numbering capacity, we previously entered into contracts with local fixed line providers for allocation of numbering capacity to us. However, the Ministry of Communications and Mass Media subsequently took the view that numbering capacity assigned to one operator could not be rented to other operators. Accordingly, we have entered into arrangements whereby fixed line operators make their numbers available to our subscribers via agency contracts between the subscribers and us acting on behalf of such fixed line operators. Our right to use numbering capacity is for an unlimited period of time. As of December 31, 2022, we had numbering capacity (federal and local) for approximately 41,86 million subscribers in the Moscow license area.

To provide our subscribers in Russia with DLD/ILD services, we have interconnect agreements with national operators Rostelecom, VEON Ltd. (VimpelCom) and other national transit operators. We have also built and operate our own DLD/ILD network, which allows us to interconnect directly to foreign operators and thereby decrease our interconnect costs. Most interconnect fees for connecting users of other operators' fixed line and wireless networks to our network are based on a one-off connection fee and charge for usage by minute which varies depending on the destination called.

Russian legislation provides that fixed line operators with a substantial market power cannot refuse to provide interconnect or discriminate against one operator in relation to another, and the interconnect rates of operators with a substantial market power are regulated by the government. See "Item 4. Information on Our Company—B. Business Overview—Regulation of Telecommunications in the Russian Federation—Regulation in the Russian Federation—Competition, Interconnect and Pricing" and "Item 3. Key Information—D. Risk Factors—Risks Relating to Our Business—If we cannot interconnect cost-effectively with other telecommunications operators, we may be unable to provide services at competitive prices, which may diminish our market share and result in a loss of revenues and margins."

Interconnect and traffic transit between the networks of mobile operators in Russia occurs through direct channels connecting the switches of the different mobile operators within the same city; through the network of transit long distance operators, which connect the networks of different mobile operators in different cities or through our own DLD/ILD network. For domestic long distance traffic transit we use our DLD/ILD network and networks of different national operators, including among others: Rostelecom and VEON Ltd. (VimpelCom). For ILD traffic transit we primarily use our DLD/ILD network which is interconnected with 52 international carriers. We also have an interconnect between the DLD/ILD MTS network and the ILD networks of our subsidiary, MTS Armenia, in order to provide transit for international traffic.

Handsets

Nearly all of our handset sales consist of tri-band GSM 900/1800/1900 and dual-band UMTS 900/2100 handsets, except for certain models in the low cost segment. Those handsets, which function in the GSM 900, GSM 1800 and PCS-1900 standards, provide users with greater automatic roaming possibilities in Russia, Europe, the United States and Canada. All LTE handsets support bandwidth LTE-FDD 2100 MHz (band 1), LTE-FDD 1800 MHz (Band 3), 2600 MHz (Band 7), LTE-FDD 900 MHz (band 8), 800 MHz (Band 20) and LTE-TDD 2600 MHz (band 38), also there are smartphones in our sales with LTE Advanced support. In 2022, we continued the process of implementation Voice over LTE and Wi-Fi Calling functions.

Please see "Item 3. Key Information—D. Risk Factors — Risks Relating to Economic Risks in Our Countries of Operation — Further deterioration in geopolitical situation and sanctions imposed as a result thereof could materially adversely affect our business, financial condition, results of operations, prospects and the value of our shares" for the impact of sanctions on relations with the suppliers.

Fixed Line Services

We offer fixed-line communications services in 60 regions across Russia, covering about 30 million households.

Our other fixed line operations include the following communication services: voice, data and broadband Internet and pay TV services for corporate and residential subscribers, as well as the provision of interconnect services to other communications operators and numbering capacity to their subscribers. We also operate in Armenia, where we provide digital telephony communications services, data transmission, Internet access and the renting of channels.

Customers and Services Offered—Moscow Fixed Line Operations

We provide fixed line communications services through our subsidiary, MGTS, which is the incumbent fixed line PSTN operator in Moscow. MGTS owns Moscow's PSTN infrastructure, including switches, a transmission network, underground ducts, and owns or holds leases to properties housing its offices and equipment.

As of December 31, 2022, MGTS had approximately 3.63 million active lines in service, a cable network of over 45,121 km, a fiber optic network of over 47,717 km and 1 116 payphones. Currently, MGTS has focused its efforts on the deployment of GPON, IP/MPLS technologies and an IMS core. The old SDH equipment is being removed which results in the decreased number of E1 streams, a reduction in the copper network and the respective extension of the fiber optic network. MGTS also develops new services for IP TV, and MVNO as the convergent service for mobile and fixed telephony.

The total installed capacity of the telephone network reached 2.130 million numbers on the TDM area (Time Division Multiplexing) and 7.989 million numbers on the IMS area (IP Multimedia Subsystem) as of December 31, 2022.

Moscow fixed line operations customers consist of the following subscribers:

Moscow fixed line operations	December 31, 2022	December 31, 2021	December 31, 2020
Residential subscribers	8,334 %	8,355 %	836 %
Corporate subscribers	714 %	725 %	78 %
Public sector subscribers	952 %	920 %	85 %

MGTS holds licenses and regulatory approvals to provide, among others, the following services:

- local telephony;
- DLD/ILD voice telephony through licensed DLD/ILD operators, including us;
- interconnect to other operators;
- Internet and data transmission, including leased DLD/ILD services;
- IP TV for B2C and B2B subscribers;
- MVNO mobile telephony and Internet;
- inquiry and information, including telephone directories;
- local telephony with use of payphones;
- telematic communications services;
- telecommunications services associated with providing of communication channel;
- telecommunications services associated with voice data transmission;
- telecommunications services associated with cablecasting;
- movable radiotelephony services;
- measures and (or) services for the protection of State secrets;
- capital construction projects engineering.

As the only licensed PSTN operator in Moscow, MGTS is considered a natural monopoly under Russian antimonopoly regulations. Consequently, substantial parts of services provided by MGTS are subject to governmental regulation. The Federal Antimonopoly Service of the Russian Federation regulates MGTS' tariffs for voice telephony services provided to its PSTN subscribers, including monthly subscription fees, installation fees and local call charges. Revenues from regulated services are accounted for approximately 24.5% of service operating revenues of our Moscow fixed line operations in 2022, 28% in 2021 and 32% in 2020.

The percentage decline is connected with gradual growth of operating revenues from non regulated services as a proportion of the overall operating revenues in 2022, 2021 and 2020. The Federal Antimonopoly Service of the Russian Federation sets the tariffs MGTS can charge taking into account cost of services, network investment and a certain profit margin, and the current tariffs fully compensate MGTS for the cost of services provided to residential and government subscribers. According to Russian legislation, MGTS is allowed to petition the Federal Antimonopoly Service of the Russian Federation for tariff increases upon certain conditions, such as inflation or increases in the cost of services. Historically, MGTS has petitioned the relevant Russian government agency for tariff increases once per year. The Federal Antimonopoly Service of the Russian Federation has permitted MGTS to increase its tariffs several times.

MGTS also provides a number of unregulated services. According to Russian legislation, DLD/ILD services provided by licensed non monopoly operators, data transmission services, value added services and a number of other services are not subject to tariff regulation. Among others, MGTS provides the following unregulated services:

- various value-added services, including call forwarding, call waiting, call holding, caller ID, provision of second direct inward dialing (DID) number;
- Internet access for residential subscribers and corporates;
- IP TV for B2C and B2B subscribers;
- MVNO mobile telephony and Internet;
- alarm signaling;
- domestic maintenance services, including electric installation, sanitary engineering, cleaning, computer emergency, and consumer electronics installation;
- video-surveillance; and
- rent of space for telecommunications equipment of other operators connected to MGTS' network.

MGTS does not have license to provide DLD/ILD communications services directly to its subscribers but must route such traffic through a licensed DLD/ILD operator. As a result, DLD/ILD traffic originated by MGTS subscribers is carried either by us, with these services included in MGTS' monthly bill, or by other providers of DLD/ILD services, who bill MGTS subscribers directly or pay MGTS an agency fee for processing their bills.

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The following table presents certain operating data for our Moscow fixed line operations as of and for the years ended December 31, 2022, 2021 and 2020.

Moscow fixed line operations	December 31, 2022	December 31, 2021	December 31, 2020
Installed telephone lines on TDM (000s) ⁽¹⁾	2,130	2,780	0,595
Installed telephone lines on IMS (000s) ⁽¹⁾	7,989	9,214	5,180
<i>Residential</i>			
Number of subscribers (000s)	2,201	2,362	2,545
CPP traffic (millions of minutes)	131	166	214
<i>Corporate⁽²⁾</i>			
Number of active lines (000s)	440	465	492
Number of subscribers (000s)	37	39	43
CPP traffic (millions of minutes)	140	164	185

(1) Telephone lines on TDM and IMS can be installed at one household. We added B2B connections of switch capacity in 2021.

(2) Includes state-owned enterprises and government agencies.

MGTS' subscriber segments and the services provided to each subscriber segment are further described below.

Residential and corporate subscribers

MGTS provides basic regulated voice services to residential and corporate subscribers using its PSTN facilities and copper or optical "last mile" access.

In addition to basic voice services, MGTS provides its residential and corporate subscribers with digital telecommunications services, Internet, IP TV, MVNO mobile telephony and Internet and VPN deployment services, rental of high-speed communication channels, intelligent voice and various other services.

Operators

MGTS provides interconnect, traffic transmission and leased line services to other communications operators. Interconnect is carried out on the local and zonal levels in accordance with terms and conditions that are publicly disclosed. MGTS also provides additional services to operators interconnecting to MGTS' network, including access to emergency service, information and customer care numbers.

MGTS has also established an active presence in the data transmission market. Through its PDTN, MGTS can establish VPNs for other operators as well as provide other data network services. Operators can also rent space and utility systems from MGTS to house their network equipment.

MGTS provides services for the design and construction of mobile and fixed-line networks for third-party Telecom operators.

Customers and Services Offered—Other Fixed Line Operations

We provide fixed-line communications services to corporate, operator and residential subscribers in 60 regions throughout Russia. Specifically, we offer local voice, DLD/ILD voice, data and Internet and pay TV services to our subscribers. Some of the interconnect tariffs we charge other telecommunications operators for in Moscow and certain other cities are regulated by the Russian government. We believe our fixed-line subscribers typically evaluate our service and product offerings based on such factors as price, technology, security, reliability and customer service.

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The following table presents certain operating data for our other fixed line operations in Russia as of and for the years ended December 31, 2022 and 2021.

Other fixed line operations	December 31, 2022	December 31, 2021
<i>Residential</i>		
Number of subscribers (000 000s) ⁽¹⁾	6,303	6,230
<i>Corporate⁽²⁾</i>		
Number of subscribers (000s)	162	170

(1) Subscribers to broadband Internet, pay-TV, Wi-Max, voice and other services.

(2) Includes state-owned enterprises and government agencies.

Corporate subscribers

We target corporate subscribers covering a range of industries, such as business centers, hotels, financial institutions, professional services firms, consumer goods companies, manufacturers and companies involved in extractive industries, among others. These subscribers vary in size, ranging from large multinational and Russian corporations with thousands of employees to small and medium sized enterprises with up to several hundred employees.

We offer voice, data transmission and Internet and various value added services to our corporate subscribers.

We also provide security services, such as Anti DDoS protection and various AntiVirus solutions.

We offer a broad range of Internet packages that vary in terms of data transfer speeds and pricing, with higher tariffs for faster uploading and downloading capabilities.

We also utilize MGTS' PDTN to provide high speed reliable Internet services and create VPNs for our corporate clients.

Leased Channels. We provide corporate clients with the ability to rent high speed data channels. These "leased channels" are dedicated lines of data transmission.

Value Added Services. We provide corporate clients with several value added services, including Autosekretar and integrated solutions. The Autosekretar service is based on our proprietary IN and is designed to help our corporate customers manage the reception and servicing of a large volume of incoming calls.

In addition, we serve as general contractor for the provision of a full range of integrated solutions to subscribers wishing to establish a modern integrated communications infrastructure. In developing these customized networks, we are able to offer the following range of services: site survey, cost analysis and optimum project planning, assistance with government related documentation, supply of equipment and operational, technical and maintenance support on an ongoing basis. Once the infrastructure is established or renovated, as the case may be, we typically provide digital voice communications, voice intelligent services, high speed Internet services, videoconferencing and other data transmission services. We intend to expand our service offerings to include customer premises management and network centric IT solutions.

Fixed mobile convergence. Based on our fixed and mobile networks, we offer fixed to mobile convergence services to corporate clients, enabling the use of their mobile phone as an extension of their private branch exchange ("PBX"). We also provide access to corporate IP networks from a mobile phone via GPRS/EDGE/3G/4G.

Operators

We operate fixed line local and zonal networks in Moscow and other cities for provision of telephony services to fixed line subscribers and additional local numbers to mobile subscribers.

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We had 202 local fixed nodes in 66 regions of Russia, including Moscow, and 62 zonal fixed networks to provide telephony services to subscribers as of December 31, 2022. Our integrated intercity/international network is interconnected to 52 international operators.

In the corporate subscriber segment, we generally compete on the basis of network quality, individual and bundled service offerings, customer service, installation time, geographical presence and pricing.

Residential subscribers

We offer voice, Internet and pay TV services to residential subscribers.

Our pricing structure is designed to appeal to large numbers of consumers with various interests and purchasing power, and varies significantly between regions. In 2022, we continued to develop converged packages that include Internet, television and mobile services, including family subscriptions and special tariff plans.

In 2022, we began to actively expand our presence in new regions through FVNO - using the broadband network of partner operators and the MTS mobile network.

Sales and Marketing

Moscow fixed line operations

In 2022, MGTS continued to modernize its own high-tech fiber-optic GPON network and developed combinations of various services in packages, including converged packages of mobile and fixed-line services, as well as subscriptions to online cinemas. The clients were offered promotional packages that included basic services, subscription to online cinemas and high-speed Internet access. In 2022, MGTS began actively developing and implementing new services within the framework of the "Smart Home" and "Smart City" concepts, actively participating in the cloud solutions market, developing partnerships with delivery services and becoming a partner of landmark urban projects.

Other fixed line operations

Our target customers include corporate, operator and residential subscribers.

To promote our product and service offerings, we use various communication channels for advertising and marketing, including direct marketing, printed mass media, television, Internet, radio, directories, outdoor advertising, advertising in the subway, special promotions and cross promotions. Through these various advertising and marketing channels, we intend to further develop our brand recognition. Our marketing strategy is designed to create a unified brand for each of our various product and service offerings with the aim of becoming a single source for all of our subscribers' communications needs.

We also actively promote our services to existing subscribers with the help of special comprehensive product offers aimed at meeting their communication needs and increasing subscriber loyalty. Our advertising and marketing materials are primarily aimed at promoting the MTS brand. All fixed line products are offered and sold under this brand. However, when we enter new markets, acquire or cooperate with companies within the framework of FVNO, we can use both brands in promotion. This is done to reduce churn, as customers tend to show strong loyalty to local brands. Then we gradually reduce the presence of the acquired brand, and this allows us to make MTS the market leader in this region in the future. Our advertising and marketing efforts are designed to convey a positive image of us to the market as a leading communications operator focused on customer satisfaction.

Competition

We compete with a number of fixed line telecommunications operators servicing Moscow, St. Petersburg and other major Russian cities. Moscow is the largest and most competitive of these markets. Our primary competitors include:

- Rostelecom, Russia's largest national fixed line telecommunications operator with presence in all Russian regions. We compete with Rostelecom in the corporate, operator and residential fixed line telecommunications markets in all regions where we operate in Russia. We also compete with Rostelecom in the mobile telecommunications market.

- ER-Telecom, voice telephony, broadband and TV operator. We compete with ER-Telecom in the corporate and residential fixed line telecommunications market in St. Petersburg, Novosibirsk, Omsk, N.Novgorod, Ekaterinburg, Kazan, Novosibirsk, Chelyabinsk and other regions.
- VEON Ltd. (VimpelCom), which is also one of our primary competitors in the Russian mobile communications market, offers voice, data and Internet services to corporates, operators and residential subscribers. We compete with VEON Ltd. (VimpelCom) in the corporate, operator and residential fixed line telecommunications markets in Moscow and in certain other regions of Russia where we are present, including, among others, St. Petersburg, Rostov, Nizhny Novgorod, Ekaterinburg and Krasnodar. In 2022, VEON Ltd., based in the Netherlands, announced the start of the sale of the Russian business — VimpelCom (operating under the «Beeline» brand) to local top management.
- MegaFon, which acquired operators Synterra and Net by Net, and offers services in the operator, corporate and residential fixed line telecommunications markets in Moscow, St. Petersburg, and other regions.
- Akado Group, which has been acquired by ER-Telecom and Rostech, provider of pay TV, broadband Internet and digital telephony in Moscow. We compete with the Akado Group primarily in the residential fixed line telecommunications market of Moscow.

Corporate subscribers

The following table sets forth the corporate subscriber market shares of the primary fixed line operators in Moscow as of December 31, 2022:

MTS	24 %
VEON Ltd. (VimpelCom)	19 %
Akado	8 %
Rostelecom	16 %
Other	33 %
Total	100 %

Source: TMT Consulting.

In the corporate subscriber segment, we generally compete on the basis of network quality, individual and bundled service offerings, customer service, installation time, geographical presence and pricing.

Residential subscribers

Voice services

The following table sets forth the market shares of the primary fixed line operators for voice services in Russia as of December 31, 2022:

Company	Russia
MTS	18 %
Rostelecom	71 %
Other	11 %
Total	100 %

Source: TMT Consulting.

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According to TMT Consulting, as of December 31, 2022, broadband Internet penetration of households was 62% in Russia. The following table sets forth the market shares of the primary operators in the residential broadband Internet market in Russia as of December 31, 2022:

Company	Russia
MTS	13 %
VEON Ltd. (VimpelCom)	8 %
ER-Telecom	11 %
Rostelecom	35 %
Other	33 %
Total	100 %

Source: TMT Consulting.

Pay-TV

According to TMT Consulting, as of December 31, 2022, pay TV penetration was 82.6% in Russia. The following table sets forth the market shares of the primary operators in the TV market in Russia as of December 31, 2022:

Company	Russia
MTS	10 %
Rostelecom	24 %
Tricolor TV	26 %
ER-Telecom	8 %
Orion	6 %
Other	26 %
Total	100 %

Source: TMT Consulting.

In the TV market, we generally compete on the basis of pricing, channel selection and content, individual and bundled service offerings, customer service and installation time.

Tariffs

We establish prices for our unregulated services and different subscriber segments based on certain common considerations, policies and goals. For example, we generally seek to establish competitive prices based on market rates for the services we offer and below market prices when our lower than average costs or economies of scale allow us to do so. We also offer subscribers bundled service packages with several services offered together at a discount to the cost of ordering each individual service separately and to promote additional services to our existing subscribers. In addition, we often offer promotions to our various subscriber segments waiving or discounting installation fees in order to attract new subscribers or promote new services.

With regard to corporate clients, we generally aim to derive the bulk of our operating revenues from monthly payments. Thus, depending on the scale and type of services ordered, we will often discount or waive installation fees.

For services offered to other communications service providers, we aim to generate most of our operating revenues from monthly payments and by offering an array of value added services.

Network Infrastructure

Network Infrastructure—Transmission Networks

Backbone and Internet Networks

Mobile, fixed and inter-carrier aggregated traffic increased in 2022: downlink (towards users) data throughput reached 10.07 Tbps (8.27 Tbps in 2021), uplink (from users) data throughput reached 2.93 Tbps (2.54 Tbps in 2021).

The size of MTS fiber-optic networks increased by 12,342 km in 2022 and reached 272,112 km in total.

The company continued to reconstruction the backbone and multi service network and the network of data centers in the context of a complex sanctions policy.

We continued to develop the backbone network in 2022.

Convergent network

We had to revise our initial plans for 2022. We completed various projects, including the development or acquisition of regional fiber-optic for interconnect sites, the deployment of new MBH transport nodes, micro-wave links and the launch of private LTE commercial zones.

We were also forced to look for a replacement for all vendors MBH and RRN.

Satellite network

We launched and installed ground receiving station to receive and process data from low-orbit Earth observation satellites.

Public Switching Telephone networks (PSTN)

The network infrastructure we maintain in Moscow is substantially different to the infrastructures we use in other regions. In Moscow, primarily we have organically grown, while our regional development has largely been through the acquisition of companies with different business models and a focus on different services. As a result, the network infrastructures in the regions outside Moscow and the technologies used to support such infrastructures are different from the network infrastructure established in Moscow and which we currently own. At present, the telephone network in Moscow and Moscow region has a capacity of more than 1,112,781 telephone numbers.

All of our PSTN switching centers (TDM and Soft switch) are connected to a digital transport network, which uses SDH and IP technology. The network ensures connectivity with a digital equipment of PSTNs of other operators.

The SDH network will be operated to support existing clients, but we also provide the moving traffic and clients from SDH/TDM technology to IP.

The management of the transport network and digital PSTN is carried out remotely from network operation centers.

As of December 31, 2022, in Moscow and the Moscow region we had a wireless broadband network including 404 base and subscriber stations in the 5-6 GHz frequency band and also near 197 radio relay lines in the 70-80 GHz frequency band.

For the provision of Internet access, IP-telephony and other services, we have our own IP network, the core of which is constructed as IP MPLS rings with routers connected to each other by means of 10/100 GE channels. In addition, separate routers are used for inter-carrier connections and are connected to the core routers by means of 10/100 GE interfaces.

Russia

As of December 31, 2022 we provided cable Internet access to about 11.4 million households and cable TV access to about 11.9 million households. Since 2020, we have started building and upgrading networks using GPON technology. As of 31 December, 2022, more than 260,000 households have been built.

Currently, we have digital TV service (DVB-C&DVB-S2) in approximately 200 cities and localities with 5,06 million subscribers. By December 2022, we launched Hybrid TV platform with an IPTV commercial service in Moscow (including Moscow Region) and more than 95 other regions, DVB-C/IP Hybrid commercial service in more than 100 regional cities and DVB-S2/IP Hybrid commercial service all over Russia including 56 HD/UHD channels using HEVC (H.265) format. We combined UHD and HD channels due to change in content policy after foreign UHD and HD channels had left Russian market in 2022. Since 2020, the target technology for providing television services is IPTV technology. As of 31 December, 2022, the service was launched at a capacity of 8.2 million households. During 2023 according to KION expansion forecast CDN bandwidth is planned to be increased by more than twice its current size. We also plan to use in-house solution for new CDN PoPs and integrate backup CDN offload partner. In Moscow and regions as an Internet traffic supplier, we mainly use our own IP Backbone network.

The acquisition of Comstar provided us with an opportunity to use MTS fiber optic lines for fixed network development. Optical network construction in cities is carried out on the basis of fixed and mobile business needs. When we modernize and construct new networks, we deploy fixed and mobile equipment on the basis of “collocation” method.

Seasonality

Our results of operations are impacted by certain seasonal trends. Generally, revenue is higher during the second and third quarter due to increase in roaming revenues and guest roaming revenues during these quarters. Quarterly trends can also be influenced by a number of factors, including new marketing campaigns and promotions, and may not be consistent from year to year.

In 2020, the measures for combating COVID-19 which included restrictions on movement had a significant impact on the seasonality of our roaming revenues and resulted in the reduction in international roaming of our subscribers and income from guest subscribers.

In 2022, after the lifting of government restrictions on movement, the volume of roaming services increased mainly due to travel within the country. The usual seasonality with a peak in the summer months during the holidays and during the school holidays has recovered.

The COVID-19 outbreak has had a significant impact on the development of the telecommunications industry and continues to contribute to the development of digital services. We recorded an increase in the consumption of internet traffic in mobile and fixed networks as well as, an increase in the number of users of online services, TV users and others OTT applications. This trend continued in 2022. We believe that digitalization processes will gradually affect all spheres of social interaction. Online entertainment services and digital services of state federal and municipal services will continue to be in the greatest demand in 2023.

Regulation of Telecommunications in the Russian Federation

In the Russian Federation, the federal government regulates telecommunications services and the principal law is the Federal Law on Communications, which came into force on January 1, 2004 and provides, among other elements, for the following:

- licensing of telecommunications services;
- requirements for obtaining a radio frequency allocation;
- equipment certification;
- equal rights for individuals and legal entities, including foreign individuals and legal entities, to offer telecommunications services;

- fair competition;
- freedom of pricing other than pricing by companies with a substantial position in public telecommunication networks; and
- liability for violations of Russian legislation on telecommunications.

The Federal Law on Communications creates a framework in which government authorities may enact specific regulations. Regulations enacted under the legislative framework in place prior to the enactment of the Federal Law on Communications continue to be applied to the extent they do not conflict with the Federal Law on Communications.

The Federal Law on Communications confers broad powers on the state to regulate the communications industry, including the allocation of frequencies, the establishment of fees for frequency use and the allocation and revocation of numbering capacity. In addition, the Federal Law on Communications provides for the establishment of a “universal services reserve fund” which is funded by a levy imposed on all operators of public networks, including us.

Regulatory Authorities

The Russian telecommunications industry is regulated by several governmental agencies, including:

The Ministry of Digital Development, Communications and Mass Media of the Russian Federation is the federal executive body that develops and supervises the implementation of governmental policy in the area of communications and coordinates and controls the activities of its subordinate agencies. The Ministry has the authority to issue certain regulations implementing the Federal Law on Communications and other federal laws.

The Federal Service for Supervision of Communications, Information Technology and Mass Media (Roskomnadzor) is a federal executive body that supervises and controls certain areas of communications and information technologies, including, among other matters, licensing, registration, certification, technical supervision of networks and equipment as well as compliance monitoring and enforcement.

The State Commission For Radio Frequencies is an inter-agency coordination body acting under the Ministry of Digital Development, Communications and Mass Media of the Russian Federation which is responsible for the regulation of the radio frequency spectrum, development of long-term policy for frequency allocation in the Russian Federation and determination of the allocation of frequency bands.

The Federal Antimonopoly Service (FAS) is a federal executive body that supervises competition regulations and enforces the Federal Law on Protection of Competition and the Federal Law on Natural Monopolies and the regulations enacted thereunder. The FAS controls certain activities of natural monopolies, including monitoring their execution of certain obligatory contracts, and can issue certain mandatory orders. In addition, the FAS regulates certain tariffs in the sphere of telecommunications, including the tariffs on the local, intra-zone and DLD calls by subscribers of public switched telephone networks and installation and subscription fees.

Other regulatory authorities. The Russian Federal Service for Surveillance on Consumer Rights Protection and Human Wellbeing (Rospotrebnadzor) is responsible for the enforcement of sanitary regulations including certain authority over the location of telecommunications equipment, and supervises compliance with consumer rights regulations. The Federal Service for State Registration, Cadastre and Cartography (Rosreestr) is responsible for registering certain telecommunications infrastructure that is considered real property. The Federal Financial Monitoring Service (Rosfinmonitoring) is a federal executive body responsible for countering money laundering and terrorism financing. Mobile operators must comply with Federal Law No. 115-FZ dated August 7, 2001 “On Combating Money Laundering and Terrorist Financing.”

Licensing of Telecommunications Services and Radio Frequency Allocation

Telecommunications licenses are issued based on the Federal Law on Communications and Government Decree No. 480 dated May 24, 2014 on Bidding Process (Auctions, Tenders) for Receipt of Telecommunications License. Under these regulations, licenses may be issued and renewed for periods ranging from three to twenty-five years. Several different licenses to conduct different communication services may be issued to one entity. Officials have broad discretion with respect to both issuance and renewal procedures.

To operate a communications network, a company must obtain:

- a license from the Federal Service for Supervision of Communications, Information Technology and Mass Media to provide communications services;
- approval to use specific frequencies within the specified band from the State Commission For Radio Frequencies if providing wireless telecommunications services; and
- permission from the Federal Service for Supervision of Communications, Information Technology and Mass Media for network operations (including certification of the company's frequency assignment and site plan in relation to electromagnetic compatibility of the proposed cellular network with other radio equipment operating in the licensed area). As of January 1, 2004, licenses may be transferred in case of mergers or other reorganizations of the licensee upon application by a transferee as a new license holder.

Licenses may be suspended or terminated for various reasons, including failure by the licensee to comply with the terms of its license, information requests or applicable law, for example, detection of violations which may cause damage to rights, interests, life or health of individuals.

Frequencies are allocated for a maximum term of ten years, which may be extended upon the application of a frequency user. Under the Federal Law on Communications, frequency allocations may be changed for purposes of state management, defense, security and protection of legal order in the Russian Federation with the license holder to be compensated for related losses. Further, frequency allocations may be suspended or terminated for a number of reasons, including failure to comply with the conditions on which the frequency was allocated.

Furthermore, the Federal Law on Communications provides for the establishment of a "universal services reserve fund" for the purpose of supporting communications companies operating in less developed regions of Russia through the financing, construction and maintenance of telecommunications networks in low-profit and unprofitable sectors. This reserve fund is aimed at eliminating the practice of cross-subsidies by compensating operators for certain mandatory, loss-making local services in rural and sparsely populated areas. It is funded by a levy imposed on all operators of public networks, including us, in the amount of 1.2% of revenues from telecommunications services less the amount of taxes paid by subscribers.

The Federal Law on Communications empowers the Russian government to determine and annually review the list of licensing requirements applicable to various communication services being licensed. This list was enacted by Government Decree No. 2385 dated December 30, 2020. Licenses also generally contain a number of other detailed conditions, including a date by which service must begin, technical standards and certain other terms and conditions.

The Federal Law No. 356-FZ dated July 14, 2022, implemented in the The Federal Law on Communications the obligation of telecommunications operators to submit an annual report on their activities to Roskomnadzor from December 1, 2022 (if the license was obtained earlier than December 1, 2022, the first report was sent by March 1, 2023 inclusive).

Equipment Certification

Government Decree No. 113 adopted on February 4, 2022, sets forth the types of communications equipment that are subject to mandatory certification, which includes all fixed line and wireless networks open to the public. The Ministry of Digital Development, Communications and Mass Media of the Russian Federation issues certificates of compliance with technical requirements to equipment suppliers. In addition, Presidential decree No. 960 adopted on August 11, 2003 requires licenses and equipment certifications to be obtained from the Federal Security Service to design, produce, sell, use or import encryption devices.

Further, certain high-frequency equipment, a list of which was approved by Government Decree No. 1800 dated October 20, 2021 manufactured or used in the Russian Federation, requires special permission from the Federal Service for Supervision of Communications, Information Technology and Mass Media. Failure to receive such certification could result in the mandatory cessation of the use of such equipment. Moreover, Federal Law No. 204 dated June 23, 2016 requires each operator sharing a radio frequency spectrum to have a telecommunications services license.

Competition, Interconnect and Pricing

The Federal Law on Communications requires federal regulatory agencies to encourage competition in the provision of communication services and prohibits the abuse of a dominant position to limit competition. The Federal Law on Communications and Presidential Decree No. 221, enacted on February 28, 1995, as amended, on Measures for Streamlining State Regulation of Prices (Tariffs) provides for regulation of tariffs and other commercial activities of telecommunications companies that are “natural monopolies.” Government Decree No. 637, dated October 24, 2005 (as amended) authorized the FAS to set the following tariffs for the natural monopolies in the communications market, including:

- provision of access to a local telephone network;
- permanent use of a subscriber’s line; and
- local and intra-zone calls.

In addition, the Federal Law on Natural Monopolies No. 147 dated August 17, 1995 outlines certain types of transactions for which a regulated entity must obtain prior FAS approval and establishes the general principle that regulated entities may not refuse to provide regulated services to certain types of consumers. Regulated entities are also subject to continuous reporting requirements, including submitting plans for capital investments.

The FAS maintains a Register of Natural Monopolies whose tariffs are controlled and regulated by the state. A telecommunications operator may be included in this register upon a decision by the FAS based on analysis of the operator’s activities and the market conditions.

Our subsidiary, MGTS, was added to the Register of Natural Monopolies in 2000 and, therefore, is subject to the requirements of the Federal Law on Natural Monopolies including, *inter alia*, the following:

- the FAS regulates and controls tariffs for services provided by MGTS, including installation fees, monthly subscription fees (for subscribers to the unlimited tariff plan) and local call charges (for subscribers who do not use the unlimited tariff plan);
- MGTS must obtain prior FAS approval for any transaction involving the acquisition, disposal or lease of assets not related to the regulated activity, if the value of such assets exceeds 10% of MGTS’ share capital, additional capital, retained profits and reserves;
- MGTS is required to maintain separate accounting records for each type of activity;
- MGTS is required to publicly disclose information on tariffs, products, material conditions of contracts with customers, capital expenditure programs and certain other information; and
- MGTS is required to comply with Federal law No. 223-FZ dated July 18, 2011 “On Procurement of Goods, Works, Services by Certain Types of Legal Entities” while active in the procurement of goods and services.

In addition, companies which are found to have a dominant position in relevant markets may be subject to certain FAS restrictions in conducting their business, including in relation to pricing, acquisitions, geographical expansion, and associations and agreements with competitors. Since January 5, 2016, under the Federal law No. 135-FZ “On Protection of the Competition”, dominant position is established on case-by-case basis. See also “Item 3. Key Information—D. Risk Factors—Risks Relating to Our Business— If we are found to have a dominant position in the markets where we operate and are determined to have abused this position and/or concluded anti-competitive agreements, or found to have committed concerted actions, the FAS may be entitled to impose fines as well as regulate our subscriber tariffs and impose certain restrictions on our operations.”

The Federal Law on Communications also provides for the special regulation of telecommunications operators occupying a “substantial position,” *i.e.*, operators which together with their affiliates have, in the Russian Federation generally or in a geographically defined specific numerical zone, 25% or more of installed capacity or capacity to carry out transmission of not less than 25% of traffic. MGTS was added to the register of telecommunications operators occupying a substantial position in the public switched telephone networks and, therefore, is subject to certain requirements including, *inter alia*, the following:

- MGTS must develop interconnect rules and procedures in accordance with federal requirements;
- MGTS must ensure that interconnect agreements with operators who intend to interconnect to our networks are entered into on the same terms and conditions as the agreements between MGTS, us and our affiliates; MGTS also cannot refuse to provide interconnect or discriminate against one operator over another;
- MGTS must comply with the mandatory orders of the Federal Service for Supervision of Communications, Information Technology and Mass Media issued if non-compliance was identified as a result of monitoring of MGTS’ interconnect terms; and
- MGTS must comply with the tariffs for interconnect and traffic transit where determined by the Ministry of Digital Development, Communications and Mass Media of the Russian Federation;
- MGTS must develop standard interconnect contracts and publish them as a public offer for all operators who intend to use such interconnect services.

The Federal Law on Communications and implementation rules adopted by Government Decrees No. 29 dated January 21, 2022, and No. 627 dated October 19, 2005, also provides for government regulation of interconnect tariffs established by operators occupying a substantial position.

Notwithstanding the above, fixed line operators not considered to occupy a substantial position and not included in the Register of Natural Monopolies, as well as mobile operators, are free to set their own tariffs. Also see “Item 3. Key Information—D. Risk Factors—Risks Relating to Our Business—If we or any of our mobile network operator subsidiaries operating in Russia are identified as an operator occupying a “substantial position,” the regulator may reduce our interconnect tariffs which, in turn, may have a material adverse effect on our financial condition and results of operations.”

Anti-terror law

The Federal Law No. 374 dated July 6, 2016, amended some legislative acts and established additional measures to counter terrorism and to maintain public safety.

In accordance with the abovementioned amendments to the Federal Law on Communications (which came into force in July, 2018) telecommunications operators have to store information on the receiving, transmitting, delivering and/or processing of voice information, text messages, images, sounds, video, or other communications by their subscribers, as well as relevant messages themselves. The authorities may request this information.

The implementation of these amendments has a material effect on telecommunications operators’ financials and performance, see also “Item 3. Key Information—D. Risk Factors.”

Subscribers identification

The Federal Law No 245 dated July 29, 2017, amended the Federal Law on Communications to prevent the conclusion of contracts for the provision of services of mobile communications without proper identification of the subscriber (user) of communication services.

Sovereign Internet

The Federal Law No. 90 dated May 1, 2019, establishes obligations on telecommunications operators to install equipment to counter threats to the stability, security and integrity of the Internet on the territory of the Russian Federation. The provisions of this Federal Law regarding the national domain-name system and national crypto security standards came into force in January 2021. In February 2021, Federal Law No. 19-FZ introduced penalties of up to 6 million rubles for violating the applicable rules governing sovereign Internet. Criminal liability may also apply. For more information on the law, see “Item 3. Key Information—Legal Risks and Uncertainties—Regulatory changes in Russia as well as regulatory changes at the international level may have a material adverse effect on our financial condition and results of operations.”

Since January 1, 2023, the administrative and criminal liability for telecommunications operators has been established for violating the requirements for traffic transit through technical means to counter threats to the stability, security and integrity of the functioning of the Internet on the territory of the Russian Federation and public communication network (The Federal Law No. 259-FZ dated July 14, 2022, The Federal Law No. 260-FZ dated July 14, 2022).

Personal data

We are subject to laws and regulations regarding privacy and protection of user data, including the Federal Law No. 152-FZ “On Personal Data” dated July 27, 2006 (the “Personal Data Law”), as amended by the Federal Law No. 519 dated December 30, 2020.

The Personal Data Law, among other things, requires, subject to a limited number of exceptions, that an individual provide specific, informed and conscious consent to any processing (i.e. any action or combination of actions performed on personal data, including the collection, recording, systematization, accumulation, storage, use, transfer (distributing, providing or authorizing access to), blocking, deleting and destroying) of his/her personal data.

The consent must be in writing in certain cases, including: (i) where the processing relates to special categories of personal data (regarding the data subject’s race, nationality, political views, religion, philosophical beliefs, health conditions or intimate information); (ii) where the processing of personal data relates to any biometrics; (iii) cross-border transfers to a state that does not provide adequate protection of rights of subjects (e.g. under Russian law, the United States is one of such states); and (iv) the certain types processing of an employee’s personal data, etc. The written consent of subjects must meet a number of formal requirements and must be signed by holographic or electronic signature.

The Federal Law No. 572-FZ dated December 29, 2022, regulates the identification or authentication of individuals using biometric personal data as well as the processing of biometric personal data.

Big Data

In 2021, the National Centre for Digital Economics announced the development of the Russian national standard corresponding with ISO/IEC TR 20547-1:2020 Information technology – Big data reference architecture – Part 1: Framework and applicable process.

Procedure for concluding subscription contracts

The Federal Law No 533-FZ dated December 30, 2020 (which came into force on June 1, 2021), amended the Federal Law on Communications to tighten various procedures for concluding subscription contracts, including how the Unified Biometric System, Simple Electronic Signature and the Enhanced Qualified Signature may be used.

In addition, under the Federal Law, subscribers now have the right to enter in the Integrated Identification and Authentication System (IIAS) information about their subscriber number and/or IMEI. If the subscriber's device is lost, he/she may report this to the operator through the IIAS. Subject to the confirmation of an IMEI number, telecommunications operators must stop providing telecommunications services for the lost device.

Moreover, the Federal Law No. 319-FZ dated July 2, 2021, and Government Decree No. 1313 dated July 22, 2022, have defined the information that telecom operators are obliged to submit to Roskomnadzor, including subscribers' information, the volume and period of provision of communication services, etc.

Providing free access to social resources

The Federal Law No 319-FZ dated July 2, 2021, establishes obligations on telecommunications operators that provide communication services for data transmission and access to the Internet to subscribers to provide such subscribers with free access to the websites of state bodies, extra-budgetary funds, portals of state and municipal services (which came into force on December 1, 2021), as well as to other sites that are determined by the Government Commission. Government Decree No. 2531 dated December 29, 2021 and Government Decree No. 2469 dated December 25, 2021, have set up a list of domestic socially significant information resources ("VKontakte" social network and "Unified Portal of Public Services") and formed a Government Commission. Telecommunications operators must provide free access to these resources.

New regulation in the interaction of telecommunications operators with the State customer and the IIAS

The Federal Law No. 465-FZ dated December 30, 2021, amended the Federal Law on Communications to establish obligations on telecommunications operators to transmit free SMS messages with a confirmation code when individual and legal entities pass authentication procedures in the IIAS and when they perform significant actions in the IIAS. It is prohibited for telecommunications operators to suspend and/or terminate the provision of communication services to the State customer after the expiration of the relevant contract without the written consent of this customer.

Monitoring compliance with the requirements for the provision of communication services, traffic transmission services, connection of communication networks

The Federal Law No 319-FZ dated July 2, 2021, amended the Federal Law on Communications to expand the list of requirements for the procedure for passing traffic and telecommunications operators, including:

- Compliance with procedures for identifying subscribers initiating a connection for the purpose of transmitting voice information in the data transmission network (came into force on May 1, 2022).
- The formation of a register of communication lines crossing the state border of the Russian Federation and the means of communication to which these communication lines are connected (the Register). Telecommunications operators are obliged to comply with the requirements established by Roskomnadzor for such lines and means of communication (came into force on January 1, 2023).
- Telecommunications operators are obliged to connect and send/receive information through a special prescribed system to ensure compliance (came into force on January 1, 2023).
- Telecommunications operators must cease providing communication services and/or traffic services in cases of identified risky traffic as set out in the Federal Law No 319-FZ (came into force on January 1, 2023).

The Federal Law No. 480-FZ dated December 30, 2021, imposes administrative liability on telecommunications operators for non-fulfillment of obligations related to the transmission of a subscriber number and/or a unique identification code, termination of the provision of communication services and/or traffic transit services (which came into force on December 30, 2021) and connection to the system to ensure compliance by telecommunications operators with the requirements for provision of communication services and traffic transit services in the public communication network (which came into force on January 1, 2023).

From March 1, 2023, Federal Law No. 625 of December 29, 2022 will introduce in the Code of Administrative Offences new types of offenses and tighten responsibility in the field of communications. New types of offenses are related to a subscriber's contract conclusion via Internet, beginning of the services provision, failure to submit information to Roskomnadzor to monitor the reliability of information about subscribers and users.

Regulation of Banking Activities in the Russian Federation

General

MTS Bank, our subsidiary, operates as a credit organization in Russia and is therefore subject to a number of laws and regulations applicable to banks. Federal Law No. 395-1 "On Banks and Banking Activity" dated December 2, 1990, as amended (the "**Banking Law**"), is the principal law regulating the Russian banking sector, among other things, defining credit organizations, setting forth the list of banking operations and other transactions that credit organizations may perform and establishing the framework for the registration, licensing of credit organizations and the regulation of banking activities by the CBR. Pursuant to the Banking Law, a banking group is described as an association of legal entities under control of a credit organization, and a banking holding is defined as an association of legal entities, at least one of which is a credit organization, under control of a parent legal entity that is not a credit organization, provided that a share of banking activities in the banking holding is at least 40% of the overall activities of such group.

Licensing

A license must be obtained from the CBR in order for any institution to engage in banking activities as defined in the Banking Law. Applicants must be incorporated within Russia and registered with the CBR as a credit organization, and submit, among other things, a feasibility report and detailed information on the suitability of the applicant's management team. A banking license may be denied for a number of reasons, including if the financial standing of the founders of the bank is deemed by the CBR to be unsatisfactory or if the proposed candidates for the senior management of the bank, including members of the management board and the chief executive officer, are deemed to be unsuitable or do not meet the qualification requirements.

Charter Capital Requirements

The Banking Law sets out the minimum charter capital for newly-established banks in Russia the amount of RUB 1 billion for a bank with a general license and RUB 300 million for a bank with a basic license. As of the date of this document, charter capital of MTS Bank that holds a general license amounts to RUB 15,015,046,500. Further, under the Banking Law, the minimum regulatory capital amounts to RUB 1 billion for banks applying for the status of a bank with a general license and to RUB 300 million for banks applying for the status of a bank with a basic license. As of February 1, 2023, regulatory capital of MTS Bank amounted to RUB 65,862 million.

Reporting Requirements

Russian banks must regularly submit balance sheets to the CBR, together with financial statements showing their actual respective financial positions. They must also inform the CBR in respect of providing large loans (exceeding 5% of a bank's capital). Banking groups and banking holdings must regularly submit consolidated accounts to the CBR. The CBR may at any time carry out full or selective checks of a bank's submissions, and may inspect all books and records of the bank. In addition, annual audits must be carried out by an audit company that is a member of a self-regulatory organization of auditors. Starting from 2004, all credit organizations in Russia have been required to prepare financial statements according to both RAS and IFRS. Banks must file IFRS standalone and audited consolidated annual financial statements with the CBR on an annual basis.

Mandatory Reserve Deposit Requirements

To cover loan losses and currency, interest and financial risks, the CBR requires banks to form mandatory reserve deposits and keep them in designated non-interest bearing accounts with the CBR. Particular reserve requirements are set by the Board of Directors of the CBR from time to time. As of March 1, 2023, mandatory reserves of MTS Bank amounted to RUB 723 million.

Licenses

The Group owns the licenses on mobile services, mobile virtual network, fixed line services, data transmission services, telecommunications services for broadcasting, cable radio (communication services for the purpose of wire broadcasting) and banking services. All our licenses are valid with average completion date of 3 years in areas in which we and our subsidiaries and affiliates provide or expect to provide GSM, LTE and UMTS services.

Each of our licenses requires service to be started by a specific date. We have met this target or received extensions to these dates in those regional license areas in which we have not commenced operations. Neither the government nor other parties have taken or attempted to take legal actions to suspend, terminate or challenge the legality of any of our licenses (except for Uzbekistan, see Note 34 to our audited consolidated financial statements). We have not received any notice of violation of any of our licenses, and we believe that we are in compliance with all material terms of our licenses.

C. Organizational Structure

The table below presents our significant subsidiaries and investees, the places of incorporation and our effective ownership interests therein as of December 31, 2022.

Subsidiary	Accounting Method	Ownership Interest	Place of Incorporation/ Organization
RTC	Consolidated	100.0 %	Russia
MTS Bank	Consolidated	99.9 %	Russia
MGTS Group	Consolidated	94.7 %	Russia
Multiregional TransitTelecom	Consolidated	100.0 %	Russia
MTS Armenia	Consolidated	100.0 %	Armenia
NVision Czech Republic ⁽¹⁾	Consolidated	100.0 %	Czech Republic
VisionLabs	Consolidated	100.0 %	Russia
Gulfstream	Consolidated	58.4 %	Russia
Bronevik	Consolidated	100.0 %	Russia
Webinar	Consolidated	84.3 %	Russia
TIC (Tower Infrastructure Company)	Consolidated	100.0 %	Russia
MDTZK (Ticketland)	Consolidated	100.0 %	Russia
Kulturnaya Sluzhba (Ponominalu)	Consolidated	100.0 %	Russia
IT-Grad 1 Cloud	Consolidated	100.0 %	Russia
MTS Auto (former Stopol Group)	Consolidated	100.0 %	Russia
Zelenaya Tochka Group – (Achemar Holdings)	Consolidated	100.0 %	Russia
MTS Media	Consolidated	100.0 %	Russia
MTS Didgital (former MTS IT)	Consolidated	100.0 %	Russia
ORK	Consolidated	100.0 %	Russia
Sistema Capital	Consolidated	100.0 %	Russia
Stream	Consolidated	100.0 %	Russia
MTS Artificial Intelligence	Consolidated	100.0 %	Russia
MWS	Consolidated	100.0 %	Russia
Energy Group	Consolidated	100.0 %	Russia
Stream Digital ⁽²⁾	Consolidated	100.0 %	Russia
Bastion ⁽²⁾	Consolidated	100.0 %	Russia
MTS International Funding Limited ⁽³⁾ (“MTS International”)	Consolidated	SE	Ireland
MTS Belarus	Equity	49.0 %	Belarus

(1) Part of NVision Czech Republic Group - NVision Czech Republic a.s.- was sold in October 2022, the results of the disposed subsidiary are presented as discontinued operations.

(2) Wholly-owned subsidiary, through which the Group repurchased its own shares.

- (3) A company organized and existing as a private limited company under the laws of Ireland. The Group does not have any equity in MTS International. It was established for the purpose of raising capital through the issuance of debt securities on the Irish Stock Exchange followed by transferring the proceeds through a loan facility to the Group. In 2010 and 2013, MTS International issued \$750 million 8.625% notes due in 2020 and \$500 million 5.0% notes due in 2023, respectively. The notes are guaranteed by MTS in the event of default. MTS International does not perform any other activities except those required for notes servicing. The Group bears all costs incurred by MTS International in connection with the notes' maintenance activities. Accordingly, the Group concluded that it exercises control over the entity.

See also Note 2 to our audited consolidated financial statements.

D. Property, Plant and Equipment

Property, Plant and Equipment

We own and occupy premises in Moscow which we use for administration, sales and other service centers as well as the operations of mobile switching centers. The size of premises is indicated in square meters. We also lease buildings in Moscow for similar purposes, including marketing and sales and other service centers.

In addition, through our subsidiary MGTS, we own 156 properties and rent buildings and premises at approximately 115 addresses located throughout Moscow, which serve as sales and customer service offices, house MGTS' telecommunication equipment. We also own office buildings in some of our regional license areas, and we lease office space on an as-needed basis. We believe that our properties are adequate for our current needs and additional space is available to us if and when it is needed.

The primary elements of our network are base stations, base station controllers, transcoders and mobile switching centers. Base stations occupy sites leased at selected locations in all the areas in which we provide network coverage. GSM, 3G and 4G technologies are based on an "open architecture," which means that equipment of radio access network from one supplier can be combined with core network equipment of another supplier to expand the network. Thus, there are no technical limitations to using equipment from different suppliers.

Item 4A. Unresolved Staff Comments

None.

Item 5. Operating and Financial Review and Prospects

The following discussion of our financial condition and results of operations is intended to help the reader understand us, our operations and our present business environment and should be read in conjunction with our consolidated financial statements, related notes and other information included elsewhere in this document. In particular, we refer you to the risks discussed in "Item 3. Key Information—D. Risk Factors". In addition, this section contains forward-looking statements that involve risk and uncertainties. Our actual results may differ materially from those discussed in forward-looking statements as a result of various factors, including those described under "Item 3. Key Information—D. Risk Factors" and "Cautionary Statement Regarding Forward-Looking Statements." Our reporting currency is the Russian ruble and our consolidated financial statements have been prepared in accordance with IFRS.

A. Operating Results

Overview

We are Russia's digital ecosystem and largest mobile operator that provides a wide range of digital-first services to help enrich the modern 21st-century lifestyle. We offer a full range of solutions for consumers and business customers across wireless and wireline connectivity; over-the-top, linear, and satellite television; digital-first banking and financial services; as well as unified communications, cloud computing and IoT. There are more than 88 million mobile subscribers using our services across the our operations in Russia, Armenia, and Belarus, including around 80 million subscribers in Russia alone. The number of ecosystem clients exceeds 12 million and MTS Bank client base is over 3 million.

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Our revenues for the year ended December 31, 2022 grew 2.6% to RUB 541,749 million with positive impacts coming from core connectivity services as well as Fintech and Media segments, which were almost offset by a drop in sales of handsets & accessories due to imposed import restrictions. Our operating income for the year ended December 31, 2022 decreased by 7.3% to RUB 109,437 million. Our operating income was negatively impacted by increased loan impairment provisions at MTS bank as well as growing personnel costs. Our profit for the year ended December 31, 2022 dropped by 48.0% to RUB 33,435 million mainly due to high finance costs as well as lower operating income.

Our cash outlays for capital expenditures for the years ended December 31, 2022, 2021 and 2020 were RUB 112,581 million, RUB 111,683 million and RUB 97,838 million, respectively.

We have financed our cash requirements through our operating cash flows and borrowings. Net cash provided by operating activities for the years ended December 31, 2022, 2021 and 2020 was RUB 190,592 million, RUB 142,846 million and RUB 155,507 million, respectively.

Our borrowings consist of notes and bank loans. Our notes comprise of U.S. dollar and ruble denominated notes. As of December 31, 2022 and December 31, 2021 U.S. dollar denominated notes totaled to RUB 23.4 billion and RUB 33.3 billion, and ruble denominated notes amounted to RUB 172.6 billion and RUB 158.7 billion, respectively. Our bank loans consist of ruble-denominated borrowings totaling approximately RUB 290.2 billion as of December 31, 2022 and RUB 270.1 billion as of December 31, 2021.

We repaid approximately RUB 119.2 billion and RUB 36.4 billion of indebtedness in 2022 and 2021, respectively. As of December 31, 2022, the total amount available to us under our credit facilities amounted to RUB 206.1 billion. We had total indebtedness of 486.1 billion as of December 31, 2022, excluding lease obligations, compared to RUB 462.1 billion as of December 31, 2021. See Note 23 to our audited consolidated financial statements for a description of our indebtedness.

Our total finance costs for the years ended December 31, 2022, 2021 and 2020 were RUB 58,378 million, RUB 41,342 million and RUB 42,078 million, net of amounts of interest capitalized, respectively. See Note 8 to our audited consolidated financial statements for a description of our finance costs.

Our reporting currency is Russian rubles. Our and our subsidiaries' functional currencies are the ruble in Russia, and the dram in Armenia. See “—Certain Factors Affecting our Financial Position and Results of Operations—Currency fluctuations” and “Item 11. Quantitative and Qualitative Disclosures about Market Risk—Foreign Currency Risk.”

We report under International Financial Reporting Standards (“IFRS”) as issued by the International Accounting Standards Board (the “IASB”). None of our financial statements were prepared in accordance with generally accepted accounting principles in the United States.

On October 24, 2022, MTS disposed of a plant that produced and supplied Tier 2 electronic components for the automotive industry as well as microelectronic components. NVision Czech Republic a.s. was part of “Czech Republic” operating segment included in “Other” reportable segment. The consolidated statements of profit or loss for the years ended December 31, 2021 and 2020 were retrospectively restated to present operations with NVision Czech Republic a.s. as discontinued operations.

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The selected financial data presented below as of December 31, 2022, 2021, 2020 and for the years ended December 31, 2022, 2021 and 2020 was derived from the audited consolidated financial statements of the Company, included in this document. The amounts are presented in millions of Russian rubles, except share and per share amounts, industry and operating data and ratios.

	2022	2021	2020
Consolidated statements of profit or loss data:			
Services revenue	496,669	457,668	425,433
Sales of goods	45,080	70,253	64,398
Total operating revenues	541,749	527,921	489,831
Operating expenses:			
Cost of services	151,780	132,613	121,317
Cost of goods	41,153	67,274	59,572
Selling, general and administrative expenses	109,401	96,035	87,802
Depreciation and amortization	114,393	110,962	100,143
Share of the profit of operating associates and joint ventures	(4,596)	(5,565)	(5,048)
Impairment of non-current assets	489	(10)	2,023
Expected credit losses	26,366	13,001	11,912
Other operating income	(6,674)	(4,394)	(493)
Operating profit	109,437	118,005	112,603
Finance income	(1,774)	(2,518)	(3,437)
Finance costs	58,378	41,342	42,078
Share of the loss of non-operating associates and joint ventures	(209)	(181)	(273)
Other non-operating expenses/(income), net ⁽¹⁾	3,041	525	(3,097)
Profit before tax	50,001	78,837	77,332
Income tax expense	13,648	15,360	16,055
Profit for the period from continuing operations	36,353	63,477	61,277
(Profit)/Loss from discontinued operations, net of tax	2,918	(792)	(796)
Profit for the period	33,435	64,269	62,073
Attributable to:			
Owners of the company	32,574	63,473	61,412
Non-controlling interests	861	796	661
Dividends declared ⁽²⁾	66,335	74,049	58,948
Earnings per share, total, basic, RUB	19.39	37.49	34.88
Earnings per share, total, diluted, RUB	19.10	37.30	34.86
Earnings per share from continuing operations, basic, RUB	21.13	37.02	34.43
Earnings per share from continuing operations, diluted, RUB	20.81	36.83	34.41
Earnings per share from discontinued operations, basic, RUB	(1.74)	0.47	0.45
Earnings per share from discontinued operations, diluted, RUB	(1.71)	0.47	0.45
Annual Dividends declared per share, RUB	33.85	26.51	20.57
Semi-annual Dividends declared per share, RUB	—	10.55	8.93
Special Dividends declared per share, RUB	—	—	13.25
Number of common shares outstanding	1,682,953,850	1,662,624,118	1,726,902,169
Weighted average number of common shares outstanding—basic	1,679,533,129	1,693,244,209	1,760,467,519
Weighted average number of common shares outstanding—diluted	1,705,415,965	1,701,786,673	1,761,777,635
Consolidated statement of cash flows data:			
Cash provided by operating activities	190,592	142,846	155,507
Cash used in investing activities	(118,238)	(116,432)	(81,133)
(of which capital expenditures) ⁽³⁾	(112,581)	(111,683)	(97,838)
Cash used in financing activities	(34,622)	(71,214)	(27,360)
Consolidated statement of financial position (end of period):			
Cash, cash equivalents and short-term investments	102,714	69,562	108,839
Property, plant and equipment and investment property, net	317,434	313,748	286,693
Right-of-use assets	120,192	132,343	130,503
Total assets	1,082,930	1,015,818	919,203
Total debt (long-term and short-term) ⁽⁴⁾	486,140	462,139	429,268
Total shareholders' equity	(3,617)	14,604	32,690
Common stock less treasury stock	(92,107)	(95,995)	(74,790)
Financial ratios (end of period):			
Total debt/total capitalization ⁽⁵⁾	100.7 %	96.9 %	92.9 %
Mobile industry and operating data:⁽⁶⁾			
Mobile penetration in Russia (end of period)	175 %	178 %	172 %
Mobile subscribers in Russia (end of period, thousands) ⁽⁷⁾	79,997	80,436	78,467
Overall market share in Russia (end of period)	31 %	31 %	31 %

(1) "Other non-operating expenses/(income), net" consist mainly of net forex exchange (gains)/losses and net (gains)/losses arising on financial instruments.

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- (2) Dividends declared in each of the years ended December 31, 2022, 2021, 2020 consisted of dividends in respect of the prior fiscal year (*i.e.*, in respect of each of the years ended December 31, 2021, 2020 and 2019, respectively), semiannual dividends in respect of the 2021 and 2020 fiscal years (RUB 20,975 million, RUB 17,842 million, respectively) and special dividends related to sale of Ukraine business in 2019 (RUB 26,478 million). Amounts include dividends on treasury shares RUB 9,317 million, RUB 12,082 million, RUB 6,935 million, in respect of the years ended December 31, 2022, 2021, and 2020, respectively.
- (3) Capital expenditures are the amounts of property, plant and equipment and intangible assets acquired during respective year.
- (4) Includes notes, bank loans and other debt.
- (5) Calculated as book value of total debt divided by the sum of the book values of total shareholders' equity and total debt at the end of the relevant period. See footnote 5 above for the definition of "total debt."
- (6) Source: AC&M-Consulting and GSMA Intelligence. Operating data is presented for mobile operations only. None of this data is derived from our audited consolidated financial statements.
- (7) We define a subscriber as an organization or individual, whose SIM-card shows traffic-generating activity or accrues a balance for services rendered or is replenished of topped off over the course of any three-month period, inclusive within the reporting period, and was not blocked at the end of the period.

Segments

Management (chief operating decision maker) analyzes and reviews results of the Company's operating segments separately based on the nature of products and services, regulatory environments and geographic areas. The Group's management evaluates the segments' performance based on revenue and operating profit, excluding depreciation and amortization. Management does not analyze assets or liabilities by reportable segments.

Our current reportable segments are the following:

Telecom: represents the results of mobile and fixed line operations, which encompasses services rendered to customers across regions of Russia, including voice and data services, transmission, broadband, pay-TV and various value-added services and retail operations.

Fintech: represents the results of banking services, investment management and services of credit broker, rendered to customers across multiple regions of Russia.

On October 24, 2022, MTS disposed of a plant that produced and supplied Tier 2 electronic components for the automotive industry as well as microelectronic components. NVision a.s. was part of "Czech Republic" operating segment included in "Other" reportable segment.

In order to reflect changes in segments' composition, segment disclosures for 2022, 2021 and 2020 were retrospectively restated.

The "Other" category does not constitute a reportable segment. It includes the results of a number of other operating segments that do not meet the quantitative thresholds for separate reporting, such as Travel, Gulfstream, Artificial intelligence, Armenia, MGTS Service, Cloud and others.

Total revenues of our segments for the years ended December 31, 2022, 2021, 2020 were as follows:

	Year Ended December 31,		
	2022	2021	2020
	(in millions of Russian rubles)		
Total revenues			
Telecom	438,362	448,339	429,319
Fintech	68,439	50,315	36,771
Other	65,779	55,702	43,451
HQ and eliminations ⁽¹⁾	(30,831)	(26,435)	(19,710)
Total revenues as reported	541,749	527,921	489,831

(1) Represents the elimination of inter-company transaction results, primarily interconnect, roaming, rent of channels and telecommunications infrastructure.

Certain Operating Data

Below we provide certain operating data not included in our financial statements that we believe is useful for evaluating our business and results. The data focuses primarily on our mobile operations, particularly in Russia, which comprise the most significant share of our revenue in the periods presented, and is among the information routinely reviewed by our management as part of their regular evaluation of our performance.

Mobile Subscriber Data

The following table shows our mobile subscribers by country as of the dates indicated:

	At December 31,		
	2022	2021	2020
	(in millions)		
Subscribers⁽¹⁾			
Russia	80.0	80.4	78.5
Armenia	2.3	2.2	2.1
Total consolidated	82.3	82.7	80.6
MTS Belarus (unconsolidated)	5.7	5.7	5.7

(1) We define a subscriber as an organization or individual, whose SIM-card shows traffic-generating activity or accrues a balance for services rendered or is replenished or topped off over the course of any three-month period, inclusive within the reporting period, and was not blocked at the end of the period.

We had approximately 80.0 million subscribers in Russia as of December 31, 2022, and a leading 31% market share of total mobile cellular subscribers in Russia, according to AC&M-Consulting. Overall penetration in Russia was at approximately 175%. In addition, as of December 31, 2022, we had approximately 2.3 million subscribers in Armenia, representing 58.4% market share, according to our estimates.

For a description of our fixed line subscriber base, see “Item 4. Information on Our Company—B. Business Overview—Fixed Line Services.”

Revenues

During the last few years our company has evolved from a leading provider of telecommunication services into an eco-system of telecommunication, financial, media and digital services.

Our principal sources of revenue are:

- revenue from telecommunication or “connectivity” services, which include mobile and fixed service revenue;
- revenue from sales of handsets, accessories and other goods; and

- revenue from financial services.

Our mobile tariffs in Russia are not regulated by any organization or governmental authority. The interconnect fees we charge to other operators for terminating calls interconnecting to our mobile network are not regulated in Russia. See also “Item 3. Key Information—D. Risk Factors—Risks Relating to Our Business—If we are found to have a dominant position in the markets where we operate and are determined to have abused this position and/or concluded anti-competitive agreements, or found to have committed concerted actions, the FAS may be entitled to impose fines as well as regulate our subscriber tariffs and impose certain restrictions on our operations.” and “—If we or any of our mobile network operator subsidiaries operating in Russia are identified as an operator occupying a “substantial position,” the regulator may reduce our interconnect tariffs which, in turn, may have a material adverse effect on our financial condition and results of operations.”

Certain of our fixed service tariffs are regulated, including tariffs charged by Moscow incumbent operator MGTS for installation fees, monthly subscription fees and local call charges, as well as interconnect and traffic transit tariffs. The interconnect tariffs charged by us are also regulated by the Federal Agency on Communications.

Service revenues

Revenue from telecommunication services primarily include monthly fees paid by our users of tariff plans which contain fixed volume of services such as minutes of usage, sms, mobile internet traffic, pay-TV and broadband internet in case of convergent tariff plans. Telecommunication services also include interconnect fees, roaming fees and other services. Telecommunication services as a percentage of revenues remained stable and was 80.4% in 2022, 78.9% in 2021 and 80.9% in 2020. We expect revenue from telecommunication services to remain flat as a percentage of total revenue in 2023.

Revenue from financial services which consist primarily of lending services, business funding options, deposit products, cash settlement services, trade finance, foreign currency control, bank cards, payroll projects, merchant acquiring and investment services provided by MTS Bank, comprised 12.6%, 9.2% and 7.2% of our total revenues in 2022, 2021 and 2020, respectively. We expect banking service revenues to remain stable as a percentage of our total operating revenue in 2023.

Sales of Goods

Sales of goods primary consist of the sale of handsets and accessories and sales of software products and as a percentage of total revenue decreased to 8.3% in 2022 from relatively stable amounts of 13.3% in 2021 and 13.1% in 2020. The significant decline in 2022 both in absolute terms and as a percentage of revenue is attributable to the compression of devices market due to supply chain problems. The increase both in absolute terms and as a percentage of revenue in 2021 as compared to 2020 is attributable to an increase of handsets retail market in monetary terms and low base of 2020 impacted by store closure due to public health guidelines amid the pandemic. We expect that sales of goods will remain stable or decline as a percentage of total revenue, depending on the continuity of smartphones and devices supplies. We do not subsidize handset sales in Russia.

Cost of Services

Cost of telecommunication services mainly consist of interconnect and line rental charges payable to other operators for access to, and use of their networks, which are necessary in the course of providing service to our subscribers. Roaming expense which consist of amounts charged by other cellular operators under agreements for roaming services provided to our subscribers while outside our service area, is also a significant part of our cost of telecommunication services.

Cost of telecommunication services as a percentage of our total revenues represented 23.8% in 2022, 22.5% in 2021 and 22.6% in 2020.

Cost of financial services consists primarily of interests on loans received from banks and other financial institutions and commission fees. Cost of financial services as a percentage of our total revenues represented 4.3% in 2022 and 2.7% in 2021 and 2.3% in 2020.

Cost of goods

This type of expense includes primarily the cost of handsets and accessories sold to subscribers, the cost of SIM cards provided to our customers, the cost of software products sold and inventory obsolescence provision. Cost of handsets, accessories and software sold and SIM cards provided to customers as a percentage of our total revenues represented 7.6% in 2022, 12.7% in 2021 and 12.2% in 2020.

Selling, general and administrative expenses

Our selling expenses comprise of all costs relating to the activities that do not directly increase the value of our products and services, but serve to secure sales. These costs consist primarily of:

- expenses for advertising and promotion;
- dealer commissions for the acquisition of new subscribers and cash collection; and
- personnel, utilities and maintenance costs incurred in the area of sales.

In 2022, 2021 and 2020, selling expenses comprised 9.5%, 8.8% and 9.0% of our total revenue, respectively. The increase of 0.7% of selling expenses in 2022 compared to 2021 was mainly attributable to increase of personnel costs, advertising and marketing expenses and dealers commissions. The decrease of 0.2% of selling expenses in 2021 compared to 2020 was mainly due to cash collection commission optimization. The increase of 2,271 mln.rub of selling expenses in 2021 compared to 2020 was due to increase of advertising and marketing expenses.

We retain some degree of flexibility to increase or decrease these expenses in any given period based on our requirements, strategy and the general economic environment.

For the structure of our dealer commissions please see “Item 4. Information on Our Company—B. Business Overview—Mobile Operations—Sales and Marketing—Sales and Distribution.”

Our general and administrative expenses comprise of expenses attributable to the core administrative functions that cannot be allocated directly to the production or selling process. These consist primarily of:

- personnel costs;
- office maintenance expenses and rental of administrative premises;
- consulting expenses;
- taxes other than income taxes, *e.g.* property taxes;
- billing and data processing expenses; and
- other expenses of administrative nature.

General and administrative expenses as a percentage of our total revenues represented 10.6%, 9.5% and 8.9% in 2022, 2021 and 2020, respectively. The increase of 1.2% in general and administrative expenses in 2022 compared to 2021 related to an increase in personnel costs related to acquisition of new companies and a number of employees growth and related to an increase in tax costs. The increase of 0.6% in general and administrative expenses in 2021 compared to 2020 related to an increase in personnel costs related to acquisition of new companies and a number of employees growth. General and administrative expenses as a percentage of revenue are expected to increase over time as a result of inflation.

Sundry Operating Income/Expenses

Our sundry operating income/expenses include:

- operating share of associates' profit;
- impairment of financial assets;
- impairment for goodwill and long-lived assets; and
- other operating income/expenses such as gain/losses on disposal of property, plant and equipment and intangible assets as well as any gain/losses resulting from stock-taking.

Sundry operating income/expenses as a percentage of our total revenues represented 2.9%, 0.6% and 1.7% as of December 31, 2022, 2021 and 2020, respectively. The increase of sundry operating expenses in 2022 compared to 2021 was mainly attributable to increase the allowance of expected credit losses (ECL) for bank deposits and loans to customers due to increased macroeconomic risks. The decrease of sundry operating income in the financial year 2021 compared to 2020 was mainly attributable to a decrease in the allowance of expected credit losses (ECL) and to an increase in the gain recognized as a result of transaction with the sale of fixed assets and leaseback.

Depreciation of Property, Network Equipment and Amortization of Intangible Assets

Our expense for depreciation of property, network equipment and amortization of intangible assets as a percentage of our total revenues was equal to 21.1% for the year ended December 31, 2022 as compared to 21.0% and 20.4% of our total revenues for the years ended December 31, 2021 and 2020 respectively. We expect this expense to remain relatively stable in 2023.

Finance costs

Our finance costs for 2022 increased by RUB 17,036 million, or 41.21%, to RUB 58,378 million from RUB 41,342 million for the year ended December 31, 2021. The increase was primarily attributable to the increase in total debt and an increase in interest rates due to the growth of Central Bank of Russia key rate since February 2022 till July 2022. Our finance costs for 2021 decreased by RUB 736 million, or 1.75%, to RUB 41,342 million from RUB 42,078 million for the year ended December 31, 2020. The decrease was primarily attributable to the effect of the derecognition and modification of debt agreements (RUB 1,151 million), decrease in interest on lease obligations (RUB 457 million) and the effect of our operations with derivatives. The decrease was partly compensated by an increase in total debt and an increase in interest rates due to the growth of Central Bank of Russia key rate (RUB 1,258 million).

We expect our finance costs to decrease slightly as a percentage of our revenue in 2023 due to the decline and steadying of Central Bank of Russia key rate.

Provision for Income Taxes

Taxation on income of Russian companies is regulated by a number of laws, government decrees and implementation instructions.

The income tax base for Russian companies is defined as income received from sales of goods and services reduced by the amount of expenses incurred in such operations with certain exceptions.

The statutory income tax rate in Russia is 20%. The effective tax rate applicable to our consolidated group in the year ended December 31, 2022, 2021 and 2020 was 27.3%, 19.5% and 20.8%, respectively. The effective tax rate differs from the statutory rate mainly as a result of prior period tax effects, changes in recognized deferred tax assets, and removal of the items not deductible for tax purposes.

Certain Factors Affecting our Financial Position and Results of Operations

Potential adverse effects of economic volatility and sanctions in Russia

In February 2022, following recent geopolitical developments, the EU, US, UK and certain other countries began to impose significant new sanctions and export controls on Russian and Belarusian persons and entities. These sanctions resulted in reduced access of the Russian businesses to international capital and some export markets, volatility of the Russian ruble, rise of inflation, decline in capitals markets, restrictions targeting several major Russian financial institutions and the Central Bank of Russia (“CBR”), a number of companies and individuals, technology export controls and other negative economic consequences.

Developments relating to these matters are highly unpredictable, occur swiftly and often with little notice and are mostly outside of our control, and the risk that any Group member, or individuals holding positions within the Group as well as its counterparties, may be affected by future sanctions designations cannot be excluded. Current and future risks include, among others, the risk of reduced or blocked access to capital markets and ability to obtain financing on commercially reasonable terms (or at all), the risk of restrictions on the import of certain equipment and software, as well as the risk deviations of the conversion rate of Russian ruble against other currencies. In addition, Central Bank’s of Russia increase of its key rate to 20% on February 28, 2022, impacted floating-rate credit facilities and consequently increased the Group’s finance costs. Further in 2022, the Central Bank of Russia has gradually decreased its key rate to 7.5% as of December 31, 2022.

Furthermore, the CBR has prohibited Russian companies from making any payments, including dividends, on securities of Russian companies to non-Russian residents, with the result that any non-Russian resident holders of our ADSs were ineligible to receive such dividends. In May 2022, the Decree of the President of Russian Federation No. 254 set temporary procedures for making dividend payments on securities of Russian companies to non-Russian residents, which includes making payments in Russian rubles through special accounts.

In April 2022, Russian Federal Law No. 114-FZ, requiring Russian companies to terminate their depository receipt programs, came into force. In May, the Russian Government Commission on Monitoring Foreign Investment (“the Commission”) approved the Company’s request to maintain its American Depositary Receipts (ADR) program. The Commission’s decision provided for the continuation of circulation of MTS ADRs until July 12, 2022 (inclusive). Following the Commission’s decision and requirements of the law the Group initiated the termination process of its depository receipt program, starting from July 13th, 2022. MTS’ ADSs were delisted from the NYSE effective August 8, 2022. The existing ADSs could have been converted into MTS’ ordinary shares at the ratio of 1:2. The guaranteed conversion period expired on January 12, 2023 (inclusive). In August 2022, the Group initiated ADSs automatic conversion into ordinary shares. If holders of depository receipts held with foreign brokers and/or custodians were restricted by foreign brokers and/or custodians from the conversion of receipts and allotment of shares due to sanctions, holders of receipts could have their shares converted through a forced conversion mechanism. The deadline for submitting forced conversion applications expired on November 11, 2022.

In February 2023, the US Office of Foreign Assets Control (OFAC) and the UK Office of Financial Sanctions Implementation (OFSI) designated MTS Bank as a sanctioned person pursuant to applicable sanctions regulations adopted by the US and the UK, respectively. Accordingly, MTS Bank became subject to so-called “blocking” (asset-freeze) sanctions maintained by the US and the UK. Among other matters, these sanctions require US and UK third parties, including banks, to block or freeze assets which MTS Bank holds with such parties or otherwise block the settlement of payments to or from MTS Bank and its counterparties. The full impact and potential implications of the imposed sanctions on MTS Bank on the Group’s operations, assets and liabilities cannot be reliably estimated at this time. Management believes it is taking the appropriate measures to mitigate the related negative effects.

Management remains focused on ensuring operational continuity and providing uninterrupted connectivity and other services for customers. In making its going concern assessment, management considered principal risks and existing uncertainties, the Group’s liquidity position (Note 28), including the Group’s borrowings and available credit facilities, its expectations on compliance with covenants, capital expenditure commitments and other factors.

For more information, see Note 33 and 34 to our consolidated financial statements, “Item 3. Key Information—D. Risk Factors—Risks Relating to Economic Risks in Our Countries of Operation — “Further deterioration in geopolitical situation and sanctions imposed as a result thereof could materially adversely affect our business, financial condition, results of operations, prospects and the value of our shares” and “Item 3. Key Information—D. Risk Factors— Risks Relating to Economic Risks in Our Countries of Operation — The imposition of sanctions on MTS Bank and the potential for further international sanctions and export restrictions affecting the Group may have a material adverse impact on our business, financial condition and result of operations”.

Currency fluctuations

A majority of our capital expenditure and a part of our liabilities and borrowings are either denominated in or tightly linked to the U.S. dollar or euro. A significant part of our financial liabilities, denominated in U.S. dollars, excluding trade accounts payables, is hedged through financial instruments with various banks. We conduct operations in multiple countries, and we are therefore subject to currency fluctuations. The local currencies of these countries fluctuate significantly against the U.S. dollar and euro. As a result of the fluctuations we may incur significant currency exchange gains/losses which may adversely affect our profit for the year. Please see also “Item 3. Key Information—D. Risk Factors—“Ruble volatility and regulatory changes in foreign currency regulation could increase our costs, decrease our available funds or make it more difficult for us to comply with financial covenants and to repay our debts and would affect the value of dividends received by holders of shares” and “Item 3. Key Information—D. Risk Factors—“Further deterioration in geopolitical situation and sanctions imposed as a result thereof could materially adversely affect our business, financial condition, results of operations, prospects and the value of our shares”.

Inflation

Our financial position and results of operations as reflected in our audited consolidated financial statements included elsewhere in this document have been influenced by inflation. We expect inflation-driven increases in costs to put pressure on our margins. While we could seek to raise our tariffs to compensate for such increase in costs, competitive pressures may not permit increases that are sufficient to preserve operating margins. See “Item 3. Key Information—D. Risk Factors—Risks Relating to our Financial Condition—Inflation could increase our costs and adversely affect our results of operations.”

COVID—19 impact

The COVID—19 outbreak has had limited impact on our results of operations. Our operating income was negatively impacted by COVID—19 outbreak, mainly due to the loan impairment provisions at MTS bank and impairment of our e—ticketing business in 2020. In addition, our revenue growth was partly offset by a decrease in revenue from roaming services due to a steep decline in international roaming in 2020, which partly recovered in 2021.

For more information, see “Item 3. Key Information—Risk Factors—The outbreak of COVID—19 may have a material adverse effect on our business, financial condition, results of operations and prospects.”

Acquisitions

Our results of operations for the periods presented are significantly affected by acquisitions. Results of operations of acquired businesses are included in our audited consolidated financial statements for the periods after their respective dates of acquisition.

Below is a list of our major acquisitions during 2022-2020. See also Note 4 to our audited consolidated financial statements for a description and financial effects of these acquisitions.

Company	Type	Date of acquisition	Stake acquired	Purchase price, RUB mln
2022				
Webinar	Videoconferencing solutions	July 2022	75.5 %*	2,095
Bronevik	Online hotels booking	July 2022	100 %	4,000
Gulfstream	Digital safeguard systems	April 2022	58.38 %	1,999
VisionLabs	Developer of AI software (computer vision, machine learning)	February 2022	100 %	6,556
				14,650
2021				
Zelenaya Tochka	Regional fixed-line operations	April 2021	49 %**	3,101
Credit Consulting	Credit broker	April 2021	100 %	60
Multiregional TransitTelecom	B2B intelligent connectivity solutions	June 2021	100 %	5,798
GDTs Energy Group	GreenBush data center	June 2021	100 %	5,200
Sistema Capital	Investment services	September 2021	70 %***	3,500
				17,659
2020				
Stopol Auto	Auto parts and multimedia devices	June 2020	100 %	321
				321
				32,630

* In September 2022 we increased stake in Webinar to 84.25% through exercise of options entered into at acquisition date.

** Acquisition of 49% in Zelenaya Tochka in addition to the previously held stake of 51% allowed us to obtain control over the entity.

*** Acquisition of 70% in Sistema Capital in addition to the previously held stake of 30% allowed us to obtain control over the entity.

Results of Operations

Our management has identified the following reportable segments: Telecom and Fintech. See “—Segments.”

Intercompany eliminations presented below consist primarily of sales transactions between segments conducted in the normal course of operations.

Financial information by reportable segments is presented below:

	Year Ended December 31,		
	2022	2021	2020
Total revenues			
Telecom	438,362	448,339	429,319
Fintech	68,439	50,315	36,771
Other	65,779	55,702	43,451
HQ and eliminations ⁽¹⁾	(30,831)	(26,435)	(19,710)
Total revenues as reported	541,749	527,921	489,831
Costs of services and cost of goods			
Telecom	156,490	171,347	157,012
Fintech	26,700	16,775	14,104
Other	30,451	28,305	21,264
HQ and eliminations ⁽¹⁾	(20,708)	(16,540)	(11,491)
Cost of services and cost of goods as reported	192,933	199,887	180,889
Sundry operating expenses/(income)⁽²⁾			
Telecom	4,599	1,509	3,128
Fintech	20,991	12,282	10,125
Other	(10,077)	(10,994)	(5,135)
HQ and eliminations ⁽¹⁾	72	235	276
Sundry operating expenses/ (income) as reported	15,585	3,032	8,394
Selling, general and administrative expenses			
Telecom	78,262	71,358	68,267
Fintech	14,393	12,665	9,187
Other	17,833	13,679	11,231
HQ and eliminations ⁽¹⁾	(1,087)	(1,667)	(883)
Selling, general and administrative expenses as reported	109,401	96,035	87,802
Depreciation and amortization expenses			
Telecom	105,505	101,112	90,871
Fintech	2,266	1,882	1,286
Other	14,784	13,672	12,707
HQ and eliminations ⁽¹⁾	(8,162)	(5,704)	(4,721)
Depreciation and amortization expenses as reported	114,393	110,962	100,143
Operating profit			
Telecom	93,506	103,013	110,041
Fintech	4,089	6,711	2,069
Other	12,788	11,040	3,384
HQ and eliminations ⁽¹⁾	(946)	(2,759)	(2,891)
Operating profit as reported	109,437	118,005	112,603

(1) Represents the elimination of inter-company transaction results, primarily interconnect, roaming, rent of channels and telecommunications infrastructure.

(2) For the purposes of this analysis "Sundry operating expenses/(income)" consist of allowance for doubtful accounts, impairment of non-current assets and goodwill, other operating expenses/(income), operating share of profit of associates.

Year Ended December 31, 2022 Compared to Year Ended December 31, 2021

Revenues and cost of services and cost of goods

Consolidated revenues for the year ended December 31, 2022, increased by RUB 13,828 million, or 26.2%, to RUB 541,749 million from RUB 527,921 million for the year ended December 31, 2021. The principal reason for the growth was the large increase in revenue from telecommunication services, including roaming and interconnect services, (by RUB 22,927 million) attributable to the usage of voice and data tariffs by our subscribers. This was mainly attributable to the increase in mobile internet penetration, an increase in usage of smartphones by our subscribers, active network expansion and the consequent improvement of the quality and uptake of value-added services. Revenue from financial services added to the overall increase of consolidated revenue as it grew by RUB 16,074 million to RUB 60,927 million in 2022 from 44,853 million in 2021. Our revenues remain partly offset by the dynamics in revenue from sales of handsets, accessories and software products by RUB 25,173 million, or 35.8% compared to the year ended December 31, 2021 caused by deficit of devices and accessories due to problems with supply chains. Companies acquired in 2022 and 2021 added up of approximately RUB 7,178 million to the consolidated revenues for the year ended December 31, 2022.

Consolidated cost of services and cost of goods for the year ended December 31, 2022 decreased by RUB 6,954 million and amounted to RUB 192,933 million as compared to RUB 199,887 million for the year ended December 31, 2021 and comprised 35.6% and 37.9% as a percentage of consolidated revenues for the year ended December 31, 2022 and 2021, respectively. The decrease was driven by the decline in the device market which led to the decrease of handsets sales and the consequent decline in cost of handsets, accessories and software products by RUB 25,899 million compared to the year ended December 31, 2021. On the contrary, our cost of telecommunication services, including interconnect and roaming, grew up by RUB 10,168 million in the back of service revenue increase. The growth of revenue from financial services added up of approximately RUB 8,998 million to consolidated cost of services and cost of goods for the year ended December 31, 2022.

Telecom revenues for the year ended December 31, 2022, decreased by 2.3% to RUB 438,362 million from RUB 448,339 million for the year ended December 31, 2021. The decrease was driven by the dynamics in revenue from sales of handsets, accessories and software products by RUB 24,019 million, or 35.6% compared to the year ended December 31, 2021 caused by deficit of devices and accessories due to problems with supply chains. The growth in revenue from telecommunication services, including roaming and interconnect services, (by RUB 14,024 million) attributable to the growth in usage of voice and data tariffs by our subscribers.

Telecom cost of services and cost of goods for the year ended December 31, 2022, decreased by 8.7% to RUB 156,490 million from RUB 171,347 million for the year ended December 31, 2021. The decrease in Telecom cost of services and cost of goods is largely attributable to the decline in cost of handsets, accessories and software products by RUB 26,545 million, driven by the deficit of devices due to problems with supply chains. The decline was partly offset by the dynamics in cost of telecommunication services to RUB 116,432 million from RUB 106,121 million, or 8.9% in line with an increase of revenues from telecommunication services.

Fintech revenues increased by RUB 18,220 million and amounted to RUB 68,439 million for the year ended December 31, 2022 and RUB 50,315 million for the year ended December 31, 2021. Fintech revenues as a percentage of our total revenues represented 12.6% in 2022 and 9.5% in 2021 and its growth is mainly attributable to the increase in the amount of users and expansion of MTS Bank clients portfolio.

Fintech cost of services and cost of goods increased by RUB 9,925 million as a consequence of Fintech revenue growth and amounted to RUB 26,700 million for the year ended December 31, 2022 and RUB 16,775 million for the year ended December 31, 2021, representing 4.9% and 3.2% of our total revenues in 2022 and 2021 respectively.

Other countries and business activities revenues for the year ended December 31, 2022 increased by 18.1% or RUB 10,077 million to RUB 65,779 million as compared to RUB 55,702 million for the year ended December 31, 2021. The increase was mainly attributable to the increase in revenue of fixed-line infrastructure segment (including intercompany revenue), and the increase in revenue from pay-TV services.

Other countries and business activities cost of services and cost of goods for the year ended December 31, 2022 increased by 7.6% or RUB 2,146 million to RUB 30,451 million as compared to RUB 28,305 million for the year ended December 31, 2021. The increase was mainly attributable the increase in cost of services of fixed-line infrastructure segment.

Sundry operating expenses/(income)

Consolidated sundry operating expenses for the year ended December 31, 2022, increased by RUB 12,553 million in comparison with the previous year. We generated RUB 15,585 million expenses and RUB 3,032 million expenses for the year ended December 31, 2022 and 2021, respectively. These amounts comprised (2.9)% and (0.6)% as a percentage of consolidated revenue for the year ended December 31, 2022 and 2021, respectively. The increase of consolidated sundry operating expenses in 2022 compared to 2021 was attributable to higher MTS Bank reserves due to significant macroeconomic risks in Russia in the year ended December 31, 2022, compared to the year ended December 31, 2021.

Telecom sundry operating expenses for the year ended December 31, 2022, increased by 204.8% or RUB 3,090 million compared to the year ended December 31, 2021. We generated RUB 4,599 million and RUB 1,509 million expenses for the year ended December 31, 2022 and 2021, respectively. These expenses comprised 1% of Telecom revenues for the year ended December 31, 2022 and 0.3% for the year ended December 31, 2021. The Group decreased income from sales of old copper cables in MGTS and increased losses from associates in 2022.

Fintech sundry operating expenses for the year ended December 31, 2022, increased by RUB 8,725 million to RUB 20,991 million from RUB 12,282 million for the year ended December 31, 2021. Sundry operating expenses as a percentage of banking service revenues increased to 34.5% for the year ended December 31, 2022, from 27.4% for the year ended December 31, 2021. Increase in Fintech sundry operating expenses was caused by the increase in allowance for expected credit losses (“ECL”) for the bank loans to customers related to the overall increase in loans to customers and impact of macroeconomic problems and sanctions.

Other countries and business activities sundry operating income for the year ended December 31, 2022, decreased by RUB 0,739 million compared to the year ended December 31, 2021. We recognized income of RUB 10,005 million for the year ended December 31, 2022 and RUB 10,744 million for the year ended December 31, 2021.

Selling, general and administrative expenses

Consolidated selling, general and administrative expenses for the year ended December 31, 2022, increased by RUB 13,367 million and amounted to RUB 109,401 million as compared to RUB 96,035 million for the year ended December 31, 2021 and comprised 20.2% and 18.2% as a percentage of consolidated revenues for the year ended December 31, 2022 and 2021, respectively, driven by the increase in salaries and social contributions, and advertising and marketing expenses.

Telecom selling, general and administrative expenses for the year ended December 31, 2022 increased by RUB 6,904 million to RUB 78,262 million, or 17.9% of Telecom revenue, from RUB 71,358 million, or 15.9% of Telecom revenue, for the year ended December 31, 2021 mainly due to the increase in payroll expenses for RUB 5,948 million.

Fintech selling, general and administrative expenses for the year ended December 31, 2022, increased by RUB 1,728 million, to RUB 14,393 million, or 21.0% of Fintech revenue, from RUB 12,665 million, or 25.2% of Fintech revenue for the year ended December 31, 2021, driven mainly by the increase in salaries and social contributions.

Other countries and business activities selling, general and administrative expenses for the year ended December 31, 2022, increased by RUB 4,153 million or 27.1% to RUB 17,833 million from RUB 13,679 million for the year ended December 31, 2021. Other countries and business activities selling, general and administrative expenses mainly increased due to the effect of an increase in payroll expenses and in advertising and marketing expenses.

Depreciation and amortization expenses

Consolidated depreciation and amortization of property, network equipment, customer base, license costs, right-of-use assets, and other intangible assets for the year ended December 31, 2022, increased by 3.1% to RUB 114,393 million from RUB 110,962 million for the year ended December 31, 2021.

Telecom depreciation and amortization for the year ended December 31, 2022, increased by 4.3% to RUB 105,505 million from RUB 101,112 million for the year ended December 31, 2021.

Fintech depreciation and amortization for the year ended December 31, 2022, amounted to RUB 2,266 million showing an increase compared to RUB 1,882 for the year ended December 31, 2021 mainly due to additions of new assets, in particular software.

Other countries and business activities depreciation and amortization for the year ended December 31, 2022, increased by 8.1% to RUB 14,784 million from RUB 13,672 million for the year ended December 31, 2021.

Operating profit

Consolidated operating profit decreased by RUB 8,568 million, or 4.8%, to RUB 109,437 million in the year ended December 31, 2022 from RUB 118,005 million in the year ended December 31, 2021. The decrease was mainly attributable to lower operating income from Telecom and Fintech partly offset by the increase in Other countries and business activities.

Telecom operating profit for the year ended December 31, 2022 decreased by RUB 9,507 million, or 9.2%, and totaled to RUB 93,506 million against RUB 103,013 million for the year ended 2021. The decrease was caused by the increase of payroll expenses and depreciation and amortization expenses partly offset by the decrease of sales of handsets which has a negative marginality.

Fintech operating profit for the year ended December 31, 2022 decreased by RUB 2,621 million, or 39.1%, and totaled to RUB 4,089 million against RUB 6,711 million for the year ended 2021. MTS Bank operating profit decreased as a percentage of MTS Bank revenue to 6.0% for the year ended December 31, 2022 from 13.3% for the year ended December 31, 2021. The decrease was caused by the increase in allowance for expected credit losses ("ECL") for the bank loans to customers related to the overall increase in loans to customers and impact of macroeconomic problems and sanctions.

Other countries and business activities operating income for the year ended December 31, 2022, increased by RUB 3,561 million and totaled to RUB 11,842 million from RUB 8,281 million for the year ended December 31, 2021. The increase was mainly attributable to the increase in revenue of fixed-line infrastructure segment (including intercompany revenue), and the increase in revenue from pay-TV services.

Finance costs

Consolidated finance costs for the year ended December 31, 2022, increased by RUB 17,036 million, or 41.21%, to RUB 58,378 million from RUB 41,342 million for the year ended December 31, 2021. The increase was primarily attributable to the increase in total debt and an increase in interest rates due to the growth of Central Bank of Russia key rate since February 2022 till July 2022.

Non-operating share of the profit of associates and joint ventures

Non-operating share of the profit or loss of associates and joint ventures for the year ended December 31, 2022 increased slightly by RUB 28 million to an income of RUB 209 million compared to an income of RUB 181 million for the year ended December 31, 2021. The decrease is primarily attributable to the increase in profit of other individually insignificant associates in the year ended December 31, 2022.

Other non-operating expenses/(income), net

Consolidated other non-operating expenses for the year ended December 31, 2022, increased by RUB 2,516 million, to RUB 3,041 million from RUB 525 million for the year ended December 31, 2021. The income from our operations with derivatives increased by RUB 5,901 million, a loss of RUB 6,107 million compared to the loss of RUB 206 for the year ended December 31, 2021. The gain of RUB 3,956 million was mainly attributable to the weakening of the Russian ruble against the U.S. dollar and the euro since February 2022 till July 2022.

Provision for income taxes

Consolidated provision for income taxes for the year ended December 31, 2022 decreased by 11.1% to RUB 13,648 million from RUB 15,360 million for the year ended December 31, 2021 mainly due to the decrease in income before provision for income taxes for, partly offset by the increase in the effective tax rate. The effective tax rate increased to 27.3% in the year ended December 31, 2022, from 19.5% in the year ended December 31, 2021 mainly as a result of an increase in expenses not deductible for tax purposes, increase in the withholding tax on distributed and undistributed profits, and changes in fair value of derivative financial instruments.

Profit attributable to the non-controlling interest

Profit attributable to the non controlling interest for the year ended December 31, 2022 increased by RUB 65 million, or 8.2%, and amounted to RUB 861 million compared to profit attributable to the non-controlling interest of RUB 796 million for the year ended December 31, 2021. The increase was attributable to the overall increase in MGTS profit for the year.

Profit attributable to the Owners of the Company

Profit attributable to the Owners of the Company for the year ended December 31, 2022, decreased by RUB 30,899 million, or 48.7%, to RUB 32,574 million, compared to RUB 63,473 million for the year ended December 31, 2021. Profit as a percentage of revenues was 6.0% in the year ended December 31, 2022 and 12.0% in the year ended December 31, 2021.

Year Ended December 31, 2021 Compared to Year Ended December 31, 2020

Revenues and cost of services and cost of goods

Consolidated revenues for the year ended December 31, 2021, increased by RUB 38,090 million, or 7.8%, to RUB 527,921 million from RUB 489,831 million for the year ended December 31, 2020. The principal reason for the growth was the large increase in revenue from telecommunication services (by RUB 20,679 million) attributable to the usage of voice and data tariffs by our subscribers. This was mainly attributable to the increase in mobile internet penetration, an increase in usage of smartphones by our subscribers, active 3G and LTE network expansion and the consequent improvement of the quality and uptake of value-added services. The growth was also attributable to the growth in sales of handsets, accessories and software products by RUB 5,855 million, or 9.1% compared to the year ended December 31, 2020. Revenue from financial services added to the overall increase of consolidated revenue as it grew by RUB 11,556 million to RUB 44,853 million in 2021 from 33,297 million in 2020.

Consolidated cost of services and cost of goods for the year ended December 31, 2021 increased by RUB 19,011 million and amounted to RUB 199,898 million as compared to RUB 180,887 million for the year ended December 31, 2020 and comprised 37.9% and 36.9% as a percentage of consolidated revenues for the year ended December 31, 2021 and 2020, respectively. The increase was largely driven by the increase in the device market which led to the growth of handsets sales and the consequent increase in cost of handsets, accessories and software products by RUB 7,704 million compared to the year ended December 31, 2020.

Telecom revenues for the year ended December 31, 2021, increased by 4.4% to RUB 448,339 million from RUB 429,319 million for the year ended December 31, 2020. The increase in Telecom revenues in the year ended December 31, 2021, was primarily due to the growth in revenue from telecommunication services for RUB 13,213 million which increased due to the active promotion of mobile only and convergent tariff plans, significant volume of Internet traffic included, and constant quality improvement of services provided, added with effect from acquisitions. The increase in device market led to the growth of handsets, accessories and software sales of *Telecom* by RUB 5,835 million compared to the year ended December 31, 2020.

Telecom cost of services and cost of goods for the year ended December 31, 2021, increased by 9.1% to RUB 171,347 million from RUB 157,012 million for the year ended December 31, 2020. The increase in Telecom cost of services and cost of goods is largely attributable to the increase in cost of handsets, accessories and software products by RUB 7,843 million, driven by the growth in sales and shifting brand mix in device sales. Companies acquired in 2021 have contributed RUB 2,947 million to the increase in Telecom cost of services and cost of goods.

Fintech revenues increased by RUB 13,544 million and amounted to RUB 50,315 million for the year ended December 31, 2021 and RUB 36,771 million for the year ended December 31, 2020. Fintech revenues as a percentage of our total revenues represented 9.5% in 2021 and 7.5% in 2020 and its growth is mainly attributable to the increase in the amount of users and expansion of MTS Bank clients portfolio.

Fintech cost of services and cost of goods increased by RUB 2,671 million and amounted to RUB 16,775 million for the year ended December 31, 2021 and RUB 14,104 million for the year ended December 31, 2020, representing 3.2% and 2.9% of our total revenues in 2021 and 2020 respectively, and its growth is mainly attributable to the increase in the amount of users and expansion of MTS Bank clients portfolio.

Other countries and business activities revenues for the year ended December 31, 2021 increased by 28.2% or RUB 12,252 million to RUB 55,702 million as compared to RUB 43,450 million for the year ended December 31, 2020. The increase was mainly attributable to the increase in revenue of fixed-line infrastructure segment (including intercompany revenue), and the increase in revenue from pay-TV services.

Other countries and business activities cost of goods for the year ended December 31, 2021 increased by 33.2% or RUB 7,055 million to RUB 28,317 million as compared to RUB 21,262 million for the year ended December 31, 2020. The increase was mainly attributable to the increase in cost of goods for software products and the increase in cost of services of fixed-line infrastructure segment.

Sundry operating expenses/(income)

Consolidated sundry operating expenses for the year ended December 31, 2021, decreased by RUB 5,359 million in comparison with the previous year. We generated RUB 3,031 million expenses and RUB 8,390 million expenses for the year ended December 31, 2021 and 2020, respectively. These amounts comprised (0.6)% and (1.7)% as a percentage of consolidated revenue for the year ended December 31, 2021 and 2020, respectively. The decrease of consolidated sundry operating expenses in 2021 compared to 2020 was attributed to a number of reasons presented below, the main of which was the absence of goodwill and long-lived assets impairment of other business activities for the year ended December 31, 2021, compared to the year ended December 31, 2020.

Telecom sundry operating expenses for the year ended December 31, 2021, decreased by 51.8% or RUB 1,169 million compared to the year ended December 31, 2020. We generated RUB 1,509 million and RUB 3,128 million expenses for the year ended December 31, 2021 and 2020, respectively. These expenses comprised 0.3% of Telecom revenues for the year ended December 31, 2021 and 0.7% for the year ended December 31, 2020. As of the acquisition date in April 2021 the Group remeasured the previously held equity interest in Achemar Holdings Limited from RUB 1,166 million to fair value of RUB 1,582 million and recognized the resulting gain of RUB 416 million in the operating share of the profit of the associates and joint ventures in the accompanying consolidated statement of profit or loss. Please see Note 16 to the consolidated financial statements for the details of the acquisition.

Fintech sundry operating expenses for the year ended December 31, 2021, increased by RUB 2,157 million to RUB 12,286 million from RUB 10,125 million for the year ended December 31, 2020. Sundry operating expenses as a percentage of banking service revenues decreased to 24.7% for the year ended December 31, 2021, from 27.5% for the year ended December 31, 2020. Increase in Fintech sundry operating expenses was caused by the increase in allowance for expected credit losses ("ECL") for the bank loans to customers related to the overall increase in loans to customers and impact of COVID-19.

Other countries and business activities sundry operating income for the year ended December 31, 2021, increased by RUB 5,900 million compared to the year ended December 31, 2020. We recognized income of RUB 10,759 million for the year ended December 31, 2021 and RUB 4,859 million for the year ended December 31, 2020. The increase is mainly due to decrease in ECL provision and the absence of goodwill and long-lived assets impairment of other business activities for the year ended December 31, 2021, compared to the year ended December 31, 2020, due to the partial recovery from the COVID-19 pandemic (see also Note 22 to our audited consolidated financial statements).

Selling, general and administrative expenses

Consolidated selling, general and administrative expenses for the year ended December 31, 2021, increased by RUB 8,233 million and amounted to RUB 96,035 million as compared to RUB 87,802 million for the year ended December 31, 2020 and comprised 18.2% and 17.9% as a percentage of consolidated revenues for the year ended December 31, 2021 and 2020, respectively, driven by the increase in salaries and social contributions, and advertising and marketing expenses.

Telecom selling, general and administrative expenses for the year ended December 31, 2021 increased by RUB 3,091 million to RUB 71,358 million, or 15.9% of Telecom revenue, from RUB 68,267 million, or 15.9% of Telecom revenue, for the year ended December 31, 2020 mainly due to the increase in payroll expenses for RUB 1,135 million and in advertising and marketing expenses for RUB 1,084 million.

Fintech selling, general and administrative expenses for the year ended December 31, 2021, increased by RUB 3,478 million, to RUB 12,665 million, or 25.2% of Fintech revenue, from RUB 9,187 million, or 25.0% of Fintech revenue for the year ended December 31, 2020, driven partially by the increase in salaries and social contributions.

Other countries and business activities selling, general and administrative expenses for the year ended December 31, 2021, increased by RUB 2,448 million or 21.8% to RUB 13,679 million from RUB 11,231 million for the year ended December 31, 2020.

Depreciation and amortization expenses

Consolidated depreciation and amortization of property, network equipment, customer base, license costs, right-of-use assets, and other intangible assets for the year ended December 31, 2021, increased by 10.8% to RUB 110,962 million from RUB 100,143 million for the year ended December 31, 2020.

Telecom depreciation and amortization for the year ended December 31, 2021, increased by 11.3% to RUB 101,112 million from RUB 90,871 million for the year ended December 31, 2020 mainly due to additions of new assets.

Fintech depreciation and amortization for the year ended December 31, 2021, amounted to RUB 1,882 million showing an increase as compared to RUB 1,286 for the year ended December 31, 2020.

Other countries and business activities depreciation and amortization for the year ended December 31, 2021, increased by 7.6% to RUB 13,672 million from RUB 12,707 million for the year ended December 31, 2020.

Operating profit

Consolidated operating profit increased by RUB 5,402 million, or 4.8%, to RUB 118,005 million in the year ended December 31, 2021 from RUB 112,603 million in the year ended December 31, 2020. The increase was mainly attributable to higher operating income from Fintech and Other countries and business activities partly offset by the decrease in Telecom operating profit.

Telecom operating profit for the year ended December 31, 2021 decreased by RUB 7,028 million, or 6.4%, and totaled to RUB 103,013 million against RUB 110,041 million for the year ended 2020. The decrease was mainly attributable to the increase of cost of handsets, accessories and software products by RUB 7,843 million, driven by the growth in sales and shifting brand mix in device sales and an increase in depreciation due to additions of intangible and fixed assets.

Fintech operating profit for the year ended December 31, 2021 increased by RUB 4,642 million, or 224.2%, and totaled to RUB 6,711 million against RUB 2,069 million for the year ended 2020. MTS Bank operating profit increased as a percentage of MTS Bank revenue to 13.3% for the year ended December 31, 2021 from 5.6% for the year ended December 31, 2020. The increase was caused by an increase in revenues attributable to the amount of users and expansion of MTS Bank clients portfolio.

Other countries and business activities operating income for the year ended December 31, 2021, increased by RUB 7,788 million and totaled to RUB 8,281 million for the year ended December 31, 2020 due to the absence of the impairment charges for goodwill and long-lived assets in the financial year 2021, and due to the increase in cost of goods for software products and the increase in cost of services of the fixed-line infrastructure segment.

Finance costs

Consolidated finance costs for the year ended December 31, 2021, decreased by RUB 736 million, or 1.75%, to RUB 41,342 million from RUB 42,078 million for the year ended December 31, 2020. The decrease was primarily attributable to the effect of the derecognition and modification of debt agreements (RUB 1,151 million), the decrease in interests on lease obligations (RUB 457 million) and the effect of our operations with derivatives. The decrease was partly compensated by an increase in total debt and an increase in interest rates due to the growth of Central Bank of Russia key rate (RUB 1,258 million).

Non-operating share of the profit of associates and joint ventures

Non-operating share of the profit or loss of associates and joint ventures for the year ended December 31, 2021 decreased slightly by RUB 91 million to an income of RUB 181 million compared to an income of RUB 273 million for the year ended December 31, 2020. The decrease is primarily attributable to the decrease in profit of other individually insignificant associates in the year ended December 31, 2021.

Other non-operating expenses/(income), net

Consolidated other non-operating expenses for the year ended December 31, 2021, was RUB 525 million, compared to an income of 3,097 million for the year ended December 31, 2020. The income from our operations with derivatives decreased by RUB 15,595 million, a loss of RUB 206 million compared to the income of RUB 15,389 for the year ended December 31, 2020. The decrease in a net forex exchange loss by RUB 9,795 million to a loss of RUB 552 million compared to the loss of RUB 10,347 million for the year ended December 31, 2020 was mainly attributable to the strengthening of the Russian ruble against the U.S. dollar and the euro during the year ended December 31, 2021.

Provision for income taxes

Consolidated provision for income taxes for the year ended December 31, 2021 decreased by 4.3% to RUB 15,360 million from RUB 16,055 million for the year ended December 31, 2020 mainly due to the decrease in the effective tax rate, partly offset by the increase in income before provision for income taxes. The effective tax rate decreased to 19.5% in the year ended December 31, 2021, from 20.8% in the year ended December 31, 2020 mainly as a result of a change in the recognition of deferred tax assets, prior period tax effects, and a decrease in expenses not deductible for tax purposes.

Profit attributable to the non-controlling interest

Profit attributable to the non controlling interest for the year ended December 31, 2021 increased by RUB 135 million, or 20.4%, and amounted to RUB 796 million compared to profit attributable to the non-controlling interest of RUB 661 million for the year ended December 31, 2020. The increase was attributable to the overall increase in MGTS profit for the year.

Profit attributable to the Owners of the Company

Profit attributable to the Owners of the Company for the year ended December 31, 2021, increased by RUB 2,061 million, or 3.4%, to RUB 63,473 million, compared to RUB 61,412 million for the year ended December 31, 2020. Profit as a percentage of revenues was 12.0% in the year ended December 31, 2021 and 12.5% in the year ended December 31, 2020.

B. Liquidity and Capital Resources

Our borrowings consist of notes and bank loans. Our bank loans consist of ruble- denominated borrowings totaling approximately RUB 290.2 billion as of December 31, 2022. We repaid approximately RUB 119.2 billion of indebtedness in 2022. As of December 31, 2022, the total amount available to us under our credit facilities amounted to RUB 206.1 billion. We had total indebtedness of approximately RUB 629.6 billion as of December 31, 2022, including lease obligations, compared to approximately RUB 616.6 billion as of December 31, 2021. Our total finance costs for the years ended December 31, 2022, 2021 and 2020, were RUB 58,378 million, RUB 41,342 million and RUB 42,078 million, net of amounts of interest capitalized, respectively. See Note 8 to our audited consolidated financial statements for a description of our finance costs.

Capital Requirements

We need capital to finance the following:

- capital expenditures, consisting of purchases of property, plant and equipment and intangible assets;
- acquisitions;
- repayment of debt and related interest payments;
- changes in working capital; and
- general corporate activities, including dividends.

We anticipate that capital expenditures, acquisitions, repayment of long-term debt and dividends will represent the most significant uses of funds for several years to come.

Our cash outlays for capital expenditures for the years ended December 31, 2022, 2021 and 2020 were RUB 112,581 million, RUB 111,683 million and RUB 97,838 million, respectively. In 2023 we plan on spending for further network expansion, special projects relating to the development of big data, media, artificial intelligence and ecosystem products, fixed network modernization, further construction of radio subsystem and additional storage, processing and indexing centers to comply with requirements of “Yarovaya Ozerov bundle of laws,” maintenance capital expenditures, construction of new sites and purchase of software for network managing in Armenia and other initiatives. As the business scale grew, MTS increased investment until 2021 from 2022 started plans to stabilize its capital expenditures and change investments structure by focusing on the building of its ecosystem and digital products. We plan to finance our capital expenditures primarily through operating cash flows, and to the extent necessary, through additional external financing. The actual amount of our capital expenditures for 2023 may vary depending on subscriber growth, demand and network development, as well as currency volatility, vendor terms and the availability of external financing. Please see also “Item 3. Key Information—D. Risk Factors—“Ruble volatility and regulatory changes in foreign currency regulation could increase our costs, decrease our available funds or make it more difficult for us to comply with financial covenants and to repay our debts and would affect the value of dividends received by holders of shares” and “Item 3. Key Information—D. Risk Factors— “Further deterioration in geopolitical situation and sanctions imposed as a result thereof could materially adversely affect our business, financial condition, results of operations, prospects and the value of our shares”.

Geopolitical and economic volatility may have an impact on our cash flows, liquidity, capital resources, cash requirements, financial position.

We cannot assess the probability and amount of potential impacts at the moment.

Throughout 2020 to 2022, we completed various acquisitions. For details on these, please see “Item 4—Information on our Company—A. History and Development”.

We have also used cash provided by operating activities as well as external credit facilities to finance our capital expenditures. We plan to finance future acquisitions through operating cash flows and additional borrowings. We may continue to expand our business through acquisitions. Our cash requirements relating to potential acquisitions can vary significantly based on market opportunities.

We expect to refinance our existing debt when it becomes due. For scheduled maturities of debt principal outstanding as of December 31, 2022 see Note 23 of our audited consolidated financial statements. We generally use the proceeds from our financing activities for our corporate purposes and refinancing existing indebtedness.

The Group continues to include dividend payments as part of its commitment to maximizing shareholder value. Decisions on dividends are proposed by the Board of Directors and voted upon thereafter at a General Meeting of Shareholders. In determining the Company's dividend payout, the Board of Directors considers a number of factors, including cash flow from operations, capital expenditures, and the Group's debt position.

The Group may take decisions on the dividend payout based not only on annual results but also on interim results for three, six or nine months of the fiscal year. Annual and interim dividend payments, if any, must be recommended by the Board of Directors and approved by the shareholders.

In accordance with Russian laws, earnings available for dividends are limited to profits determined under Russian Accounting Standards (RAS), denominated in Russian Rubles, after certain deductions.

The following table summarizes the Group's declared cash dividends for the years ended December 31, 2022, 2021 and 2020:

	2022	2021	2020
Dividends declared (including dividends on treasury shares of 9,318, 12,082 and 6,936 respectively)	66,334	74,049	58,948
Dividends, RUB per ADS	67.70	74.12	59.00
Dividends, RUB per share	33.85	37.06	29.50

The conflict between Russia and Ukraine, and the consequential actions by the EU, US, UK and certain other countries, have resulted in restrictions on our ability to pay dividends. For more information, see “—A. Operating Results—*Certain Factors Affecting our Financial Position and Results of Operations—Potential adverse effects of economic volatility and sanctions in Russia*”.

As of December 31, 2022, 2021 and 2020 dividends payable were RUB 16,591 million, RUB 68 million and RUB 108 million, respectively, and were included in trade and other payables within the consolidated statement of financial position.

We generally intend to finance our dividend requirements through operating cash flows, and accordingly, our payment of dividends may make us more reliant on external sources of capital to finance our capital expenditures and acquisitions.

Capital Resources

We plan to finance our capital requirements through a mix of operating cash flows and financing activities, as described above. Our major sources of cash have been cash provided by operations and the proceeds of our ruble-denominated note issuances and loans. We expect that these sources will continue to be our principal sources of cash in the future.

The availability of financing is influenced by many factors, including our profitability, operating cash flows, debt levels, credit ratings, contractual restrictions and market conditions. We cannot assure you that we will be able to continue to obtain large amounts of financing in the future through debt or equity offerings, bank financings or otherwise.

The Group's borrowings represent interest bearing bank loans and bonds issued in the capital markets. Borrowings are initially recorded at fair value plus transaction costs that are directly attributable to the issue of the financial liability and subsequently measured at amortized cost, using the effective interest rate method.

The Group's borrowings comprise the following:

	December 31,	
	2022	2021
Notes	195,929	191,996
Bank and other loans	290,211	270,143
Total borrowings	486,140	462,139
Less: current portion	(117,747)	(111,839)
Total borrowings, non-current	368,393	350,300

On November 21, 2022, the Group announced a consent solicitation in relation to the MTS International Notes due 2023 on the terms and subject to the conditions set forth in the Consent Solicitation Memorandum dated November 21, 2022.

On December 13, 2022 in connection with the Consent Solicitation, the Extraordinary Resolution was duly passed and became effective.

Pursuant to the terms of the Extraordinary Resolution, amongst other things, the November 30, 2022 coupon payment under the Notes were to be paid by the Group in accordance with the Amended Payment Mechanics within sixty (60) calendar days from November 30, 2022 by January 30, 2023. The Group paid coupon payments in respect of the Notes due on January 16, 2023.

Bank loans and notes of the Group are subject to certain covenants limiting the Group's ability to create liens on properties, dispose assets, including cellular licenses in core Russian regions, issue guarantees and grant loans to the third parties, delay payments for the borrowings, merge or consolidate MTS PJSC with a third party or be a subject to unsatisfied judgments (excluding the total penalty under the agreements with the DOJ). The Group is required to comply with certain financial ratios.

The noteholders of MTS International Notes due in 2023 have the right to require the Group to redeem the notes at 101% of their principal amount and related interest, if the Group experiences a change in control.

If the Group fails to meet covenants, after the notice and cure periods, the debtholders are entitled to demand accelerated principal repayment.

The Group was in compliance with all existing notes and bank loans covenants as of December 31, 2022.

The following table presents the aggregate scheduled maturities of debt principal outstanding as of December 31, 2022:

	December 31, 2022	
	Notes	Bank loans and other debt
Payments due in the year ending December 31,		
2023	63,963	90,636
2024	67,213	76,944
2025	41,246	150,222
2026	38,415	15,242
2027	22,477	—
Contractual undiscounted cash flows	233,314	333,044
Less: unamortized debt issuance costs	(321)	—
Less: interest	(37,064)	(41,762)
Less: debt modification	—	(459)
Less: subsidized interest rate effect	—	(612)
Total debt	195,929	290,211

In March 2022, Cisco Systems Finance International UC (CSFI) made a decision to stop all business operation in Russia and Belarus. On February 16, 2023 MTS signed an additional agreement with CSFI where the parties agreed that all the loans were terminated and there are no outstanding obligations of the parties under or in connection with the loans. As of December 31, 2022, the Group's total debt to Cisco amounted to RUB 1,234 million.

In addition, we had lease obligations in the amount of RUB 143,502 million and RUB 154,509 million as of December 31, 2022 and 2021, respectively. The terms of our material lease obligations are described in Note 24 to our audited consolidated financial statements.

See “Item 3. Key Information—D. Risk Factors—Risks Relating to our Financial Condition — Indentures relating to some of our notes contain, and some of our loan agreements contain, restrictive covenants, which limit our ability to incur debt and to engage in various activities.”

Consolidated Cash Flow Summary

A summary of our cash flows and cash outlays for the years ended December 31, 2022, 2021 and 2020 is as follows:

	2022	2021	2020
	(amounts in million RUB)		
Cash flows from:			
Net cash provided by operating activities	190,592	142,846	155,507
Net cash used in investing activities	(118,238)	(116,432)	(81,133)
Net cash used in financing activities	(34,622)	(71,214)	(27,360)
Effect of exchange rate changes on cash and cash equivalents	(30)	(79)	385
Net increase/(decrease) in cash and cash equivalents	(37,702)	(44,879)	47,399
Cash outlays for:			
Capital expenditures ⁽¹⁾	(112,581)	(111,683)	(97,838)
Acquisition of subsidiaries, net of cash acquired	(13,948)	(10,186)	(262)
Disposal of subsidiaries, net of cash disposed	(149)	3,891	3,461
Cash payments for the acquisition of subsidiaries under common control and non-controlling interests	—	(3,474)	—
Cash inflow from sale and liquidation of associates	—	3,014	2,450

(1) Includes acquisitions of property, plant and equipment and intangible assets

For the year ended December 31, 2022 net cash provided by operating activities amounted to RUB 190,592 million, an increase of RUB 47,746 million or 33.4% year-over-year. The increase was mainly driven by decline in consumer lending by MTS Bank.

For the year ended December 31, 2022, the cash outflows generated by the Group investing activities increased by RUB 1,806 million or 1.6% compared to the year ended December 31, 2021 and totaled to RUB 118,238 million. The increase was mainly attributable to cash receipts from sale of our associates (Ozon) and subsidiaries (VF Ukraine and Rent Nedvizimost) and higher investing in purchases of new businesses, which contributed 7,054 million and RUB 3,762 million of the increase, respectively. At the same time our net inflows from investing in deposits, traded debt securities and assets in trust management of Sistema-Capital grew by RUB 8,716 million, which partially compensated the effect of sale and acquisition of our subsidiaries and associates.

For the year ended December 31, 2022, the cash outflows generated by the Group financing activities decreased by RUB 36,592 million or 51.4% from RUB 71,214 million in the year ended December 31, 2021 to RUB 34,622 million mainly due to lower dividend payments and completion of shares buy back programme.

Liquidity

As of December 31, 2022, we had total cash and cash equivalents of RUB 78,292 million (RUB 44,125 million in rubles, RUB 12,404 million in Chinese yuan, RUB 11,902 million in U.S. dollars, RUB 7,516 million in euros, RUB 314 million in Turkmenistan manat and RUB 2,031 million in other currencies). In addition, as of December 31, 2022, we had short-term investments of RUB 24,422 million, mostly in form of investments in mutual funds and debt securities as well as deposits. We also had RUB 206,099 million available under existing credit facilities as of December 31, 2022. For a description of our outstanding external financing, see Note 23 to our audited consolidated financial statements.

As of December 31, 2022, we had a working capital deficit of RUB 250,462 million compared to a deficit of RUB 210,120 million as of December 31, 2021. The increase primarily related to an increase in the current bank deposits and liabilities by RUB 53,689 million. We believe that our operating cash flows, together with our plans for external financing, will provide us with sufficient funds for our present requirements.

Russian law requires that dividends can only be paid in an amount not exceeding net profits as determined under Russian accounting standards, denominated in rubles, after certain deductions. In addition, dividends may only be paid if the value of the company's net assets is not less than the sum of the company's charter capital, the company's reserve fund and the difference between the liquidation value and the par value of the issued and outstanding preferred stock of the company, if any, as determined under Russian accounting standards. Our profit for the year available for distribution determined in accordance with Russian accounting standards and Russian legislation for the years ended December 31, 2022 and 2021 amounted to RUB 123,057 million and RUB 84,573 million respectively.

Following the conflict between Russia and Ukraine, the EU, US, UK and certain other countries have imposed significant sanctions and export controls on Russian and Belarusian persons and entities, which could have a material adverse effect on our liquidity (for more details please refer to "Item 3. Key Information—D. Risk Factors — Risks Relating to Economic Risks in Our Countries of Operation — Further deterioration in geopolitical situation and sanctions imposed as a result thereof could materially adversely affect our business, financial condition, results of operations, prospects and the value of our shares" for the risks related to the value and recoverability of dividends by holders of ADSs". We remain focused on ensuring operational continuity and providing uninterrupted connectivity and other services for our customers as well as servicing our obligations.

Credit Rating Discussion

Our credit ratings impact our ability to obtain short- and long-term financing and the cost of such financing. In determining our credit ratings, the rating agencies consider a number of factors, including our operating cash flows, total debt outstanding, commitments, interest requirements, liquidity needs and availability of liquidity. Other factors considered may include our business strategy, the condition of our industry and our position within the industry and the strategy, activity and/or credit rating of Sistema. Although we understand that these and other factors are among those considered by the rating agencies, each agency might calculate and weigh each factor differently. However due to the current geopolitical situation we have no ability to obtain financing from international sources. In March 2022, our international credit ratings were downgraded and further withdrawn following the sovereign ratings of Russia. See “Item 3. Key Information—D. Risk Factors—Risks Relating to Our Business—We have a significant shareholder, which may limit your ability to influence corporate matters and may give rise to conflicts of interest”.

Accounting Policies

Please refer to the Notes to our audited consolidated financial statements included elsewhere in this document.

Recent Accounting Pronouncements

Please refer to Note 2 to our audited consolidated financial statements included elsewhere in this document.

C. Research and Development, Patents and Licenses, etc.

Not applicable.

D. Trend Information

Sales

Our mobile subscriber base in Russia and Armenia decreased to 82.3 million subscribers as of December 31, 2022 from 82.7 million subscribers as of December 31, 2021. We expect our consolidated subscriber base to remain stable in 2023 as a result of continued marketing and advertising activity. We expect growth of our subscriber base in a long-term perspective due to an increased use of IoT (M2M) devices. We anticipate our consolidated revenues will remain stable in 2023 mainly based on growth in development of our broadband business and convergent services.

Average monthly minutes per subscriber in Russia decreased and amounted to 340 minutes in 2022 as compared to 375 minutes in 2021 as a result of the spread of the use of instant messaging and voice communication services over IP for everyday communication. We expect an increase in megabytes per subscriber due to our efforts aimed to stimulate data usage, such as increasing the volume of traffic included in the tariff without increasing the cost, facilitating access to social networks, and preferential access to public services.

Our subscriber base in Armenia slightly increased and amounted to 2.27 million subscribers in 2022 as compared to 2.23 million subscribers in 2021. We expect that the growth of competition in these markets may, in turn, lead to decreasing tariffs, the addition of lower-value mass market subscribers and macroeconomic trends calling for “save mode.”

Russia is the largest market for us, both in terms of subscribers and revenue. In 2022, the underlying developments within this market remained positive and included high mobile penetration, strong demand for mobile services and increased consumption of data services, especially remote or online services. We focused our efforts to develop new competencies in the digital economy amid the global pandemic of COVID-19. We expect growth of business activity in Russia to continue throughout 2023.

We expect a challenging operating environment in 2023 due to continued macroeconomic and market volatility in the countries where we operate, increasing competition and significant changes in the mobile retail market in Russia. We also experienced significant exchange rate volatility and depreciation of local currencies in the countries where we operate against the U.S. dollar. The volatility and devaluation of local currencies against the U.S. dollar and/or euro may adversely affect our costs, including our non-cash foreign exchange loss due to the translation of our U.S. dollar- and euro-denominated debt. For further information on these risks, see “—A. Operating Results—Certain Factors Affecting our Financial Position and Results of Operations—Currency Fluctuations,” and “Item 3. Key Information—D. Risk Factors—Risks Relating to our Financial Condition—Inflation could increase our costs and adversely affect our results of operations.” For information on the risks ensuing from international sanctions against Russia, see “Item 3. Key Information—D. Risk Factors—Risks Relating to our Financial Condition,” and “Item 3. Key Information—D. Risk Factors— Political and Social Risks.”

However, considering current macroeconomic conditions, our management believes that we will experience medium- and long-term growth. Due to the fact that the Russian market is highly penetrated, we believe the next wave of revenue growth for the overall market is likely to come from customers’ increasing use of data and convergent services.

Moscow Fixed Line Operations

In 2022, the total revenue of MGTS increased by 4.6%. MGTS revenue from broadband access services decreased by 2.2%. Revenue from digital television services decreased by 8.2% in 2022. In 2023, we expect a further decline in revenue from broadband Internet access and digital television services due to the transfer of the subscriber base to MTS and the reorientation of sales to the red brand.

In 2022, revenue from MGTS fixed-line services decreased by 6.8%. The subscriber base of the B2C and B2B segments decreased by 6.8% and 6.7%, respectively. Due to the reduction of the subscriber base in 2022, we expect a further decrease in MGTS revenue from fixed-line services.

In 2022, MGTS revenue from data transmission services in the B2G segment increased by 26.9%.

Churn

We define churn as the total number of subscribers who cease to be a subscriber during the reference period (whether involuntarily due to non-payment or voluntarily), expressed as a percentage of the average number of our subscribers during that period.

A vast majority of our subscribers are prepaid subscribers with no contractual commitment to us. As a result, these subscribers have unfettered freedom to migrate between operators at their convenience. This freedom, combined with the relative ease with which subscribers can obtain SIM cards, contributes to churn and increasing penetration levels in the markets where we operate.

The churn rate is highly dependent on competition in our license areas and those subscribers who migrate as a result of such competition. Our churn rate in Russia remained relatively stable at up to 34% for the year ended December 31, 2022. We continued to offer our popular tariff plans “SMART” (integrated voice and data bundles): “My MTS”, “MTS Dostup”, “Tarifische” and “NETARIF”. We expect that the possibility of choosing traffic bundles, connecting of converged services and other our activities will increase customer loyalty and allow us to keep churn rate under control in 2023.

Moscow Fixed Line Operations Churn

The outflow rate in the services provided varies. The main services of MGTS are fixed-line communication services. The level of outflow of fixed-line services in 2022 decreased by 0.46% to 7.16% compared to 7.62% in 2021.

In 2022, the percentage of outflow of broadband Internet access services decreased to 10.72% compared to 13.68% in 2021. The percentage of outflow of MGTS digital television services decreased to 12.3% in 2022 compared to 14.1% in 2021.

E. Critical Accounting Estimates

Please see Note 4 to our consolidated financial statements.

Off-balance Sheet Arrangements

We believe that our existing off-balance sheet arrangements do not have and are not reasonably likely to have a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that is material to investors.

Obligations under derivative contracts

We have entered into several cross currency interest rate swap agreements. These contracts are mainly designated to manage the exposure of changes in currency exchange rate. The contracts assumed periodic exchange of principal and interest payments from RUB denominated amounts to USD denominated amounts at a specified exchange rate. The rate was determined by the market spot rate upon issuance. Cross-currency interest rate swap contracts mature in 2023 - 2024.

Tabular Disclosure of Contractual Obligations

We have various contractual obligations and commercial commitments to make future payments, including debt agreements, lease obligations (including interest) and certain committed obligations. The following table summarizes our future obligations under these contracts due by the periods indicated as of December 31, 2022:

	Payments due by period				Total
	Less than 1 year	1 - 3 years	3 - 5 years	More than 5 years	
	(amounts in millions of RUB)				
Contractual Obligations: ⁽¹⁾					
Long-term principal debt obligations ⁽²⁾	118,107	296,836	71,981	—	486,924
Interest payments ⁽³⁾	36,117	38,554	4,155	—	78,826
MTS Bank deposits and liabilities	270,285	19,430	79	719	290,513
Lease obligations ⁽⁴⁾	31,450	55,875	40,947	84,646	212,918
Purchase obligations ⁽⁵⁾	33,134	6,031	1,801	70	41,036
Provision for decommissioning and restoration	133	—	—	4,963	5,096
Retirement and post-retirement obligation	328	—	—	56	384
Payments related to business acquisitions ⁽⁴⁾	313	504	—	—	817
Total	489,867	409,766	126,427	90,454	1,116,514

(1) Debt payments could be accelerated upon violation of covenants in our debt agreements.

(2) Does not include the amount of debt modification.

(3) Interest payments are calculated based on indebtedness as of December 31, 2022, scheduled maturities for the debt and interest rates effective as of December 31, 2022. We calculate interest payments on ruble-denominated notes until the dates of their respective put options, as described in Note 23 to our audited consolidated financial statements. Payments under interest rate swap agreements are excluded from the table as their amount and timing cannot be reasonably estimated.

(4) Undiscounted.

(5) Includes future payments under purchase agreements to acquire property, plant and equipment, intangible assets, costs related thereto, inventory and services. We plan to finance our capital commitments through operating cash flow and additional borrowings.

Item 6. Directors, Senior Management and Employees

A. Directors and Senior Management

Key Biographies

Our directors and executive officers, their dates of birth and positions as of April 17, 2023 are as follows:

Name	Year of Birth	Position
Artem I. Zassoursky	1979	Non-Executive Director
Regina Dagmar Benedicta von Flemming ⁽¹⁾⁽²⁾	1965	Deputy Chairperson of the Board of Directors, Independent Director
Paul Berriman	1957	Independent Director
Thomas Holtrop ⁽¹⁾⁽²⁾	1954	Independent Director
Nadia Shouraboura ⁽²⁾	1970	Independent Director
Valentin B. Yumashev ⁽¹⁾	1957	Independent Director
Vyacheslav K. Nikolaev	1970	President and Chief Executive Officer (“CEO”), Executive Director
Andrey M. Kamenskiy	1972	Vice President, Finance and Chief Financial Officer (“CFO”)

(1) Member of the Remuneration and Nomination Committee.

(2) Member of the Audit Committee.

Paul Berriman has served as one of our Directors since June 2022. He is a member of several committees of the Board of Directors. He holds various positions, including as an independent director, in other large companies. At the different stages of his career, he held such positions as Chief Technical Director. Mr. Berriman has a Bachelor's degree in Electroacoustics and an MBA.

Artem I. Zassoursky has served as one of our Directors since June 2017. He also is a Member of some Committees of the MTS Board of Directors. He has deep expertise in strategy, held and holds positions as a member of the Boards of Directors and the Management Boards in various companies.

Regina von Flemming has served as one of our Directors since June 2015. She is the Deputy Chairperson of the Board of Directors and financial expert. She is the Chairperson of the Remuneration and Nomination Committee, a Member of the Audit Committee and other committees of the MTS Board of Directors. She has extensive managerial experience and is a member of the Boards of Directors of various companies. At the different stages of her career, she held such positions as CEO, Vice President, counselor to the CEO, and more.

Thomas Holtrop has served as one of our Directors since February 2013. He is also the Chairman of Audit Committee, and financial expert, a Member of Remuneration and Nomination Committee and other committees of the MTS Board of Directors. He has extensive managerial experience and deep expertise in audit. At the different stages of his career, he held such positions as Member of the Supervisory Board, CEO, Vice President, and more.

Nadia Shouraboura has served as one of our Directors since June 2020. She is a Deputy Chairperson of our Audit Committee, a member of other Committees of the Board of Directors and financial expert. She has deep expertise in Digital and Tech. She is a member of Boards of Directors of various companies. At different stages of her career, she held such positions as CEO, Vice President for Technology, Head of systems development, Senior Principal Consultant, and more. Nadia has a bachelor's degree, master's degree, and a PhD in Mathematics.

Valentin B. Yumashev has served as one of our Directors since June 2019. He is a member of Remuneration and Nomination Committee and other Committees of the MTS Board of Directors. He has extensive managerial experience. Mr. Yumashev holds a degree in journalism.

Vyacheslav K. Nikolaev has served as our President and CEO since March 2021. Prior to that he served as our First Vice President for Customer Experience, Marketing and Ecosystem Development from March 2020, and earlier served as our Vice President for Customer Experience and Marketing from August 2019. Before that he served as our Vice President for Marketing from July 2017. He is a Member of the Board of Directors of some companies. Mr. Nikolaev has been working for MTS since October 2004 and has held various positions within the Group.

Andrey M. Kamenskiy has served as our Vice President—Chief Financial Officer since April 2018. He is also a Member of the Board of Directors of different companies. Before that, he held senior positions in finance at various companies.

All members of our Board of Directors were elected at the annual shareholders' meeting on June 22, 2022 and will serve until their terms expire at the next annual shareholders' meeting, which will take place no later than June 2023. The business address of each of our directors is 4 Marksistkaya Street, Moscow 109147, Russian Federation.

On April 11, 2023, Felix Evtushenkov, the Chairman of our Board of Directors, was designated under asset freeze and travel ban sanctions by the HM Treasury of the United Kingdom. Mr. Evtushenkov resigned as Chairman and member of the Board of Directors effective April 17, 2023.

B. Compensation of Directors and Senior Management

We accrued compensation to our directors and senior management during 2022 for services in all capacities provided to us in an aggregate amount of approximately RUB 2,864 million, including social contributions of RUB 730 million. This amount comprised RUB 1,453 million in base salaries and RUB 1,412 million in bonuses paid pursuant to a bonus plan and in other monetary compensations for our management and directors. Bonuses are awarded annually based on our financial performance. Our management and directors are also entitled to cash-settled and equity-settled share-based payments. Related compensation accrued in 2022 amounted to RUB 3,465 million, including social contributions amounted to RUB 254 million.

Members of the Board of Directors who are non-employee directors receive annual base compensation of \$300,000 (RUB 20.6 million) *or \$400,000 (RUB 27.4 million)* in the case of a non-employee director who serves as Chairman of the Board of Directors. "Non-Employee Director" shall mean a member of the Board of Directors (including Independent Directors) who is not an employee of the Company (neither a member of its executive bodies), its controlled entities, the controlling shareholder of the Company or its controlled entities. For the purposes of these Regulations, a Director who holds offices only in boards of directors (supervisory boards) of the Company, its controlled entities, the controlling shareholder of the Company and its controlled entities shall be considered to be a Non-Employee Director.

Non-employee directors who also serve on board committees receive additional compensation as follows. Members of the Remuneration and Nomination Committee, Committee on Corporate Governance and Environmental and Social Responsibility (ESG), Strategy Committee and Audit Committee receive additional annual compensation of \$30,000 (RUB 2.1 million), and a director serving as Chairman of the foregoing committees receives additional annual compensation of \$50,000 (RUB 3.4 million). Members of special committees of the Board of Directors, which are committees established for undertaking preliminary consideration and making recommendations to the full Board of Directors in relation to certain assigned matters, receive additional annual compensation of \$30,000 (RUB 2.1 million), and a director serving as Chairman of a special committee receives additional annual compensation of \$50,000 (RUB 3.4 million). Members of all other board committees receive additional annual compensation of \$25,000 (RUB 1.7 million) and a director serving as Chairman of any other board committee receives additional annual compensation of \$30,000 (RUB 2.1 million).

Non-employee members of the Board of Directors are also eligible for remuneration in the form of shares. The number of shares to be transferred to each non-employee director based on the results of the corporate year shall be determined as the quotient obtained by:

- the ruble equivalent of \$100,000 (RUB 6.9 million) calculated according to the exchange rate established by the CBR for the date of the annual meeting of shareholders by the end of the corporate year divided by the share price in rubles being the weighted average price of the share for the last 30 calendar days preceding the annual meeting of shareholders, during which the trading was held on the Moscow Exchange.

The aggregate amount of the basic remuneration and remuneration for performance of additional duties (except for remuneration for the work in Special Committees) received by a non-employee director on the basis of performance in the Corporate Year should not exceed \$400,000 (RUB 27.4 million) and for serving as Chairman of the Board of Directors should not exceed \$500,000 (RUB 34.3 million). In the event of early termination of a director, such director receives a pro rata share of the base, committee and bonus compensation based on the amount of time the director served on our Board of Directors.

The amounts of compensation were recalculated to Russian rubles from US dollars.

We provide all of our directors with professional liability insurance and reimburse them for all documented expenses incurred in connection with their attendance at board meetings and other expenses.

** Hereafter, the USD amounts are converted into RUB using the average exchange rate during the year ended December 31, 2022 which equals 68,55 RUB per 1 USD.*

C. Board Practices

Board of Directors

Members of our Board of Directors are elected by a majority vote of shareholders at the annual General Meeting of Shareholders meeting using a cumulative voting system. Directors are typically elected by the annual General Meeting of Shareholders for one year until the next annual General Meeting of Shareholders and may be re-elected an unlimited number of times. The Joint Stock Companies Law requires that companies with more than 10,000 holders of voting shares have a board of directors consisting of not less than nine members. Our Board of Directors was formed at the annual General Meeting of Shareholders consisting of nine members. The Board of Directors has the authority to make overall management decisions for us, except for those matters reserved to the shareholders. Planned meetings of the Board of Directors shall be held periodically when needed, but at least 2 (two) times per each quarter of a year according to our bylaws. See “— B. Compensation of Directors and Senior Management” for a description of compensations for the members of our Board of Directors.

Audit Committee

The members of our Audit Committee are appointed by the Board of Directors and all members of this committee must be independent directors. The current members are Thomas Holtrop (Independent Director, Committee Chairman), Nadia Shouraboura (Deputy Committee Chairperson, Independent Director) and Regina von Flemming (Independent Director). The Audit Committee is primarily responsible for the integrity of our financial statements; overseeing our risk management, internal control system and corporate governance system, including reviewing certain related party transactions and interested party transactions; overseeing our accounting and financial reporting processes and the internal and external audits of our financial statements; our compliance system, compliance with the Code of Business Conduct and Ethics of MTS PJSC; recommending the appointment and compensation of the independent auditors to the Board of Directors; overseeing the performance of the auditors; reviewing issues raised by the auditors, management and/or Board of Directors and, as required, making recommendations to the Board of Directors; resolving matters arising during the course of audits; and since February 25, 2015 exercising functions related to ethics matters.

According to our bylaws, the Audit Committee shall convene with our external auditors at least four times per year, but may convene more frequently if the Audit Committee chooses to do so.

Remuneration and Nomination Committee

Our Remuneration and Nomination Committee consists of three members appointed by the Board of Directors. The current members are Regina von Flemming (Independent Director, Committee Chairperson), Valentin Yumashev (Independent Director) and Thomas Holtrop (Independent Director). The Remuneration and Nomination Committee is primarily responsible for developing a remuneration structure and compensation levels for management executives.

According to our bylaws, the Remuneration and Nomination Committee shall be convened by the Committee Chairperson, at her sole discretion, or at the suggestion of any member of this committee, a member of the Board of Directors or our President.

In addition to the above-mentioned committees of the Board of Directors, ESG Committee (Corporate Governance, Environmental and Social Responsibility Committee), Strategy Committee and special committees were also formed in “MTS” PJSC.

President

Our President is elected by the Board of Directors for a term of three years and can be re-elected for an unlimited number of times. The rights, obligations and the times and amounts of payment for the President’s services are determined by a contract between him and us, as represented by our Chairman or by a person authorized by our Board of Directors. The President is responsible for the day to day management of our activities, except for matters reserved to our shareholders or the Board of Directors and the Management Board. The President reports to the General Meeting of Shareholders and to the Board of Directors and is responsible for carrying out decisions made by the shareholders and by the Board of Directors and the Management Board.

Management Board

In October 2006, we revised our charter to establish a new governing body called the Management Board. The Management Board oversees certain aspects of our ongoing activities. The overall number of the Management Board members is approved by the Board of Directors at the proposal of the President with each member being elected by the Board of Directors upon nomination by the President. Each board member is elected for a three-year period and can be reelected an unlimited number of times.

Disclosure Committee

In April 2007, we established an advisory body called the Disclosure Committee. The Disclosure Committee supervises our compliance with disclosure standards in connection with all public information regarding us. These disclosure standards are based on principles of timeliness, accuracy and completeness. Members of the Disclosure Committee may be nominated by various divisions of MTS, willing to have representatives in the Disclosure Committee. Members are appointed by the President.

Auditing Commission

Our Auditing Commission supervises our financial and operational activities. Members of the Auditing Commission are nominated and elected by our shareholders at annual General Meetings of Shareholders. A director may not simultaneously be a member of the Auditing Commission. As of the date of this document, our Auditing Commission has three members.

The members of our Auditing Commission serve until their terms expire at the next annual General Meeting of Shareholders, which will take place no later than June, 2023.

Audit Committee Financial Expert

Our Board of Directors has determined that Thomas Holtrop, Nadia Shouraboura and Regina von Flemming are “audit committee financial experts” as defined in Item 16A of Form 20 F. Mr. Holtrop is “independent” as defined in Rule 10A 3 under the Exchange Act and current New York Stock Exchange listing rules applicable to us. For a description of Mr. Holtrop’s, Mrs Shouraboura and Regina von Flemming experience’s, please see “Item 6. Directors, Senior Management and Employees—A. Directors and Senior Management—Key Biographies.”

D. Employees

At December 31, 2022, we had 60,388 employees. Of our 59,120 employees in Russia, we estimate that 904 were executives; 14,494 were technical and maintenance employees; 25,370 were sales, marketing and customer service staff; and 18,352 were administration and finance staff. In addition, of the 59,120 employees in Russia, we estimate that 10,786 were employed in our retail unit.

As of December 31, 2022, 116 of our employees worked in Czech Republic. Of these employees, we estimate that 6 were executives; 95 were technical and maintenance employees; 2 were sales, marketing and customer service staff; and 13 were administration and finance staff.

As of December 31, 2022, 1,084 of our employees worked in Armenia. Of these employees, we estimate that 9 were executives; 130 were technical and maintenance employees; 644 were sales, marketing and customer service staff; and 301 were administration and finance staff.

The following chart sets forth the number of our employees at December 31, 2022 and 2021:

	Years ended	
	December 31, 2022	December 31, 2021
Russia	59,120	56,166
Czech Republic	116	464
Armenia	1,084	1,116
Other	68	97
Total	60,388	57,843

Our employees are not unionized, except for 983 employees of MGTS, who are members of trade unions. We have not experienced any work stoppages and we consider our relations with employees to be strong.

Objectives that we focus on in managing the human capital resources depend on current needs of our ecosystem. We expect to acquire new employees as a consequence of our regular acquisitions in line with the development of new products and services.

E. Share Ownership

As of April 10, 2023, we believe, that our directors, senior management and employees owned more than 1% but less than 2% of our outstanding common stock, except for Felix V. Evtushenkov, who effectively owned 7.59%.

The following table sets forth information with respect to the ownership of our common stock as of April 10, 2023, by our current directors and executive officers. All shares of common stock have the same voting rights.

Directors and Executive officers	Beneficial ownership as of April 10, 2023	
	Number ⁽¹⁾	% ⁽²⁾
Vyacheslav K. Nikolaev, Executive Director, President and Chief Executive Officer (“CEO”)	— (3)	— (3)
Andrey M. Kamenskiy, Vice President, Finance and Chief Financial Officer (“CFO”)	— (4)	— (4)
Regina von Flemming, Independent Director	— (4)	— (4)
Valentin B. Yumashev, Independent Director	— (4)	— (4)
Thomas Holtrop, Independent Director	— (4)	— (4)
Nadia Shouraboura, Independent Director	— (4)	— (4)
Total	— (3)	— (3)

(1) Based on information provided by our directors and executive officers as of April 10, 2023, and results of execution of share based program and other transactions during 2023 before April 10, 2023

(2) Percentage of ownership of each named director and executive officer is based on 1,691,194,224 ordinary shares outstanding as of April 10, 2023

(3) Indicates ownership more than 1% and less than 2%

(4) Indicates ownership of less than 1%

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Our management is entitled to remuneration in the form of options granted to them for MTS ordinary shares, which will expire in a weighted average term of approximately three years. The transfer of such shares is probable and is subject to certain employment conditions. In 2022, options related to compensation accrued in the amount of RUB 3,465 million.

The following table sets forth information with respect to our ordinary shares in the form of share options granted to our current directors and executive officers as of April 10, 2023. All shares of common stock have the same voting rights.

	Number of ordinary shares as of April 10, 2023	
	Number	% ⁽¹⁾
Directors and Executive officers		
Vyacheslav K. Nikolaev, Executive Director, President and Chief Executive Officer (“CEO”)	— (2)	— (2)
Andrey M. Kamenskiy, Vice President, Finance and Chief Financial Officer (“CFO”)	— (2)	— (2)
Total	— (2)	— (2)

(1) Percentage of ordinary shares in the form of share options granted to each named director and executive officer is based on 1,691,194,224 ordinary shares outstanding as of April 10, 2023

(2) Indicates ownership of less than 1%

F. Disclosure of a Registrant’s Action to Recover Erroneously Awarded Compensation

Not applicable.

Item 7. Major Shareholders and Related Party Transactions

A. Major Shareholders

The following table sets forth, as of April 10, 2023, certain information regarding the beneficial ownership of our outstanding common stock. All shares of common stock have the same voting rights.

Name	Beneficial ownership as of April 10, 2023	
	Number	Percentage
Sistema ⁽¹⁾	620,552,329	36.69 %
STA ⁽²⁾	220,467,234	13.04 %
ADS holders ⁽³⁾	318,362,986	18.82 %
Other Public Float (including our directors and executive officers) ⁽⁴⁾	531,811,675	31.45 %
Total⁽⁵⁾	1,691,194,224	100.00 %

(1) As of April 10, 2023 Vladimir P. Evtushenkov held 49.2% of Sistema’s issued shares, i.e. he beneficially owned less than 25% of shares. In the financial year 2022 he transferred 10% of Sistema’s shares and thus ceased to be a majority shareholder of Sistema. As of April 10, 2023 Felix V. Evtushenkov held 15.2% of Sistema shares, i.e. he beneficially owned less than 8% of our shares. 50.8% of Sistema shares were held by a significant number of shareholders as of April 10, 2023

(2) STA is a limited liability company formed under the laws of Russia. Sistema owns 100% of STA, STA holds 13.04% of our shares

(3) As of April 10, 2023, the total number of ADSs outstanding was 159,181,493, representing underlying ownership of 318,362,986 shares, or approximately 18.82% of our outstanding common stock. The shares underlying the ADSs are deposited with the Russian custodian, JSC Raiffeisenbank

(4) We believe that our directors and executive officers as a group own more than 1% but less than 2% of our shares

(5) Excludes treasury shares, as described below

Our subsidiary MGTS owned 5,452,327 of our ordinary shares as of April 10, 2023.

As a result of series of buy-backs since 2016 Stream Digital LLC owned 87,245,832 of our shares as of April 10, 2023.

As a result of series of buy backs since 2018 our subsidiary Bastion LLC owned 175,824,490 of our shares.

As April 10, 2023, MTS PJSC held a total of 38,664,702 of our ordinary shares, which were redeemed by MTS PJSC during 2017 - 2021 within procedure of buy-backs in connection with decisions on reorganization of MTS PJSC made by General shareholders' meeting.

As of April 10, 2023, we and our subsidiaries held a total of 308,254,829 shares. These shares are excluded from the total number of shares presented in the table above.

Sistema's (including STA) current stake in the share capital of MTS is 42.085% while effective ownership in MTS is 49,73 % (as of April 10, 2023).

B. Related Party Transactions

Transactions with Sistema and its Affiliates

Business Nedvizhimost

In December 2021, we purchased 5-year 10.8% coupon notes of JSC "Business-Nedvizhimost" or "Business-Nedvizhimost", in the amount of RUB 2,100 million. The notes were accounted as financial assets at fair value through profit and loss and disclosed within short-term investments in the accompanying condensed consolidated statements of financial position. As of December 31, 2022 and 2021, the investment amounted to RUB 2,105 million and RUB 2,105 million respectively.

In April 2022, we entered into a novation agreement in respect to the disposal of property to Business Nedvizhimost in 2019. Under the terms of new agreement part of the receivables were converted to a loan with a similar repayment schedule and interest rate. The loan is payable by "Sistema-Invest" JSC, Sistema's subsidiary. As of December 31, 2022, the amount of the loan was recognized as part of other investments and short-term investments in the accompanying consolidated statements of financial position totaled to RUB 3,095 million and RUB 164 million, respectively. During the year ended December 31, 2022 we recognized expenses from discounting in the amount of RUB 380 million as part of financial expenses.

Sistema

We holds Sistema notes that were accounted as financial assets at fair value through profit and loss and disclosed within short-term investments in the accompanying condensed consolidated statements of financial position. As of June December 31, 2022 and 2021, the investment amounted to RUB 1,459 million and RUB 1,443 million respectively.

Nvision Group

We acquire software, services and other intangible assets from Nvision Group, a subsidiary of Sistema

The purchases of software, services and other intangible assets during the years ended December 31, 2022 and 2021, amounted to RUB 11,466 million and RUB 7,181 million, respectively.

VisionLabs Group

In February 2022, we purchased of 24% in VisionLabs Group from Sistema Venture Capital Fund I, and since then it is considered a subsidiary instead of related party.

Koncel

During the years ended December 31, 2020, 2021 and 2022, we received income from the scrap metal realizations minus the costs of dismantling services with Koncel, subsidiary of Sistema, for a total amount of RUB 82 million, RUB 2,398 million and RUB 2,398 million, respectively.

Transactions with Associates

Vorsicher

In April 2022, we purchased of 54% in Gulfstream Group and therefore entered into the put option agreement with Vorsicher Holding Limited to buy the non-controlling stake. As of December 31, 2022 the option agreement had been valued in the amount of RUB 2,081 million.

Accounts receivable and accounts payable

We had total accounts receivable of RUB 14,189 million, RUB 7,287 million and RUB 4,409 million, from, and total accounts payable of RUB 3,146 million, RUB 4,107 million and RUB 1,451 million to, related parties as of December 31, 2020, 2021 and 2022, respectively. We had total Bank deposits and liabilities of RUB 52,372 million, RUB 68,212 million and RUB 71,892 million from related parties as of December 31, 2020, 2021 and 2022. We do not have the intent or ability to offset the outstanding accounts payable and/or accounts receivable with related parties under the term of existing agreements with them. See Note 30 to our audited consolidated financial statements for details of our accounts payable and accounts receivable.

C. Interests of Experts and Counsel

Not applicable.

Item 8. Financial Information

A. Consolidated Statements and Other Financial Information

8.A.1-3. See Item 18.

8.A.4-6. Not applicable.

8.A.7. Litigation

Compliance monitorship

In March 2019, we reached a resolution with the United States Securities and Exchange Commission (“SEC”) and the United States Department of Justice (“DOJ”) relating to the previously disclosed investigation concerning our former subsidiary in Uzbekistan, consented to the entry of an administrative cease-and-desist order (the “Order”) by the SEC and entered a deferred prosecution agreement (“DPA”). Under the DPA and the Order in September 2019 the Group appointed an independent compliance monitor for, inter alia, review, testing and perfecting MTS’ anti-corruption compliance code, policies, and procedures.

We have not received notice from the SEC, the DOJ or the monitor of any breach of the terms of the DPA or the Order. In 2021 given a variety of factors, including the COVID-19 pandemic, we agreed to a one-year extension of the DPA and the monitorship with the DOJ and the SEC to (i) provide us with adequate time to implement necessary enhancements to certain critical components of our anti-corruption compliance and ethics program and (ii) allow the monitor sufficient time to be able to complete its review of the remedial efforts, including our implementation of the monitor’s recommendations and an assessment of the sustainability of our remedial actions. The term of the monitorship will continue until September 2023.

In connection with compliance monitorship, certain transactions were identified relating to our subsidiary in Armenia, and such transactions were disclosed to the DOJ and SEC. The DOJ and SEC have requested information regarding the transactions and we have initiated an investigation into the matter. It’s currently impossible to predict the timing or outcome of the investigation.

In December 2020, we received a request for information from the DOJ concerning certain historical transactions with a supplier of telecommunication and information technology. Currently, we are cooperating to provide information to the DOJ and the SEC responsive to the request.

Turkmenistan

In September 2017, our subsidiary in Turkmenistan, MTS Turkmenistan or MTS-TM, suspended the provision of telecommunication services to its subscribers, due to the termination by Turkmen state-owned companies and state authorities of line rental, frequency allocation, interconnect, and other agreements necessary to provide telecommunication services. The license for the provision of telecommunication services on the territory of Turkmenistan was valid until July 2018.

In July 2018, we filed a Request for Arbitration against the Sovereign State of Turkmenistan with the ICSID in order to protect our legal rights and investments in Turkmenistan. In April 2019, we filed a Memorial (statement of claim) in the dispute with the Sovereign State of Turkmenistan with the ICSID. As of December 31, 2022 the case was pending. See “Item 3. Key Information—D. Risk Factors—Legal Risks and Uncertainties—An outcome of the proceedings relating to sustaining operations of our subsidiary in Turkmenistan is unpredictable.”

Tax Audits and Claims

In the ordinary course of business, we may be party to various tax proceedings, and subject to tax claims, some of which relate to the developing markets and evolving fiscal and regulatory environments in which we operate. In the opinion of our management, our liability, if any, in all pending tax proceedings or tax claims will not have a material effect on our financial condition, results of operations or liquidity. We believe that we have adequately provided for tax liabilities in the accompanying consolidated financial statements; however, the risk remains that relevant authorities could take differing positions with regard to interpretive issues and the effect could be significant. See also Note 33 to our audited consolidated financial statements.

In December 2018, the Russian tax authorities completed a secondary tax audit of MGTS for the year ended December 31, 2014. Based on the results of this audit, the Russian tax authorities argued the possibility of utilization by MGTS of tax assets in the amount of RUB 1,065.79 million. In September 2019 we filed an appeal with the Commercial Court of the City of Moscow. In June 2021 the Commercial Court of the City of Moscow issued a ruling to dismiss our claim, which was subsequently confirmed by the Appellate Commercial Court in October 2021. In March 2022 the Arbitrate Court of the Moscow Region confirmed the aforementioned rulings. In July 2022 the Supreme Court of the Russian Federation declined to review decisions of lower courts.

In 2022 the tax authorities of the Republic of Uzbekistan claimed for violation of tax against LLC «Kolorit dizayn INK» in the total amount of approximately 32 977 687 215 soms (approximately RUB 207 million as of December 31, 2022). Based on the aforementioned claims the tax authorities applied for the bankruptcy of the company with the Tashkent economic court. Meanwhile we filed an appeal with the Tashkent administrative court to dismiss the aforementioned claims. The case hearing in the Tashkent economic court is postponed till the Tashkent administrative court issues the ruling.

Generally, according to Russian tax legislation, tax declarations remain open and subject to inspection for a period of three years following the tax year. As of December 31, 2022, tax declarations of our Russian subsidiaries were open for audit for the preceding three fiscal years. Since 2016, we communicate with tax authorities within Tax Monitoring regime. Under this regime, we disclose information and documents related to calculation of our tax liabilities on-line; the tax year is considered closed for disputes by October of the year following the reporting tax year.

Antimonopoly Proceedings

In August 2018, the Federal Antimonopoly Service (“FAS”) charged us and other federal operators with violation of antimonopoly laws in respect to establishing discriminatory terms and conditions for bulk SMS pricing for the banks with state-owned equity interest as compared to the terms and conditions for other banks and later – with establishing unreasonably high bulk SMS prices. In May 2019, FAS considered that MTS had breached the provisions of antimonopoly laws in respect to establishing discriminatory terms and conditions for bulk SMS pricing and charging unreasonably high bulk SMS prices, prescribing MTS to cease its violations. MTS contested the decision and the prescription of FAS, however courts at different levels upheld the position of FAS. In August 2021, we paid the fine imposed by FAS in full amount of RUB 189 million.

In 2021, certain financial institutions in Russia initiated litigations against us, claiming reimbursement for losses incurred in connection with violation of antimonopoly laws in respect to establishing unreasonably high bulk SMS prices. The arbitration courts at three levels have dismissed all the claims in full. It’s currently impossible to predict the possibility or outcome of new litigations on violation of antimonopoly laws in respect to establishing unreasonably high bulk SMS prices.

We believe that as of December 31, 2022 we had adequately provided for claims related to antimonopoly proceedings.

8.A.8. Dividend Distribution Policy

As a leading telecommunications group operating in rapidly developing, yet volatile, markets, MTS' primary need is to maintain sufficient resources and financial flexibility to meet our financial and operational requirements. As demonstrated throughout our history, MTS continually seeks ways to create shareholder value through both commercial and financial strategies, which may include both organic and inorganic development as well as the Company's capital management practices.

Following historical practice, MTS continues to pay dividends as part of our commitment to enhancing shareholder value. In determining the Company's payout, the Board of Directors considers a number of factors, including cash flow from operations, capital expenditures and the Company's debt position. Decisions on dividends are proposed by the Board of Directors and voted upon thereafter at an annual general meeting of shareholders (AGM) or extraordinary meeting of shareholders (EGM).

Payments in 2019, 2020¹ and 2021 amounted to RUB 28.66, RUB 29.50 and 37.06 rubles respectively, in line with the dividend policy, which provided a minimum cumulative payout of RUB 28.0 per share per calendar year through two semi-annual payments. In May 2022 The Board of Directors recommended that the AGM approve annual dividends of RUB 33.85 per ordinary MTS share based on the Company's full-year 2021 financial results, equivalent to a total of RUB 66.3 billion². In June 2022, shareholders at the AGM approved the dividend payment. The record date for shareholders entitled to receive dividends for the 2021 fiscal year was July 12, 2022.

In April 2022, Russian Federal Law No. 114-FZ dated April 16, 2022 (the "Delisting Law") which required Russian companies to terminate their depositary receipt programmes unless granted an exemption by the Russian Government Commission on Monitoring Foreign Investment came into force. PJSC MTS submitted an application for such exemption, and in May 2022 received permission to maintain ADR Program until July 12, 2022.

MTS believes that there is a possibility of interpretation of the Delisting Law, as currently effective, according to which the holders of depositary receipts do not have the right to vote or receive dividends from July 13, 2022 and until the conversion of the depositary receipts into shares. According to such interpretation, after conversion of the depositary receipts into shares, holders of shares thereby received had the right to claim unpaid dividends within three years from the date of the Company's decision to pay them in the manner prescribed by Federal Law No. 208-FZ "On Joint Stock Companies" of December 26, 1995 and the Company's Articles of Association for the receipt of unclaimed dividends. According to the terms of the Deposit Agreement, the period guaranteed for converting ADRs into ordinary shares ended on January 12, 2023 (inclusive), whereafter, as we understand, the depositary may continue to convert ADRs in ordinary shares and/or sell unconverted ordinary shares to distribute the proceeds of sale among ADRs holders.

As of December 31, 2022 dividends payable were RUB 16.5 bn, and were included in trade and other payables within the consolidated statement of financial position.

B. Significant Changes

Purchase of stake in Buzzoola - In February 2023 the Group purchased 67% of Buzzoola Internet Technologies LLC («Buzzoola»), provider of digital advertising services. Total consideration contains cash payment of RUB 371 million and contingent consideration. The purchase of 67% stake was accounted as investment in joint venture.

Sanctions on MTS Bank - In February 2023, the US Office of Foreign Assets Control (OFAC) and the UK Office of Financial Sanctions Implementation (OFSI) designated MTS Bank as a sanctioned person pursuant to applicable sanctions regulations adopted by the US and the UK, respectively. Accordingly, MTS Bank became subject to so-called "blocking" (asset-freeze) sanctions maintained by the US and the UK. Among other matters, these sanctions require US and UK third parties, including banks, to block or freeze assets which MTS Bank holds with such parties or otherwise block the settlement of payments to or from MTS Bank and its counterparties. The full impact and potential implications of the imposed sanctions on MTS Bank on our operations, assets and liabilities cannot be reliably estimated at this time. Management believes it is taking the appropriate measures to mitigate the related negative effects.

¹ Excluding a special dividend paid in Q1 2020 based on the Company's 9M 2019 financial results and taking into consideration the sale of VF Ukraine PrJSC amounting to RUB 13.25 per ordinary share (in total RUB 26.5 bn).

² FY2021 dividend payments in the amount of RUB 48.2 bn when including quasi-treasury shares were completed by August 16, 2022.

See also “Item 3. Key Information—D. Risk Factors— [Risks Relating to Economic Risks in Our Countries of Operation](#) — The imposition of sanctions on MTS Bank and the potential for further international sanctions and export restrictions affecting the Group may have a material adverse impact on our business, financial condition and result of operations.”

Item 9. Offer and Listing Details

A. Offer and Listing

Not applicable.

B. Plan of Distribution

Not applicable.

C. Markets

Our ADS, each representing two ordinary shares, have been listed on the NYSE from July 6, 2000 to August 8, 2022 under the symbol “MBT.” Our ordinary shares have been listed on MICEX (currently Moscow Exchange) since December 2003. Our U.S.dollar-denominated notes due in 2023 are listed on the Irish Stock Exchange. Our ruble-denominated notes are listed on the Moscow Exchange.

In April 2022, Russian Federal Law No. 114-FZ dated April 16, 2022 (the “Delisting Law”) which required Russian companies to terminate their depositary receipt programmes unless granted an exemption by the Russian Government Commission on Monitoring Foreign Investment came into force. PJSC MTS submitted an application for such exemption, and in May 2022 received permission to maintain ADR Program until July 12, 2022.

In June, MTS informed JPMorgan Chase Bank, N.A., the depositary under the existing MTS ADR program, of its intention to terminate the Deposit Agreement, effective as of July 13, 2022.

In August, MTS received confirmation from the NYSE that the Company’s ADRs had been delisted from the NYSE effective August 8, 2022. Under the terms of the Deposit Agreement, the conversion of MTS’s ADRs into MTS’s ordinary shares shall be completed within six months after July 12, 2022, i.e., by January 12, 2023 (inclusive).

Item 10. Additional Information

A. Share Capital

Not applicable.

B. Charter and Certain Requirements of Russian Legislation

Charter and Certain Requirements of Russian Legislation

We describe below material provisions of our charter and certain requirements of Russian legislation. In addition to this description, we urge you to review our charter to learn its complete terms.

Our Purpose

Article 2.1 of our charter provides that our principal purpose is to obtain profits through the planning, marketing, establishing and operating communications network and facilities, to provide access to Internet and to render communications services on our license territories.

We are registered with the Ministry of Taxes and Duties of the Russian Federation under the state registration number 1027700149124.

General Matters

Pursuant to our charter, we have the right to issue registered common stock, preferred stock and other securities provided for by legal acts of the Russian Federation with respect to securities. Our capital stock currently consists of 1,998,381,575 common shares, each with a par value of 0.10 rubles, all of which are issued and fully paid. Under Russian legislation, charter capital refers to the aggregate par value of the issued and outstanding shares. We are also authorized to issue an additional 100,000,000 common shares with a par value of 0.10 rubles each. We have issued only common stock. No preferred shares are authorized or outstanding. Preferred stock may only be issued if corresponding amendments have been made to our charter pursuant to a resolution of the general meeting of shareholders.

As of the date of this document, we had more than ten thousand shareholders for purposes of the Joint Stock Companies Law.

Rights Attaching to Shares

Holders of our common stock have the right to vote at all shareholders' meetings. As required by the Joint Stock Companies Law and our charter, all shares of our common stock have the same par value and grant identical rights to their holders. Each fully paid share of common stock, except for treasury shares, gives its holder the right to:

- freely transfer the shares without our consent and the consent of other shareholders (however, for a certain non-residents several restrictions are in affect – please see “Item 10. Additional Information – Registration and Transfer of Shares”);
- receive dividends (however, for a certain non-residents several restrictions are in affect – please, see “Item 10. Additional Information – Dividends”);
- participate in shareholders' meetings and vote on all matters within shareholders' competence;
- transfer voting rights to a representative on the basis of a power of attorney;
- participate in the election and dismissal of members of the Board of Directors and Auditing Commission;
- exercise its pre-emptive right in certain circumstances, as determined by the Joint Stock Companies Law;
- if holding, alone or with other holders, 1% or more of the outstanding common shares, file a lawsuit against a member of the Board of Directors or member of any executive body of the company (including the company's CEO and/or the company's managing organization) to reimburse damages suffered by the company as the result of their fault (however, until December 31, 2023 only shareholders holding alone or with other holders at least 5% of voting shares have the right to file such a claim, according to article 3 of the Federal Law No. 55-FZ dated March 14, 2022 in the edition as of December 19, 2022);
- if holding, alone or with other holders, 1% or more of the outstanding common shares, file a lawsuit with the claim for recognition of the invalid major transaction and interested party transaction made with violation of a procedure of receiving consent (however, until December 31, 2023 only shareholders holding alone or with other holders at least 5% of voting shares have the right to file such a claim, according to article 3 of the Federal Law No. 55-FZ dated March 14, 2022 in the edition as of December 19, 2022);
- if holding, alone or with other holders, more than 1% of the voting shares, demand from the holder of register of shareholders to provide information on shareholders of the company and shares held by such shareholders (however, until December 31, 2023 only shareholders holding alone or with other holders at least 5% of voting shares have the right to demand this information, according to article 3 of the Federal Law No. 55-FZ dated March 14, 2022 (in the edition as of December 19, 2022);
- if holding, alone or with other holders, 2% or more of the voting stock, within 100 days after the end of our fiscal year, make proposals for the agenda of the annual shareholders' meeting and nominate candidates (including by self-nomination) to the Board of Directors, the Counting Commission and the Auditing Commission;

- if holding, alone or with other holders, 10% or more of the voting stock, demand from the Board of Directors the calling of an extraordinary shareholders' meeting or an unscheduled audit by the Auditing Commission or an independent auditor, and file a lawsuit against the company to convene an extraordinary shareholders' meeting if the Board of Directors fails to take a decision to convene an extraordinary shareholders' meeting or decides against convening such meeting;
- demand, under the following circumstances, the repurchase by us of all or some of the shares owned by it, as long as such holder voted against or did not participate in the voting on the decision approving the following:
 - any reorganization;
 - the conclusion of a major transaction, the value of which exceeds 50% of the balance sheet value of the assets calculated under Russian Accounting Standards ("RAS");
 - any amendment of our charter or approval of a restated version of our charter in a manner that restricts the holder's rights;
 - delisting of our shares from a stock exchange; and
 - the amendment of the public company's charter which eliminates indication that the company is public, simultaneously with the decision on applying to the CBR on release from obligation to disclose information under the laws of the Russian Federation on securities and the decision on applying for delisting of shares and equity securities convertible into shares (i.e., transformation to a non-public company);
- upon liquidation, receive a proportionate amount of our property after our obligations are fulfilled;
- have free access to certain company documents, receive copies for a reasonable fee and, if holding alone or with other holders, 25% or more of the voting stock, have access to accounting documents and minutes of the management board meetings;
- if holding, alone or with other shareholders at least 1% of the voting shares, demand consent for an interested party transaction; and
- exercise other rights of a shareholder provided by our charter, Russian legislation and decisions of shareholders' meeting approved in accordance with its competence.

Pre-emptive Rights

The Joint Stock Companies Law and our charter provide existing shareholders with a pre-emptive right to purchase shares or securities convertible into shares during an open subscription in the amount proportionate to their existing shareholdings. In addition, the Joint Stock Companies Law provides shareholders with a pre-emptive right to purchase shares or securities convertible into shares, in an amount proportionate to their existing shareholdings, during a private subscription if the shareholders voted against or did not participate in the voting on the decision approving such subscription. The pre-emptive right does not apply to a private subscription to the existing shareholders provided that such shareholders may each acquire a whole number of shares or securities convertible into shares being placed in an amount proportionate to their existing shareholdings. We must provide shareholders with written notice of their pre-emptive right to purchase shares and the period during which shareholders can exercise their pre-emptive rights may not be less than 45 or, under certain circumstances, 20 or even eight business days. We cannot sell the shares or securities convertible into shares which are subject to the pre-emptive rights during this period.

Dividends

The Joint Stock Companies Law and our charter set forth the procedure for determining the quarterly and annual dividends that we may distribute to our shareholders. We may declare dividends based on our first quarter, six month, nine month or annual results. Dividends are recommended to a shareholders' meeting by a majority vote of the Board of Directors and approved by the shareholders by a majority vote. A decision on quarterly, six month and nine month dividends must be taken within three months of the end of the respective quarter at the extraordinary shareholders' meeting; and a decision on annual dividends must be taken at the annual general shareholders' meeting. The dividend approved at the shareholders' meeting may not be more than the amount recommended by the Board of Directors.

The Joint Stock Companies Law allows dividends to be declared only out of net profits calculated under RAS as long as the following conditions have been met:

- the charter capital of the company has been paid in full;
- the value of the company's net assets on the date of the adoption of the decision to pay dividends is not less (and would not become less as a result of the proposed dividend payment) than the sum of the company's charter capital, the company's reserve fund and the difference between the liquidation value and the par value of the issued and outstanding preferred stock of the company;
- the company has repurchased all shares from shareholders having the right to demand repurchase; and
- the company is not, and would not become, insolvent as the result of the proposed dividend payment.

The Joint Stock Companies Law and the Securities Market Law have been amended on December 29, 2012 to adopt new dividend payment rules that came into force January 1, 2014. These amendments include new rules on determining the shareholders entitled to dividend distribution whereby the list of such shareholders is fixed at date determined in the decision of the General shareholders' meeting on the distribution of dividends. The date shall be not earlier than 10 days and not later than 20 days following the date of such decision. The dividends are to be paid to private shareholders registered in the share register of the company within 25 business days and to nominal holders and professional managers within 10 business days from the date on which persons entitled to receive dividends are determined. If shares are held on a depo account with a depository, dividends will be transferred to such shareholders by such depository within seven business days of receipt of funds by the depository.

Pursuant to Decree of the President of Russia No. 95 dated March 5, 2022 (version as of the October 10, 2022), the dividends for non- Russian residents are to be paid according to the special procedure established by the Decree. Dividends which exceed of 10 million rubles are to be through special accounts of type "C".

The funds held in a bank account of type "C" can be used only for several operations, such as:

- payment of taxes, duties, fees and other mandatory payments payable in accordance with the budget legislation of the Russian Federation;
- transfers for the purchase of federal loan bonds placed by the Ministry of Finance of the Russian Federation at auctions;
- transfers to another bank accounts of type "C";
- payment of commissions to the authorized bank that is servicing the account.

To use the funds held in the type "C" account for other purposes other than the above, it is necessary to obtain a special permit from the Ministry of Finance of the Russian Federation.

Moreover, the terms for obtaining the permission to pay dividends of Russian joint-stock and limited liability companies exceeding 10 mln RUB to certain non-residents were introduced. These are:

- the amount of paid profit (dividends) is not more than 50% of the amount of net profit for the previous year;
- the results of a retrospective analysis of the payment of profits (dividends) for previous periods are taken into account;
- there is a willingness of foreign participants (shareholders) to continue commercial activities in the territory of the Russian Federation;
- the positions of the federal executive authorities and the Central Bank of the Russian Federation on the assessment of the significance of the organization's activities and the impact of the activities carried out by the organization on the technological and industrial sovereignty of the Russian Federation, the socio-economic development of the Russian Federation (regions of the Russian Federation) are taken into account;
- federal executive authorities have established quarterly key performance indicators for the organization;
- it is possible to pay dividends on a quarterly basis, provided that the established key performance indicators are met.

Distributions to Shareholders on Liquidation

Under Russian legislation, liquidation of a company results in its termination without the transfer of rights and obligations to other persons as legal successors. The Joint Stock Companies Law and our charter allow us to be liquidated:

- by a three-quarters majority vote of a shareholders' meeting; or
- by a court order.

Following a decision to liquidate us, the right to manage our affairs would pass to a liquidation commission appointed by a shareholders' meeting. In the event of an involuntary liquidation, the court may assign the duty to liquidate the company to its shareholders. Creditors may file claims within a period to be determined by the liquidation commission, but such period must not be less than two months from the date of publication of notice of liquidation by the liquidation commission.

The Civil Code of the Russian Federation gives creditors the following order of priority during liquidation:

- individuals owed compensation for injuries or deaths;
- employees and authors of intellectual property;
- federal and local governmental entities claiming taxes and similar payments to the federal and local budgets and to non-budgetary funds; and
- other creditors in accordance with Russian legislation.

Claims of creditors in obligations secured by a pledge of the company's property ("secured claims") are satisfied out of the proceeds of sale of the pledged property prior to claims of any other creditors except for the creditors of the first and second priorities described above, provided that claims of such creditors arose before the pledge agreements in respect of the company's property were made. To the extent that the proceeds of sale of the pledged property are not sufficient to satisfy secured claims, the latter are satisfied simultaneously with claims of the fourth priority creditors as described above.

The Federal Law on Insolvency (Bankruptcy), however, provides for a different order of priority for creditors' claims in the event of bankruptcy.

The remaining assets of a company are distributed among shareholders in the following order of priority:

- payments to repurchase shares from shareholders having the right to demand repurchase;
- payments of declared but unpaid dividends on preferred shares and the liquidation value of the preferred shares determined by the company's charter, if any; and
- payments to holders of common and preferred shares.

Liability of Shareholders

The Civil Code of the Russian Federation and the Joint Stock Companies Law generally provide that shareholders in a Russian joint stock company are not liable for the obligations of a joint stock company and bear only the risk of loss of their investments. This may not be the case, however, when one company is capable of determining decisions made by another company. The company capable of determining such decisions is called an "effective parent." The company whose decisions are capable of being so determined is called an "effective subsidiary." The effective parent bears joint and several responsibility for transactions concluded by the effective subsidiary in carrying out these decisions if:

- this decision-making capability is provided for in the charter of the effective subsidiary or in a contract between such persons; and
- the effective parent gives binding instructions or consent for a transaction to the effective subsidiary (except for voting of the effective parent in a shareholders' meeting of its effective subsidiary and approval by the effective parent's governing body of a transaction if such approval is required under the charter of the effective parent or the effective subsidiary).

In addition, an effective parent is secondarily liable for an effective subsidiary's debts if an effective subsidiary becomes insolvent or bankrupt resulting from the act or omission of an effective parent only when the effective parent has used the right to give binding instructions, knowing that the consequence of carrying out this act or omission would be insolvency of this effective subsidiary. This is the case no matter how the effective parent's capability to determine decisions of the effective subsidiary arises, such as through ownership of voting securities or by contract. In these instances, other shareholders of the effective subsidiary may claim compensation for the effective subsidiary's losses from the effective parent that caused the effective subsidiary to take any action or fail to take any action knowing that such action or failure to take action would result in losses.

Alteration of Capital

Charter Capital Increase

We may increase our charter capital by:

- issuing new shares; or
- increasing the par value of previously issued shares.

A decision on any issuance of shares or securities convertible into shares by private subscription, or an issuance by open subscription of common shares or securities convertible into common shares constituting 25% or more of the number of issued common shares, requires a three-quarters majority vote of a shareholders' meeting. Otherwise, a decision to increase the charter capital by increasing the par value of issued shares requires a majority vote of a shareholders' meeting. In certain circumstances provided in our charter, a decision to increase the charter capital may be taken by our Board of Directors. In addition, the issuance of shares above the number provided in our charter necessitates a charter amendment, which requires a three-quarters affirmative vote of a shareholders' meeting.

The Joint Stock Companies Law requires that the value of newly issued shares be determined by the board of directors based on their market value but not less than their par value. The price of newly issued shares for existing shareholders exercising their pre-emptive right to purchase shares could be less than the price paid by third parties, but not less than 90% of the price paid by third parties. Fees paid to intermediaries may not exceed 10% of the shares placement price. The board of directors shall value any in-kind contributions for new shares, based on the appraisal report of an appraiser.

Russian securities regulations set out detailed procedures for the issuance and registration of shares of a joint stock company. These procedures require:

- taking a decision on a share placement;
- approval of a resolution on a share issuance;
- prior registration of the share issuance with the CBR;
- placement of shares;
- filing with the CBR and registration of a report or a notice (as applicable) on results of the share issuance; and
- public disclosure of information relating to the issuance of shares.

Charter Capital Decrease; Share Buy-Backs

The Joint Stock Companies Law does not allow a company to reduce its charter capital below the minimum charter capital required by law, which is 100,000 rubles for a public joint stock company. The Joint Stock Companies Law and our charter require that any decision to reduce our charter capital through the repurchase and cancellation of shares, be made by a majority vote of a shareholders' meeting and through reduction of the par value of shares, by a three-quarter majority vote of a shareholders' meeting. Additionally, within three business days of a decision to reduce our charter capital, we must notify the federal executive body in charge of the state registration of legal entities on the decision taken and publish within the same three-day period a notice regarding the charter capital reduction, as well as a second notice one month after the first notice is published. Our creditors, whose claims arose before the decision on the charter capital decrease was taken, would then have the right to demand, not later than 30 days of the second publication of the notice, early termination or settlement of relevant obligations by us, as well as compensation for damages.

The Joint Stock Companies Law and our charter allow our shareholders or the Board of Directors to authorize the repurchase of up to 10% of our shares in exchange for cash. The repurchased shares pursuant to a board decision must be resold at the market price within one year of their repurchase or, failing that, the shareholders must decide to cancel such shares and decrease the charter capital. Repurchased shares do not bear voting rights.

Shares repurchased pursuant to a decision of our shareholders' meeting to decrease the overall number of shares are cancelled at their redemption.

The Joint Stock Companies Law allows us to repurchase our shares only if, at the time of repurchase:

- our charter capital is paid in full;
- we are not and would not become, as a result of the repurchase, insolvent;
- the value of our net assets at the time of repurchase of our shares is not less (and would not become less, as a result of the proposed repurchase) than the sum of our charter capital, the reserve fund and the difference between the liquidation value and par value of our issued and outstanding preferred shares; and
- we have repurchased all shares from shareholders having the right to demand repurchase of their shares in accordance with Russian law, as described immediately below.

Our subsidiaries are not restricted from purchasing our shares, and our subsidiaries can vote these shares. However, our subsidiaries did not vote with such shares in 2020, 2021 and 2022.

The Joint Stock Companies Law and our charter provide that our shareholders may demand repurchase of all or some of their shares as long as the shareholder demanding repurchase voted against or did not participate in the voting on the decision approving any of the following actions:

- any reorganization;
- the conclusion of a major transaction, which involves assets having value of more than 50% of the balance sheet value of the assets calculated under RAS (including those which are simultaneously interested party transactions); or
- any amendment of our charter or approval of a restated version of our charter in a manner which restricts shareholders' rights; and
- the amendment of the public company's charter which eliminates indication that the company is public, simultaneously with the decision on applying to the CBR on release from obligation to disclose information under the laws of the Russian Federation on securities and the decision on applying for delisting of shares and equity securities convertible into shares.

We may spend up to 10% of our net assets calculated under RAS on the date of the adoption of the decision which gives rise to a share redemption demanded by the shareholders. If the value of shares in respect of which shareholders have exercised their right to demand repurchase exceeds 10% of our net assets, we will repurchase shares from each such shareholder on a pro-rata basis. Repurchase of the shares is made at a price agreed on by the board of directors, but it should not be less than the market price.

Registration and Transfer of Shares

Russian legislation requires that a joint stock company ensures maintenance of a register of its shareholders, which for a public joint stock company, shall be maintained by a registrar. Registrar NIKoil OJSC had maintained our register of shareholders since May 10, 2000. In July 2014, it has been merged into Independent Registration Company JSC (known as Computershare Registrar JSC prior to October 6, 2015) and on February 4, 2019, Independent Registration Company JSC has been merged into JSC IRC—R.O.S.T. which was maintaining our register of shareholders by way of universal succession.

On December 19, 2019, our Board of Directors adopted a decision to terminate the existing agreement with JSC IRC—R.O.S.T. and enter into relevant agreement with JSC REESTR and starting from April 10, 2020 our register is maintained by REESTR.

The Federal Law No. 414-FZ “On the Central Depository” dated December 7, 2011 (the “Central Depository Law”), which came into force on January 1, 2012, set out a legal framework for establishment and operation of the central depository. On November 6, 2012, the Russian Federal Financial Markets Service granted the JSC National Settlement Depository the status of central depository which opened its nominee holder accounts in, among others, all securities registers of the issuers which are obliged to disclose information in accordance with Russian securities law. As we are required to make public disclosures, the above requirement is applicable to us, which means that the central depository became the only person having a nominee holder account in our share register. Also, the Central Depository Law prohibits persons maintaining securities registers from opening and depositing securities (save for limited exceptions) to other nominee holder accounts from the date of the opening of a nominee holder account with the central depository.

Ownership of our registered shares is evidenced by entries made in the register of shareholders, on the books of the central depository or a Russian licensed depository. Any of our shareholders may obtain an extract from the register of our shareholders maintained by the registrar or from their respective depository, as the case may be, certifying the number of shares that such shareholder holds. We are also entitled to obtain an extract from our shareholders' register which sets out all of our shareholders registered directly therein. In addition, we are entitled to obtain a list of nominal holders that opened depo accounts with the central depository, as well as a list of entities that have accounts opened with the nominal holders, given that such list is provided by the relevant nominal holder. However, we are unable to monitor transfers of our shares that are held on the books of depositories registered with the central depository because underlying shareholders have no obligation to reveal and such depositories have no obligation to notify us about such transfers. As a result, we can currently only identify our actual shareholders in a limited number of cases provided for by Russian law, including when requesting our registrar and the central depository to compile a list of shareholders of record for the General Shareholders' Meeting and when holders provide voting instructions together with disclosure of information, including ownership information, in accordance with Russian securities regulations.

The purchase, sale or other transfer of shares is accomplished through the registration of the transfer in the shareholder register, or the registration of the transfer with a depository if shares are held by a depository. The registrar or depository may not require any documents in addition to those required by Russian legislation in order to transfer shares in the register. Refusal to register the shares in the name of the transferee or, upon request of the beneficial holder, in the name of a nominee holder, is not allowed, except in certain instances provided for by Russian legislation, and may be challenged in court.

On March 1, 2022, the President of the Russian Federation signed Decree No. 81 "On additional temporary economic measures to ensure financial stability in Russia", pursuant to which with effect from March 2, 2022, a special procedure is introduced for residents in order to make certain transactions with certain non-residents, including for instance, transactions creating the right of ownership of securities made with certain non-residents (including their controlled persons). The Government of the Russian Federation adopted the Decree N 295, dated March 6, 2022, according to which the Government Commission for Monitoring the Implementation of Foreign Investments in the Russian Federation will issue permissions for implementation (execution) by residents of transactions (operations) with such foreign persons.

Decrees of the President of the Russian Federation dated March 1, 2022 № 81 and dated September 8, 2022 № 618 introduced restrictions on transactions entailing the ownership of securities as well as establishment, change of ownership or termination of the rights of ownership, as well as other rights that allow determining the management and / or entrepreneurial activity of Russian limited liability companies, if these transactions are concluded with the participation of a certain non-residents. Such transactions are possible only if the permission of the Special governmental Commission is obtained.

In December 2022, the Subcommittee of the Special governmental Commission introduced the terms, which the Special governmental Commission takes into consideration when delivering the permission. These are:

- existence of an independent assessment of the market value of assets;
- sale of assets at a discount of at least 50% of the market value of the relevant assets indicated in the asset valuation report;
- establishment of key performance indicators for new shareholders (owners) in the transaction documentation;
- availability of installment payments for 1-2 years and (or) an obligation to voluntarily send funds to the federal budget in the amount of at least 10% of the amount of the transaction (operation) being carried out.

Reserve Fund

Russian legislation requires that each joint stock company establish a reserve fund to be used only to cover the company's losses, redeem the company's bonds and repurchase the company's shares in cases when other funds are not available. Our charter provides for a reserve fund of 15% of our charter capital, funded through mandatory annual transfers of at least 5% of our net profits until the reserve fund has reached the 15% requirement.

Disclosure of Information

The Central Bank of Russia developed and adopted regulations “On the disclosure of information by issuers of securities” No. 714-P dated March 27, 2020 that arrange substantial changes to the system of disclosure of information. These regulations came into force on October 1, 2021. Regulations require us to make the following periodic disclosure and fillings:

- disclosing issuer’s report every six and twelve months instead of posting quarterly reports. Pursuant to these new regulations, we do not have to disclose information about bank accounts, branches and representative offices, size and structure of our charter capital in the issuer’s report;
- publishing any information (including inside information) concerning material facts and changes in our financial and business activity, including our reorganization, certain changes in the amount of our assets, decisions on share issuances, certain corporate events, such as mandatory or voluntary tender offers, record dates, certain changes in ownership and shareholding, filing of any material claim against us, obtainment or revocation of material licenses, entry into certain transactions, as well as shareholders’ and certain board of directors’ resolutions and certain information regarding our material subsidiaries;
- disclosing information on various stages of share placement, issuance and registration through publication of certain data as required by the securities regulations;
- disclosing our charter and internal corporate governance documents on our website;
- disclosing our annual report and annual financial statements prepared in accordance with RAS, as well as annual and interim financial statements prepared in accordance with IFRS;
- posting on our website a list of our affiliated companies and individuals every six months instead of quarterly basis;
- posting on our website a list of inside information; and
- other information as required by applicable Russian securities legislation.

Moreover, according to the new regulations, for the preparation of the issuer’s report, we will use IFRS for calculation of financial performance, and the most important information, including operational and financial performance and data about key contractors, will be disclosed on a consolidated basis by group.

However, the Decree of the Government of the Russian Federation dated March 12, 2022 No. 351 (in the edition as of November 24, 2022) allows us not to disclose or disclose in a limited manner some information until July 1, 2023.

General Shareholders’ Meetings

Procedure

The powers of a shareholders’ meeting are set forth in the Joint Stock Companies Law and in our charter. In a public joint stock company a shareholders’ meeting may not decide on issues that are not included in the list of its competence by the Joint Stock Companies Law. Among the issues which our shareholders have the power to decide on are:

- charter amendments;
- reorganization or liquidation;
- election and removal of members of the board of directors;
- determination of the amount of compensation for members of the board of directors;

- determination of the number, par value, class/type of authorized shares and the rights granted by such shares;
- changes in our charter capital in certain instances;
- appointment and removal of our independent auditor and of the members of our Auditing Commission and Counting Commission if it is obligatory for the company to have the Auditing Commission;
- participation in trade or industrial groups, or other associations of commercial entities;
- approval of certain internal documents and corporate records;
- distribution of profits and losses, including approval of dividends;
- redemption by the company of issued shares in cases provided by the Joint Stock Companies Law; and
- other matters, as provided for by the Joint Stock Companies Law and our charter.

Voting at a shareholders' meeting is generally based on the principle of one vote per share of common stock, with the exception of the election of the board of directors, which is done through cumulative voting. Decisions are generally passed by a majority vote of the voting shares present at a shareholders' meeting. However, Russian law and our charter requires a three-quarters majority vote of the voting shares present at a shareholders' meeting to approve the following:

- charter amendments;
- reorganization or liquidation;
- consent or subsequent approval of major transactions involving assets in excess of 50% of the balance sheet value of the company's assets calculated under RAS;
- the number, par value, and category (type) of authorized shares and the rights granted by such shares;
- repurchase by the company of its issued shares;
- any issuance of shares or securities convertible into shares of common stock by private subscription;
- issuance by open subscription of shares of common stock or securities convertible into common stock, in each case, constituting 25% or more of the number of issued and outstanding shares of common stock;
- issuance by private subscription securities convertible into common stock;
- increase of the charter capital through issuing additional shares by private subscription;
- decrease of the charter capital through reduction of the par value of shares; or
- filing of an application for delisting of our shares or securities convertible into shares.

Moreover, a ninety-five majority vote of the voting shares present at a shareholders' meeting is required to approve the amendment of the public company's charter which eliminates indication that the company is public, simultaneously with the decision on applying to the CBR on release from obligation to disclose information under the laws of the Russian Federation on securities and the decision on applying for delisting of shares and equity securities convertible into shares (*i.e.*, transformation to a non-public company).

The quorum requirement for our shareholders' meetings is met if holders of shares (or their representatives) accounting for more than 50% of the issued voting shares are present. If the 50% quorum requirement is not met, another shareholders' meeting with the same agenda may (and, in case of an annual shareholders' meeting must) be scheduled and the quorum requirement is satisfied if holders of shares (or their representatives) accounting for at least 30% of the issued voting shares are present at that meeting.

The annual shareholders' meeting must be convened by the board of directors between March 1 and June 30 of each year, and the agenda must include the following items:

- election of the members of the board of directors;
- approval of the annual report and the annual financial statements, including the balance sheet and profit and loss statement;
- approval of distribution of profits, including approval of dividends, and losses, if any;
- appointment of an independent auditor; and
- appointment of the members of the auditing commission.

A shareholder or group of shareholders owning in the aggregate at least 2% of the issued voting shares may introduce proposals for the agenda of the annual shareholders' meeting and may nominate candidates for the board of directors, counting commission and auditing commission. Any agenda proposals or nominations must be provided to the company no later than 100 calendar days after the preceding financial year end.

Extraordinary shareholders' meetings may be called by the board of directors on its own initiative, or at the request of the auditing commission, the independent auditor or a shareholder or group of shareholders owning in the aggregate at least 10% of the issued voting shares as of the date of the request. The decision to call or reject the call for an extraordinary shareholders' meeting shall be made by the board of directors within five days from the receipt date of the request and sent to the party that requested the meeting within three days after such a decision was made.

A general meeting of shareholders may be held in a form of a meeting or by absentee ballot. The form of a meeting contemplates the adoption of resolutions by the general meeting of shareholders through the attendance of the shareholders or their authorized representatives for the purpose of discussing and voting on issues of the agenda, provided that if a ballot is mailed to shareholders for participation at a meeting convened in such form, the shareholders may complete and mail the ballot back to the company without personally attending the meeting. A general meeting of the shareholders by absentee ballot contemplates the determination of collecting shareholders' opinions on issues of the agenda by means of a written poll.

The following issues cannot be decided by a shareholders' meeting by absentee ballot:

- election of the members of the board of directors;
- election of the auditing commission;
- approval of a company's independent auditor; and
- approval of the annual report, the annual financial statements.

At the same time, the provision establishing these restrictions on holding a general meeting of shareholders in absentia was suspended until the end of 2022 due to the COVID-19 pandemic (Articles 2 and 3 of Federal Law No. 25-FZ dated February 25, 2022).

Moreover, in 2023, general meetings of shareholders, the agenda of which contains the above issues, could also be held in absentia (Article 2 of Federal Law No. 25-FZ dated February 25, 2022 (in the edition as of December 19, 2022))

Notice and Participation

Pursuant to the Joint Stock Companies Law, persons registered in the register of shareholders and entitled to participate in a general shareholders' meeting must be notified of the meeting, whether the meeting is to be held in the form of a meeting or by absentee ballot, no less than 21 days (or 30 days if the agenda includes an item on reorganization) prior to the date of the meeting, and such notification shall specify the agenda for the meeting.

However, Article 17 of the Federal Law No. 46-FZ dated March 8, 2022 (in the edition as of December 19, 2022) set new rules for the notice until December 31, 2023 - shareholders and persons entitled to participate in a general shareholders' meeting must be notified of the meeting, whether the meeting is to be held in the form of a meeting or by absentee ballot, no less than 35 days prior to the date of the meeting.

Moreover, according to these new provisions, we have to determine the date by which proposals on putting issues on the agenda of the general shareholders' meeting and proposals on nominating candidates to the Board of Directors and other bodies of the company will be accepted from shareholders, but not less than 27 days prior the date of the general shareholders' meeting.

However, if it is an extraordinary shareholders' meeting to elect the board of directors, persons registered in the register of shareholders and entitled to participate in the general shareholder's meeting must be notified at least 50 days prior to the date of the meeting. Only those items that were set out in the agenda to shareholders may be voted upon at a general shareholders' meeting.

If a nominal holder of the shares registers in the register of shareholders, then a notification of the shareholders' meeting shall be sent to the nominal holder. The nominal holder must notify its clients in accordance with Russian legislation or an agreement with the client. The list of persons entitled to participate in a general shareholders' meeting is to be compiled on the basis of data in our shareholders register on the date established by the board of directors, which date may neither be earlier than the 10 days after the date of adoption of the board resolution to hold a general shareholders' meeting nor more than 25 days before the date of the meeting (or, in the case of an extraordinary shareholders' meeting to elect the board of directors, not later than 55 days before the date of the meeting).

The right to participate in a general meeting of shareholders may be exercised by a shareholder as follows:

- by personally participating in the discussion of agenda items and voting thereon;
- by sending an authorized representative to participate in the discussion of agenda items and to vote thereon;
- by submitting a written ballot reflecting the shareholders' voting on the agenda items;
- by delegating the right to submit such written ballot to an authorized representative; or
- by sending information on their willingness to the nominee holder for further transfer to the registrar in accordance with the requirements of the Russian securities law.

The decision of the Board of Directors to convene the General meeting of shareholders may provide for the possibility to fill the electronic voting ballots online at website on the Internet.

Board of Directors

Our Board of Directors is elected through cumulative voting. Under cumulative voting, each shareholder may cast an aggregate number of votes equal to the number of shares held by such shareholder multiplied by the number of persons to be elected to our Board of Directors, and the shareholder may give all such votes to one candidate or spread them between two or more candidates. Before the expiration of their term, the directors may be removed as a group at any time without cause by a majority vote of a shareholders' meeting.

The Joint Stock Companies Law requires at least a three-member board of directors for joint stock companies, a five-member board of directors for public joint stock companies, at least a seven-member board of directors for a joint stock company with more than 1,000 holders of voting shares, and at least a nine-member board of directors for a joint stock company with more than 10,000 holders of voting shares. Only natural persons (as opposed to legal entities) are entitled to sit on the board. Members of the board of directors are not required to be shareholders of the company. The actual number of directors is determined by the company's charter or a decision of the shareholders' meeting. Our charter provides that our Board of Directors consists of at least nine members, which number may be increased pursuant to a decision of the general meeting of shareholders. Our Board of Directors was formed at the annual General Meeting of Shareholders consisting of 9 members.

The Joint Stock Companies Law requires for the quorum of the board of directors's meeting half of the elected directors. The retirement of one of our director and decrease in the number of members of our Board of Directors don't effect on the Board's quorum since five of the elected directors are needed to attend the Board's meeting to meet this quorum requirement.

Furthermore, according to the Federal Law No. 519-FZ dated December 19, 2022, board of directors is considered to meet the above-mentioned quorum requirement till December 31, 2023 even if someone is resigned and the number of board's members drops below half of elected directors. However, if retirement cases occur, board of directors should not consists of less than three members.

The Joint Stock Companies Law prohibits a board of directors from acting on issues that fall within the competence of the general shareholders' meeting. Our Board of Directors has the power to perform the general management of the company, and to decide, among others, the following issues:

- determination of our business priorities;
- approval of our annual plans, including financial plans;
- capital participation, change of share and termination of capital participation in the commercial organizations (except in certain circumstances specified in our charter when these issues fall within the competence of the General Shareholders' Meetings or the Management Board as described in the paragraph below);
- convening annual and extraordinary shareholders' meetings, except in certain circumstances specified in the Joint Stock Companies Law;
- approval of the agenda for the shareholders' meeting and determination of the record date for shareholders entitled to participate in a shareholders' meeting;
- placement of our bonds and other securities in cases specified in the Joint Stock Companies Law;
- determination of the price of our property and of our securities to be placed or repurchased, as provided for by the Joint Stock Companies Law;
- repurchase of our shares, bonds and other securities in certain cases provided for by the Joint Stock Companies Law;
- appointment and removal of our President and determination of the number of the members of our Management Board and their election;
- formation of the Board of Directors committees;
- determination of principles and approaches to risk management, internal control and audit within the company;
- transfer of powers of the company's CEO to a managing organization of an individual manager;
- recommendations on the amount of the dividend and the payment procedure thereof;

- recommendations on the amount of remuneration and compensation to be paid to the members of our Auditing Commission and on the fees payable for the services of an independent auditor;
- use of our reserve fund and other funds;
- approval of our internal documents, except for those documents whose approval falls within the competence of our shareholders or the president;
- consent or subsequent approval of major and interested party transactions in certain cases provided for by the Joint Stock Companies Law;
- increasing our charter capital by issuing additional shares within the limits of the authorized charter capital, except in certain circumstances specified in our charter;
- approval of our share registrar and the terms of the agreement with it; and
- other issues, as provided for by the Joint Stock Companies Law and our charter.

Our charter generally requires a majority vote of the directors present for an action to pass, with the exception of actions for which Russian legislation requires a unanimous vote or a majority vote of the disinterested and independent directors, as described therein. A board meeting is considered duly assembled and legally competent to act when a majority of elected directors is present.

According to our charter, an exception provides for the competence of the Board of Directors on the participation in the capital of commercial organizations: the decision on participation in “startups” can be made by the Management Board if: (i) the amount of the transaction is no more than U.S. dollars 5, 000, 000 (calculated at the exchange rate between the ruble and the U.S. dollar quoted by the CBR for the date the decision is made), and (ii) the overall size of the acquired or sold share, taking into account the share that MTS already possess, is less than 50% of the charter capital of the “startup”. The criteria to determine whether the organization is a “startup” are defined by the decision of Board of Directors.

In the past, matters within the competence of our Board of Directors included all transactions on participation in the capital of companies, regardless of the size of the transaction or the size of the acquired or sold share. Since our digital transformation and development of a digital ecosystem actively involves innovative products created by external startups in the ecosystem, and recognizing that the speed of decision-making to invest in a startup is critical, the transfer of competence on investment and management of a portfolio of startups will allow to increase the speed of the decision-making by our level of management when working with startups, and will allow us to increase capitalization through minority investments in startups.

Our internal regulation “On the Board of Directors of Mobile TeleSystems Public Joint Stock Company” (the “Regulation”) was approved by the annual General Meeting of Shareholders on June 22, 2022. In accordance with clause 2.2.2 of the Regulation, the members of the Board of Directors have the right to:

- receive information regarding our operations;
- propose issues to be discussed by the Board of Directors;
- review the minutes of the Board of Directors meetings;
- request to include in the minutes of the meetings their personal opinion concerning issues on the agenda and decisions made with respect thereto;
- receive a remuneration and/or compensation of expenses related to the execution of their duties as members of the Board of Directors in accordance with decisions of the general shareholders’ meeting; and
- be present at the general shareholders’ meeting and answer questions regarding our operations.

In accordance with clause 2.3.2 of the Regulation, the members of the Board of Directors must:

- be loyal to the Company;
- execute their duties in a confident and scrupulous manner;
- act within their rights and duties in accordance with the goals and objectives of the Board of Directors;
- not distribute confidential information concerning us and protect such information from unlawful and improper use and publishing, and not use such confidential information in their own or third parties' commercial purposes;
- participate in the work of the Board of Directors;
- participate in the voting process during the Board of Directors meetings;
- complete the tasks assigned by the Board of Directors;
- evaluate the risks and consequences of the decisions made;
- inform us on a timely basis about their participation in the management of other companies and changes in such participation;
- restrain from voting on issues of personal interest;
- inform the Board of Directors about future deals in which they may have a personal interest;
- disclose information about the holding, disposal or acquisition of our shares and other securities;
- restrain from actions, which could lead to a conflict between their personal and our interests; and
- perform other responsibilities as provided by our charter and the Regulation.

Interested Party Transactions

Under the Joint Stock Companies Law, certain transactions are defined as “interested party transactions.” Such transactions include transactions involving a member of the board of directors, the company’s CEO, a member of the company’s management board), any person controlling the company, or any person who is able to give binding instructions to the company, if that person and/or that person’s spouse, parents, children, adoptive parents or children, full and half brothers or sisters and/or their controlled entities, is/are:

- a party to, or beneficiary of, a transaction with the company, whether directly or as a representative or intermediary;
- controlling persons of a legal entity that is a party to, or beneficiary of, a transaction with the company, whether directly or as a representative or intermediary; or
- a member of any governing body of a company that is a party to, or beneficiary of, a transaction with the company, whether directly or as a representative or intermediary, or a member of any governing body of a management organization of such a company.

Pursuant to the Joint Stock Companies Law a “controlling person” is deemed to be a person (i) directly or indirectly controlling over 50% of the voting shares in another legal entity (on the basis of an instruction, a shareholders’ agreement or other agreements); or (ii) having the right to appoint the sole executive body or more than half of the governing body of a controlled entity. A controlled entity is understood to be a legal entity directly or indirectly controlled by the controlling entity.

Pursuant to the changes to the Joint Stock Companies Law, which entered into force on January 1, 2017, transactions defined as “interested party transactions” do not require a mandatory prior approval by disinterested directors or shareholders of the company. However, a company shall notify members of a board of directors, management board or shareholders (if all members of the board of directors are deemed interested or a board of directors is not formed in a company) of a contemplated interested party transaction not later than 15 days prior to execution of such transaction, and the company’s sole executive body, members of its board of directors and management board or a shareholder (group of shareholders) owning at least 1% of the company’s voting shares may request consent for such interested party transaction.

In public joint stock companies consent or subsequent approval of the transaction shall be granted (if requested by the sole director, a member of the management board, a member of the board of directors or a shareholder owning at least 1% of the company’s voting shares³) by a majority of disinterested directors of the company which within one year prior to the decision:

- (1) did not act as persons performing functions of the sole executive body, including its executive manager, members of the company’s management board or members of the management bodies of the company’s managing organization;
- (2) did not have spouses, parents, children, adoptive parents and adopted children, full and half brothers and sisters acting as members of the company’s management bodies, members of the management bodies of the company’s managing organization or of its executive manager; and
- (3) did not control the company or the company’s managing organization (including its executive manager) or were not entitled to issue instructions binding on the company (collectively, “independent directors”).

Consent or subsequent approval by a majority of shareholders who are not interested in the transaction and are not controlled by interested persons shall be granted if:

- the value of such transaction or a number of interrelated transactions is 10% or more of the balance sheet value of the company’s assets determined under RAS;
- the transaction or a number of interrelated transactions involves a sale of common shares, in an amount exceeding 2% of the company’s issued common stock, or preference shares, in an amount exceeding 2% of the company’s issued stock, unless the charter of a company provides for a lesser amount of shares;
- the number of directors who are not interested in the transaction is not sufficient to constitute a quorum; or
- the number of directors who are not interested in the transaction and meet the requirements established by clause 3, Article 83 of the Federal Law “On Joint Stock Companies” becomes less than two, unless the charter of a company provides for a higher quorum for a board of directors meeting on this issue.

³ However, until December 31, 2023 only shareholders holding alone or with other holders at least 5% of voting shares have the right to file such a claim, according to article 3 of the Federal Law No. 55-FZ dated March 14, 2022 in the edition as of December 19, 2022

Consent or subsequent approval of interested party transactions is not required nor can be requested in the following instances:

- the transactions are concluded in the ordinary course of business, provided that the company has concluded similar transactions with disinterested parties on substantially similar terms over a long time;
- the company has only one shareholder that simultaneously performs the functions of the company's CEO;
- all shareholders owning voting shares of the company are deemed interested in such transactions and there are no other persons interested in such transactions;
- the transactions constitute the issuance of shares or securities convertible into shares, including by way of subscription;
- the transactions constitute the issuance of bonds by public subscription or repurchase of bonds;
- the transactions arise from the repurchase, whether mandatory or not, by the company of its issued shares;
- the transactions constitute transfer of assets within the framework of reorganization, in particular under merger and accession agreements; or
- the transactions are mandatory for the company pursuant to Russian law and must be concluded on the basis of fixed prices and tariffs adopted by a competent state body;
- the transactions are public agreements which terms are similar to other public agreements executed by the company;
- the transactions constitute the agreements set out by certain provisions of the Federal Law of the Russian Federation No. 35 "On Electricity Power" dated 26 March 2003;
- the transactions concluded on the same terms as preliminary contracts previously approved as interested party transactions;
- the transactions concluded in an open tender, if such tender terms were previously approved by the Board of Directors;
- the value of the transaction or the subject matter under the transaction does not exceed 0.1% of the company's balance sheet assets calculated according to RAS and it also does not exceed the threshold set out by the CBR for these purposes.

Major Transactions

The Joint Stock Companies Law defines a "major transaction" as a transaction, or a number of interrelated transactions entered into beyond the ordinary course of business connected with the direct or indirect acquisition or disposal, or a possibility of disposal (whether directly or indirectly) of property (including intellectual property) having a value of 25% or more of the balance sheet value of the assets of a company determined under RAS, as well as in other cases provided by the Joint Stock Company Law.

Consent or subsequent approval of major transactions is not required nor can be requested in the following instances:

- the company has only one shareholder that simultaneously performs the functions of the company's CEO;
- the transactions involving the placement of common stock, or securities convertible into common stock or transactions involving services provided in connection with such placements;
- the transactions constitute transfer of assets within the framework of reorganization, in particular under merger and accession agreements;

- the transactions to be executed by the company pursuant to the federal laws and/or other regulations of the Russian Federation and priced in accordance with the regulations of the Russian government or other federal bodies authorized by the Russian government;
- the transactions are public agreements which terms are similar to other public agreements executed by the company;
- the transactions arising from a mandatory tender offer to purchase company's issued shares or securities convertible to shares;
- the transactions concluded on the same terms as the preliminary contracts previously approved as major transactions.

Major transactions involving assets having a value ranging from 25% to 50% of the balance sheet value of the assets of a company determined under RAS require unanimous approval by all members of the board of directors or, failing to receive such approval, a simple majority vote of a shareholders' meeting.

Major transactions involving assets having a value in excess of 50% of the balance sheet value of the assets of a company determined under RAS require a three-quarters majority vote of a shareholders, participating in the meeting.

Change in Control

Anti-takeover Protection

Russian legislation requires the following:

- A person intending to acquire more than 30% of a public joint stock company's ordinary shares and voting preferred shares (including, for such purposes, shares already owned by such person and its affiliates), will be entitled to make a public tender offer to other holders of such shares or securities convertible into such shares (the "**voluntary offer**").
- A person that has acquired more than 30% of a public joint stock company's ordinary shares and voting preferred shares (including, for such purposes, shares already owned by such person and its affiliates) will, except in certain limited circumstances, be required to make, within 35 days of acquiring such shares, a public tender offer for other shares of the same class (the "**mandatory offer**") and for securities convertible into such shares, at the price which is not less than the price determined based on a weighted average market price of the shares over the six month period before the filing of the offer with the CBR as described below, if the shares are publicly traded, or on a price supplied by an appraiser if the shares have no or insufficient (less than six months) trading history. The public tender offer price may not be less than the highest price at which the offeror or its affiliated persons purchased or undertook to purchase the relevant securities over the six month period before the offer was sent to the company. From the moment of acquisition of more than 30% of the shares until the date the offer was sent to the company, the person making the offer and its affiliates will be able to register for quorum purposes and vote only 30% of the company's ordinary shares and voting preferred shares (regardless of the size of their actual holdings). These rules also apply to acquisitions resulting in a person or a group of persons owning more than 50% and 75% of a company's issued ordinary shares and voting preferred shares.
- A person that as a result of an offer described in either of the preceding paragraphs becomes (individually or with its affiliates) the owner of more than 95% of the company's ordinary shares and voting preferred shares, must buy out the remaining shares of the company as well as other securities convertible into such shares upon request of the holders of such shares or other securities, and may require such holders to sell such shares and other securities, at the price determined in the manner described in the preceding paragraph but not less than (i) the price of the preceding acquisition of the company's relevant securities under an offer described in either of the preceding paragraphs as a result of which the offeror and its affiliates acquired over 95% of the company's ordinary shares and voting preferred shares; or (ii) the highest price at which after the expiration date of an offer described in either of the preceding paragraphs the offeror or its affiliates purchased or undertook to purchase the relevant securities.

- An offer of the kind described in either of the preceding three paragraphs must be accompanied by a bank guarantee of payment. If the company is publicly traded, prior notice of the offer must be filed with the CBR; otherwise, notice must be filed with the CBR no later than the date of the offer. The CBR may order amendments to the terms of the offer (including price) in order to bring them into compliance with the rules.
- Once such an offer has been made, competing offers for the same securities can be made by third parties and, in certain circumstances, acceptance of the initial offer may be withdrawn by the security holders who choose to accept such competing offer. From the making of such an offer until 20 days after its expiry (which period may in certain cases exceed 100 days) the company's shareholders' meeting will have the sole power to make decisions on charter capital increase, issuance of securities, approval of interested party and certain major transactions, and on certain other significant matters.

The above rules may be supplemented through CBR rulemaking, which may result in a wider, narrower or more specific interpretation of these rules by the government and judicial authorities, as well as by market participants.

Approval of the FAS

Pursuant to the Federal Law on Competition, the FAS had to approve in advance acquisitions of voting shares in a company involving companies with a combined value of assets or combined annual revenues calculated under RAS exceeding a certain threshold, or otherwise occupying a dominant position on the market, and which would result in acquisition by a person (or a group of affiliates) of more than 25%, 50% or 75% of voting shares of a joint stock company, or a participation interest according 1/3, 50%, 2/3 of voting rights in a limited liability company, or in a transfer between such companies of assets or rights to assets, the value of which exceeds a certain amount.

See also "Item 3. Key Information—D. Risk Factors—Risks Relating to Our Business—If we are found to have a dominant position in the markets where we operate and are determined to have abused this position and/or concluded anti-competitive agreements, or found to have committed concerted actions, the FAS may be entitled to impose fines as well as regulate our subscriber tariffs and impose certain restrictions on our operations"

Furthermore, according to the Federal Law No. 46-FZ dated March 8, 2022 (in the edition as of December 19, 2022) in 2023, without prior approval of the FAS, transactions are made with shares:

- specified in Part 1 of Article 28 of the Federal Law on Competition in Respect of a Commercial organization, if the value of assets of the object of economic concentration and its group of persons is more than 800 million rubles, but less than 2 billion rubles;
- specified in Part 1 of Article 29 of the Federal Law on Competition in Relation to financial organizations.

However, it is necessary to post-notify the FAS about such transactions.

Strategic Industries Law

Pursuant to the Strategic Foreign Investment Law, investments resulting in a foreign entity or a group of entities receiving control over a company with strategic importance for the national defense and security of the Russian Federation (a "strategic company") or acquisition of fixed production assets of a strategic company having value of at least 25% of its assets calculated under RAS require prior approval from the state authorities. The procedure for issuing such consent involves a special governmental commission on control of foreign investments, which was established by the Resolution of the Government of Russia dated July 6, 2008 as the body responsible for granting such consents, and the FAS, which is authorized to process applications for consent from foreign investors. For the purposes of the Strategic Foreign Investment Law "control" means an ability to determine, directly or indirectly, decisions taken by a strategic company, whether through voting at the general shareholders' (participants') meeting of the strategic company, participating in the board of directors or management bodies of the strategic company, or acting as the external management organization of the strategic company, or otherwise. As a result, "control" will generally be deemed to exist if an entity or a group of entities acquires more than 50% of the shares (or participation interest in share capital) of a strategic company, or if through a contract or securities with voting rights it is able to appoint more than 50% of the members of the board of directors or of the management board of a strategic company.

Furthermore, if a foreign entity or group of entities holding securities of a strategic company or other entity that exercises control over this company becomes a direct or indirect holder of voting shares in an amount that is considered to give it direct or indirect control over this company in accordance with the Strategic Foreign Investment Law due to a change in allocation of voting shares pursuant to the procedures provided by Russian law (e.g., as a result of a buy-back of its shares by the relevant company), then such entity or group of entities will have to apply for state approval of its control within three months after it received such control.

Moreover, the Russian prime minister, who acts as President of the Commission, is entitled to impose an obligation of prior approval in regard of any transaction involving a Russian enterprise, regardless of whether such enterprise operates within a “strategic” industry or not. The decision of the Commission President has to be sent to the investor by the FAS within three business days. Upon receipt the investor will need to file the necessary application with the FAS to obtain approval. Failure to comply will result in penalties set out by the legislation.

In addition, foreign investors are required to notify the FAS about any transactions undertaken by them resulting in the acquisition of 5% or more of the charter capital of a strategic company and other transactions or other actions preapproved in accordance with the Strategic Foreign Investment Law.

See also “Item 3. Key Information—D. Risk Factors—Legal Risks and Uncertainties—The Strategic Foreign Investment Law imposes certain restrictions on us and our existing and potential foreign shareholders, which could have a material adverse effect on our business, financial condition, results of operations and prospects.”

Disclosure of Ownership

Under Russian law, a person acquiring, directly or indirectly, 5% or more of our voting shares is required to notify us and the CBR of, and we must then publicly disclose, such acquisition, as well as any subsequent acquisitions or disposals resulting in the crossing of 5%, 10%, 15%, 20%, 25%, 30%, 50%, 75% or 95% thresholds of our voting shares by such person.

A holder of more than 5% of our voting shares is required to file with us and the CBR information about its controlling shareholder (if any) or notify us and the CBR about the absence of any such controlling shareholders.

Our subsidiaries are required to notify us and the CBR about the acquisition of our common shares. We are required to publicly disclose the acquisition of our voting shares by our subsidiaries.

Notification of Foreign Ownership

Legal entities and individual entrepreneurs who acquire shares in Russian joint stock companies are required to notify the Russian tax authorities (in case the share of direct participation exceeds 10%) within one month following such acquisition.

C. Material Contracts

As of December 31, 2022 we were not party to any contracts considered material to our financial results or operations except for loan agreement with MTS International Funding Limited relating to the issued loan participation notes and ruble bonds issued. For more information, see “Item 5. Operating and Financial Review and Prospects—Liquidity and Capital Resources.”

D. Exchange Controls

The Federal Law on Currency Regulation and Currency Control which came into effect on June 18, 2004 sets forth certain restrictions on settlements between residents of Russia with respect to operations involving foreign securities (including ADSs), including requirements for settlement in Russian rubles.

Repatriation of Export Proceeds

Russian companies must repatriate 100% of their receivables from the export of goods and services (with a limited number of exceptions concerning, in particular, certain types of secured financing, Ruble-nominated transactions etc.).

Restrictions on the remittance of dividends, interest or other payments to non-residents

The Federal Law on Foreign Investments in the Russian Federation of July 9, 1999 specifically guarantees foreign investors the right to repatriate their earnings from Russian investments. However, the evolving Russian exchange control regime may materially affect your ability to do so.

Currently, ruble dividends on common shares may be converted into U.S. dollars without restriction. However, the ability to convert rubles into U.S. dollars is also subject to the availability of U.S. dollars in Russia's currency markets. Although there is an existing market within Russia for the conversion of rubles into U.S. dollars, including the interbank currency exchange and over-the-counter and currency futures markets, the further development of this market is uncertain.

Certain non-residents several restrictions that are in affect are also disclosed in "Item 10. Additional Information – Dividends".

E. Taxation

Certain Russian Tax Consequences

The following discussion describes the material Russian corporate income tax and personal income tax consequences to you if you are a U.S. holder of ADSs, or ordinary shares received upon conversion of ADSs, and a resident of the United States for purposes of the United States—Russia income tax treaty and are fully eligible for benefits under the United States—Russia income tax treaty. Subject to certain provisions of the United States—Russia income tax treaty relating to limitations on benefits, a U.S. resident under the treaty is generally defined as a person liable, under the laws of the United States, to U.S. tax (other than taxes with respect to only of income from sources in the United States or capital situated therein) by reason of your domicile, residence, citizenship, place of incorporation, or any other similar criterion (and, for income derived by a partnership, trust or estate, residence is determined in accordance with the residence of the person liable to tax with respect to such income). The treaty provides for a procedure to resolve matters where a resident of the United States qualifies as a Russian tax resident under Russian domestic rules. The treaty also provides for the non-application of treaty benefits to certain types of entities.

Additionally, the benefits under the United States—Russia income tax treaty discussed in this document generally are not available to U.S. persons who hold ADSs, or ordinary shares received upon conversion of ADSs, in connection with the conduct of a business in the Russian Federation through a permanent establishment as defined in the United States—Russia income tax treaty. Subject to certain exceptions, a U.S. person's permanent establishment under the United States—Russia income tax treaty is a fixed place of business through which such person carries on business activities in the Russian Federation (generally including, but not limited to, a place of management, a branch, an office and a factory). Under certain circumstances, a U.S. person may be deemed to have a permanent establishment in the Russian Federation as a result of activities carried on in the Russian Federation through agents of the U.S. person. This summary does not address the treatment of holders described in this paragraph.

Treaty benefits may be potentially available to U.S. tax residents that are not subject to limitations on treaty benefits under the treaty, do not operate through a permanent establishment in Russia and are foreign legal entities (*i.e.*, a legal entity or organization in each case not organized under Russian law) or individuals not considered Russian tax residents under Russian law. Under current Russian law, the Russian tax residency for entities is generally determined based on the place of management of this entity; for individuals is generally determined based on the number of days a person spends in Russia in a 12-month rolling period. Law specifies that an individual present in Russia for an aggregate period of 183 days in any consecutive 12-month period will be considered as a tax resident. Since tax year in Russia is a calendar year the final tax residency status of an individual taxpayer shall still be defined for a whole calendar year by counting the days spent in Russia within that relevant calendar year. Accordingly, to be considered a Russian tax resident, the taxpayer should spend at least 183 days in Russia in a calendar year. The following discussion is based on:

- Russian tax legislation; and
- the United States—Russia income tax treaty (and judicial and administrative interpretations thereof by the Russian authorities).

All of the foregoing tax consequences are based on information in effect as of the date of this document and are subject to change, possibly on a retroactive basis, after the date of this document. This discussion is also based, in part, on representations of the depositary, and assumes that each obligation in the deposit agreement and any related agreements will be performed in accordance with its terms. The discussion with respect to Russian legislation is based on our understanding of current Russian law and Russian tax rules, which are subject to frequent change and varying interpretations.

The following discussion is not intended as tax advice to any particular investor. It is also not a complete analysis or listing of all potential Russian corporate income and personal income tax consequences to you of ownership of ADSs, or ordinary shares received upon conversion of ADSs. We urge you to consult your own tax adviser regarding the specific Russian tax consequences of the ownership and disposition of ADSs, or ordinary shares received upon conversion of ADSs, under your own particular factual circumstances.

Specific uncertainties associated with the tax treatment of ADS holders

The Russian tax rules in relation to ADS holders (that would affect U.S. holders) are characterized by significant uncertainties and limited interpretive guidance. Recent amendments to the tax rules have clarified the status of the ADS holders as beneficial owners of the income from the underlying shares by establishing that the custodian holding the depositary account with the shares underlying the ADSs acts as the tax agent and determines amounts of the withholding tax based on the information about the ADS holders and their tax residency status as provided by the depositary. However, the application of the baseline tax rate for ADS holders and any double tax treaty relief is available only if the tax treaty residence of the holder is provided to the custodian along with the other information prescribed by the Russian Tax Code. In relation to ADS holders such information is to be provided by the ADS holders to the depositary, who relays it to the custodian, who acts as the tax agent and withholds the taxes when making transferring the dividends to the depositary. It is currently unclear how the depositary will collect the necessary information from ADS holders. Thus, while a U.S. holder may technically be entitled to benefit from the provisions of the United States—Russia income tax treaty, in practice such relief may be difficult or impossible to obtain.

Russian tax law and procedures are also not well developed, and local tax inspectors have considerable autonomy and may interpret tax rules without regard to the rule of law. Both the substantive provisions of Russian tax law and the interpretation and application of those provisions by the Russian tax authorities may be subject to more rapid and unpredictable change than in jurisdictions with more developed capital markets.

Taxation of Dividends

Dividends paid to U.S. holders generally will be subject to Russian withholding tax at a 15% rate. The tax burden may be reduced to 5% or 10% under the United States—Russia income tax treaty for eligible U.S. holders; a 5% rate may potentially apply for U.S. holders who are legal entities owning 10% or more of the company's voting shares, and a 10% rate applies to dividends paid to eligible U.S. holders in other cases, including dividend payments to individuals and legal entities owning less than 10% of the company's voting shares. These reduced tax rates may apply if the information required by the Russian Tax Code, is presented to the tax agent fully and in time; otherwise, the tax agent is required to use the baseline tax rate established by the Russian Tax Code, or the tax rate set by the applicable tax treaty, not taking into account the percentage of share in Charter Capital, the amount of investment, or term of ownership, whichever is appropriate. See also “—United States—Russia Income Tax Treaty Procedures.”

From a practical perspective, it may have not been possible for the depositary to collect the necessary information from all ADS holders and submit the relevant information to the custodian. Therefore, with respect to legal entities or organizations who are U.S. holders, the custodian may be obligated to withhold income tax at a rate of 15% from dividend payments made to the depositary, unless the information on the ADS holder (including the amount of ADSs and shares held and holder's tax residency) is provided to the depositary and thereafter to the custodian within 7 days of the date on which the shareholders entitled to dividend payout are determined according to the relevant decision of the general shareholders meeting. The same amendments described above under “*Specific uncertainties associated with the tax treatment of ADS holders*” have also introduced an expedited refund process whereby the information regarding the ADSs not provided to the custodian can be submitted within 25 days of the date of the payment of the dividends to the depositary in order for the custodian to refund the difference between the increased 15% tax rate used and the tax rate the respective ADS holders are entitled to according to their tax residency, however this process is new and not tested and it is unclear how it will work in practice. Although non-resident holders of ADSs may apply for a refund of a portion of the tax withheld under an applicable tax treaty, the procedure to do so may be time consuming and no assurance can be given that the Russian tax authorities will grant a refund. See “—United States—Russia Income Tax Treaty Procedures.”

If the appropriate information is not provided to the depository for transfer to the custodian in a timely manner, the custodian may have to withhold tax at the 15% rate, and U.S. holders that are legal entities qualifying for a reduced rate under the United States—Russia income tax treaty then may file claims for a refund within three years with the Russian tax authorities.

With respect to individuals who are U.S. holders of ADSs and who are Russian tax non-residents, the custodian may also be obligated to withhold income tax at the rate of 15% from dividend payments made to the depository. Reduced tax rates may apply if the information required by the Russian Tax Code is presented to the tax agent fully and in time; otherwise, the tax agent is required to use the baseline tax rate established by the Russian Tax Code, or tax rate set by the applicable tax treaty, not taking into account the percentage of share in Charter Capital, the amount of investment, or term of ownership, whichever is appropriate. Where withholding of personal income tax is not performed, individuals who are U.S. holders of ADSs will then be required to submit an annual personal tax return to the Russian tax authorities and pay Russian income tax at a rate of 15% as under Russian law an individual should report on his or her tax liabilities in case the relevant tax was due but not withheld by a tax agent from the relevant payment. When submitting the tax return, individuals who are U.S. holders may claim an application of the reduced rates of withholding tax established by the relevant treaty, provided that the procedures described in “—United States—Russia Income Tax Treaty Procedures” are complied with. Obtaining the respective approvals from the tax authorities may be time-consuming and burdensome.

For individuals claiming treaty relief, the documents substantiating the right for treaty benefits should be submitted to the Russian tax authorities within one year after the end of the year to which these benefits relate. In practice, where withholding is performed, the tax authorities may refuse to refund or credit any portion of the 15% tax withheld from payment of dividends to the depository and, therefore, it is possible that individuals who are U.S. holders may be subject to up to a 15% effective tax rate (general tax rate for Russian tax non-residents) on their share of dividends.

Taxation of Capital Gains

Legal entities and Organizations

Income received by a foreign company from the sale, exchange or other disposal (assuming that such income is not related to a permanent establishment of a foreign company in Russia) of shares (participation interest) in an organization in which over 50% of the assets consist of immovable property located in Russia, as well as financial instruments derived from such shares, is treated as income derived from a source in the Russian Federation and is subject to withholding tax at a rate of 20%. However, gains arising from the disposition of the securities which are traded on an organized stock exchange are not treated as Russian-source income, and should not be subject to taxation in Russia.

The amount of such income is typically determined as the sales price of shares (participation interest). However, if documentary support for the acquisition cost of the shares (participation interest) is available, the tax may instead be assessed on the basis of the difference between the sales price and the acquisition cost (including other related costs) if documentary evidence of such costs is submitted to the tax agent. The Russian Tax Code also establishes special rules for calculating the tax base for the purposes of transactions with securities. However, an exemption applies if immovable property located in Russia constitutes more than 50% of our assets and the securities are traded on a foreign stock exchange. The determination of whether more than 50% of our assets consist of immovable property located in Russia is inherently factual and is made on an on-going basis and the relevant Russian legislation and regulations in this respect are not entirely clear. Hence, there can be no assurance that immovable property owned by us and located in Russia does not currently and will not constitute more than 50% of our assets as at the date of the sale of ADSs, or ordinary shares received upon conversion of ADSs, by non-residents.

Where the ADSs, or ordinary shares received upon conversion of ADSs, are sold by legal entities or organizations to persons other than a Russian company or a foreign company or an organization with a registered permanent establishment in Russia, even if the resulting capital gain is considered taxable in Russia, there is currently no mechanism under which the purchaser will be able to withhold the tax and remit it to the Russian budget.

Under the United States—Russia income tax treaty, capital gains from the sale of shares and/or ADSs, or ordinary shares received upon conversion of ADSs, by eligible U.S. holders should be relieved from taxation in Russia, unless 50% or more of our assets (the term “fixed assets” is used in the Russian version of the treaty) were to consist of immovable property located in Russia.

Individuals

The taxation of the income of tax non-resident individuals depends on whether this income is received from Russian or non-Russian sources. Russian tax law considers the place of sale as an indicator of source. Accordingly, the sale of securities outside of Russia by individuals who are non-resident holders should not be considered Russian source income and, therefore, should not be taxable in Russia. However, Russian tax law gives no clear indication as to how the place of sale of securities should be defined in this respect. Therefore, the Russian tax authorities may have a certain amount of flexibility in concluding whether a transaction is in Russia or out of Russia.

The sale, exchange or other disposal of the shares and ADSs, or ordinary shares received upon conversion of ADSs, by non-resident individual holders in Russia will be considered Russian source income and will be subject to tax at a rate of 30% on the difference between the sales price and the acquisition costs of such securities, as well as other documented expenses, such as depositary expenses and broker fees, among others, defined by the tax rules.

Under Russian law, the acquisition costs and related expenses can be deducted at the source of payment if the sale was made by a non-resident holder through a licensed Russian broker, trust manager or other person that carries out operations under agency or commission agreements, or other agreements in favor of a taxpayer. Such party (as defined above) should also act as a tax agent and withhold the applicable tax. Such tax agent will be required to report to the Russian tax authorities the amount of income realized by the non-resident individual and tax withheld upon the sale of the securities.

Otherwise, if the sale is made to individuals but not through a tax agent, generally no withholding needs to be made and the non-resident holder will have an obligation to file a tax return, report his income realized and apply for a deduction of acquisition expenses (which includes filing of support documentation). Although Russian tax law imposes tax agent responsibility only on professional trustees, brokers or dealers, in practice, the tax authorities may require Russian legal entities and organizations or foreign companies with any registered presence in Russia that are not professional trustees, dealers or brokers to act as tax agents and withhold the applicable tax when purchasing securities from non-resident individuals.

Under the United States—Russia income tax treaty, capital gains from the sale of the ADSs, or ordinary shares received upon conversion of ADSs, by eligible U.S. holders should be relieved from taxation in Russia, unless 50% or more of our assets (the term “fixed assets” is used in the Russian version of the United States—Russia Tax Treaty) were to consist of immovable property located in Russia. If this 50% threshold is not met, individuals who are U.S. holders may seek to obtain the benefit of the United States—Russia income tax treaty in relation to capital gains resulting from the sale, exchange or other disposition of the ADSs, or ordinary shares received upon conversion of ADSs.

In order to apply the provisions of the United States – Russia income tax treaty, the individual holders should receive clearance from the Russian tax authorities as described below. See “—United States—Russia Income Tax Treaty Procedures” below.

United States—Russia Income Tax Treaty Procedures

The Russian Tax Code does not contain a requirement that a non-resident holder that is a legal entity or organization must obtain tax treaty clearance from the Russian tax authorities prior to receiving any income in order to qualify for benefits under an applicable tax treaty. However, a non-resident legal entity or organization seeking to obtain relief from or reduction of Russian withholding tax under a tax treaty must provide to a Russian company or foreign company or organization acting through its Russian registered presence, which is a tax agent (*i.e.*, the entity paying income to a non-resident) a confirmation of its tax treaty residence that complies with the applicable requirements and a Russian translation attached to it in advance of receiving the relevant income. The tax residency confirmation needs to be renewed on an annual basis and provided to the payer of income before the first payment of income in each calendar year. Starting from 2017, in order to benefit from the tax treaty the recipient of passive income has to provide a confirmation that it is the beneficial owner of this income.

A U.S. holder may obtain the appropriate certification by mailing completed forms, together with the holder’s name, taxpayer identification number, the tax period for which certification is required, and other applicable information, to the United States Internal Revenue Service. The procedures for obtaining certification are described in greater detail in the instructions to Internal Revenue Service Form 8802. As obtaining the required certification from the Internal Revenue Service may take at least six to eight weeks, U.S. holders should apply for such certification as soon as possible.

In accordance with the Russian Tax Code, to rely on tax treaty benefits, a non-resident holder who is an individual must present to the tax authorities an official document confirming his residency in the home country issued by the competent authorities in his/her country of residence and also other supporting documentation including a statement confirming the income received and the tax paid in the home country, also confirmed by the relevant foreign tax authorities, duly translated and apostilled or pass through a consular legalization. Technically, such a requirement means that an individual cannot rely on the tax treaty until he or she pays the tax in the jurisdiction of his or her residence. Therefore, advance relief from or reduction of withholding taxes for individuals will generally be impossible as it is very unlikely that the supporting documentation for the treaty relief can be provided to the tax authorities and approval from the latter obtained before any payments are made to individuals. A non-resident holder which is an individual may apply for treaty-based benefits and claim tax refund within three years following the end of the tax period in which the relevant income was received and the tax was withheld.

If a non-resident holder which is a legal entity or organization does not obtain double tax treaty relief at the time that income or gains are realized and tax is withheld by a Russian tax agent, the non-resident holder may apply for a refund within three years from the end of the tax period (a calendar year) in which the tax was withheld. To process a claim for a refund, the Russian tax authorities require (i) apostilled or legalized confirmation of the tax treaty residence of the non-resident at the time the income was paid, (ii) an application for the refund of the tax withheld in a format provided by the Russian tax authorities and (iii) copies of the relevant contracts under which the foreign entity received income, as well as payment documents confirming the payment of the tax withheld to the Russian budget (Form 1012DT for dividends and interest and Form 1011DT for other income are designed by the Russian tax authorities to combine requirements (i) and (ii) specified above). The Russian tax authorities may require a Russian translation of the above documents if they are prepared in a foreign language. The refund of the tax withheld should be granted within one month of the filing of the above set of documents with the Russian tax authorities. However, procedures for processing such claims have not been clearly established and there is significant uncertainty regarding the availability and timing of such refunds.

Recent amendments to the Russian Tax Code have established additional requirements to the reimbursement procedure referred to above, identifying further documents that need to be provided to the tax authorities. These include: 1) a document confirming the rights of the ADS or ordinary share holder to the ADS, or ordinary shares received upon conversion of ADSs, as of the date on which the shareholders entitled to the dividend payout are set according to the relevant decision of the General shareholders meeting, 2) a document evidencing the actual amount of income received by the ADS or ordinary share holder, 3) a document with information about the custodian that transferred the dividend amounts to the depository, and 4) documents confirming the ADS or ordinary share holder's compliance with the requirements of the Tax Code and/or the relevant income tax treaty provisions necessary for application of a reduced rate. The above requirements refer not only to ADS and ordinary shares, but also to securities in general. In addition to the documents listed above, tax authorities may require more information and documents. Decision on refund is to be taken by the tax authorities within six months. The procedures referred to above are new and no assurance can be given that the custodian will be able to apply the respective double tax treaties when paying dividends to non-resident holders or that ADS holders would be successful in receiving relevant tax refunds.

Neither the depository nor us has or will have any obligation to assist an ADS or ordinary share holder with the completion and filing of any tax forms.

Certain United States Federal Income Tax Consequences

The following is a general description of certain material United States federal income tax consequences that apply to you if you are, for United States federal income tax purposes, a beneficial owner of ADSs, or ordinary shares received upon conversion of ADSs, that is an individual who is a citizen or resident of the United States, a corporation created or organized in or under the laws of the United States, any state thereof or the District of Columbia, an estate the income of which is subject to United States federal income tax regardless of its source, or a trust, if a United States court can exercise primary supervision over the administration of the trust and one or more United States persons can control all substantial trust decisions, or if the trust has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a United States person (in each case, a “U.S. Holder”). This discussion is based on the Internal Revenue Code of 1986, as amended (the “Code”), Treasury Regulations promulgated thereunder, judicial decisions, and published rulings and administrative pronouncements of the Internal Revenue Service (“IRS”), and the Convention Between the United States of America and the Russian Federation for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion With Respect To Taxes on Income and Capital, in force as of December 16, 1993 (the “United States—Russia income tax treaty”), all as publicly available and in effect as of the date of this document. These authorities are subject to differing interpretations and may change, possibly retroactively, resulting in United States federal income tax consequences different from those discussed below. No ruling has been or will be sought from the IRS with respect to the matters discussed below, and there can be no assurance that the IRS will not take a contrary position regarding the tax consequences of the acquisition, ownership or disposition of ADSs, or ordinary shares received upon conversion of ADSs, or that any such contrary position would not be sustained by a court. If an entity or arrangement treated as a partnership for United States federal income tax purposes is an owner of ADSs, or ordinary shares received upon conversion of ADSs, the United States federal income tax treatment of a partner in the partnership will generally depend on the status of the partner and the activities of the partnership. Accordingly, entities or arrangements treated as partnerships for United States federal income tax purposes that hold ADSs, or ordinary shares received upon conversion of ADSs, and partners in such partnerships are urged to consult their tax advisors regarding the specific United States federal income tax consequences to them. The following discussion does not deal with the tax consequences to any particular investor or to persons in special tax situations such as:

- an insurance company;
- a tax-exempt organization;
- a financial institution;
- a person subject to the alternative minimum tax;
- a person who is a broker-dealer in securities or a trader subject to a mark-to-market election;
- a S corporation;
- a partnership, a pass-through entity or arrangement, a person holding ADSs through a partnership or other pass-through entity or arrangement;
- an expatriate subject to Section 877 of the Code;
- a holder that is not a U.S. Holder;
- an investor that has a functional currency other than the U.S. dollar;
- a regulated investment company;
- a real estate investment trust;
- an owner, directly, indirectly or by attribution, of ADSs (alone or together with shares) representing 10% or more of the outstanding shares of our stock (by vote or value); or

- an owner holding ADSs, or ordinary shares received upon conversion of ADSs, as part of a hedge, straddle, synthetic security or conversion transaction.

In addition, this summary is limited to U.S. Holders holding ADSs, or ordinary shares received upon conversion of ADSs, as “capital assets” within the meaning of Section 1221 of the Code and whose functional currency is the U.S. dollar. The discussion below does not address the effect of the Medicare contribution tax on “net investment income” or of any United States state or local tax law or any non-U.S. tax law. This discussion also does not address any tax consequences relating to the direct ownership of common stock.

The discussion below assumes that the representations contained in the deposit agreement are true and that the obligations in the deposit agreement and any related agreement will be complied with in accordance with their terms. For purposes of applying United States federal income tax law, we believe, and the following discussion assumes, that a holder of an ADS should be treated as the owner of the underlying shares of common stock represented by that ADS, although this matter is not free from doubt.

The U.S. Treasury has expressed concerns that intermediaries in the chain of ownership between the holder of an ADS and the issuer of the shares underlying the ADS may be taking actions that are inconsistent with the beneficial ownership of the underlying shares. Accordingly, the analysis of the creditability of Russian withholding taxes described below and the availability of the reduced tax rate for dividends received by certain non-corporate U.S. Holders (discussed below) could be affected by actions taken by intermediaries in the chain of ownership between the holder of ADSs and our company if as a result of such actions the holders of ADSs are not properly treated as beneficial owners of underlying shares and future actions that may be taken by the U.S. Treasury. The remainder of this discussion assumes that a holder of an ADS will be treated as the beneficial owner of the underlying shares of common stock represented by such ADS for United States federal income tax purposes.

Taxation of Distributions on ADSs, or ordinary shares received upon conversion of ADSs

Subject to the passive foreign investment company rules described below, for United States federal income tax purposes, the gross amount of a distribution, including any amount withheld in respect of Russian taxes, paid by us with respect to ADSs, or ordinary shares received upon conversion of ADSs, will be treated as a taxable foreign source dividend on the date of actual or constructive receipt by the depository to the extent of our current and accumulated earnings and profits, computed in accordance with United States federal income tax principles. If you are a non-corporate U.S. Holder such dividends may be “qualified dividend income” that is taxed at the lower applicable capital gains rate provided that certain conditions are satisfied, including (1) certain holding period requirements are satisfied, (2) either (a) our ADSs, or ordinary shares received upon conversion of ADSs, are readily tradable on an established securities market in the United States (such as the New York Stock Exchange) or (b) we are eligible for the benefits of the United States—Russia income tax treaty, and (3) we are not, for the taxable year in which the dividend was paid, or in the preceding taxable year, a “passive foreign investment company” (as discussed below). Our ADSs, and ordinary shares received upon conversion of ADSs, are not currently readily tradable on an established securities market in the United States. We believe, however, that we are eligible for the benefits of the United States—Russia income tax treaty, and as a result that dividends may be “qualified dividend income.” Distributions with respect to ADSs, or ordinary shares received upon conversion of ADSs, in excess of our current and accumulated earnings and profits (computed in accordance with United States federal income tax principles) will be applied against and will reduce your tax basis in such ADSs, or ordinary shares received upon conversion of ADSs, and, to the extent in excess of such tax basis, will be treated as gain from a sale or exchange of such ADSs, or ordinary shares received upon conversion of ADSs. You should be aware that we do not intend to calculate our earnings and profits in accordance with United States federal income tax principles and, unless we make such calculations, you should assume that any distributions with respect to ADSs, or ordinary shares received upon conversion of ADSs, generally will be treated as a dividend, even if such distributions would otherwise be treated as a return of capital or as capital gain pursuant to the rules described above. If you are a corporation, you will not be allowed a deduction for dividends received in respect of distributions on ADSs, or ordinary shares received upon conversion of ADSs, which is generally available for dividends paid by U.S. corporations. U.S. Holders are strongly urged to consult their tax advisors as to the United States federal income tax treatment of any distribution received with respect to ADSs, or ordinary shares received upon conversion of ADSs.

The amount of any distribution paid in rubles will equal the U.S. dollar value of such rubles, calculated using the exchange rate in effect on the date of actual or constructive receipt by the depository, regardless of whether the payment is actually converted into U.S. dollars. Generally, any gain or loss resulting from currency exchange rate fluctuations during the period from the date of receipt by the depository to the date the rubles are converted into U.S. dollars will be treated as ordinary income or loss from sources within the United States for foreign tax credit limitation purposes. Additionally, you may be required to recognize foreign currency gain or loss on the receipt of a refund of Russian withholding tax pursuant to the United States—Russia income tax treaty to the extent the U.S. dollar value of the refunded rubles differs from the U.S. dollar value of that amount of rubles on the date of receipt of the underlying distribution.

Russian withholding tax at the rate applicable to you (taking into account any entitlement to a reduced rate under the United States—Russia income tax treaty) should be treated as a foreign income tax that, subject to generally applicable limitations and conditions, may be eligible for credit against your United States federal income tax liability or, at your election, may be deducted in computing taxable income. If Russian tax is withheld at a rate in excess of the rate applicable to you, you may not be entitled to a foreign tax credit (or deduction) for the excess amount, even though the procedures for claiming refunds for such Russian taxes and the practical likelihood that refunds will be made available in a timely fashion are uncertain (as described above under “Certain Russian Tax Consequences”). If the dividends are qualified dividend income (as discussed above), the amount of the dividend taken into account for purposes of calculating the foreign tax credit limitation will generally be limited to the gross amount of the dividend, multiplied by the reduced rate divided by the highest rate of tax normally applicable to dividends.

The limitation on foreign taxes eligible for credit is calculated separately with respect to specific classes of income. For United States foreign tax credit purposes, a dividend distribution with respect to the ADSs will be treated as foreign source “passive category income.” The rules relating to the determination of the foreign tax credit, or deduction in lieu of the foreign tax credit, are complex and you should consult your tax advisors with respect to those rules.

Taxation on Sale or Other Taxable Disposition of ADSs, or ordinary shares received upon conversion of ADSs

Subject to the passive foreign investment company rules described below, the sale or other taxable disposition of ADSs will generally result in the recognition of gain or loss in an amount equal to the difference between the amount realized on the sale or other taxable disposition and your adjusted basis in such ADSs, or ordinary shares received upon conversion of ADSs. That gain or loss will be capital gain or loss and will be long-term capital gain or loss if you have held the ADSs, or ordinary shares received upon conversion of ADSs, for more than one year. If you are a non-corporate U.S. Holder, such recognized long-term capital gain is generally subject to a reduced rate of United States federal income tax. Limitations may apply to your ability to offset capital losses against ordinary income.

Gain or loss recognized on the sale of ADSs, or ordinary shares received upon conversion of ADSs, will generally be treated as U.S. source income or loss for United States foreign tax credit purposes. The use of any foreign tax credits relating to any Russian taxes imposed upon such sale may be limited. You are strongly urged to consult your tax advisors as to the availability of tax credits for any Russian taxes imposed on the sale of ADSs, or ordinary shares received upon conversion of ADSs.

Passive Foreign Investment Company Considerations

A non-U.S. corporation generally will be a passive foreign investment company (a “PFIC”), in any taxable year in which, after taking into account the income and assets of the corporation and certain subsidiaries pursuant to applicable “look-through” rules, either (i) at least 75% of its gross income is “passive income” or (ii) at least 50% of the average value of its total assets is attributable to assets which produce passive income or are held for the production of passive income.

We do not believe that we were a PFIC for the year ended December 31, 2020, for the year ended December 31, 2021, or for the year ended December 31, 2022. However, our possible status as a PFIC must be determined annually and requires a factual determination that depends on, among other things, the nature and composition of our income, assets and activities for the entire taxable year. Moreover, the value of our total assets for PFIC purposes is generally determined based on the market price of our ADSs, or ordinary shares received upon conversion of ADSs, which is subject to potentially significant fluctuation. Therefore, our possible status as a PFIC may be subject to change. Thus there can be no assurance that we will not be treated as a PFIC in our current taxable year or in the future. If we were to be treated as a PFIC, U.S. Holders generally would be required to pay additional taxes on certain distributions and gains on sales or other dispositions (including pledges) of the ADSs, or ordinary shares received upon conversion of ADSs, at tax rates that may be higher than those otherwise applicable. You should consult your tax advisors regarding the possible application of the PFIC rules to your investment in the ADSs, or ordinary shares received upon conversion of ADSs.

Information Reporting and Backup Withholding

Dividend payments with respect to ADSs, or ordinary shares received upon conversion of ADSs, and proceeds from the sale or exchange of ADSs, or ordinary shares received upon conversion of ADSs, may be subject to information reporting to the IRS and possible U.S. backup withholding. Backup withholding will not apply, however, to a U.S. Holder who furnishes a correct taxpayer identification number and makes other required certifications or who is otherwise exempt from backup withholding. U.S. Holders who are required to establish their exempt status generally must provide such certification on IRS Form W-9. U.S. Holders should consult their tax advisors regarding the application of the U.S. information reporting and backup withholding rules.

Backup withholding is not an additional tax. Amounts withheld as backup withholding may be credited against your United States federal income tax liability, and you may obtain a refund of any excess amounts withheld under the backup withholding rules by timely filing the appropriate claim for refund with the IRS and furnishing any required information.

Foreign Financial Asset Reporting

Individual U.S. Holders that own “specified foreign financial assets” with an aggregate value in excess of U.S.\$50,000 on the last day of the taxable year or U.S.\$75,000 at any time during the taxable year are generally required to file an information statement along with their tax returns, currently on Form 8938, with respect to such assets. “Specified foreign financial assets” include any financial accounts held at a non-U.S. financial institution, as well as securities issued by a non-U.S. issuer that are not held in accounts maintained by financial institutions. Higher reporting thresholds apply to certain individuals living abroad and to certain married individuals. Regulations extend this reporting requirement to certain entities that are treated as formed or availed of to hold direct or indirect interests in specified foreign financial assets based on objective criteria. U.S. Holders who fail to report the required information could be subject to substantial penalties. In addition, the statute of limitations for assessment of tax would be suspended, in whole or part. Prospective investors are encouraged to consult with their own tax advisors regarding the possible application of these rules, including the application of the rules to their particular circumstances.

F. Dividends and Paying Agents

Not applicable.

G. Statement by Experts

Not applicable.

H. Documents on Display

The documents that are exhibits to or incorporated by reference in this document can be obtained from the SEC website at www.sec.gov. Our electronic filings are available at the SEC website www.sec.gov. Information about MTS is also available on the Internet at www.ir.mts.ru. Information included in our website does not form part of this document.

I. Subsidiary Information

Not applicable.

Item 11. Quantitative and Qualitative Disclosures about Market Risk

We are exposed to market risk from changes in interest rates and foreign currency exchange rates. We are subject to market risk deriving from changes in interest rates, which may affect the cost of our financing. Foreign exchange risks exist to the extent our revenues, costs and debt obligations are denominated in currencies other than the functional currency in the countries of our operations.

Interest Rate Risk

We are exposed to variability in cash flow primarily related to our variable interest rate debt and exposed to fair value risk related to our fixed rate notes. As of December 31, 2022, RUB 251,336 million, or 51.70% of our total indebtedness, excluding lease obligations, was variable interest rate debt, while RUB 234,804 million, or 48.30% of our total indebtedness, excluding lease obligations, was fixed interest rate debt.

The table below presents principal cash flows and related weighted average interest rates for indebtedness by contractual maturity dates as of December 31, 2022.

Contractual Maturity Date as of December 31, 2022:

Indebtedness	2023	2024	2025	2026	Thereafter	Total
Total variable debt	36,441	56,313	144,562	15,000	—	252,316
Weighted average interest rate	8.54 %	8.50 %	8.61 %	8.15 %	—	5.63 %
Total fixed debt ¹	82,042	61,195	35,000	34,978	—	235,215
Weighted average interest rate	7.46 %	8.29 %	8.48 %	8.26 %	—	6.52 %

(1) Totals may add up differently due to rounding

We would have experienced an additional interest expense of approximately RUB 2,157 million on an annual basis as a result of a hypothetical increase in variable rates by 1% over the current rate as of December 31, 2022. Since a linear dependence is applicable, a hypothetical increase in variable rate by each additional 1% would have caused a same additional interest expense of approximately RUB 2,157 million on an annual basis. The rates of EUR and USD as of December 31, 2022 were used in these calculations. We would have experienced an additional interest expense of approximately RUB 1,523 million on an annual basis as a result of a hypothetical increase in variable rates by 1% over the current rate as of December 31, 2021. The rates of EUR and USD as of December 31, 2021 were used in calculations. The increase in an additional interest expense on an annual basis as a result of a hypothetical increase in variable rates by 1% as of December 31, 2022 as compared to December 31, 2021 is mainly related to the increase in total variable debt.

The fair value of our publicly traded fixed-rate notes as of December 31, 2022, ranged from 91.48% to 108.1% of the notional amount. As of December 31, 2022, the difference between the carrying value and the fair value of other fixed rate debt, including lease obligations, was immaterial. For details of our fixed-rate debt, refer to Note 23 of our audited consolidated financial statements. The fair value of variable rate debt approximates its carrying value.

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We use derivative financial instruments to reduce our exposure to adverse fluctuations in interest rates. We primarily focus on reducing risk caused by the fluctuations in interest rates for our variable-rate long-term debt. According to our policy, we have entered into several cross-currency interest rate swap agreements. Most of these contracts assume periodical exchanges of interest payments or both principal and interest payments from ruble-denominated amounts to U.S. dollar-denominated amounts, to be exchanged at specified rates. The rates were determined with reference to the market spot rates upon issuance. These contracts also include an interest rate swap of a variable U.S. dollar-denominated interest rate to a fixed ruble-denominated interest rate. All of our cross-currency interest rate swaps agreements mature in 2024.

The table below presents a summary of our cross-currency interest rate swap agreements:

Type of derivative	Maturity	Notional amount (at inception) (amounts in millions of Rubles)	Mark to Market Value as of December 31, 2022
Cross-currency Interest Rate Swap Agreements			
Swap agreements to pay a fixed rates of 8.29% to 8.3125% and receive a variable interest rate of 6m LIBOR	June 2024	4,410	201
Swap agreements to pay a fixed rates of 7.924% to 8.2965% and receive a variable interest rate of 6m LIBOR	June 2024	8,499	518
Swap agreements to pay a variable Central Bank key rate + (+0.03%) and receive a fixed interest rate of 8.3%	August 2024	10,000	14
Swap agreements to pay a variable Central Bank key rate + (−0.05%) and receive a fixed interest rate of 8.4%	December 2024	15,000	28

Foreign Currency Risk

The following tables show, for the periods indicated, certain information regarding the exchange rate between the ruble and the U.S. dollar, based on data published by the CBR. These rates may differ from the actual rates used in preparation of our financial statements and other financial information provided herein.

Years ended December 31,	Rubles per U.S. dollar			Period End
	High	Low	Average ⁽¹⁾	
2018	69.97	55.67	62.71	69.47
2019	69.47	61.72	64.74	61.91
2020	80.88	60.95	72.15	73.88
2021	77.77	69.55	73.65	74.29
2022	120.38	51.16	68.55	70.34

(1) The average of the exchange rates on the last business day of each full month during the relevant period.

	Rubles per U.S. dollar	
	High	Low
July 2022	63.14	52.51
August 2022	62.05	59.13
September 2022	61.18	57.41
October 2022	63.76	55.30
November 2022	62.10	60.22
December 2022	72.13	60.88
January 2023	70.30	67.57
February 2023	75.43	70.04
March 2023	77.24	74.89

Source: CBR.

The exchange rate between the ruble and the U.S. dollar quoted by the CBR for March 31, 2023 was 77.09 rubles per U.S. dollar.

We have exposure to fluctuations in the value of the U.S. dollar relative to the Russian ruble and Armenian dram which are the functional currencies in our countries of operation. As a result, we may face translation losses, increased debt service payments and increased capital expenditures and operating costs should these currencies depreciate against the U.S. dollar.

A significant part of our capital expenditures, borrowings and certain operating costs (roaming expenses, cost of customer equipment and other costs) are either denominated in U.S. dollars or tightly linked to the U.S. dollar exchange rate, and our U.S. dollar-denominated debt represents our primary future risk of exchange loss in U.S. dollar terms. A decline in the value of the ruble or dram versus the U.S. dollar would result in currency remeasurement losses as the amount of these currencies required to repay U.S. dollar-denominated debt increases. In addition, if any of the ruble or dram declines against the U.S. dollar and tariffs cannot be maintained for competitive or other reasons, our revenues and operating margins could be materially adversely affected and we could have difficulty repaying or refinancing our U.S. dollar-denominated indebtedness and financing our capital expenditures and operating costs.

A portion of our capital expenditures, borrowings and certain operating costs (roaming expenses, costs of customer equipment and other costs) are also denominated in euros. We currently do not hedge against the risk of decline in the ruble or dram against the euro because settlements denominated in euros are not significant.

We would experience a currency exchange loss of RUB 7,259 million on our U.S. dollar denominated net monetary assets as a result of a hypothetical 30.0% increase in the ruble/manat/dram/sum to U.S. dollar exchange rate at December 31, 2022. We would experience a currency exchange loss of RUB 1,930 million in the fair value of our euro denominated net monetary assets as a result of a hypothetical 30.0% increase in the ruble/manat/dram to euro exchange rate at December 31, 2022. Since a linear dependence is applicable, an additional hypothetical 30.0% increase in the ruble/manat/dram/sum to U.S. dollar or euro exchange rate at December 31, 2022 would have caused additional currency exchange loss as stated above. We are unable to estimate future loss of earnings as a result of such changes. The change of a currency exchange gain on our U.S. dollar denominated net monetary assets as a result of a hypothetical 30.0% increase in the ruble/manat/dram/sum to U.S. dollar exchange rate at December 31, 2021 into a loss at December 31, 2022 mainly relates to a change in our net monetary assets.

Item 12. *Description of Securities Other Than Equity Securities*

(Only Items 12.D.3-4 are applicable.)

D. American Depositary Shares

We completed our initial public offering on July 6, 2000, and listed our shares of common stock, represented by ADSs on the New York Stock Exchange (the “NYSE”) under the symbol “MBT.” Each ADS represents two underlying shares of our common stock. Prior to May 3, 2010, each ADS represented five shares of our common stock.

On February, 28, 2022 trading in the Company’s ADSs on the NYSE was suspended.

In April 2022, Russian Federal Law No. 114-FZ dated April 16, 2022 (the “Delisting Law”) came into force which required Russian companies to terminate their depositary receipt programmes unless granted an exemption by the Russian Government Commission on Monitoring Foreign Investment. MTS submitted an application for such exemption, and in May 2022 received permission to maintain ADR Program until July 12, 2022.

In June 2022, MTS informed JPMorgan Chase Bank, N.A., the depositary under the existing MTS ADR program, of its intention to terminate the Deposit Agreement, effective as of July 13, 2022.

In August 2022, MTS received confirmation from the NYSE that the Company’s ADSs had been delisted from the NYSE effective August 8, 2022. The existing ADSs could be converted into MTS’ ordinary shares at the ratio of 1:2. The guaranteed period for depositary receipts conversion was completed on January 12, 2023 (inclusive).

PART II

Item 13. *Defaults, Dividend Arrearages and Delinquencies*

None.

Item 14. *Material Modifications to the Rights of Security Holders and Use of Proceeds*

None.

Item 15. *Controls and Procedures*

(a) *Disclosure Controls and Procedures.*

As of the end of the period covered by this Annual Report on Form 20-F, we carried out an evaluation, under the supervision and with the participation of our management, including our CEO and CFO, of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934).

Based on this evaluation, our CEO and CFO concluded that our disclosure controls and procedures are effective, as of December 31, 2022, to provide reasonable assurance that the information required to be disclosed in filings and submissions under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified by the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our CEO and CFO, as appropriate to allow timely decisions about required disclosure.

There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective disclosure controls and procedures can only provide reasonable assurance of achieving their control objectives.

(b) *Management's annual report on internal control over financial reporting.*

Management is responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control system was designed to provide reasonable assurance to our management and board of directors regarding the reliability of financial reporting and the preparation of financial statements for external purposes in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

Internal control over financial reporting refers to a process designed by, or under the supervision of, our Chief Executive Officer and Chief Financial Officer and effected by our Board of Directors, management and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board and includes those policies and procedures that:

- Pertain to the maintenance of records that in reasonable details accurately and fairly reflect the transactions and dispositions of our assets;
- Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board, and that our receipts and expenditures are being made only in accordance with authorizations of our management and members of our Board of Directors;
- Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of our assets that could have a material effect on our financial statements.

Management evaluated the effectiveness of our internal control over financial reporting as of December 31, 2022 based on the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission, or COSO, in Internal Control—Integrated Framework (2013).

As a result of management's evaluation of our internal control over financial reporting, management concludes that internal control over financial reporting as of December 31, 2022 was effective.

The effectiveness of our internal control over financial reporting as of December 31, 2022 has been audited and assessed as effective by independent registered public accounting firm AO "Business Solutions and Technologies", who has also audited and reported on our consolidated financial statements.

There were no changes in our internal control over financial reporting during the year ended December 31, 2022 that have materially affected, or are reasonably likely to materially affect our internal control over financial reporting.

(c) *Attestation Report of Independent Registered Public Accounting Firm.*

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of Mobile TeleSystems PJSC

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Mobile TeleSystems PJSC and its subsidiaries (the "Group") as of December 31, 2022, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Group maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2022, of the Group and our report dated March 1, 2023 expressed an unqualified opinion on those consolidated financial statements.

Basis for Opinion

The Group's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Group's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Group in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

AO "Business Solutions and Technologies"

Moscow, Russia

March 1, 2023

(d) *Changes in internal control over financial reporting.*

Management has evaluated, with the participation of our CEO and CFO, whether any changes in our internal control over financial reporting that occurred during the period covered by this annual report have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. Based on the evaluation we conducted, management has concluded that no such changes have occurred.

Item 16A. Audit Committee Financial Expert

Our Board of Directors has determined that Thomas Holtrop, Nadia Shouraboura and Regina von Flemming are "audit committee financial experts" as defined in Item 16A of Form 20 F. Mr. Holtrop is "independent" as defined in Rule 10A 3 under the Exchange Act and current New York Stock Exchange listing rules applicable to us. For a description of Mr. Holtrop's, Mrs Shouraboura and Regina von Flemming experience's, please see "Item 6. Directors, Senior Management and Employees—A. Directors and Senior Management—Key Biographies."

Item 16B. Code of Business Conduct and Ethics

MTS strives to comply with applicable legal requirements and leading international practices, and therefore periodically updates its compliance policies and procedures. As one of fundamental documents of the Company, the Code of Business Conduct and Ethics (hereinafter referred to as the Code) was significantly updated in 2021⁴ and has undergone changes. As of the publication date, the edition as of October 20, 2022 is disclosed on our website. Since 2021, there were no significant changes.

The provisions of the Code apply to all employees and directors of MTS (regardless of position, duties, length of service and place of work), including all subsidiaries, affiliates and joint ventures. The Company also strives to ensure compliance with the Code by affiliated companies, in respect of which MTS does not exercise control, as well as by partners and counterparties.

⁴ As of the publication date, the edition as of October 20, 2022 is disclosed on our website. Since 2021, there were no significant changes.

The content of the Code covers the following main topics relevant to all groups of MTS stakeholders:

1. MTS Values and Principles (introduction on behalf of the Management Board of MTS).
2. Consultations
3. Responsible business practice (ethics of making business decisions in MTS).
4. Compliance with laws (anti-corruption legislation, internal labor regulations, information security and data protection, insider, intellectual property protection, asset protection and reliable reporting)
5. Principles of sustainable development (quality of life and service, innovation)
6. Reporting violations, prohibition of retaliation.

In order to ensure the effectiveness of the Code, the Company uses a language that is simple and understandable to all stakeholders, an interactive format, provides easy access to the Code, other compliance policies and procedures of the Company on its resources (internal and external), and also conducts periodic training in accordance with the requirements of the Code.

A copy of our Code of Business Conduct and Ethics is available on our website at <http://ir.mts.ru/>.

Item 16C. Principal Accountant Fees and Services

AO Business Solutions and Technologies (PCAOB ID No. 1341) has served as our Independent Registered Public Accounting Firm for the fiscal years ended December 31, 2022 and 2021 for which audited financial statements appear in this Annual Report. The following table presents the aggregate fees billed for professional services and other services by AO Business Solutions and Technologies and its affiliates in 2022 and 2021, respectively.

	Year ended December 31,	
	2022	2021
	(in thousands of Russian rubles)	
Audit Fees	165,383	179,845
Audit-Related Fees	700	1,500
All Other Fees	13,662	3,300
Total	179,745	184,645

Audit Fees

The Audit Fees for the years ended December 31, 2022 and 2021 were for the reviews and integrated audits of our consolidated financial statements prepared in accordance with IFRS, reviews and audits of the financial statements of our public subsidiaries prepared in accordance with IFRS, statutory audits.

Audit-Related Fees

The Audit-Related Fees for the years ended December 31, 2022 and 2021 primarily relate to agreed-upon procedures engagement.

All Other Fees

All Other Fees for the year ended December 31, 2022 primarily relate to agreed-upon procedures engagement on non-financial information, advisory and training services; for the year ended December 31, 2021 – to advisory and training services.

Audit Committee Pre-Approval Policies and Procedures

The Sarbanes-Oxley Act of 2002 required us to implement a pre-approval process for all engagements with our independent public accountants. In compliance with Sarbanes-Oxley requirements pertaining to auditor independence, our Audit Committee pre-approves the engagement terms and fees of AO Business Solutions and Technologies and its affiliates for all audit and non-audit services, including tax services. Our Audit Committee pre-approved the engagement terms and fees of AO Business Solutions and Technologies and its affiliates for all services performed for the fiscal year ended December 31, 2022. No services of any kind were approved pursuant to a waiver permitted pursuant to 17 CFR 210.2-01(c)(7)(C)(1).

Item 16D. Exemption from the Listing Standards for Audit Committees

Not Applicable.

Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers

There were no share repurchases during the year ended December 31, 2022

See also “Item 7. Major Shareholders and Related Party Transactions—A. Major Shareholders.”

Item 16F. Change in Registrant’s Certifying Accountant

Not applicable.

Item 16G. Corporate Governance

Not applicable.

PART III

Item 17. Financial Statements

See instead Item 18.

Item 18. Financial Statements

The following financial statements, together with the report of AO “BUSINESS SOLUTIONS AND TECHNOLOGIES”, are filed as part of this Annual Report.

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Item 19. Exhibits

Exhibits No.	Description
1.1	Charter of Mobile TeleSystems PJSC, restated version No. 16, as approved by the General Meeting of Shareholders of Mobile TeleSystems PJSC held on June 22, 2022 (English translation): https://storage.ir.mts.ru/mts-ir/images/documents/MTS-Charter_2021_v16-eng.pdf
1.2	Amendments and Additions to the Charter of Mobile TeleSystems PJSC (Version No. 15), as approved by Extraordinary Meeting of Shareholders of Mobile TeleSystems PJSC held on February 15, 2021 (English translation): https://storage.ir.mts.ru/mts-ir/images/documents/Amendments-to-MTS-Charter-(81)_NPO-PROGTECH-eng.pdf
1.3	Amendments and Additions to the Charter of Mobile TeleSystems PJSC (Version No. 15), as approved by Extraordinary Meeting of Shareholders of Mobile TeleSystems PJSC held on February 15, 2021 (English translation): https://storage.ir.mts.ru/mts-ir/images/documents/Amendments-to-MTS-Charter-(80)_MKS-Balashikha-eng.pdf
1.4	Amendments and Additions to the Charter of Mobile TeleSystems PJSC (Version No. 15), as approved by Extraordinary Meeting of Shareholders of Mobile TeleSystems PJSC held on February 15, 2021 (English translation): https://storage.ir.mts.ru/mts-ir/images/documents/Charter-Amendments-Regarding-STV.pdf
2.1	Deposit Agreement, dated as of July 6, 2000, by and among, MTS, Morgan Guaranty Trust Company of New York (as depositary), and holders of ADRs is incorporated herein by reference to Exhibit 2.1 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2000, on Form 20-F.
2.2	<u>Amendment No. 1 to Deposit Agreement is incorporated herein by reference to Exhibit (a)(2) to Form F-6 (Registration No 333-12008).</u>
2.3	<u>Amendment No. 2 to Deposit Agreement is incorporated herein by reference to Exhibit (a)(3) to Form F-6 (Registration No 333-121240).</u>
2.4	<u>Amendment No. 3 to Deposit Agreement is incorporated herein by reference to Exhibit (a)(4) to Form F-6 (333-145190).</u>
2.5	<u>Amendment No. 4 to Deposit Agreement is incorporated herein by reference to Exhibit (a)(5) to Form F-6 (Registration No. 333-166178).</u>
2.6	<u>Amendment No. 5 to Deposit Agreement is incorporated herein by reference to Exhibit (a)(6) to Form F-6 (Registration No. 333-166178).</u>
2.7	<u>Listing Prospectus of Mobile TeleSystems PJSC relating to exchange-traded interest-bearing non-convertible documentary bonds dated March 5, 2013 (English translation) is incorporated herein by reference to Exhibit 2.6 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2016, on Form 20-F.</u>
2.8	<u>Listing Prospectus of Mobile TeleSystems PJSC relating to exchange-traded interest-bearing non-convertible documentary bonds dated July 27, 2016 (English translation) is incorporated herein by reference to Exhibit 2.8 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2019, on Form 20 F.</u>
2.9	<u>Modifications to the Listing Prospectus of Mobile TeleSystems PJSC relating to exchange-traded interest-bearing non-convertible documentary bonds dated August 17, 2018 (English translation) is incorporated herein by reference to Exhibit 2.9 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2019, on Form 20 F.</u>
2.10	<u>Modifications to the Exchange-Traded Bond Program of Mobile TeleSystems PJSC relating to exchange-traded interest-bearing non-convertible documentary bonds dated June 25, 2020 (English translation) is incorporated herein by reference to Exhibit 4.439 to the Annual Report filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2020, on Form 20-F.</u>
2.11	<u>Description of the Registrant's Securities registered pursuant to Section of the Securities Exchange Act of 1934, as amended is incorporated herein by reference to Exhibit 2.10 to the Annual Report</u>

- [filed pursuant to Section 13 or 15\(d\) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2019, on Form 20-F.](#)
- 2.12 [Listing Prospectus of Mobile TeleSystems PJSC relating to exchange-traded interest-bearing non-convertible documentary bonds dated April 15, 2022 \(English translation\) is incorporated herein by reference to Exhibit 2.12 to the Annual Report filed previously pursuant to Section 13 or 15\(d\) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2022, on Form 20-F.](#)
- 4.1 [Loan Agreement, dated May 28, 2013 between MTS and MTS International Funding Limited is incorporated herein by reference to Exhibit 4.1 to the Annual Report filed pursuant to Section 13 or 15\(d\) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2019, on Form 20-F.](#)
- 8.1 [List of Subsidiaries of Mobile TeleSystems Public Joint Stock Company is incorporated herein by reference to Exhibit 8.1 to the Annual Report filed previously pursuant to Section 13 or 15\(d\) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2022, on Form 20-F.](#)
- 11.1 Code of Business Conduct and Ethics of Mobile TeleSystems PJSC approved by the Board of Directors of Mobile TeleSystems PJSC on October 20, 2022 (English translation): [Code_of_Business_Conduct_and_Ethics.pdf \(mts.ru\)](#)
- 12.1 [Certification by the Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.](#)
- 12.2 [Certification by the Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.](#)
- 13.1 [Certification by the Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.](#)
- 13.2 [Certification by the Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.](#)
- 101 The following financial information formatted in Extensive Business Reporting Language (XBRL): (i) Consolidated statements of financial position as of December 31, 2022 and 2021, (ii) Consolidated statements of profit or loss for the years ended December 31, 2022, 2021 and 2020, (iii) Consolidated statements of comprehensive income for the years ended December 31, 2022, 2021 and 2020, (iv) Consolidated statements of changes in shareholders' equity for the years ended December 31, 2022, 2021 and 2020, (v) Consolidated statements of cash flows for the years ended December 31, 2022, 2021 and 2020, and (vi) Notes to the consolidated financial statements.
- 104 Cover Page Interactive Data File formatted as Inline XBRL and contained in Exhibit 101.

SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-FA and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

Date: September 14, 2023

MOBILE TELESYSTEMS PUBLIC JOINT STOCK COMPANY

By: /s/ Vyacheslav K. Nikolaev

Name: Vyacheslav K. Nikolaev

Title: Chief Executive Officer

PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES

Consolidated Financial Statements

As of December 31, 2022, 2021 and
for the Years Ended December 31, 2022,
2021 and 2020

PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of Mobile TeleSystems PJSC:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated statements of financial position of Mobile TeleSystems PJSC and subsidiaries (the “Group”) as of December 31, 2022 and 2021, the related consolidated statements of profit or loss, comprehensive income, changes in shareholders’ equity, and cash flows, for each of the three years in the period ended December 31, 2022, and the related notes (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Group as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Group’s internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 1, 2023 expressed an unqualified opinion on the Group’s internal control over financial reporting.

Basis for Opinion

These consolidated financial statements are the responsibility of the Group’s management. Our responsibility is to express an opinion on the Group’s consolidated financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Group in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current-period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that (1) relate to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Revenue Recognition — Refer to Note 6 to the consolidated financial statements

Critical Audit Matter Description

The Group's revenue from telecommunication services consists of a significant volume of low-value transactions, sourced from multiple systems, databases, and other tools, including billing systems. The processing and recording of revenue is highly automated and is based on established tariff plans.

We identified this matter as a critical audit matter due to the complexity of information systems involved in the revenue recognition process and the risks associated with recognition and measurement of revenue, arising from the diversity and constant evolution of tariff plans, marketing offers and discounts provided to customers. The auditing of revenue required an increased extent of audit effort, including the need for us to involve professionals with expertise in information technology (IT) to identify, test, and evaluate the Group's systems, software applications, and automated controls.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the Group's revenue recognition for telecommunication services included the following, among others:

- We evaluated the IT environment that secures proper functioning of billing and other IT systems related to accounting, including control procedures for monitoring changes and segregation of duties, as well as testing of these controls;
- We tested the design and operating effectiveness of internal controls over revenue recognition, including the recording and registration of phone calls, call duration, provision of data and value added services; authorization of changes in tariff plans and input of this information into the billing systems; and the accuracy of the application of incentive arrangements and discounts;
- We performed end-to-end testing of the reconciliation of data on the duration and volume of telecommunication services provided from their initial registration by switching equipment to billing and other IT systems and then to accounting records, including testing of certain manual adjustments recorded when transferring data from billing and other IT systems to the general ledger;
- We used test calls to test the accuracy of the details of connections, their duration and the tariff plans applied;
- We tested whether incentive arrangements and discounts were correctly accounted for in accordance with the relevant accounting policies of the Group;
- We agreed the information on active tariffs entered in the billing systems to the approved tariff orders and published tariff plans;
- We evaluated the Group's accounting policy with respect to the recognition of revenue from the provision of services to subscribers to determine if the existing policy continues to be appropriate; and
- We assessed the compliance of the disclosures in the consolidated financial statements with the requirements of IFRS 15, Revenue from Contracts with Customers.

Compliance with anti-corruption laws and regulations and associated accounting and disclosure implications — Refer to Note 33 to the consolidated financial statements

Critical Audit Matter Description

In March 2019, the Group reached a resolution with the United States Securities and Exchange Commission ("SEC") and the United States Department of Justice ("DOJ") relating to the investigation concerning the Group's former subsidiary in Uzbekistan. The Group consented to the commencement of an administrative cease-and-desist order (the "Order") by the SEC and entered into a deferred prosecution agreement ("DPA"). Under the DPA and the Order in September 2019 the Group appointed an independent compliance monitor ("Independent Monitor") for, inter alia, review, testing and improving MTS' anti-corruption compliance code, policies, and procedures for a period of three years. In 2021, the DOJ and SEC approved a one-year extension of the monitorship, which is permitted by the terms of the DPA and the Order.

The audit procedures necessary to evaluate management's judgments in area of potential instance of non-compliance with anti-corruption laws and regulations as of December 31, 2022 required a high degree of auditor judgment in evaluating whether the audit evidence obtained supports management's estimate.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the Group's estimation of any contingencies related to any potential instance of non-compliance with anti-corruption laws and regulations included the following, among others:

- We inspected the laws and regulations the Group has to comply with in order to obtain an understanding of the relevance and applicability to the Group and to assess any potential penalties that may arise for non-compliance;
- We read the procedures performed by the Independent Monitor and evaluated the implications of their findings, including discussing these with management of the Group as well as internal and external legal advisors;
- We inquired management regarding their follow up on the results of internal and external investigations and on the design and operational effectiveness of the Group's compliance programs and internal controls relating to the prevention and detection of fraud and corruption;
- We tested the design and operating effectiveness of internal controls, including, amongst others, the control environment (including whistle-blower and internal fraud management cases) and the controls for the adherence of business partners to the anti-corruption codes;
- We read the minutes of the Board of Directors' meetings;
- We evaluated management's assessment of compliance with anti-corruption laws and regulations as well as an estimation of contingencies related to any potential instances of non-compliance;
- We obtained letters from external and internal legal counsel; and
- We evaluated the Group's accounting policy with respect to the accounting for provisions and disclosure of contingent liabilities to determine if the existing policy continues to be appropriate, and assessed the compliance of the disclosures in the consolidated financial statements against the requirements of IAS 37, Provisions, Contingent Liabilities and Contingent Assets.

Assessment and measurement of expected credit losses on loans to customers — Refer to Note 3 and Note 29 to the consolidated financial statements

Critical Audit Matter Description

The Group applies an 'expected loss' model to determine the impairment of loans to customers of MTS Bank. As described in Note 29, MTS Bank financial assets and liabilities, the Group reported an allowance for expected credit losses of RUB 36,798 million as at December 31, 2022 in respect of loans to customers (2021: RUB 21,144 million), including allowance for expected credit losses in the amount of RUB 33,814 million as at December 31, 2022 in respect of loans to individuals (2021: RUB 17,976 million). Due to the underlying assumptions and estimations, in particular the evaluation of the probability of default for loans assessed on a collective basis, the determination of expected credit losses is one of the most significant management estimates.

We identified this area as a critical audit matter because models and techniques applied in calculating of expected credit losses requires the use of statistical data as well as the application of complex and subjective judgments by management. Therefore, a high degree of auditor judgment and an increased extent of audit effort was required in this area, including the need to involve our actuarial specialists and to perform focused audit procedures to evaluate management judgements made in estimating the allowance for expected credit losses to customers.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the assessment and measurement of expected credit losses of loans to customers assessed on a collective basis included the following, among others:

- We tested the design and the effectiveness of internal controls over key assumptions in the assessment of probability of default of customers;
- We evaluated compliance of the methodology, models and techniques used by the Group's management to determine the expected credit losses with the requirements of IFRS 9, Financial Instruments;
- With the assistance of our actuarial specialists, we performed an analysis of the integrity and logic of the models and assessed the most critical underlying assumptions against historical data and recent trends of default ratios, the retrospective testing of internally developed models performed by the Group, and assessed the Group managements' judgments regarding the impact of restructuring loans to customers and other external factors on expected credit losses;
- We tested the completeness and accuracy of statistical historical data used in the estimation of expected credit losses; and
- We evaluated the compliance of the disclosures in the consolidated financial statements with the requirements of IFRS 9, Financial Instruments.

AO "Business Solutions and Technologies"

Moscow, Russia

March 1, 2023

We have served as the Group's auditor since 2002.

PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF FINANCIAL POSITION
AS OF DECEMBER 31, 2022 AND 2021
(Amounts in millions of Russian Rubles)

	Notes	December 31, 2022	December 31, 2021
ASSETS			
NON-CURRENT ASSETS:			
Property, plant and equipment	19	312,509	311,250
Investment property		4,925	2,498
Right-of-use assets	24	120,192	132,343
Goodwill	20	55,694	42,819
Other intangible assets	22	109,549	100,132
Investments in associates and joint ventures	15	9,752	8,735
Other investments	16	7,539	4,591
Deferred tax assets	11	11,610	11,683
Accounts receivable, related parties	30	1,767	5,000
Trade accounts receivable	17	882	1,898
Bank deposits and loans to customers	29	138,199	118,342
Other financial assets	27	5,383	7,437
Other assets		4,046	5,790
Total non-current assets		782,047	752,518
CURRENT ASSETS:			
Inventories	18	14,199	18,981
Trade and other receivables	17	37,176	37,897
Accounts receivable, related parties	30	2,643	2,287
Bank deposits and loans to customers	29	96,135	87,594
Short-term investments	14	24,422	28,972
Advances paid and prepaid expenses		8,160	3,452
VAT receivable		10,867	11,746
Income tax assets		785	2,021
Assets held for sale		273	549
Cash and cash equivalents	13	78,292	40,590
Other financial assets	27	24,015	27,349
Other assets		3,916	1,862
Total current assets		300,883	263,300
TOTAL ASSETS		1,082,930	1,015,818

PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES
**CONSOLIDATED STATEMENTS OF FINANCIAL POSITION
AS OF DECEMBER 31, 2022 AND 2021 (CONTINUED)**
(Amounts in millions of Russian Rubles)

	Notes	December 31, 2022	December 31, 2021
EQUITY AND LIABILITIES			
EQUITY:			
Common stock	32	200	200
Treasury stock	32	(92,307)	(96,195)
Additional paid-in capital		895	619
Retained earnings		69,742	94,935
Accumulated other comprehensive income	32	12,103	10,207
Equity attributable to owners of the Company		(9,367)	9,766
Non-controlling interests		5,750	4,838
Total equity		(3,617)	14,604
NON-CURRENT LIABILITIES:			
Borrowings	23	368,393	350,300
Lease obligations	24	123,894	135,800
Bank deposits and liabilities	29	12,397	14,313
Deferred tax liabilities	11	17,759	17,901
Provisions	26	7,288	7,288
Contract liabilities	6	1,124	977
Other financial liabilities	27	3,464	180
Other liabilities		883	1,035
Total non-current liabilities		535,202	527,794
CURRENT LIABILITIES:			
Trade and other payables		67,166	72,078
Accounts payable, related parties	30	1,451	4,107
Contract liabilities	6	26,082	22,621
Borrowings	23	117,747	111,839
Lease obligations	24	19,608	18,709
Bank deposits and liabilities	29	260,744	207,055
Income tax liabilities		3,150	768
Provisions	26	23,757	17,479
Other financial liabilities	27	2,985	202
Other liabilities		28,655	18,562
Total current liabilities		551,345	473,420
TOTAL EQUITY AND LIABILITIES		1,082,930	1,015,818

The accompanying notes are an integral part of these consolidated financial statements.

President and CEO

Vice-president, Finance

Vyacheslav K. Nikolaev

Andrey M. Kamensky

March 1, 2023

PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES
**CONSOLIDATED STATEMENTS OF PROFIT OR LOSS
FOR THE YEARS ENDED DECEMBER 31, 2022, 2021 AND 2020**
(Amounts in millions of Russian Rubles, except per share amounts)

	Notes	2022	2021	2020
Service revenue		496,669	457,668	425,433
Sales of goods		45,080	70,253	64,398
Revenue	5,6	541,749	527,921	489,831
Cost of services		151,780	132,613	121,317
Cost of goods	18	41,153	67,274	59,572
Selling, general and administrative expenses	7	109,401	96,035	87,802
Depreciation and amortization	5	114,393	110,962	100,143
Share of the profit of operating associates and joint ventures	15	(4,596)	(5,565)	(5,048)
Impairment of non-current assets	21	489	(10)	2,023
Expected credit losses	17	26,366	13,001	11,912
Other operating income		(6,674)	(4,394)	(493)
Operating profit	5	109,437	118,005	112,603
Finance income	8	(1,774)	(2,518)	(3,437)
Finance costs	8	58,378	41,342	42,078
Share of the profit of non-operating associates and joint ventures	15	(209)	(181)	(273)
Other non-operating expenses/(income)	9	3,041	525	(3,097)
Profit before tax		50,001	78,837	77,332
Income tax expense	11	13,648	15,360	16,055
Profit for the year from continuing operations		36,353	63,477	61,277
Loss/(Profit) from discontinued operations	10	2,918	(792)	(796)
Profit for the year		33,435	64,269	62,073
Profit for the year attributable to:				
Owners of the Company		32,574	63,473	61,412
Non-controlling interests		861	796	661
Earnings per share from continuing operations (basic and diluted), Russian Rubles:	12	21.13 and 20.81	37.02 and 36.83	34.43 and 34.41
Earnings per share from discontinued operations (basic and diluted), Russian Rubles:	12	(1.74) and (1.71)	0.47 and 0.47	0.45 and 0.45
Earnings per share, total (basic and diluted), Russian Rubles:	12	19.39 and 19.10	37.49 and 37.30	34.88 and 34.86

The accompanying notes are an integral part of these consolidated financial statements.

President and CEO

Vice-president, Finance

Vyacheslav K. Nikolaev

Andrey M. Kamensky

March 1, 2023

PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES
**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2022, 2021 AND 2020
(Amounts in millions of Russian Rubles)**

	2022	2021	2020
Profit for the year	33,435	64,269	62,073
Other comprehensive income			
<i>Items that may be reclassified subsequently to profit or loss:</i>			
Reclassification to profit and loss due to Disposal of Nvision Czech Republic a.s., (Note 10)	794	—	—
Exchange differences on translating foreign operations	2,026	1,102	1,840
Net fair value (loss) on financial instruments	(134)	—	—
Share of other comprehensive (loss) / income of associates			
<i>Items that may be reclassified subsequently to profit or loss:</i>			
Exchange differences on translating foreign operations in associates	(790)	95	(196)
Other comprehensive income for the year, net of income tax	1,896	1,197	1,644
Total comprehensive income for the year	35,331	65,466	63,717
Total comprehensive income for the year attributable to:			
Owners of the Company	34,470	64,670	63,056
Non-controlling interests	861	796	661

The accompanying notes are an integral part of these consolidated financial statements.

President and CEO

Vice-president, Finance

March 1, 2023 Vyacheslav K. Nikolaev

Andrey M. Kamensky

PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES
**CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2022, 2021 AND 2020**
(Amounts in millions of Russian Rubles, except share amounts)

	Common stock		Treasury stock		Additional paid-in capital	Accumulated other comprehensive income / (loss)				Equity attributable to equity holders	Non-controlling interests	Total equity
	Shares	Amount	Shares	Amount		Foreign currency translation reserve	Remeasurements of the net defined benefit liability	Retained earnings				
Balances at January 1, 2020	1,998,381,575	200	(225,547,422)	(59,748)	—	6,697	670	85,249		33,068	3,326	36,394
Profit for the year	—	—	—	—	—	—	—	61,412		61,412	661	62,073
Currency translation adjustment	—	—	—	—	—	1,644	—	—		1,644	—	1,644
Total comprehensive income for the year	—	—	—	—	—	1,644	—	61,412		63,056	661	63,717
Issuance of stock options	—	—	—	—	560	—	—	—		560	—	560
Exercise of stock options	—	—	2,865,735	768	(767)	—	—	—		—	—	—
Dividends declared by MTS	—	—	—	—	—	—	—	(52,012)		(52,012)	—	(52,012)
Dividends to non-controlling interests	—	—	—	—	—	—	—	—		—	52	52
Purchase of own stock (Note 31)	—	—	(48,797,719)	(16,010)	—	—	—	—		(16,010)	—	(16,010)
Reclass to retained earnings	—	—	—	—	296	—	—	(258)		38	(49)	(11)
Balances at December 31, 2020	1,998,381,575	200	(271,479,406)	(74,990)	89	8,341	670	94,391		28,700	3,990	32,690
Profit for the year	—	—	—	—	—	—	—	63,473		63,473	796	64,269
Currency translation adjustment	—	—	—	—	—	1,197	—	—		1,197	—	1,197
Total comprehensive income for the year	—	—	—	—	—	1,197	—	63,473		64,670	796	65,466
Issuance of stock options	—	—	—	—	2,796	—	—	—		2,796	—	2,796
Exercise of stock options	—	—	1,030,559	279	(263)	—	—	—		—	—	—
Dividends declared by MTS	—	—	—	—	—	—	—	(61,967)		(61,967)	—	(61,967)
Dividends to non-controlling interests	—	—	—	—	—	—	—	—		—	52	52
Purchase of own stock (Note 31)	—	—	(65,308,610)	(21,484)	—	—	—	—		(21,484)	—	(21,484)
Purchase of non-controlling interests	—	—	—	—	(143)	—	—	—		(143)	—	(143)
Acquisitions under common control (Note 4)	—	—	—	—	(2,794)	—	—	—		(2,794)	—	(2,794)
Reclass to retained earnings and other	—	—	—	—	934	—	—	(962)		(28)	—	(28)
Balances at December 31, 2021	1,998,381,575	200	(335,757,457)	(96,195)	619	9,537	670	94,935		9,766	4,838	14,604

PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES
**CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2022, 2021 AND 2020 (CONTINUED)**
(Amounts in millions of Russian Rubles, except share amounts)

	Accumulated other comprehensive income / (loss)											
	Common stock		Treasury stock		Additional paid-in capital	Investment revaluation reserve	Foreign currency translation reserve	Remeasurements of the net defined benefit liability	Retained earnings	Equity attributable to equity holders	Non-controlling interests	Total equity
	Shares	Amount	Shares	Amount								
Balances at December 31, 2021	1,998,381,575	200	(335,757,457)	(96,195)	619	—	9,537	670	94,935	9,766	4,838	14,604
Profit for the year	—	—	—	—	—	—	—	—	32,574	32,574	861	33,435
Disposal of subsidiary, net of tax	—	—	—	—	—	—	794	—	—	794	—	794
Currency translation adjustment	—	—	—	—	—	—	1,236	—	—	1,236	—	1,236
Change in fair value of investments, net of tax	—	—	—	—	—	(134)	—	—	—	(134)	—	(134)
Total comprehensive income for the year	—	—	—	—	—	(134)	2,030	—	32,574	34,470	861	35,331
Issuance of stock options	—	—	—	—	863	—	—	—	—	863	—	863
Exercise of stock options	—	—	20,329,732	3,888	(1,579)	—	—	—	—	2,309	—	2,309
Dividends declared by MTS	—	—	—	—	—	—	—	—	(56,573)	(56,573)	—	(56,573)
Dividends to non-controlling interests	—	—	—	—	—	—	—	—	—	—	51	51
Disposal of subsidiary	—	—	—	—	(202)	—	—	—	—	(202)	—	(202)
Reclass to retained earnings	—	—	—	—	1,194	—	—	—	(1,194)	—	—	—
Balances at December 31, 2022	1,998,381,575	200	(315,427,725)	(92,307)	895	(134)	11,567	670	69,742	(9,367)	5,750	(3,617)

The accompanying notes are an integral part of these consolidated financial statements.

PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES
**CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2022, 2021 AND 2020**
(Amounts in millions of Russian Rubles)

	2022	2021	2020
CASH FLOWS FROM OPERATING ACTIVITIES:			
Profit for the year	33,434	64,269	62,073
Adjustments for:			
Depreciation and amortization	114,491	111,088	100,205
Impairment of non-current assets	489	(10)	2,023
Expected credit loss	26,359	12,983	11,936
Loss/(gain) from sale of Czech/Ukraine operations (Note 10)	1,367	54	(2,101)
Finance income	(1,774)	(2,518)	(3,439)
Finance costs	58,393	41,352	42,085
Income tax expense	13,616	15,403	17,191
Share of profit of associates and joint ventures	(4,805)	(5,746)	(5,321)
Net foreign exchange loss/ (gain) and change in fair value of financial instruments	4,371	186	(4,330)
Inventory obsolescence expense	2,920	1,456	891
Change in provisions	6,468	3,620	1,492
Other non-cash items	(1,405)	(4,360)	(4,393)
Movements in operating assets and liabilities:			
(Increase)/Decrease in trade and other receivables and contract assets	(1,528)	(2,608)	1,904
Increase in bank deposits and loans to customers	(57,027)	(101,897)	(33,570)
Decrease / (Increase) in inventory	810	(5,206)	(630)
Increase in advances paid and prepaid expenses	(4,009)	(2,526)	(6,507)
Decrease / (Increase) in VAT receivable	876	(2,821)	482
Increase / (Decrease) in trade and other payables, contract liabilities and other current liabilities	7,036	16,544	(1,104)
Increase in bank deposits and liabilities	50,464	53,765	27,172
Dividends received	4,614	4,794	3,676
Income tax paid	(11,255)	(17,494)	(15,193)
Interest received	1,914	3,150	2,727
Interest paid, net of interest capitalized	(55,227)	(40,632)	(41,762)
NET CASH PROVIDED BY OPERATING ACTIVITIES	190,592	142,846	155,507
CASH FLOWS FROM INVESTING ACTIVITIES:			
Purchase of subsidiaries, net of cash acquired (Note 4)	(13,948)	(10,186)	(262)
Purchases of property, plant and equipment (including capitalized interest in the amount of RUB 841 million, RUB 533 million and RUB 550 million, respectively)	(70,624)	(73,081)	(66,256)
Purchases of other intangible assets	(41,957)	(38,602)	(31,153)
Purchase of Advantage	—	—	(429)
Cost to obtain and fulfill contracts, paid	(4,358)	(4,218)	(5,442)
Proceeds from sale of property, plant and equipment and assets held for sale	5,938	5,082	6,678
Purchases of short-term and other investments	(2,567)	(13,765)	(10,054)
Proceeds from sale of short-term and other investments	10,602	13,085	16,012
Investments in associates and joint ventures (Note 15)	(1,587)	(1,087)	(1,460)
Cash (payments) and proceeds related to swap contracts	(242)	(657)	5,322
Proceeds from sale of subsidiaries, net of cash disposed (Notes 10 and 30)	(149)	3,891	3,461
Proceeds from sale/liquidation of associates (Note 15)	—	3,014	2,450
Other investing activities	654	92	—
NET CASH USED IN INVESTING ACTIVITIES	(118,238)	(116,432)	(81,133)

PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES
**CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2022, 2021 AND 2020 (CONTINUED)**
(Amounts in millions of Russian Rubles)

	2022	2021	2020
CASH FLOWS FROM FINANCING ACTIVITIES:			
Repayment of notes	(56,767)	(20,813)	(28,167)
Proceeds from issuance of notes	63,970	4,350	46,757
Notes and debt issuance cost paid	(263)	(96)	(107)
Lease obligation principal paid	(16,443)	(16,516)	(15,054)
Dividends paid	(40,959)	(61,955)	(74,923)
Acquisition of entities under common control, net of cash acquired (Note 4)	—	(3,474)	—
Proceeds from loans	80,152	64,311	194,645
Repayment of loans	(62,412)	(15,538)	(134,483)
Repurchase of common stock	—	(21,483)	(16,028)
Other financing activities	(1,900)	—	—
NET CASH USED IN FINANCING ACTIVITIES	(34,622)	(71,214)	(27,360)
Effect of exchange rate changes on cash and cash equivalents	(30)	(79)	385
NET INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS	37,702	(44,879)	47,399
CASH AND CASH EQUIVALENTS, beginning of the year	40,590	85,469	38,070
CASH AND CASH EQUIVALENTS, end of the year	78,292	40,590	85,469
Less cash and cash equivalents within held for sale	—	—	(64)
CASH AND CASH EQUIVALENTS, end of the year	78,292	40,590	85,405

The accompanying notes are an integral part of these consolidated financial statements.

PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(Amounts in millions of Russian Rubles unless otherwise stated)

1. GENERAL INFORMATION AND DESCRIPTION OF BUSINESS

Mobile TeleSystems Public Joint-Stock Company (“MTS PJSC”, or “the Company”) is a company incorporated under the laws of the Russian Federation and having its registered address at 4, Marksistskaya Street, 109147, Moscow, Russian Federation.

The consolidated financial statements of the Company and its subsidiaries (“the Group” or “MTS”) as of December 31, 2022 and 2021, and for the years ended 31 December 2022, 2021 and 2020 were authorized for issue by the President of the Company on March 1, 2023.

Business of the Group – MTS PJSC was incorporated on March 1, 2000, through the merger of MTS CJSC and Rosico TC CJSC, its wholly-owned subsidiary. MTS CJSC started its operations in the Moscow licence area in 1994, before expanding through Russia and the CIS. As of December 31, 2022 and 2021, 42.1% and 42.1% of the Company’s issued shares were held by Sistema Public Joint-Stock Financial Corporation or Sistema and its subsidiary, 42.2% and 41.1% of the issued shares were owned by a significant number of shareholders. As of December 31, 2022 and 2021, Vladimir P. Yevtushenkov held 49.2% and 59.2% of Sistema’s issued shares, in the financial year 2022 he transferred 10% of his shares and thus ceased to be a majority shareholder of Sistema. 50.8% and 40.8% of Sistema’s shares were held by a significant number of shareholders as of December 31, 2022 and 2021, respectively.

MTS completed its initial public offering in 2000 and listed its shares of common stock, represented by American Depositary Shares, or ADSs, on the New York Stock Exchange (NYSE) under the symbol “MBT”. Since 2003 common shares of MTS PJSC have been traded on the Public Joint-Stock Company “Moscow Exchange MICEX-RTS” (the “Moscow Exchange”). In April 2022, Russian Federal Law No. 114-FZ, requiring Russian companies to terminate their depository receipt programs, came into force. Following the requirements of the law the Group terminated its depository receipt program. MTS’ ADSs were delisted from NYSE. The existing ADSs could be converted into MTS’ ordinary shares at the ratio of 1:2. The guaranteed period for depository receipts conversion was completed on January 12, 2023 (inclusive).

The Group provides a wide range of telecommunications and digital services including voice and data transmission, internet access, pay TV, various value added services (“VAS”) through wireless and fixed lines, fintech services, B2B Cloud and digital solutions as well as the sale of equipment, accessories and software. The Group primarily operates in Russia.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND NEW ACCOUNTING PRONOUNCEMENTS

Basis of preparation – The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (“IFRS”) as issued by the International Accounting Standards Board (“IASB”).

The consolidated financial statements have been prepared on a historical cost basis, unless disclosed otherwise. Historical cost is generally based on the fair value of the consideration given in exchange for goods and services.

Amounts in the consolidated financial statements are stated in millions of Russian Rubles (“RUB million”), unless indicated otherwise.

The consolidated financial statements have been prepared on the assumption that the Group is a going concern and will continue in operation for the foreseeable future (Note 28).

Basis of consolidation – The consolidated financial statements incorporate the financial statements of the Company and entities controlled by the Company. Control is achieved only where the Company has power over the entity, is exposed and has rights to variable returns, and is able to use the power to affect its amount of variable returns. The results of the controlled entities acquired or disposed of during the reporting period are included in the consolidated financial statements from the date the Group achieves control over the entity, or until the date on which the Company ceases to control the entity. If necessary, the accounting policies of controlled entities are aligned with the accounting policy applied by the Group. All intra-group balances, income, expenses and cash flows are eliminated on consolidation.

PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in millions of Russian Rubles unless otherwise stated)

Effective ownership interests in the Group's significant subsidiaries were the following:

	Accounting method	December 31, 2022	December 31, 2021
RTC	Consolidated	100.0 %	100.0 %
MTS Bank	Consolidated	99.9 %	99.9 %
MGTS Group	Consolidated	94.7 %	94.7 %
Multiregional TransitTelecom (Note 4)	Consolidated	100.0 %	100.0 %
MTS Armenia	Consolidated	100.0 %	100.0 %
Nvision Czech Republic ¹⁾	Consolidated	100.0 %	100.0 %
VisionLabs Group (Note 4)	Consolidated	100.0 %	—
Gulfstream Group (Note 4)	Consolidated	58.4 %	—
Bronevik (Note 4)	Consolidated	100.0 %	—
Webinar (Note 4)	Consolidated	84.3 %	—
BIC (Tower infrastructure Company) ²⁾	Consolidated	100.0 %	—
MDTZK LLC (Ticketland)	Consolidated	100.0 %	100.0 %
Kulturnaya Sluzhba (Ponominalu)	Consolidated	100.0 %	100.0 %
Sputnikovoe TV ³⁾	Consolidated	—	100.0 %
IT-Grad (Note 4)	Consolidated	100.0 %	100.0 %
MTS Avto (former Stopol) (Note 4)	Consolidated	100.0 %	100.0 %
"Zelenaya Tochka" Group – Achemar Holdings Ltd (Note 4)	Consolidated	100.0 %	100.0 %
Oblachny Retail LLC ³⁾	Consolidated	—	100.0 %
MTS Media	Consolidated	100.0 %	100.0 %
Navigation Information Systems Group	Consolidated	100.0 %	94.7 %
MTS Didgital (former MTS IT)	Consolidated	100.0 %	100.0 %
Kinopolis (Note 4)	Consolidated	100.0 %	100.0 %
Sistema Capital (Note 4)	Consolidated	100.0 %	100.0 %
Stream	Consolidated	100.0 %	100.0 %
MTS Turkmenistan	Consolidated	100.0 %	100.0 %
MTS Artificial Intelligence	Consolidated	100.0 %	100.0 %
Energy Group (Note 4)	Consolidated	100.0 %	100.0 %
Dega	Consolidated	100.0 %	100.0 %
Stream Digital	Consolidated	100.0 %	100.0 %
Bastion	Consolidated	100.0 %	100.0 %
MTS International Funding Limited ⁴⁾ ("MTS International")	Consolidated	SE	SE
MTS Belarus (Note 15)	Equity	49.0 %	49.0 %

¹⁾ Part of Nvision Czech Republic Group – Nvision Czech Republic a.s.- was sold in October 2022, the results of the disposed subsidiary are presented as discontinued operations (Note 10) in the accompanying audited consolidated statements of profit or loss for the year ended December 31, 2022

²⁾ Spinned off from PJSC MTS

³⁾ Merged with PJSC MTS in 2022

⁴⁾ A company organized and existing as a private limited company under the laws of Ireland. The Group does not have any equity in MTS International. It was established for the purpose of raising capital through the issuance of debt securities on the Irish Stock Exchange followed by transferring the proceeds through a loan facility to the Group. In 2010 and 2013, MTS International issued USD 750 million 8.625% notes due in 2020 (fully repaid in June 2020) and USD 500 million 5.0% notes due in 2023, respectively (Note 23). The notes are guaranteed by MTS PJSC in the event of default. MTS International does not perform any other activities except those required for notes servicing. The Group bears all costs incurred by MTS International in connection with the notes' maintenance activities. Accordingly, the Group concluded that it exercises control over the entity.

PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(Amounts in millions of Russian Rubles unless otherwise stated)

Acquisitions from entities under common control – Business combinations arising from transfers of interests in entities that are under common control with the Group are consolidated prospectively starting from the date that the control over those entities is passed to the Group. The assets and liabilities acquired are recognized at the carrying values recorded previously in the counterparty's financial statements, with the resulting gain or loss recognized directly in equity.

Joint operations – The Group has joint operations with Megafon and Vimpelcom, relating to the construction of LTE base stations. Joint operations are characterized by the fact that the operators that have joint control over the arrangement each have both a right to the assets, and obligations for the liabilities, according to the arrangement. Respectively, each operator accounts for its share of the joint assets and its agreed share of any liabilities, and recognizes its share of the output, revenues and expenses incurred under the arrangement. The result of joint operations does not influence the consolidated financial statements significantly.

Non-current assets held for sale and discontinued operations - The Group classifies assets and disposal groups as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. This condition is met only when the assets (or disposal group) are available for immediate sale in its present condition subject only to terms that are usual and customary for sales of such assets (or disposal groups) and their sale is highly probable to occur within a year. Held for sale assets and disposal groups are measured at the lower of carrying amount or fair value less cost to sell. Assets and liabilities classified as held for sale are presented separately as current items in the statement of financial position.

A disposal group qualifies as discontinued operation if it is a component of the entity that either has been disposed of or is classified as held for sale, and:

- Represents a separate major line of business or geographical area of operations;
- Is part of a single co-ordinated plan to dispose of a separate major line of business or geographical area of operations;
- Or is a subsidiary acquired exclusively with a view to resale.

Discontinued operations are excluded from the results of continuing operations and are presented as a single amount as profit or loss after tax from discontinued operations in the statement of profit or loss.

Group's statement of cash flows include both cash flows from continuing and discontinued operations, amounts related to discontinued operations by operating, investing and financing activities are presented in Note 10.

Vendor financing arrangements – The Group has factoring arrangements under which banks pay the amounts due to the identified suppliers on behalf of the Group for a fixed fee. No additional collateral or guarantee are provided by the Group in respect of factored payables. Based on the Group's assessment the liabilities under the factoring arrangements are closely related to its operating purchases and the arrangements do not lead to any significant change in the nature or function of the related liabilities. These liabilities are therefore classified as accounts payables. As of December 31, 2022 and 2021 accounts payables under the factoring arrangements totaled to RUB 7,867 million and RUB 9,343 million.

Functional currency translation methodology – As of December 31, 2022, the functional currencies of Group entities were as follows:

- For entities incorporated in the Russian Federation and MTS International – the Russian Ruble ("RUB");
- For MTS Armenia – the Armenian Dram;
- For MTS Turkmenistan – the Turkmenian Manat;
- For MTS Belarus – the Belarusian Ruble;
- For Nvision Czech Republic – the Czech Crown.

PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS***(Amounts in millions of Russian Rubles unless otherwise stated)*

Foreign-currency transactions are translated into the functional currency at the exchange rates at the dates of the transactions. At the reporting date, monetary items denominated in foreign currencies are translated at the closing rate, whereas non-monetary items are stated at the exchange rate at the date of their recognition. Exchange rate differences are recognized in profit or loss.

For entities whose records are maintained in their functional currency, which is other than the reporting currency, all year-end assets and liabilities have been translated into U.S. Dollars ("USD") at the period-end exchange rate set by local central banks. Subsequently, U.S. Dollars balances have been translated into Russian Rubles at the period-end exchange rate set by the Central Bank of Russia. Revenues and expenses have been translated at the average exchange rate for the period using the cross-currency exchange rate via the U.S. Dollar as described above. Translation differences resulting from the use of these rates are reported as a component of other comprehensive income.

Standards, interpretations and amendments adopted in the financial year 2022

Amendments to IAS 37	<i>Onerous contracts – Cost of fulfilling a contract</i>
Amendments to IAS 16	<i>Property, Plant and Equipment: Proceeds before Intended Use</i>
Amendments to IFRS 3	<i>Reference to Conceptual Framework</i>
Amendments to IFRS	<i>Annual Improvements to IFRSs (2018-2020 Cycle)</i>

None of these interpretations and amendments had material effect on the Group's consolidated financial statements.

Standards, interpretations and amendments in issue but not yet effective

The Group has not applied the following new and revised IFRSs that have been issued but are not yet effective:

IFRS 17 and amendments to IFRS17	<i>Insurance Contracts</i> ¹⁾
Amendments to IAS 8	<i>Definition of Accounting Estimate</i> ¹⁾
Amendments to IAS 1 and IFRS Practice Statement 2	<i>Disclosure of Accounting Policy</i> ¹⁾
Amendments to IFRS 10 and IAS 28	<i>Sale or Contribution of Assets between an Investor and its Associate or Joint Venture</i> ²⁾
Amendments to IAS 1	<i>Classification of Liabilities as Current or Non-Current</i> ³⁾
	<i>Non current Liabilities with Covenants</i> ³⁾
Amendments to IFRS 16	<i>Lease Liability in a Sale and Leaseback</i> ³⁾

(1) Effective for annual periods beginning on or after January 1, 2023, with earlier application permitted.

(2) The effective date for these amendments was deferred indefinitely. Early adoption continues to be permitted.

(3) Effective for annual periods beginning on or after January 1, 2024, with earlier application permitted.

These IFRS pronouncements are not expected to have a material impact on the Group's consolidated financial statements.

3. SIGNIFICANT ACCOUNTING JUDGMENTS, ESTIMATES AND ASSUMPTIONS

A critical accounting estimate is an estimate that is both important to the presentation of the Group's financial position and requires management's most difficult, subjective or complex judgments, often as a result of the need to determine estimates and develop assumptions about the outcome of matters that are inherently uncertain.

Management evaluates such estimates on an on-going basis, based upon historical results, historical experience, trends, consultations with experts, forecasts of the future, and other methods which management considers reasonable under the circumstances. Management considers the accounting estimates discussed below to be its critical accounting estimates, and, accordingly, provides an explanation of each.

PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(Amounts in millions of Russian Rubles unless otherwise stated)

1. Depreciation and amortization of non-current assets

Depreciation and amortization expenses are based on management estimates of useful life, residual value and amortization method of property and equipment and intangible assets. Estimates may change due to technological developments, competition, changes in market conditions and other factors and may result in changes in the estimated useful life and in the amortization or depreciation charges. Technological developments are difficult to predict and management views on the trends and pace of development may change over time. Some of the assets and technologies, in which the Group invested several years ago, are still in use and provide the basis for new technologies. Critical estimates in the evaluations of useful lives for intangible assets include, but are not limited to, the estimated average customer relationship based on churn, the remaining licence period and the expected developments in technology and markets.

The useful lives of property and equipment and intangible assets are reviewed at least annually, taking into consideration the factors mentioned above and all other important relevant factors. The actual economic lives of intangible assets may be different from useful lives estimated by management, thereby resulting in a different carrying value of intangible assets with finite lives.

The Group continues to evaluate the amortization period for intangible assets with finite lives to determine whether events or circumstances warrant revised amortization periods. A change in estimated useful lives is a change in accounting estimate, and depreciation and amortization charges are adjusted prospectively. See Notes 19 and 22 for further information.

2. Impairment of non-current assets

The Group made significant investments including in property, plant and equipment, intangible assets, goodwill, right-of-use assets, acquiring and fulfilling of contracts.

Pursuant to IAS 36, goodwill and other intangible assets with indefinite useful lives and intangible assets not yet brought into use must be tested for impairment annually or more often if indicators of impairment exist. Other assets are tested for impairment when circumstances indicate that there may be a potential impairment.

Recoverable amounts of assets and cash generating units (“CGUs”) are based on evaluations, including the determination of the appropriate CGUs, the discount rate, estimates of future performance, the revenue generating capacity of the assets, timing and amount of future purchases of property and equipment, assumptions of the future market conditions and the long-term growth rate into perpetuity (terminal value). A change of assumptions, particularly in relation to the discount rate and growth rate used to estimate the recoverable amounts of assets, could significantly impact results of the Group’s impairment evaluation.

See Note 21 for further information.

3. Fair value of financial instruments

Where the fair value of financial assets and financial liabilities recorded in the statement of financial position cannot be derived from active markets, their fair value is determined using valuation techniques, including discounted cash flow models. The inputs to these models are taken from observable markets where possible, but when this is not feasible, a degree of judgment is required in establishing fair values. The judgments include considerations of inputs such as liquidity risk, credit risk and volatility. Changes in assumptions about these factors could affect the reported fair value of financial instruments. See Note 27 for further information.

4. Provisions and contingencies

The Group is subject to various legal proceedings, disputes and claims, including regulatory discussions related to the Group’s business, licences, tax positions and investments, where the outcomes are subject to significant uncertainty. In addition, significant uncertainty exists in relation to employee bonuses and other rewards, which depend on their individual performance and Group’s results. The management evaluates, among other factors, the degree of probability of an unfavorable outcome and the ability to make a reasonable estimate of the amount of loss or related expense. Unanticipated events or changes in these factors may require the Group to increase or decrease the amount recorded or to be recorded for a matter that has not been previously recorded because it was not considered probable. See Notes 26 and Note 33 for further information.

PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(Amounts in millions of Russian Rubles unless otherwise stated)

5. Right-of-use assets and lease liabilities

The value of right-of-use assets and lease liabilities is based on management estimates of lease terms as well as an incremental borrowing rate used to discount lease payments. The lease term corresponds to the non-cancellable period of each contract except in cases where the Group is reasonably certain of exercising renewal options. When assessing the lease term the management considers all facts and circumstances that create the economic incentive for the Group to exercise the option to extend the lease, such as the useful life of the asset located on the leased site, statistics on sites replacement, sequence of technology change, profitability of the Group's retail stores as well as costs to terminate or enter into lease contracts. The incremental borrowing rate of the Group is determined based on the credit spreads of the Group's debt instruments in relation to zero-coupon yield curve for government securities. Changes in these factors could affect the estimated lease term and the reported value of right-of-use assets and lease liabilities.

See Note 24 for further information.

6. Impairment of financial assets

The Group uses management's judgement to estimate allowance for expected credit losses (ECL) for financial assets at amortized costs. ECL are measured in a way that reflects the unbiased and probability-weighted amount, the time-value of money and reasonable and supportable information at the reporting date pertaining to past events, current conditions and forecasts of future economic conditions.

ECL are measured as probability-weighted present value of all cash shortfalls over the expected life of each financial asset. For receivables from financial services, ECL are mainly calculated using a statistical model based on three major risk parameters: probability of default, loss given default and exposure at default.

The estimation of these risk parameters incorporates all available relevant information, not only historical and current loss data, but also reasonable and supportable forward-looking information reflected by the future expectation factors. This information includes macroeconomic factors (unemployment rate, inflation rate) and forecasts of future economic conditions.

Significant changes in risk parameters could affect the estimated amount of ECL.

See Notes 17 and 29 for further information.

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4. BUSINESS ACQUISITIONS

Unless stated otherwise, all business combinations disclosed were accounted for by applying the acquisition method. Goodwill recognized as a result of the acquisitions is not expected to be deductible for income tax purposes.

Acquisitions and disposal in 2022

Acquisition of VisionLabs – In February 2022, the Group acquired a 100% ownership interest in VisionLabs B.V. (“VisionLabs”), leading provider of computer vision and machine learning solutions, for total consideration of RUB 6,556 million. The acquisition was aimed at reinforcement of the Group’s artificial intelligence product portfolio in the computer vision space, and enhancing the potential of the Group’s digital ecosystem. The purchase price constitutes a cash payment of RUB 5,276 million, deferred payment of RUB 659 million paid later in 2022 and contingent consideration of RUB 621 million. Contingent consideration was based on certain performance criteria for the periods starting 2022 and ending 2024.

Acquisition of Gulfstream – In April 2022, the Group acquired a 58.38% ownership interest in Gulfstream Security Systems JSC (“Gulfstream”), one of Russia’s leading providers of digital safeguard systems for residential households, automobiles, and commercial real estate, for total consideration of RUB 1,999 million in cash. The acquisition was aimed at expanding the Group’s Smart Home business vertical. The Group has acquired call and written put options to purchase the remaining 41.62% stake, exercisable starting 2025 based on the financial results of Gulfstream.

Acquisition of Bronevik – In July 2022, the Group acquired a 100% ownership interest in LLC “Company Bronevik” and LLC “Bronevik Online” (together – “Bronevik”), one of the market leaders in online hotels booking. The acquisition was aimed at developing the Group’s new business line, MTS Travel, in the tourism industry. Total consideration of RUB 4,000 million was paid in cash.

Acquisition of Webinar – In July 2022, the Group acquired a 75.5% ownership interest in LLC “Webinar” and LLC “Webinar Technologies” (together – “Webinar”), developer and provider of videoconferencing solutions and video services for corporations, for total consideration of RUB 2,095 million in cash. The acquisition was aimed at complementing the Group’s ecosystem of B2B services and development of a single universal application for video calls and conferences further integrated with videoconferencing services. The Group has acquired call and written put options to purchase the remaining 24.5% stake. In September 2022, options were partly exercised for RUB 328 million and the Group’s ownership interest in Webinar increased to 84.25%. The remaining put and call options are exercisable in 2024 and 2025 based on the financial results of Webinar.

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The purchase price allocations for acquired companies as at the dates of acquisitions were as follows:

	VisionLabs final	Gulfstream preliminary	Bronevik preliminary	Webinar preliminary
Goodwill	4,320 ⁽¹⁾	1,889 ⁽³⁾	3,898 ⁽⁵⁾	2,609 ⁽⁶⁾
Customer base	2,333 ⁽²⁾	2,114 ⁽⁴⁾	—	—
Other intangible assets	736	332	38	452
Property, plant and equipment	81	279	8	12
Other non-current assets	31	289	41	84
Current assets	319	2,609	1,266	57
Cash and cash equivalents	326	24	197	58
Current liabilities	(816)	(3,055)	(1,416)	(187)
Put option to purchase NCI	—	(1,877)	—	(986)
Non-current liabilities	(774)	(605)	(32)	(4)
Total consideration	6,556	1,999	4,000	2,095
Including:				
Fair value of contingent consideration	621	—	—	—
Deferred payment	659	—	—	—
Cash paid	5,276	1,999	4,000	2,095

(1) The goodwill is attributable to the expected synergies arising from the acquisition and allocated to the “Artificial Intelligence” operating segment (Note 5).

(2) Amortized over the term of up to 7 years.

(3) The provisional goodwill is attributable to the expected synergies arising from the acquisition and allocated to the “Gulfstream” operating segment (Note 5).

(4) Amortized over the term of 5 to 8 years.

(5) The provisional goodwill is attributable to the expected synergies arising from the acquisition and allocated to the “Travel” operating segment (Note 5).

(6) The provisional goodwill is attributable to the expected synergies arising from the acquisition and allocated to the “Telecom” operating segment (Note 5).

Disposal of NVision Czech Republic a.s. – In October 2022, the Group disposed of 100% in NVision Czech Republic a.s., which constituted the part of “Other” reportable segment (Note 5). The details of the disposal are disclosed in Note 10.

Acquisitions in 2021

Acquisition of Zelenaya Tochka – In April 2021, the Group increased its stake in Achemar Holdings Limited, owner of the operational companies of “Zelenaya Tochka” Group, to 100% and obtained control over the entity to expand its regional footprint. Prior to the acquisition, the Group owned 51% in Achemar Holdings Limited and accounted for the investment as the investment in joint venture (Note 15). “Zelenaya Tochka” Group includes fixed-line operators in Stavropol and Tambov regions. The purchase price constituted a cash payment of RUB 1,512 million paid in April 2021 and deferred payment of RUB 7 million.

Acquisition of Credit Consulting – In April 2021, the Group acquired a 100% ownership interest in LLC “Credit Consulting”, a credit broker. The purchase price constituted a cash payment of RUB 10 thousand paid in May 2021 and contingent consideration at fair value of RUB 60 million, payable in 5-year period based on operating performance targets.

Acquisition of MTT – In June 2021, the Group acquired a 100% ownership interest in OJSC “Multiregional TransitTelecom” (“MTT”), a provider of intelligent connectivity solutions for businesses, to expand its connectivity services portfolio. The purchase price constituted a cash payment of RUB 3,680 million paid in June 2021, transfer of receivables from former owners offset against the purchase price for RUB 1,958 million and deferred payment of RUB 160 million.

Acquisition of Energy Group – In June 2021, the Group acquired a 100% ownership interest in LLC “GDTs Energy Group” (“GreenBush”), the operator of the GreenBush data center in Technopolis special economic area, to use the facility’s additional capacity to offer colocation and cloud solutions to customers as well as to facilitate the Group’s own compute and storage needs. The purchase price constituted a cash payment of RUB 5,200 million paid in July 2021.

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The purchase price allocations for acquired companies as at the dates of acquisitions were as follows:

	<u>Zelenaya Tochka</u>	<u>GreenBush</u>	<u>Credit Consulting</u>
Goodwill	1,353 ⁽¹⁾	—	46 ⁽²⁾
Customer base	320 ⁽³⁾	—	—
Trademark	12	—	—
Other intangible assets	24	1	4
Property, plant and equipment	623	5,171	—
Other non-current assets	43	17	—
Current assets	1,417	84	18
Cash and cash equivalents	152	9	3
Current liabilities	(725)	(26)	(11)
Non-current liabilities	(118)	(56)	—
Total consideration	3,101	5,200	60
Including:			
Fair value of contingent consideration	—	—	60
Fair value of previously held interest	1,582	—	—
Deferred payment	7	—	—
Cash paid or payable	1,512	5,200	—

(1) The goodwill is attributable to the expected synergies arising from the acquisition and allocated to the “Telecom” operating segment (Note 5).

(2) The goodwill is attributable to the expected synergies arising from the acquisition and allocated to the “Fintech” operating segment (Note 5).

(3) Amortized over the term of 5 years.

The purchase price allocation of MTT was not finalized as of the date the 2021 financial statements were authorised for issue as the Group had not completed the valuation of the individual assets of the company acquired. The Group’s consolidated financial statements as of December 31, 2021 reflected the allocation of the purchase price based on a preliminary fair value assessment of the assets acquired and liabilities assumed. In 2022 the Group finalized the valuation of assets of MTT and the acquisition date fair value of the assets changed since the preliminary calculations. The following table summarizes the purchase price allocation for MTT as of December 31, 2022:

	<u>Preliminary amounts</u>	<u>Measurement period adjustments</u>	<u>Final amounts</u>
Goodwill	2,984 ⁽¹⁾	(61)	2,923 ⁽¹⁾
Customer base	827 ⁽²⁾	(539)	288 ⁽²⁾
Trademark	530	(436)	94
Other intangible assets	590	238	828
Property, plant and equipment	588	821	1,409
Other non-current assets	254	—	254
Current assets	3,056	—	3,056
Cash and cash equivalents	340	—	340
Current liabilities	(2,656)	—	(2,656)
Non-current liabilities	(715)	(23)	(738)
Total consideration	5,798	—	5,798
Including:			
Fair value of offset financial assets	1,958	—	1,958
Deferred payment	160	—	160
Cash paid or payable	3,680	—	3,680

(1) The goodwill is attributable to the expected synergies arising from the acquisition and allocated to the “Telecom” operating segment.

(2) Amortized over the term of up to 4 years.

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Acquisitions under common control, accounted for directly in equity

Acquisition of LLC Sistema Capital (“Sistema Capital”) – In September 2021, the Group acquired the remaining 70% stake in the investment services company Sistema Capital from subsidiaries of Sistema, for total consideration of RUB 3,500 million. Acquisition of Sistema Capital enables the Group to enhance its retail financial services portfolio, adding a comprehensive set of investment services.

The following table summarizes the details of acquisition of subsidiary under common control finalized in 2021:

Acquired company	Consideration paid net of cash acquired*	Cash acquired	Assets acquired other than cash	Liabilities assumed
Sistema Capital	3,474	26	1,185	90

* Included in consolidated statement of cash flows within cash flows from financing activities as transactions with entities under common control

Disposal of STS-Ukraine

In February 2021, the Group sold its 100% stake in LLC “Sitronics Telecom Solutions Ukraine” (“STS-Ukraine”) for RUB 52 million.

As of the date of disposal, the carrying amounts of assets and liabilities pertaining to the disposal group and reconciliation of the loss on disposal were as follows:

Current assets	282
Non-current assets	51
Total assets	333
Current liabilities	(275)
Non-current liabilities	(36)
Total liabilities	(311)
Accumulated other comprehensive income	83
Total consideration	(52)
Loss on disposal	53

Acquisition in 2020

Acquisition of Stopol – In June 2020, the Group acquired a 100% ownership interest in LLC “Stopol Auto” and LLC “Koagent Rus” (jointly referred as “Stopol”, later renamed to “MTS Auto”), wholesalers of auto parts and multimedia devices. The purchase price constituted a cash payment of RUB 312 million paid in July 2020 and a contingent consideration. This acquisition allowed the Group to enter into the market of the smart multimedia systems for cars.

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The purchase price allocation for Stopol as at the date of acquisition was presented as follows:

	<u>Stopol</u>
Goodwill⁽¹⁾	282
Other non-current assets	2
Current assets	230
Cash and cash equivalents	69
Current liabilities	<u>(262)</u>
Total consideration	<u>321</u>
<i>Including:</i>	
Fair value of contingent consideration	9
Cash paid	<u>312</u>

- (1) The goodwill is attributable to the expected synergies resulted from the acquisition and allocated to the “MTS Auto” operating segment within “Other” category in reportable segments.

None of the final or provisional amounts of goodwill recognized is expected to be deductible for income tax purposes.

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According to the terms of the purchase agreements, deferred payments and contingent consideration payable by the Group could be reduced by the amount of any losses incurred by the Group in respect of any tax or other claims relating to the pre-acquisition period. In case the amount of the losses incurred exceeds the amount of deferred payment, the seller has indemnified the Group for the amounts in excess. The following table summarizes the movement in deferred payment and contingent consideration liabilities and related indemnification assets for the years ended December 31, 2022, 2021 and 2020:

Indemnification asset/ (Liability on deferred payment/ contingent consideration)	VisionLabs contingent consideration	IT-Grad contingent consideration	Stopol contingent consideration	Zelenaya Tochka deferred payment	Credit Consulting contingent consideration	MTT deferred payment
January 1, 2020	—	(907)	—	—	—	—
Initial recognition of deferred payment/contingent consideration	—	—	(40)	—	—	—
Less: Provision for tax liabilities related to pre-acquisition period	—	—	26	—	—	—
Reversal of tax provision	—	—	(10)	—	—	—
December 31, 2020	—	(907)	(24)	—	—	—
Initial recognition of deferred payment/contingent consideration	—	—	—	(7)	(60)	(160)
Less: Provision for tax liabilities related to pre-acquisition period	—	—	3	—	—	—
Revaluation	—	542	—	—	(1)	—
Payment	—	365	—	7	—	—
December 31, 2021	—	—	(21)	—	(61)	(160)
Initial recognition of deferred payment/contingent consideration	(621)	—	—	—	—	—
Reversal of tax provision	—	—	(8)	—	—	—
Revaluation	(54)	—	(11)	—	(4)	—
Payment	—	—	40	—	—	160
December 31, 2022	(675)	—	—	—	(65)	—

Pro forma results of operations – The following pro forma financial data for the years ended December 31, 2022, 2021 and 2020 give effect to the business combinations as if they had been completed at the beginning of the year.

	2022	2021	2020
	VisionLabs, Webinar, Bronevik, Gulfstream	MTT, Zelenaya Tochka, GreenBush, Credit Consulting, Sistema Capital	STOPOL
Pro forma:			
Revenue	543,321	537,867	495,273
Profit for the year	33,584	64,399	62,079

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The pro forma information is based on various assumptions and estimates. The pro forma information is neither necessarily indicative of the operating results that would have occurred if the Group acquisitions had been consummated as of January 1, 2020, 2021 or 2022, nor is it necessarily indicative of future operating results. The pro forma information does not give effect to any potential revenue enhancements or cost synergies or other operating efficiencies that could result from the acquisitions. The actual results of operations of these companies are included into the consolidated financial statements of the Group only from the respective dates of acquisition and are presented as follows:

	2022	2021	2020
	VisionLabs, Webinar, Bronevik, Gulfstream	MTT, Zelenaya Tochka, GreenBush, Credit Consulting, Sistema Capital	STOPOL
Revenue	4,707	5,341	355
(Loss)/profit for the year	(489)	25	25

5. SEGMENT INFORMATION

Management (chief operating decision maker) analyzes and reviews results of the Group's operating segments separately based on the nature of products and services, regulatory environments and geographic areas. Management of the Group evaluates the performance of each segment based on revenue and operating profit, excluding depreciation and amortization measured on the basis consistent with IFRS consolidated financial statements (the relevant financial indicator called OIBDA). Management does not analyze assets or liabilities by reportable segments.

The Group identified the following reportable segments:

Telecom: represents the results of mobile and fixed line operations, which encompasses services rendered to customers across the regions of Russia, including voice and data services, transmission, broadband, pay-TV and various value-added services and retail operations.

Fintech: represents the results of banking services, investment management and services of credit broker, rendered to customers across regions of Russia.

In 2021 management of the Group has changed the composition of operating segments, by dividing operations of the Group's subsidiary MGTS (previously constituted Moscow Fixed Line reportable segment) into two operating segments. Operations of the established "MGTS service" operating segment comprised primarily maintenance and development of fixed-line network infrastructure. The segment generates revenues mainly from granting own network infrastructure in rent. Operations of the established component "MGTS commercial" include client relationships and related fixed-line services, generating revenue from existing subscribers. The operating and financial results of "MGTS commercial" are reviewed jointly with "Russia convergent" segment, in line with focus on convergent products development, while the results of "MGTS service" are monitored separately. Consequently, "MGTS service" represents a separate operating segment. "MGTS commercial" and "Russia convergent" are presented as one operating segment – "Telecom".

Financial results of operating segment "MTS Bank" were supplemented with operations of investment management and credit broker services in connection with acquisition of LLC Sistema Capital and acquisition of Credit Consulting. New operating segment was called "Fintech".

At the end of 2020 the management's change of approach for reviewing of Group's operational results led to separation of two new segments – Cloud and WASD. Cloud represents operational results of Group MTS business aimed at cloud services. WASD is the MTS streaming platform. Cloud and WASD were moved from "Telecom" operating segment to the "Other" category.

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On October 30, 2020, the Group disposed of 100% share in JSC “Nvision Group”, which provided integration services, as well as the sales of software, and constituted “System Integrator” operating segment included in “Other” reportable segment.

On October 24, 2022, MTS disposed of a plant that produces and supplies Tier 2 electronic components for the automotive industry as well as microelectronic components. NVision Czech Republic a.s. was part of “Czech Republic” operating segment included in “Other” reportable segment.

In order to reflect changes in segments’ composition, segment disclosures for 2021 and 2020 were retrospectively restated.

“Bronevik”, “Gulfstream” and “VisionLabs” – groups of companies acquired in 2022 (see Note 4) constituted new operating segments “Travel”, “Gulfstream” and “Artificial intelligence”, respectively. Operating segment “Artificial intelligence” includes financial results of MTS Artificial Intelligence, the Group’s subsidiary.

The “Other” category does not constitute a reportable segment. It includes the results of a number of other operating segments that do not meet the quantitative thresholds for separate reporting, such as Travel, Gulfstream, Artificial intelligence, Armenia, MGTS Service, Cloud and others.

The intercompany eliminations presented below primarily consist of sales transactions between segments conducted under the normal course of operations.

Financial information by reportable segments is presented below:

Year ended December 31, 2022:

	Telecom	Fintech	Total of reportable segments	Other	HQ and elimination	Consolidated
Revenue						
External customers	432,766	64,676	497,442	44,220	87	541,749
Intersegment	5,596	3,763	9,359	21,559	(30,918)	—
Total revenue	438,362	68,439	506,801	65,779	(30,831)	541,749
OIBDA	199,010	6,355	205,365	28,062	(9,108)	224,319
Depreciation and amortization						(114,393)
Impairment of non-current assets						(489)
Operating profit						109,437

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Year ended December 31, 2021:

	<u>Telecom</u>	<u>Fintech</u>	<u>Total of reportable segments</u>	<u>Other</u>	<u>HQ and elimination</u>	<u>Consolidated</u>
Revenue						
External customers	444,201	47,545	491,746	36,079	96	527,921
Intersegment	4,138	2,770	6,908	19,623	(26,531)	—
Total revenue	448,339	50,315	498,654	55,702	(26,435)	527,921
OIBDA	204,125	8,593	212,718	24,700	(8,461)	228,957
Depreciation and amortization						(110,962)
Impairment of non-current assets						10
Operating profit						118,005

Year ended December 31, 2020:

	<u>Telecom</u>	<u>Fintech</u>	<u>Total of reportable segments</u>	<u>Other</u>	<u>HQ and elimination</u>	<u>Consolidated</u>
Revenue						
External customers	425,059	34,308	459,367	30,372	92	489,831
Intersegment	4,260	2,463	6,723	13,079	(19,802)	—
Total revenue	429,319	36,771	466,090	43,451	(19,710)	489,831
OIBDA	200,908	3,356	204,264	18,116	(7,611)	214,769
Depreciation and amortization						(100,143)
Impairment of non-current assets						(2,023)
Operating profit						112,603

The consolidated operating profit is reconciled to the consolidated profit before tax on the face of the consolidated statement of profit or loss.

Financial information by geographic area is presented below:

Revenue	<u>2022</u>	<u>2021</u>	<u>2020</u>
Russia	533,794	520,671	481,536
Other	7,955	7,250	8,295
Total revenue	541,749	527,921	489,831
Non-current assets⁽¹⁾	December 31,		
	<u>2022</u>	<u>2021</u>	
Russia	464,979	443,023	
Other	12,773	11,178	
Total non-current assets:	477,752	454,201	

⁽¹⁾ Comprises property, plant and equipment, goodwill and other intangible assets.

Revenues from external customers and non-current assets are allocated to individual countries based on location of operations. No single customer represents 10% or more of the consolidated revenue.

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Disaggregation of revenue:

Year ended December 31, 2022:	Telecom	Fintech	Total of reportable segments	Other	HQ and elimination	Consolidated
Revenue						
<i>Connectivity services</i>	387,598	269	387,866	36,417	87	424,370
<i>Sales of goods</i>	42,809	—	42,809	922	—	43,731
<i>Fintech services</i>	—	63,543	63,543	—	—	63,543
<i>Other services</i>	2,359	864	3,223	6,882	—	10,105
External Customers	432,766	64,676	497,441	44,221	87	541,749
Intersegment	5,596	3,763	9,359	21,559	(30,918)	—
Total revenue	438,362	68,439	506,800	65,780	(30,831)	541,749
Thereof:						
Recognised over time	389,957	42,990	454,632	43,299	87	498,018
Recognised at point of time	42,809	21,686	42,809	922	—	43,731
	432,765	64,676	497,441	44,221	87	541,749
Year ended December 31, 2021:						
	Telecom	Fintech	Total of reportable segments	Other	HQ and elimination	Consolidated
Revenue						
<i>Connectivity services</i>	375,719	198	375,917	29,612	96	405,625
<i>Sales of goods</i>	67,290	—	67,290	1,683	—	68,973
<i>Fintech services</i>	—	46,632	46,632	—	—	46,632
<i>Other services</i>	1,192	715	1,907	4,784	—	6,691
External Customers	444,201	47,545	491,746	36,079	96	527,921
Intersegment	4,138	2,770	6,908	19,623	(26,531)	—
Total revenue	448,339	50,315	498,654	55,702	(26,435)	527,921
Thereof:						
Recognised over time	376,911	28,225	424,456	34,396	96	458,948
Recognised at point of time	67,290	19,320	67,290	1,683	—	68,973
	444,201	47,545	491,746	36,079	96	527,921
Year ended December 31, 2020:						
	Telecom	Fintech	Total of reportable segments	Other	HQ and elimination	Consolidated
Revenue						
<i>Connectivity services</i>	363,131	166	363,297	24,705	92	388,094
<i>Sales of goods</i>	61,230	—	61,230	1,593	—	62,823
<i>Fintech services</i>	—	33,773	33,773	23	—	33,796
<i>Other services</i>	698	369	1,067	4,051	—	5,118
External Customers	425,059	34,308	459,367	30,372	92	489,831
Intersegment	4,260	2,463	6,723	13,079	(19,802)	—
Total revenue	429,319	36,771	466,090	43,451	(19,710)	489,831
Thereof:						
Recognised over time	363,829	24,902	398,137	28,779	92	427,008
Recognised at point of time	61,230	9,406	61,230	1,593	—	62,823
	425,059	34,308	459,367	30,372	92	489,831

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6. REVENUE FROM CONTRACTS WITH CUSTOMERS

Revenue is recognized to the extent that the Group has delivered goods or rendered services under an agreement, the amount of revenue can be reliably measured and it is probable that the economic benefits associated with the transaction will flow to the Group. Revenue is measured at the fair value of the consideration receivable, exclusive of value added taxes and discounts.

The Group obtains revenue from providing mobile and fixed telecommunication services (access charges, voice and video calls, messaging, interconnect fees, fixed and mobile broadband, tv and musical content and connection fees), financial services, integration services, cloud services, tickets distribution, as well as selling equipment, accessories and software. Products and services may be sold separately or in bundle packages. The most significant part of revenue relates to prepaid contracts.

Revenue for access charges, voice and video calls, rendering of cloud services, messaging, interconnect fees and fixed and mobile broadband is recognized as services are rendered. This is based upon either usage (minutes of traffic processed, volume of data transmitted) or passage of time (monthly subscription fees). Revenue from the sale of prepaid credit is deferred until such time as the customer consumes the services or the credit expires.

Revenue from the provision of TV and music content is recognized as the Group renders the service and is recorded either at the gross amount billed to the customers or in the amount of commission fee receivable by the Group.

Revenue from commission services for tickets distribution is recognized immediately when the related entertainment event has occurred.

Revenue from sales of goods (mainly mobile handsets, other mobile devices, software licences) is recognized when the significant risks and rewards of ownership have been transferred to the customer.

For bundled packages, the Group accounts for individual products and services separately if they are distinct, which means that a product or service, as well as the customer benefit, is separately identifiable from other items in the bundled package and a customer can benefit from it. The arrangement consideration is allocated to each separate product and service, based on its relative fair value. The determined fair value of individual elements is generally based on prices at which the deliverable is regularly sold on a stand-alone basis after considering any appropriate volume discounts.

The Group provides retrospective volume discounts under roaming agreements with international and local mobile operators. To estimate the variable consideration in relation to these discounts, the Group uses original data traffic adjusted on a monthly basis to reflect newly-available information. The resulting liability for the expected future discounts is recognized as a reduction of revenue within trade and other payables in the accompanying consolidated statement of financial position.

For contracts that permit customers to return acquired mobile devices, the amount of recognized revenue is adjusted for expected product return or refunds, which are estimated based on the basis of historical data. The respective refund liability is recorded as provision in the accompanying consolidated statement of financial position.

Revenue from the provision of financial services mainly relates to interest bearing assets of MTS Bank. Such revenue is recognized on an accrual basis using the effective interest method. Loan origination fees are deferred together with the related direct costs and are recognised as an adjustment to the effective interest rate of the loan. Commission revenue which is also a significant part of MTS Bank revenue is either recognized at the moment the related operation occurs, or during the period of customer contract duration.

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Revenue from construction services mainly relates to project type contracts and is determined by reference to the stage of completion of each respective projects. The stage of completion is calculated using the input method – based on the proportion of costs incurred for work performed to date to the estimated total contract costs. Revenue is recognized cumulatively as total revenue under the project multiplied by percentage of completion as at reporting date. When it is probable that total contract costs will exceed the total contract revenue, the expected loss is recognized as an expense immediately.

Contract balances

Contract balances include trade receivables related to the recognized revenue, contract assets and contract liabilities.

Trade receivables represent an unconditional right to receive consideration (primarily in cash).

Contract assets represent accrued revenues that have not yet been billed to customers due to certain contractual terms other than the passage of time. This is the case in a bundled offering which combines the sale of a mobile device and the provision of mobile services for a fixed-period, where the mobile device is invoiced at a reduced price leading to the reallocation of a portion of amounts invoiced for mobile communication services to the supply of the mobile phone. The excess of the amount allocated to the mobile phone over the price invoiced is recognized as a contract asset and is thus transferred to trade receivables as the service is invoiced. The other part of contract assets relates to the Group's rights to consideration for work completed but not yet billed for construction services projects.

Contract liabilities represent amounts paid by customers to the Group before receiving the goods and/or services promised in the contract. This is the case for advances received from customers or amounts invoiced or amounts invoiced and paid for goods or services that are yet to be transferred.

The following table provides information about receivables, contract assets and contract liabilities from contracts with customers:

	December 31,	
	2022	2021
Receivables	30,012	32,361
Contract assets	96	189
Total assets	30,108	32,550
Less current portion	(29,213)	(20,638)
Total non-current assets	895	11,912
Contract liabilities:		
<i>Mobile and fixed telecommunication services</i>	(25,499)	(22,064)
<i>Other services</i>	(1,252)	(1,056)
<i>Loyalty programme</i>	(455)	(451)
Total liabilities	(27,206)	(23,571)
Less current portion	26,082	22,594
Total non-current liabilities	(1,124)	(977)

PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS***(Amounts in millions of Russian Rubles unless otherwise stated)*

Changes in the contract liabilities balances during the period are as follows:

	<u>2022</u>	<u>2021</u>
Balance as of January 1	(23,571)	(21,842)
Revenue recognised that was included in the contract liability balance at the beginning of the period	22,687	18,712
Increase due to cash received, excluding amount recognised as revenue during the period	(25,657)	(20,441)
Aquisition of Gulfstream, Bronevik and Webinar	(665)	—
Balance as of December 31	(27,206)	(23,571)

The Group expects to recognize revenue related to performance obligations that were unsatisfied (or partially unsatisfied) as of December 31, 2022 as follows:

	<u>2023</u>	<u>2024-2028</u>	<u>2029-2033</u>	<u>Total</u>
Connectivity services	24,375	1,097	27	25,499
Other services	1,252	—	—	1,252
Loyalty programme	455	—	—	455

The total transaction price assigned to unsatisfied performance obligations is presented below:

	<u>2023</u>	<u>2024-2028</u>	<u>2029-2033</u>	<u>After 2033</u>	<u>Total</u>
Connectivity services	812	2,130	210	112	3,264

Cost to obtain and fulfill a contract

The Group capitalizes certain incremental costs incurred in acquiring or fulfilling a contract with a customer if the management expects these costs to be recoverable.

The Group uses a practical expedient from IFRS 15 which allows to expense contract costs as incurred when the expected contract duration is one year or less.

Costs of acquiring a contract include commissions paid to a third-party distributors as well as the associated remuneration of the Group's commercial employees for obtaining a contract with a customer with the expected duration of more than twelve months. These costs are amortized on a straight-line basis over the average life of a long-lived subscriber.

Costs to fulfill a contract mainly relate to costs of equipment transferred to the subscribers required for the provision of services. These costs are amortized on a straight-line basis generally for the period of average subscriber life.

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As of December 31, 2022 and 2021 the balances of cost to obtain and fulfill contracts capitalized by the Group amounted to:

	December 31,	
	2022	2021
Cost to obtain contracts		
Gross book value	15,589	14,633
Accumulated amortization	(7,080)	(6,736)
Cost to fulfill contracts		
Gross book value	4,967	5,240
Accumulated amortization	(2,686)	(2,279)

Amortization expense related to cost to obtain and fulfill contracts recognized for the years ended December 31, 2022, 2021 and 2020 amounted RUB 4,457 million, RUB 4,076 million and RUB 3,819 million, respectively. There was no impairment loss relating to the costs capitalized.

7. SELLING, GENERAL AND ADMINISTRATIVE EXPENSES

Selling, general and administrative expenses for the years ended December 31, 2022, 2021 and 2020 comprised the following:

	2022	2021	2020
Salaries and social contributions	63,181	54,149	48,737
Advertising and marketing expenses	14,145	12,539	10,652
General and administrative expenses	8,961	8,050	7,498
Dealers commission	4,434	3,434	3,385
Universal service fund	3,887	3,813	3,670
Consulting expenses	3,464	3,614	3,409
Cash collection commission	3,130	3,533	3,645
Taxes other than income tax	2,492	1,062	1,844
Other personnel expenses	2,431	1,845	1,539
Utilities and maintenance	1,885	2,550	2,255
Other	1,391	1,446	1,168
Total	109,401	96,035	87,802

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8. FINANCE INCOME AND COSTS

Finance income and costs for the years ended December 31, 2022, 2021 and 2020 comprised the following:

	2022	2021	2020
Interest expense:			
– Loans and notes	45,838	29,430	28,174
– Amortization of debt issuance costs	125	109	97
– Lease obligations	12,791	11,816	12,272
– Provisions: unwinding of discount	152	165	138
Total interest expense	58,906	41,520	40,681
(Gain) loss on financial instruments	—	—	373
Other finance costs	(72)	140	84
Total finance costs	58,834	41,660	41,138
Less: amounts capitalized on qualifying assets ⁽¹⁾	(850)	(534)	(426)
Debt modification/derecognition and other loss/(gain)	394	216	1,366
Finance costs	58,378	41,342	42,078
Finance income on loans and receivables:			
– Interest income on bank deposits	1,341	1,468	2,282
– Interest income on loans issued	349	52	17
– Other finance income	84	998	1,138
Finance income	1,774	2,518	3,437
Net finance costs	56,604	38,824	38,641

⁽¹⁾ The annual weighted average capitalization rates of 9.2%, 6.8% and 6.9% were used to determine the amount of capitalized interest for the years ended December 31, 2022, 2021 and 2020, respectively.

9. OTHER NON-OPERATING (INCOME)/EXPENSES

Other non-operating (income)/expenses for the years ended December 31, 2022, 2021 and 2020 comprised the following:

	2022	2021	2020
Net forex exchange (gain) / loss	(3,404)	560	10,347
Loss/(gain) arising on derivatives	3,616	345	(13,443)
Net gain/(loss) arising on financial assets measured at FVTPL	2,287	(139)	(1,893)
Net gain/(loss) arising on financial liabilities measured at FVTPL	204	—	(53)
Impairment of investments and loans given	—	—	1,392
Other	338	(241)	553
Total	3,041	525	(3,097)

10. DISCONTINUED OPERATIONS

Vodafone Ukraine - on November 22, 2019, the Group entered into a sale agreement to dispose of Preludium B.V., 100% owner of PJSC “Vodafone Ukraine” and its subsidiaries, which carried out the Group’s operations in Ukraine and constituted “Ukraine” reporting segment. The disposal was completed on December 3, 2019, and the results of operations in Ukraine were reported as discontinued operations in the consolidated statements of profit or loss.

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According to the terms of the sale agreement, an additional consideration based on the performance of the discontinued operations in Ukraine was receivable. The Group received the first part of the additional contingent consideration in the amount of RUB 1,234 million in March 2021. The Group recognized contingent consideration receivable of RUB 1,867 million as of December 31, 2021. In 2022 following uncertainty over the receipt of the consideration and economic volatility and sanctions in Russia as disclosed in Note 33, the Group created expected credit allowance for the total amount of receivable and its value decreased to nil.

The results of the discontinued operation in Ukraine, which have been included in the profit for the year, were as follows:

	For the year ended December 31,		
	2022	2021	2020
Profit on disposal	—	—	2,101
Currency revaluation gain/(loss) on deferred consideration	—	—	154
Earn-out revaluation - fair value measurement	(1,867)	377	645
Earn-out revaluation - Currency revaluation gain/(loss)	—	93	(27)
Net (loss)/income attributable to discontinued operations	(1,867)	470	2,873

Cash flows from discontinued operation were presented as follows:

	For the year ended December 31,	
	2021	2020
Net cash provided by investing activities	1,234	2,998

Nvision Group - In October 2020, the Group disposed to Sistema 100% share in JSC “Nvision Group”, which provided integration services, as well as the sales of software, and was included in “Other” reportable segment. The disposal was completed on October 30, 2020, the results of operations of “System Integrator” operating segment were reported as discontinued operations in the accompanying consolidated statements of profit or loss. The consolidated statements of financial position and consolidated statements of cash flows for all periods presented were not retrospectively restated on discontinued operations. Cash consideration in amount of RUB 369 million was settled in late 2020.

As of October 30, 2020, the carrying amounts of discontinued operation net assets and reconciliation of the loss on disposal were as follows:

Property, plant and equipment	95
Intangible assets	245
Other non-current assets	220
Other current assets	2,912
Cash and cash equivalents	285
Non-current liabilities	(98)
Current liabilities	(3,281)
Accumulated other comprehensive loss	3
Total consideration	(369)
Satisfied by:	
Cash and cash equivalents	(369)
Loss on disposal	11
Net cash inflow arising on disposal:	84
Cash consideration received	369
Less: cash and cash equivalents disposed of	(285)

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NVision Czech Republic a.s. - In October 2022, the Group disposed of 100% in NVision Czech Republic a.s., which was included in "Other" reportable segment. The disposal was completed on October 24, 2022, and the results of operations of NVision Czech Republic a.s. were reported as discontinued operations in the accompanying consolidated statements of profit or loss for the years ended December 31, 2022, 2021 and 2020. The accompanying statements of financial position and statements of cash flows were not retrospectively restated. The fair value of consideration, receivable in five-year term, amounted to RUB 453 million, of which RUB 50 million were received in 2022.

As of October 24, 2022, the carrying amounts of discontinued operation net assets and reconciliation of the loss on disposal were as follows:

Property, plant and equipment	225
Intangible assets	32
Other non-current assets	371
Other current assets	2,170
Cash and cash equivalents	80
Non-current liabilities	(103)
Current liabilities	(1,547)
Accumulated other comprehensive loss	794
Other	(202)
Less: Fair value of consideration	(453)
Loss on disposal	1,367
Net cash outflow arising on disposal:	(30)
Cash consideration received	50
Less: cash and cash equivalents disposed of	(80)

The results of the discontinued operations of NVision Group and NVision Czech Republic a.s. were included in the (loss)/profit from discontinued operations in the consolidated statements of profit or loss as follows:

	For the year ended December 31,				
	2022	2021	2020		
	<i>NVision Czech Republic a.s.</i>	<i>NVision Czech Republic a.s.</i>	<i>NVision Czech Republic a.s.</i>	<i>NVision Group</i>	Total
Revenue	6,004	6,482	5,096	10,051	15,147
Expenses	(5,802)	(6,117)	(4,845)	(11,293)	(16,138)
Profit/(Loss) before tax	202	365	251	(1,242)	(991)
Attributable tax income/(expense)	32	(43)	(72)	(1,003)	(1,075)
Profit/(Loss) for the period	234	322	179	(2,245)	(2,066)
Loss on disposal	(1,367)	—	—	(11)	(11)
Consideration revaluation - fair value measurement	4	—	—	—	—
Consideration revaluation - Currency revaluation gain/(loss)	78	—	—	—	—
Net (loss)/income attributable to discontinued operations	(1,051)	322	179	(2,256)	(2,077)

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Cash flows from (used in) discontinued operation are presented as follows:

	For the year ended December 31,				
	2022	2021	2020		
	<i>Nvision Czech Republic a.s.</i>	<i>Nvision Czech Republic a.s.</i>	<i>Nvision Czech Republic a.s.</i>	<i>Nvision Group</i>	Total
Net cash provided by/(used in) operating activities	61	(204)	73	(1,466)	(1,393)
Net cash provided by/(used in) investing activities	(69)	356	(81)	664	583
Net cash provided by/(used in) financing activities	31	(154)	(75)	748	673

11. INCOME TAX

Income taxes of the Group's Russia-incorporated entities have been calculated in accordance with Russian legislation and are based on the taxable profit for the period. The corporate income tax rate in Russia is 20%. The withholding tax rate on dividends paid within Russia is 13%. The foreign subsidiaries of the Group pay withholding taxes in their respective jurisdictions. Deferred tax assets and liabilities are recognized for temporary differences between the carrying amounts of assets and liabilities in the consolidated financial statements and the corresponding tax bases of assets and liabilities that will result in future taxable or deductible amounts. The deferred tax assets and liabilities are measured using the enacted or substantially enacted tax laws and rates applicable to the periods in which the differences are expected to affect taxable income.

Significant components of income tax expense were as follows:

	2022	2021	2020
Current income tax charge	14,480	20,089	15,151
Prior period tax adjustments	159	(173)	(490)
Total current income tax	14,639	19,916	14,661
Deferred tax	(991)	(4,556)	1,394
Income tax expense on continuing operations	13,648	15,360	16,055

Income tax expense on continuing operations excludes the amounts from the discontinued operations of RUB 32 million, RUB (43) million and RUB (1,075) million for the years ended December 31, 2022, 2021 and 2020, respectively, which have been included in profit / (loss) from discontinued operations in the accompanying consolidated statements of profit or loss (Note 10).

The statutory income tax rates in jurisdictions in which the Group operates for 2022, 2021 and 2020 were as follows: Russia – 20%, Armenia – 18%. Since 2022, special tax regime was applicable to some of the Group's software development subsidiaries in Russia, reducing income tax rate to nil. The Russian statutory income tax rate of 20% reconciled to the Group's effective income tax rate for the years ended December 31, 2022, 2021 and 2020 is as follows:

	2022	2021	2020
Statutory income tax rate for the year	20.0 %	20.0 %	20.0 %
Adjustments:			
Expenses not deductible for tax purposes	2.5	0.1	1.3
Prior periods tax effects	0.3	(0.2)	(0.7)
Different tax rate of subsidiaries	(0.6)	(0.8)	(0.8)
Withholding tax on distributed and undistributed profits	4.1	1.6	1.5
Change in fair value of derivative financial instruments	0.5	—	—
Changes in recognized deferred tax assets	—	(0.9)	(0.1)
Other	0.5	(0.3)	(0.4)
Effective income tax rate	27.3 %	19.5 %	20.8 %

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The Group reported the following deferred income tax assets and liabilities in the consolidated statement of financial position:

	2022	2021
Deferred tax assets	11,610	11,683
Deferred tax liabilities	(17,759)	(17,901)
Net deferred tax liabilities	(6,149)	(6,218)

Movements in the deferred tax assets and liabilities for the year ended December 31, 2022 were as follows:

	December 31, 2021	Recognised in profit / loss	Recognised in other compre-hensive income	Effect of acquisitions and disposal	December 31, 2022
Assets / (liabilities) arising from tax effect of:					
Property, plant and equipment	(19,680)	(871)	62	—	(20,489)
Other intangible assets	(5,458)	3,296	—	(260)	(2,422)
Potential distributions from/to Group's subsidiaries/ associates and joint ventures	(2,426)	(1,240)	98	—	(3,568)
Licenses	(1,675)	79	—	—	(1,596)
Customer base	(592)	550	—	(768)	(810)
Capitalization of cost to obtain and fulfill contracts	(1,830)	(86)	—	—	(1,916)
Accrued expenses for services	7,814	872	(8)	(59)	8,619
Write-down of inventories	238	266	3	—	507
Allowance for ECL	3,254	731	5	—	3,990
Lease obligations	31,093	(2,130)	(5)	—	28,958
Right-of-use assets	(26,076)	2,317	7	(1)	(23,753)
Loss carryforward	5,857	(2,379)	2	38	3,518
Contract liabilities	1,606	276	—	—	1,882
Debt modification	(73)	79	—	—	6
Other	1,730	(769)	16	(52)	925
Net deferred tax liability	(6,218)	991	180	(1,102)	(6,149)

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Movements in the deferred tax assets and liabilities for the year ended December 31, 2021 were as follows:

	December 31, 2020	Recognised in profit / loss	Recognised in other compre-hensive income	Effect of acquisitions	December 31, 2021
Assets / (liabilities) arising from tax effect of:					
Property, plant and equipment	(18,250)	(1,352)	32	(110)	(19,680)
Other intangible assets	(6,314)	998	—	(142)	(5,458)
Potential distributions from/ to Group's subsidiaries/ associates and joint ventures	(2,506)	166	(86)	—	(2,426)
Licenses	(1,699)	24	—	—	(1,675)
Customer base	(470)	107	—	(229)	(592)
Capitalization of cost to obtain and fulfill contracts	(1,668)	(162)	—	—	(1,830)
Accrued expenses for services	7,158	588	(1)	69	7,814
Write-down of inventories	413	(178)	—	3	238
Allowance for ECL	2,713	533	3	5	3,254
Lease obligations	29,910	1,181	(1)	3	31,093
Right-of-use assets	(25,686)	(392)	2	—	(26,076)
Loss carryforward	3,961	1,801	—	95	5,857
Contract liabilities	1,430	176	—	—	1,606
Debt modification	(123)	50	—	—	(73)
Other	718	981	31	—	1,730
Net deferred tax liability	(10,413)	4,521 *	(20)	(306)	(6,218)

* In the total amount of RUB 4,521 million, RUB (35) million were reported as discontinued operations in the accompanying consolidated statement of profit or loss for the year ended December 31, 2021.

The Group recognizes deferred income tax on future dividend distributions from subsidiaries associates and joint ventures which are based on the cumulative undistributed earnings of those subsidiaries in accordance with local statutory accounting regulations.

The Group recognizes deferred tax assets in respect of tax losses carried forward to the extent that realization of tax losses against future taxable profit is probable. Deferred tax assets related to tax losses of the Group's subsidiaries are recognized according to the fact that certain tax planning opportunities are available to these subsidiaries that will create taxable profit in the period in which the unused tax losses can be utilized. The amount of the deferred tax asset considered realizable, however, could be remeasured if estimates of future taxable income are changed.

Since 2016 the time limit of prior periods' tax losses carryforward was amended to become perpetual. The federal law 401-FZ also specified that for the fiscal years 2017-2024 the utilisation of prior periods' tax losses should not exceed 50% of the taxable profit.

Unused tax losses, for which deferred tax assets were not recognized in the consolidated statements of financial position as of December 31, 2022 and 2021 amounted to RUB 35,100 million and RUB 40,898 million, respectively.

The Group accrued RUB 109 million and RUB 160 million as of December 31, 2022 and 2021, respectively, as a component of income tax payable in relation to uncertain income tax positions.

A provision is recognised for those matters for which the tax determination is uncertain but it is considered probable that there will be a future outflow of funds to a tax authority. The provisions are measured at the best estimate of the amount expected to become payable.

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The IAS 12 amendments related to assets and liabilities arising from a single transaction were early adopted for the years ended December 31, 2022, 2021 and 2020.

12. EARNINGS PER SHARE

The following table sets forth the computation of earnings per share for the years ended December 31:

	2022	2021	2020
Numerator:			
Profit for the year from continuing operations attributable to the owners of the company	35,492	62,681	60,616
Profit / (loss) for the year from discontinued operations attributable to the owners of the company	(2,918)	792	796
Denominator, in thousands:			
Weighted-average ordinary shares outstanding	1,679,533	1,693,244	1,760,468
Employee stock options	25,883	8,541	1,310
Weighted-average diluted shares outstanding	1,705,416	1,701,785	1,761,778
Earnings per share – basic, Russian Rubles	19.39	37.49	34.88
Basic EPS from continuing operations	21.13	37.02	34.43
Basic EPS from discontinued operations	(1.74)	0.47	0.45
Earnings per share – diluted, Russian Rubles	19.10	37.30	34.86
Diluted EPS from continuing operations	20.81	36.83	34.41
Diluted EPS from discontinued operations	(1.71)	0.47	0.45

13. CASH AND CASH EQUIVALENTS

Cash and cash equivalents represent cash on hand and in bank accounts, as well as short-term bank deposits, which have original maturities of less than three months. Other short-term highly liquid investments are treated as cash equivalents only if they are held for the purpose of meeting short-term cash commitments, are readily convertible to known amounts of cash and are subject to insignificant risk of change in value. Cash and cash equivalents are placed in banks with credit ratings from AAA to B+ according to an independent credit rating agency Expert RA.

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Cash and cash equivalents comprised the following:

	December 31,	
	2022	2021
Cash and cash equivalents at banks and on hand in:		
Russian Rubles	33,912	17,911
Chinese yuan	12,404	15
US Dollars	11,902	1,766
Euro	7,516	2,899
Turkmenian Manat	314	367
Other	2,031	801
Short-term deposits with an original maturity of less than 92 days:		
Russian Rubles	10,213	16,594
Other	—	237
Total cash and cash equivalents	78,292	40,590

14. SHORT-TERM INVESTMENTS

Short-term investments represent investments in loans and time deposits, which have original maturities of longer than 92 days and are repayable in less than twelve months, as well as investment in debt and equity securities. Deposits, loans and debt securities are carried at amortized cost as they are held to collect contractual cash flows in the form of payments of principal and interest. Assets in Sistema Capital trust management as well as mutual funds are carried at fair value through profit and loss (“FVTPL”), as this portfolio of assets is neither held to collect contractual cash flows nor held both to collect contractual cash flows and to sell financial assets.

Short-term investments, carried at amortized cost, are presented net of allowance for expected credit losses (“ECL”).

Loans to customers issued by MTS Bank are presented separately within Bank deposits and loans in the accompanying consolidated statements of financial position.

The Group’s short-term investments comprised the following:

	Category	December 31,	
		2022	2021
Investments in mutual funds (Notes 27)	At FVTPL	12,749	10,719
Assets in Sistema Capital trust management (Notes 27)	At FVTPL	9,426	10,374
Notes / loans	At amortized cost	2,235	6,383
Deposits	At amortized cost	9	1,499
Short-term investments, gross		24,419	28,975
Allowance for ECL		3	(3)
Total short-term investments		24,422	28,972

15. INVESTMENTS IN ASSOCIATES AND JOINT VENTURES

Associates are those entities where the Group exercises significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee but does not equate to control or joint control over those policies.

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Associates are accounted for using the equity method, with exception of associates held by the Group's venture capital subsidiary, MTS Ventures Limited. The Group elected to measure venture investments in associates at fair value through profit or loss in accordance with IFRS 9.

Investments in associates are accounted for using the equity method are recognized at cost at the time of acquisition and adjusted thereafter to recognize the Group's share of the profit or loss and other comprehensive income. The carrying amount of the investment in such entities may include goodwill as the positive difference between the cost of the investment and Group's proportionate share in the fair-values of the entity's identifiable assets and liabilities.

Joint ventures are joint arrangements whereby the parties that have joint control of the arrangement and have rights to the net assets of the arrangement. The Group recognizes its interest in a joint venture where it has joint control of the investment and accounts for that investment using the equity method.

The Group presents its share in profits or losses in associates and joint ventures accounted for using the equity method within operating profit if those interests are viewed as part of Group's core operations. As of December 31, 2022, MTS Belarus, Zelenaya Tochka, Factorin and Monumental Vision were considered as part of the Group's core operating activity. Shares in profits and losses of other Group's associates and joint ventures were presented as non-operating items.

The Group's investments in associates and joint ventures accounted for using the equity and fair value methods in the consolidated statements of profit or loss comprised the following:

	Country of operations	Operating activity	December 31, 2022	December 31, 2021
MTS Belarus	Belarus	telecommunications	5,798	6,265
Zelenaya Tochka	Russia	telecommunications	199	141
YouDo	Russia	classifieds	667	705
Other unquoted companies	Russia		2,611	1,319
Total investments in associates and joint ventures accounted for using the equity method			9,275	8,430
Other unquoted companies accounted for at fair value through profit or loss	Russia		477	305
Total investments in associates			9,752	8,735

Associates and joint ventures accounted for using the equity method and presented in share of the profit of operating associates and joint ventures in the consolidated statements of profit or loss

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MTS Belarus

The reconciliation of summarized financial information of MTS Belarus to the carrying amount of the Group's interest in associate is presented as follows:

	December 31, 2022	December 31, 2021
Assets		
Non-current assets	14,743	19,030
Current assets	11,940	15,386
Liabilities		
Non-current liabilities	(4,497)	(9,062)
Current liabilities	(10,354)	(12,568)
Total identifiable net assets	11,832	12,786
The Group's share in associate	49 %	49 %
The Group's share of identifiable net assets	5,798	6,265
Carrying amount of the Group's interest	5,798	6,265

The composition of the Group's share of income of MTS Belarus is as follows:

	Year ended December 31,		
	2022	2021	2020
Revenue	37,444	39,383	36,121
Net profit for the year	9,863	10,379	10,267
The Group's share of the profit of the associate for the year	4,833	5,086	5,031
Other comprehensive income/(loss) for the year (currency translation adjustment)	(1,541)	183	(397)
Total comprehensive income for the year	8,322	10,562	9,870
The Group's share of total comprehensive income of the associate for the year	4,078	5,175	4,836
Dividends received	(4,545)	(4,034)	(4,212)

Zelenaya Tochka

In February 2020, the Group purchased 51% stakes in Achemar Holdings Limited and Clarkia Holdings Limited, owners of the operational companies of "Zelenaya Tochka" Group, fixed-line operator in multiple regions of Russia. Purchase price comprised of cash payment in total amount of RUB 1,370 million. Purchase conditions included call and put options for the remaining stakes in Achemar Holdings Limited and Clarkia Holdings Limited, and share of purchase price in amount of RUB 166 million related to the fair value of call and put options acquired. The purchase of 51% stake was accounted as investment in joint venture based on the terms of the shareholders' agreement.

In April 2021 the Group performed a step acquisition and obtained control over Achemar Holdings Limited, owner of Stavropol and Tambov subsidiaries of Zelenaya Tochka (Note 4).

As of the acquisition date the Group remeasured the previously held equity interest in Achemar Holdings Limited from RUB 1,166 million to fair value of RUB 1,582 million and recognized the resulting gain of RUB 415 million in the share of the profit in operating associates and joint ventures in the accompanying consolidated statement of profit or loss.

The Group continued to account for its investment in other operational companies of Zelenaya Tochka, owned by Clarkia Holdings Limited, as investment in joint venture.

PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS***(Amounts in millions of Russian Rubles unless otherwise stated)***Factorin**

In July 2021 the Group purchased 51% stake in Amaran Limited, 100% owner of LLC Factorin (“Factorin”), for RUB 867 million. Factorin is the developer and owner of blockchain-based platform for trade finance transactions with a focus on supply chain finance and invoice factoring. The purchase of 51% stake was accounted as investment in joint venture based on the terms of the shareholders’ agreement.

The following table is the aggregate financial information of investments in individually insignificant joint ventures, held by the Group and presented within operating profit in the consolidated statements of profit or loss:

	Year ended December 31,	
	2022	2021
Net (income)/loss for the year	1,362	114
The Group’s share of the (income)/loss of the joint venture for the year	260	32
Total comprehensive income for the year	1,362	114
Gain on remeasurement of previously held interest upon acquisition	—	(415)
Compensation of losses	—	(96)
The Group’s share of total comprehensive (income)/loss of the joint venture for the year	260	(479)

Associates and joint ventures accounted for using the equity method and presented within share of the profit of non-operating associates and joint ventures in the consolidated statements of profit or loss

YouDo

In September 2018, the Group acquired a 13.68% ownership interest in Youdo Web Technologies Limited (YouDo), a Russian online service provider matching freelance labor supply to demand for everyday and business tasks, for a cash contribution of RUB 824 million. In November 2021, the Group increased its share to 14.39%. Though the Group holds less than 20% of the equity interests in YouDo, nevertheless it has significant influence over the investee by means of representation on the investee’s Board of Directors and certain additional rights related to the decision-making process on key issues.

Navitel

In September 2022, the Group acquired a 50.85% ownership interest in Navitel for a cash contribution of RUB 690 million. Navitel is a leading digital navigation solution provider for automotive industries around the world. The Group holds more than 50% of the equity interests in Navitel, it has significant influence over the investee based on its ownership of equity shares, representation on the investee’s Board of Directors.

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The following table is the aggregate financial information of investments in individually insignificant associates and joint ventures, held by the Group and presented within non-operating items in the consolidated statements of profit or loss:

	Year ended December 31,		
	2022	2021	2020
Net (income) for the year	(1,035)	(856)	(1,048)
The Group's share of the (income)/loss of the associate for the year	(209)	(181)	(273)
Other comprehensive income for the year	—	—	—
Total comprehensive (income) for the year	(1,035)	(856)	(1,048)
The Group's share of total comprehensive (income)/loss of the associate for the year	(209)	(181)	(273)

Investments in venture capital associates

The following table is the aggregate financial information of investments in individually insignificant associates measured at fair value through profit or loss in accordance with IFRS 9:

	December 31, 2022	Fair value adjustment	Investment	December 31, 2021
Total investments in associates measured at fair value through profit or loss	477	—	172	305

16. OTHER INVESTMENTS

Other investments consist primarily of long-term deposits, which are repayable in more than a year, loans, debt securities and equity holdings in private companies. Deposits, loans and notes are carried at amortized cost as they are held to collect contractual cash flows in the form of payments of principal and interest.

Loans to customers issued by MTS Bank are presented separately within Bank deposits and loans to customers.

Other investments, carried at amortized cost, are presented net of allowance for expected credit losses (ECL).

Other investments of the Group comprised the following:

	Category	December 31,	
		2022	2021
Debt securities	At amortized cost	1,299	2,810
Investments in equity	FVPL	2,000	1,228
Loans and unquoted notes	At amortized cost	4,239	555
Other investments (Gross)		7,538	4,593
Allowance for ECL		1	(2)
Total other investments		7,539	4,591

The main change in the amount of other investments relates to the Business Nedvizhimost receivables novation agreement under which receivables were converted into the loan.

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17. TRADE AND OTHER RECEIVABLES

Trade and other receivables are carried at transaction price. The carrying value of all trade receivables is reduced by appropriate allowances for ECL.

For trade receivables the Group applies a simplified approach and calculates ECL based on lifetime expected credit losses. For receivables from subscribers and dealers and partially for other trade receivables the allowance for ECL is computed using the provision matrix. The provision rates are based on days past due for groupings of various customer segments with similar loss patterns. The calculation reflects the probability-weighted outcome and all reasonable and supportable information that is available at the reporting date about past events, current conditions and forecasts of future economic conditions. Generally, receivables from subscribers are written-off if past due for more than 180 days on average based on category of subscriber. Receivables other than from subscribers are written-off upon the expiration of the limitation period or before based on results of internal investigations.

MTS Group accounts for Receivables from handset sales financing as a part of current trade and other receivables and non-current other non-financial assets. These financial assets are measured based on fair value basis using effective rate approach at recognition and then amortised cost approach applies. Receivables from handset sales financing are written off against the allowance when deemed uncollectible, including by means of foreclosure on the provision. Write off of receivables takes place when the Group has no reasonable expectations of recovering the financial asset either entirely or a portion of it.

Trade and other receivables current and non-current comprised the following:

	December 31,	
	2022	2021
Subscribers	16,689	15,240
Handset sales financing	5,630	12,161
Property	2,607	683
Bank commission	2,512	1,208
Bonuses from suppliers	2,467	892
Interconnect	1,658	1,640
Sharing	1,474	2,164
Integration services	1,070	1,584
Roaming	686	800
Dealers	267	161
Factoring	64	282
Other receivables	6,179	6,516
Allowance for ECL	(3,245)	(3,536)
Trade and other receivables, total	38,058	39,795
Less non-current portion	(882)	(1,898)
Trade and other receivables, current	37,176	37,897

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The analysis of the age of trade and other accounts receivables and the respective allowance for ECL as of December 31, 2022:

Receivables from subscribers and dealers and other trade receivables assessed for impairment based on provision matrix	Weighted-average loss rate	Gross carrying amount	Loss allowance (based on provision matrix)	Credit-impaired
Current	1 %	2,602	(29)	No
1 - 30 days past due	3 %	12,490	(390)	No
31 - 60 days past due	38 %	506	(195)	No
60 - 90 days past due	58 %	392	(228)	No
More than 90 days past due	78 %	966	(755)	Yes
Total	9 %	16,956	(1,597)	

Receivables from the sharing agreement, interconnect, integration services and other receivables based on individual approach	Weighted-average loss rate	Gross carrying amount	Loss allowance (individually assessed)	Credit-impaired
Current	2 %	11,158	(187)	No
1 - 30 days past due	0 %	2,956	(11)	No
31 - 60 days past due	2 %	785	(19)	No
60 - 90 days past due	2 %	586	(12)	No
More than 90 days past due	22 %	3,231	(713)	Yes
Total	5 %	18,716	(942)	

Receivables from handset sales financing	Weighted-average loss rate	Gross carrying amount	Loss allowance (based on provision matrix)	Credit-impaired
Current	1 %	4,628	(68)	No
1 - 30 days past due	21 %	123	(25)	No
31 - 60 days past due	41 %	63	(25)	No
60 - 90 days past due	52 %	58	(30)	No
More than 90 days past due	74 %	759	(558)	Yes
Total	13 %	5,631	(706)	

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The analysis of the age of trade and other accounts receivables and the respective allowance for ECL as of December 31, 2021:

Receivables from subscribers and dealers and other trade receivables assessed for impairment based on provision matrix	Weighted-average loss rate	Gross carrying amount	Loss allowance (based on provision matrix)	Credit-impaired
Current	1 %	2,560	(27)	No
1 - 30 days past due	3 %	10,848	(332)	No
31 - 60 days past due	32 %	583	(189)	No
60 - 90 days past due	45 %	355	(161)	No
More than 90 days past due	78 %	1,055	(818)	Yes
Total	10 %	15,401	(1,527)	

Receivables from the sharing agreement, interconnect, integration services and other receivables based on individual approach	Weighted-average loss rate	Gross carrying amount	Loss allowance (individually assessed)	Credit-impaired
Current	2 %	9,407	(193)	No
1 - 30 days past due	1 %	2,219	(8)	No
31 - 60 days past due	1 %	1,119	(16)	No
60 - 90 days past due	5 %	624	(31)	No
More than 90 days past due	36 %	2,400	(865)	Yes
Total	7 %	15,769	(1,113)	

Receivables from handset sales financing	Weighted-average loss rate	Gross carrying amount	Loss allowance (based on provision matrix)	Credit-impaired
Current	2 %	10,948	(180)	No
1 - 30 days past due	12 %	289	(34)	No
31 - 60 days past due	47 %	94	(45)	No
60 - 90 days past due	58 %	74	(43)	No
More than 90 days past due	78 %	756	(594)	Yes
Total	7 %	12,161	(896)	

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The following table summarizes changes in the allowance for expected credit losses for the year ended December 31, 2022, 2021 and 2020:

	2022	2021	2020
Balance, beginning of the year	(3,536)	(4,623)	(4,203)
Allowance for ECL	(2,203)	(1,135)	(3,382)
Accounts receivable written off	2,522	2,232	2,719
Disposal/(Acquisition) of subsidiaries	(28)	(10)	243
Balance, end of the year	(3,245)	(3,536)	(4,623)

18. INVENTORIES

Inventories are stated at the lower of cost or net realizable value. Inventory cost is determined using the weighted average cost method. Handsets and accessories held for sale are expensed when sold. The Group regularly assesses its inventories for obsolete and slow-moving stock.

Inventory and spare parts comprised the following:

	December 31,	
	2022	2021
Handsets and accessories	10,290	15,201
SIM cards and prepaid phone cards	1,495	853
Software and equipment for installation and resale	1,433	364
Advertising and other materials	630	1,934
TV equipment for resale	305	449
Spare parts for telecommunication equipment	46	180
Total inventories	14,199	18,981

Spare parts for telecommunication equipment included in the inventory are expected to be utilized within twelve months of the year end.

Expenses for writing inventory down to net realisable value were included in cost of goods in the consolidated statement of profit or loss.

For the years ended December 31, 2022, 2021 and 2020, cost of goods comprised the following expenses:

	2022	2021	2020
Amount of inventories recognized as an expense	38,233	65,818	58,677
Inventory obsolescence provision	3,833	1,625	1,465
Reversal of obsolescence provision	(913)	(169)	(570)
Total cost of goods	41,153	67,274	59,572

The reversal of the inventory obsolescence provision relates to handsets and accessories sold over the course of the Group's promotion campaigns. Inventories were sold with a positive margin.

PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS***(Amounts in millions of Russian Rubles unless otherwise stated)*

19. PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment, including improvements, are stated at cost. Property, plant and equipment with a useful life of more than one year is capitalized at historical cost and depreciated on a straight-line basis over its expected useful life, as follows:

Network and base station equipment:

Network infrastructure	3-50 years
Other	3-20 years

Land and buildings:

Buildings	7-99 years
Leasehold improvements	the term of the lease

Office equipment, vehicles and other:

Office equipment	2-7 years
Vehicles	2-10 years
Other	2-25 years

The estimated useful lives and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

The gain or loss arising on the disposal of an item of property, plant and equipment is determined as the difference between any sale proceeds and the carrying amount of the asset and is recognised in the consolidated statement of profit or loss.

Construction in progress and equipment held for installation is not depreciated until the constructed or installed asset is ready for its intended use. Maintenance and repair costs are expensed as incurred, while upgrades and improvements are capitalized.

Borrowing costs – Borrowing costs directly attributable to the acquisition, construction or production of a qualifying asset during the construction phase that necessarily takes a substantial period of time are capitalized as part of property, plant and equipment until the asset is substantially ready for its intended use. The Group considers a construction period of more than six months to be substantial.

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Balances of cost, accumulated depreciation, net book value as of December 31, 2022, 2021 and 2020 and movements of property, plant and equipment for the year ended December 31, 2022, 2021 and 2020 were as follows:

	Network and base station equipment	Land and buildings	Office equipment, vehicles and other	Construction in progress and equipment for installation	Total
Cost					
January 1, 2020	560,599	34,556	57,269	21,896	674,320
Additions	(173)	434	729	74,032	75,022
Transferred into use	53,005	1,317	12,286	(66,608)	—
Arising on business combinations	578	4	6	—	588
Disposal of NVISION GROUP (Note 10)	—	—	(314)	(18)	(332)
Transfer to assets held for sale	(2,890)	(475)	(34)	(3)	(3,402)
Disposal	(38,293)	(447)	(4,405)	(255)	(43,400)
Other	(4)	675	30	35	736
Foreign exchange differences	2,286	495	520	74	3,375
December 31, 2020	575,108	36,559	66,087	29,153	706,907
Additions	2,432	38	801	75,450	78,721
Transferred into use	57,666	748	11,499	(69,913)	—
Arising on business combinations	973	4,601	605	204	6,383
Transfer to assets held for sale	(992)	(1)	(24)	(27)	(1,044)
Disposal	(44,394)	(559)	(5,542)	334	(50,161)
Other	(341)	482	159	(137)	163
Foreign exchange differences	1,306	10	170	12	1,498
December 31, 2021	591,758	41,878	73,755	35,076	742,467
Additions	1,748	68	419	53,630	55,865
Transferred into use	39,096	1,965	9,426	(50,487)	—
Arising on business combinations	289	—	91	14	394
Transfer to assets held for sale	(978)	—	(26)	—	(1,004)
Disposal of Nvision CR a.s. (Note 10)	—	(840)	(953)	—	(1,793)
Disposal	(22,082)	74	(3,267)	(127)	(25,402)
Other	(2,948)	540	1,280	66	(1,062)
Foreign exchange differences	937	(438)	(373)	(1)	125
December 31, 2022	607,820	43,247	80,352	38,171	769,590
Accumulated amortisation and impairment					
January 1, 2020	(362,006)	(10,571)	(36,264)	—	(408,841)
Charge for the year	(43,220)	(1,153)	(5,696)	—	(50,069)
Disposal of NVISION GROUP (Note 10)	—	—	236	—	236
Transfer to assets held for sale	1,899	146	(7)	—	2,038
Disposal	33,058	343	4,165	—	37,566
Other	(5)	(133)	(34)	—	(172)
Foreign exchange differences	(1,968)	(397)	(496)	—	(2,861)
December 31, 2020	(372,242)	(11,765)	(38,096)	—	(422,103)
Charge for the year	(44,387)	(1,204)	(7,548)	—	(53,139)
Transfer to assets held for sale	1,247	1	15	—	1,263
Disposal	38,225	435	5,062	—	43,722
Other	277	(99)	(4)	—	174
Foreign exchange differences	(1,016)	(6)	(112)	—	(1,134)
December 31, 2021	(377,896)	(12,638)	(40,683)	—	(431,217)
Charge for the year	(43,211)	(1,167)	(9,550)	—	(53,928)
Transfer to assets held for sale	899	—	23	—	922
Disposal of Nvision CR a.s. (Note 10)	—	794	775	—	1,569
Disposal	21,957	(111)	3,362	—	25,208
Other	210	(20)	(1,163)	—	(973)
Foreign exchange differences	240	474	624	—	1,338
December 31, 2022	(397,801)	(12,668)	(46,612)	—	(457,081)
Net book value					
December 31, 2021	213,862	29,240	33,072	35,076	311,250
December 31, 2022	210,019	30,579	33,740	38,171	312,509

The amount of the compensation from third parties for items of property, plant and equipment that were accidentally damaged during construction in Moscow for the years ended December 31, 2022, 2021 and 2020 totaled RUB 2,927 million, RUB 2,403 million and RUB 1,510 million, respectively. This was included in the accompanying consolidated statements of profit or loss as component of other operating income.

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20. GOODWILL

Goodwill represents an excess of consideration transferred plus the fair value of any non-controlling interest (“NCI”) in the acquiree at the acquisition date over the fair values of the identifiable net assets of the acquired entity. Goodwill is not amortized, but is tested for impairment (Note 21).

The change in the net carrying amount of goodwill for the years ended December 31, 2022 and 2021 by reportable segments was as follows:

	Telecom	Other	Total
Balance at January 1, 2021			
Gross amount of goodwill	30,924	13,904	44,828
Accumulated impairment loss	(1,466)	(5,321)	(6,787)
	29,458	8,583	38,041
Acquisitions (Note 4)	4,337	46	4,383
Reclassification (Note 5)	253	(253)	—
Currency translation adjustment	—	395	395
Balance at December 31, 2021			
Gross amount of goodwill	35,514	14,092	49,606
Accumulated impairment loss ⁽¹⁾	(1,466)	(5,321)	(6,787)
	34,048	8,771	42,819
Acquisitions (Note 4)	2,609	10,107	12,716
Measurement period adjustment (Note 4)	(61)	—	(61)
Impairment (Note 21)	—	(489)	(489)
Currency translation adjustment	—	709	709
Balance at December 31, 2022			
Gross amount of goodwill	38,062	24,908	62,970
Accumulated impairment loss ⁽¹⁾	(1,466)	(5,810)	(7,276)
	36,596	19,098	55,694

(1) Accumulated impairment loss of Other segments as of December 31, 2021 consists of impairment loss of CGU “Armenia” (RUB 3,516 million), impairment loss of CGU “Oblachnyi retail” (RUB 524 million) and impairment loss of CGU “Entertainment” (RUB 1,281 million). As of December 31, 2022 impairment loss of CGU “MTS Auto” (RUB 282 million) and impairment loss of CGU “Gambit” (RUB 207 million) were also recognised within accumulated impairment loss of Other segments.

21. IMPAIRMENT REVIEW

Goodwill – The management of the Group performs impairment tests with respect to goodwill assigned to the cash-generating units at least annually, and also when there are any indications that the carrying amount of the cash generating unit (“CGU”) is impaired.

Investments in associates and joint ventures – The carrying amount of an investment accounted for under the equity method is tested for impairment provided there are indications of impairment. If the carrying amount of the investment exceeds its recoverable amount, an impairment loss is recognized in the amount of the difference. The recoverable amount is measured at the higher of fair value less costs of disposal and value in use.

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Tangible and intangible assets excluding goodwill – At the end of each reporting period, the management of the Group reviews the carrying amounts of its tangible and intangible assets to determine whether there is any indication that those assets may be impaired. If such an indication exists, the recoverable amount of the assets is estimated in order to determine the amount of impairment loss.

In the process of identifying the impairment indicators management of the Group considers, among other factors, CGU market and book value and changes in risk premiums in country of operations.

When the carrying amount of the CGU exceeds its recoverable amount, assets allocated to this CGU must be impaired.

For the purpose of the impairment test the recoverable amounts of the CGUs are considered to be equal to their value-in-use. While determining value-in-use, the estimated future cash flows are discounted to present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the CGU. The discount rate applied to measure free cash flow is the weighted average cost of capital according to the finance structure established for each CGU.

Estimation of future cash flows requires assumptions to be made in respect to uncertain factors, including management expectations in relation to OIBDA margin, timing and amount of capital expenditures, terminal growth rates and appropriate discount rates to reflect the risks involved. Therefore, OIBDA margin and capital expenditures used for value in use calculation are primarily derived from internal sources, based on past experience and extended to include management expectations. For the purposes of impairment testing OIBDA calculated as operating profit less depreciation and amortization measured on the basis consistent with IFRS consolidated financial statements.

For the purpose of impairment testing the Group has assessed potential adverse effects of economic volatility and sanctions in Russia on Group's business and financial situation (as disclosed in Note 33) for impairment indicators. The Group took into consideration relevant effects for estimation of future cash flows.

Moscow Fixed Line

In 2021 management of the Group has changed the composition of operating segments, by dividing operations of the Group's subsidiary MGTS (previously constituted "Moscow Fixed Line" reportable segment) into two operating segments, as disclosed in Note 5. The described change in composition of operating segments led to separation of "Moscow fixed line" into two CGU – "MGTS commercial" and "MGTS service".

Entertainment

Due to restrictive measures implemented by government in respect to mass events and gatherings ticket sales dropped significantly in 2020. Group management adjusted its expectations of Ticketland and Ponominalu operating performance to reflect significant reduction of business activities and time needed for recovery. The recoverable amount was in total equal to RUB 2,658 million as of June 30, 2020. As a result of impairment test the Group recognized impairment of goodwill related to Ticketland and Ponominalu in the aggregate amount of RUB 1,281 million for the year ended December 31, 2020.

Kinopolis

Kinopolis provides services of movie sites rental and movie production. The sites and related infrastructure for rent are presented in the statement of financial position as investment property.

Overall slowdown of movie production and pandemic restrictions lead to decrease in demand for movie site rental. Operating results of Kinopolis dropped below expectations.

As of December 31, 2020 the recoverable amount of Kinopolis's assets was assessed as being lower than its carrying amount, and hence the impairment charge of RUB 807 million was recognized in respect to Kinopolis CGU.

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Gambit

Due to the political and economic sanctions, Esports teams under the brand “Gambit” has been unable to participate in most of major worldwide championships and lost significant part of cash inflows from advertising contracts and prizes. The Group recognized impairment of goodwill relating to CGU “Gambit” in the amount of RUB 207 million for the year ended December 31, 2022.

MTS Auto

As a result of decline in Russia’s automotive market MTS Auto’s revenue from sale of multimedia platforms for cars was significantly reduced. The Group recognized impairment of goodwill relating to CGU “MTS Auto” in the amount of RUB 282 million for the year ended December 31, 2022.

Impairment losses and reversal of the impairment charges recognized during year ended December 31, 2022, 2021 and 2020 are attributable to operating segments, reported as a part of the “Other” category (Note 4).

MTS Turkmenistan

During the years ended December 31, 2021 and 2020 MTS Turkmenistan sold a number of long-lived assets impaired in prior periods, hence the reversal of the impairment in the amount of gain from disposal of RUB 10 million and RUB 66 million, respectively, was recognized in the accompanying consolidated statements of profit or loss.

Impairment losses and reversal of the impairment charges recognized during the years ended December 31, 2022, 2021 and 2020 are attributable to operating segments, reported as a part of the “Other” category (Note 5).

The total amount of impairment loss and reversal of impairment charges for the year ended December 31, 2022, 2021 and 2020 was allocated to the long-lived assets carrying amounts as follows:

	2022		2021		2020	
	Gambit	MTS Auto	MTS Turkmenistan	Entertainment	Kinopolis	MTS Turkmenistan
Goodwill	207	282	—	1,281	—	—
Property, plant and equipment	—	—	(10)	—	—	(66)
Investment property	—	—	—	—	807	—
Total	207	282	(10)	1,281	807	(66)

Key assumptions used for value in use calculation:

The table below presents OIBDA margin applied for value in use calculation of related CGUs:

CGU	December 31,	
	2022	2021
Russia Convergent	37.5%-37.9%	41.3%-46.9%
Armenia	50.6%-54.2%	53.5%-60.3%
MGTS Commercial	50.6%-54.2%	59.9%-63.0%
MGTS Service	31.4%-33.9%	42.5%-51.8%
Entertainment	2.1%-11.9%	4.8%-12%
Cloud	39.8%-59.1%	37.7%-67.3%

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The table below presents capital expenditure as a percentage of revenue applied for value-in-use calculations of related CGUs:

CGU	December 31,	
	2022	2021
Russia Convergent	22 %	18 %
Armenia	22 %	22 %
MGTS Commercial	19 %	16 %
MGTS Service	15 %	16 %
Entertainment	10 %	3 %
Cloud	61 %	17 %

The terminal growth rate into perpetuity has been determined based on the nominal gross domestic product rates for the country of operation, adjusted for specific characteristic of the CGUs.

The table below presents terminal growth rates applied for value-in-use calculations of related CGUs:

CGU	December 31,	
	2022	2021
Russia Convergent	1 %	1 %
Armenia	nil	nil
MGTS Commercial	1 %	1 %
MGTS Service	1 %	1 %
Entertainment	1.5 %	1.5 %
Cloud	1 %	1 %

The table below presents pre-tax rates for the discounting of cash flows in functional currencies of related CGUs:

CGU	December 31,	
	2022	2021
Russia Convergent	16.9 %	10.1 %
Armenia	12.3 %	11.2 %
MGTS Commercial	17.3 %	12.7 %
MGTS Service	16.5 %	9.9 %
Entertainment	20.4 %	13.1 %
Cloud	18.8 %	13.6 %

22. OTHER INTANGIBLE ASSETS

Other intangible assets primarily consist of billing, telecommunication, accounting and office software as well as numbering capacity, customer base and licenses. These assets are assets with finite useful lives. They are initially recognized at cost and amortized on a straight-line basis over their estimated useful lives.

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Balances of historical cost, accumulated amortization, net book value as of December 31, 2022 and 2021 and movements of other intangible assets for the year ended December 31, 2022, 2021 and 2020 were as follows:

	Licenses	Right to use radio frequencies	Billing and other software	Client base	Numbering capacity	Cost to obtain contracts	Content	Other	Total
<i>Useful life, years</i>	<i>1 to 20</i>	<i>1 to 15</i>	<i>1 to 25</i>	<i>4 to 31</i>	<i>2 to 15</i>	<i>2 to 5</i>	<i>1 to 5</i>	<i>1 to 10</i>	
Cost									
January 1, 2020	21,705	5,689	139,968	5,930	2,677	13,635	—	3,096	192,700
Additions	1,466	(11)	35,277	—	15	10,390	—	1,941	49,078
Disposal of NVISION GROUP (Note 10)	—	—	(311)	—	—	—	—	—	(311)
Reclassification into assets for sale	—	—	(184)	—	—	—	—	—	(184)
Impairment	—	43	(167)	—	—	—	—	(2)	(126)
Disposal	(108)	(172)	(28,035)	(73)	(24)	(9,758)	—	(1,033)	(39,203)
Other	25	30	(83)	—	—	—	—	(1)	(29)
Foreign exchange differences	913	—	386	—	—	—	—	4	1,303
December 31, 2020	24,001	5,579	146,851	5,857	2,668	14,267	—	4,005	203,228
Additions	1,350	—	34,421	—	75	3,653	—	5,494	44,993
Arising on business combinations	—	—	571	1,147	174	—	—	576	2,468
Reclassification into assets for sale	—	—	(17)	—	—	—	—	—	(17)
Impairment	(1)	21	—	—	—	—	—	—	20
Disposal	(39)	(233)	(14,783)	(680)	(251)	(3,287)	—	(1,064)	(20,337)
Other	—	1	(97)	—	—	—	—	(9)	(105)
Foreign exchange differences	992	—	381	—	—	—	—	(1)	1,372
December 31, 2021	26,303	5,368	167,327	6,324	2,666	14,633	—	9,001	231,622
Additions	1,231	—	31,934	—	134	3,945	7,952	205	45,402
Arising on business combinations (Note 4)	—	—	713	4,447	—	260	—	619	6,039
Disposal of Nvision CR a.s. (Note 10)	—	—	(89)	—	—	—	—	—	(89)
Disposal	(63)	(174)	(11,810)	(619)	(24)	(3,250)	—	(465)	(16,405)
Other	34	(34)	52	—	—	—	(9)	(35)	8
Foreign exchange differences	1,778	—	298	(539)	(66)	—	—	(468)	1,003
December 31, 2022	29,283	5,160	188,425	9,613	2,710	15,588	7,943	8,857	267,579
Accumulated amortisation and impairment									
January 1, 2020	(13,182)	(4,098)	(82,096)	(3,048)	(2,611)	(6,394)	—	(1,542)	(112,971)
Charge for the year	(1,266)	(367)	(25,146)	(431)	(27)	(9,964)	—	(345)	(37,546)
Disposal of NVISION GROUP (Note 10)	—	—	77	—	—	—	—	—	77
Disposal	71	160	27,953	72	24	9,758	—	402	38,440
Other	(10)	(31)	81	—	—	—	—	2	42
Foreign exchange differences	(894)	—	(275)	—	—	—	—	2	(1,167)
December 31, 2020	(15,281)	(4,336)	(79,406)	(3,407)	(2,614)	(6,600)	—	(1,481)	(113,125)
Charge for the year	(1,443)	(349)	(29,737)	(631)	(35)	(3,424)	—	(1,867)	(37,486)
Disposal	3	228	14,716	679	249	3,288	—	920	20,083
Other	—	—	204	—	—	—	—	16	220
Foreign exchange differences	(971)	—	(211)	—	—	—	—	—	(1,182)
December 31, 2021	(17,692)	(4,457)	(94,434)	(3,359)	(2,400)	(6,736)	—	(2,412)	(131,490)
Charge for the year	(1,607)	(312)	(31,702)	(820)	(55)	(3,596)	(2,144)	(89)	(40,325)
Disposal of Nvision CR a.s. (Note 10)	—	—	57	—	—	—	—	—	57
Impairment	—	—	(1,150)	—	—	—	—	(18)	(1,168)
Disposal	38	193	11,792	619	24	3,250	—	439	16,355
Other	(31)	31	(39)	3	—	3	7	22	(5)
Foreign exchange differences	(1,742)	—	191	—	66	—	—	31	(1,454)
December 31, 2022	(21,034)	(4,545)	(115,285)	(3,557)	(2,365)	(7,080)	(2,137)	(2,027)	(158,030)
Net book value									
December 31, 2021	8,611	911	72,893	2,965	266	7,897	—	6,589	100,132
December 31, 2022	8,249	615	73,140	6,056	345	8,509	5,806	6,830	109,549

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The Group was granted with GSM licenses by the Russian Ministry of Information Technologies and Communications to provide telecommunication services. In addition to the licenses received directly from the Russian Ministry of Information Technologies and Communications, the Group acquired access to telecommunication licenses through business combinations.

Operating licenses contain conditions specified by legislation which generally include the required date of services provision, territorial coverage and expiration date. Management believes that the Group is in compliance with all material terms of its licenses.

The Group's operating licenses do not provide for automatic renewal. All licenses covering the territories of the Russian Federation expired as of December 31, 2022 were renewed. The cost to renew the licenses was not significant. Weighted-average period until the next renewal of licenses in the Russian Federation is five years.

The license for the provision of telecommunication services in Armenia is valid until 2034.

Contractual obligations to purchase intangible assets are disclosed in the Note 33.

23. BORROWINGS

Group's borrowings represent interest bearing bank loans and bonds issued in the capital markets. Borrowings are initially recorded at fair value plus transaction costs that are directly attributable to the issue of the financial liability and subsequently measured at amortized cost, using the effective interest rate method.

The Group's borrowings comprise the following:

	December 31,	
	2022	2021
Notes	195,929	191,996
Bank and other loans	290,211	270,143
Total borrowings	486,140	462,139
Less: current portion	(117,747)	(111,839)
Total borrowings, non-current	368,393	350,300

On 21 November 2022, the Group announced a consent solicitation in relation to the MTS International Notes due 2023 on the terms and subject to the conditions set forth in the Consent Solicitation Memorandum dated 21 November 2022.

On December 13, 2022 in connection with the Consent Solicitation, the Extraordinary Resolution was duly passed and became effective.

Pursuant to the terms of the Extraordinary Resolution, amongst other things, the 30 November 2022 coupon payment under the Notes were to be paid by the Group in accordance with the Amended Payment Mechanics within sixty (60) calendar days from 30 November 2022 by January 30, 2023. The Group paid Notes coupon due on January 16, 2023.

Compliance with covenants – Bank loans and notes of the Group are subject to certain covenants limiting the Group's ability to create liens on properties, dispose assets, including cellular licenses in core Russian regions, issue guarantees and grant loans to the third parties, delay payments for the borrowings, merge or consolidate MTS PJSC with a third party or be a subject to unsatisfied judgments (excluding the total penalty under the agreements with the DOJ). The Group is required to comply with certain financial ratios.

The noteholders of MTS International Notes due in 2023 have the right to require the Group to redeem the notes at 101% of their principal amount and related interest, if the Group experiences a change in control.

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If the Group fails to meet covenants, after the notice and cure periods, the debtholders are entitled to demand accelerated principal repayment.

The Group was in compliance with all existing notes and bank loans covenants as of December 31, 2022.

Available credit facilities – As of December 31, 2022, the Group's total available unused credit facilities amounted to RUB 206,099 million.

The following table presents the aggregated scheduled maturities of principal and interests on notes and bank loans (gross of debt issuance costs) outstanding for the five years ending December 31, 2027 and thereafter:

	December 31, 2022	
	Notes	Bank loans and other debt
Payments due in the year ending December 31,		
2023	63,963	90,636
2024	67,213	76,944
2025	41,246	150,222
2026	38,415	15,242
2027	22,477	—
Contractual undiscounted cash flows	233,314	333,044
Less: unamortized debt issuance costs	(321)	—
Less: interest	(37,064)	(41,762)
Less: debt modification	—	(459)
Less: subsidized interest rate effect	—	(612)
Total debt	195,929	290,211

24. RIGHT-OF-USE ASSETS AND LEASE OBLIGATIONS

The Group's lease contracts largely relate to leases of cellular sites (i.e. land, space in cell towers or rooftop surface areas), network infrastructure, and retail stores as well as buildings used for administrative or technical purposes.

The Group recognizes a right-of-use asset and a corresponding lease liability with respect to all lease agreements (including sub-lease and lease of intangible assets), which conveys the right to control the use of identified assets for a period of time in exchange for consideration, except for short-term leases (with a lease term of 12 months or less). For these leases, the Group recognizes the lease payments as operating expenses over the term of the lease. When identifying the lease, the Group uses practical expedient of IFRS 16 permitting the lessee not to separate the non-lease components of the contract and, instead, to account for any lease and associated non-lease components as a single arrangements.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the incremental borrowing rate of the Group. The incremental borrowing rate of the Group is determined based on the credit spreads of the Group debt instruments in relation to the zero-coupon yield curve for government securities. The lease payments include fixed payments, variable payments that depend on index or rate, amounts expected to be paid under residual value guarantee, the exercise price under a purchase option the Group is reasonably certain to exercise as well as early termination fees unless the Group is reasonably certain not to terminate earlier. Variable payments that depend on external factors (such as sale volume of a particular retail store) are expensed as incurred.

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Lease liability is remeasured when there is a change in future lease payments arising from a change in an index or rate, if there is a change in the Group's estimate of the amount expected to be payable under a residual value guarantee, or if the Group changes its assessment of whether it will exercise a purchase, extension or termination option. A corresponding adjustment is made to the carrying amount of the right-of-use assets, or is recorded in profit or loss if the carrying amount of right-of-use asset had been reduced to zero.

Right-of-use assets are initially measured at cost, which is the initial amount of lease liability adjusted for any lease payments made at or before the commencement date, plus any direct costs incurred and an estimate of costs to dismantle, remove or restore the underlying asset less any lease incentives received.

Right-of-use assets are subsequently amortized on a straight-line basis over the expected lease term. The lease term corresponds to the non-cancellable period of each contract except in cases where the Group is reasonably certain of exercising renewal or termination options. When assessing the lease term, the Group considers all facts and circumstances that create an economic incentive for the Group to exercise the option to extend the lease, such as useful life of the asset located on the leased site, sites replacement statistics, sequence of technology change, profitability of our retail stores as well as costs to terminate or enter into lease contracts.

The table below summarises the estimated terms, over which the right-of-use assets are amortized:

Sites for placement of network equipment and base stations inside the buildings	10 years
Sites for placement of network equipment and base stations on land	20 years
Retail stores	Up to 8 years
Administrative offices, warehouses, parking garages	not less than 3 years
Vehicles	4 – 5 years

The following table presents a summary of net book value of right-of-use assets:

	December 31,	
	2022	2021
Sites for network and base station equipment	83,795	91,566
Land and buildings	36,005	40,572
Vehicles and other	392	205
Right-of-use assets, net	120,192	132,343

The following table presents a summary of depreciation charge of the right-of-use assets:

	2022	2021	2020
Sites for network and base station equipment	11,600	11,448	6,903
Land and buildings	7,585	8,274	11,858
Vehicles and other	155	103	43
Depreciation charge, total	19,340	19,825	18,804

Depreciation of the right-of-use assets was insignificant for the years ended December 31, 2022, 2021 and 2020.

Additions to the assets leased during the years ended December 31, 2022, 2021 and 2020 amounted to RUB 13,425, RUB 17,510 and RUB 13,102 million, respectively.

Interest expense accrued on lease obligations for the years ended December 31, 2022, 2021 and 2020 in the amount of RUB 12,791, RUB 11,816 and RUB 12,272 million, respectively, were included in finance costs in the accompanying consolidated statements of profit or loss.

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For the years ended December 31, 2022, 2021 and 2020, expenses recognized in respect of variable lease payments not included on the measurement of lease liabilities and short-term leases amounted to:

	2022	2021	2020
Variable lease payments	11,349	10,623	9,542
Short-term leases	130	310	195
Total	11,479	10,933	9,737

The following table presents future lease payments under lease arrangements together with the present value of the net lease payments as of December 31, 2022 and 2021:

	December 31,	
	2022	2021
Lease payments, including:		
Current portion (less than 1 year)	31,450	29,758
More than 1 to 5 years	96,822	101,965
Over 5 years	84,646	91,031
Total lease payments	212,918	222,754
Less amount representing interest	(69,416)	(68,245)
Present value of net lease payments	143,502	154,509
Less current portion of lease obligations	(19,608)	(18,709)
Non-current portion of lease obligations	123,894	135,800

Total cash outflows for leases for the years ended December 31, 2022, 2021 and 2020 totaled to RUB 40,963, RUB 38,996 and RUB 36,963 million, of which RUB 13,040, RUB 11,548 and RUB 12,173 million was included in interest paid.

A minor part of the Group's lease contracts for retail stores include variable payments that depend on sales volume of the respective store.

The Group's lease contracts include typical restrictions and covenants common for local business practice, such as the responsibility of the Group for regular maintenance and repair of the lease assets and their insurance, redesign and conduction of permanent improvements only with the consent of the lessor, and use of the leased asset in accordance with current legislation.

For the year ended December 31, 2020 the Group recognized gain related to termination of lease agreements and rent holidays for retail outlets in the amount of RUB 464 and RUB 286 million, respectively. The amounts for the years ended December 31, 2022 and 2021 were not significant.

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25. RECONCILIATION OF LIABILITIES ARISING FROM FINANCIAL ACTIVITIES

	December 31, 2021	Financing cash flows	Operating cash flows	Acquisitions/ Disposals	Foreign exchange movement	Other comprehensive income	Change in fair value	Change in retained earnings	Other changes ¹	December 31, 2022
Notes (Note 23)	191,996	6,941	—	—	(2,768)	—	—	—	(240)	195,929
Bank and other loans (Note 23)	270,143	15,840	—	1,970	(82)	—	—	—	2,340	290,211
Lease obligation (Note 24)	154,509	(16,443)	(13,040)	252	(335)	—	—	—	18,559	143,502
Dividends payable (Note 32)	68	(40,959)	—	220	—	—	—	57,015	247	16,591
Liability under put option agreement	—	—	—	2,577	—	—	204	—	—	2,781
Hedge asset (net)	(3,290)	—	—	—	3,805	—	—	—	(515)	—
Total liabilities arising from financial activities	613,426	(34,621)	(13,040)	5,019	620	—	204	57,015	20,391	649,014

¹⁾ Including accrual of liabilities related to repurchase of common stock, additions under lease agreements, dividends related to non-controlling interest, depreciation of debt issuance cost, modification gain and other changes.

	December 31, 2020	Financing cash flows	Operating cash flows	Acquisitions/ Disposals	Foreign exchange movement	Other comprehensive income	Change in fair value	Change in retained earnings	Other changes ¹	December 31, 2021
Notes (Note 23)	208,155	(16,504)	—	—	187	—	—	—	158	191,996
Bank and other loans (Note 23)	221,113	48,718	—	1,735	—	(10)	—	—	(1,413)	270,143
Lease obligation (Note 24)	150,814	(16,515)	(11,548)	146	45	72	—	—	31,495	154,509
Payables related to repurchase of common stock (Note 32)	—	(21,483)	—	—	—	—	—	—	21,483	—
Dividends payable (Note 32)	109	(61,955)	—	—	—	—	—	61,967	(53)	68
Payables related to transactions under common control	—	(3,474)	—	—	—	—	—	—	3,474	—
Liability under put option agreement	62	—	—	—	—	—	(62)	—	—	—
Hedge asset (net)	(3,591)	—	—	—	(125)	—	—	—	426	(3,290)
Total liabilities arising from financial activities	576,662	(71,213)	(11,548)	1,881	107	62	(62)	61,967	55,570	613,426

¹⁾ Including accrual of liabilities related to repurchase of common stock, additions under lease agreements, dividends related to non-controlling interest, depreciation of debt issuance cost, modification gain and other changes.

26. PROVISIONS

Provisions – Provisions are recognized when the Group has a present obligation (legal or constructive) as a result of past event, and it is probable that the Group will be required to settle that obligation and a reliable estimate can be made of the amount of the obligation. Provisions are measured at the managements' best estimate of the expenditure required to settle the obligation at the reporting date and are discounted to present value where the effect is material. The main provisions the Group holds are in relation to employees' bonuses and other rewards (including retirement benefits and cash-settled share-based payments), decommissioning and restoration obligation, tax provisions as well as legal claims.

Provision for decommissioning and restoration – The Group calculates a provision for decommissioning and restoration when the Group has a legal or constructive obligation in connection with the retirement of tangible long-lived assets. The Group's obligations relate primarily to the cost of removing its equipment from sites. The Group records the present value of provision for decommissioning and restoration as non-current provisions in the consolidated statement of financial position.

Employee bonuses and share-based settlement programs – For employee bonuses and cash-settled share-based payment transactions, the fair value of the obligation is newly determined at each reporting date and at the settlement date, and the changes in the fair value are recognized in profit or loss, until the liability is settled.

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The following table summarizes the movement in provisions for the years ended December 31, 2022, 2021 and 2020:

	Tax provisions other than for income tax	Provision for decommissioning and restoration	Employee bonuses and other rewards	Litigation and Other provisions (Note 33)	Total provisions
January 1, 2020	(563)	(4,788)	(10,043)	(893)	(16,287)
Arising during the year	(211)	(914)	(14,770)	(3,860)	(19,755)
Utilised	29	54	16,489	137	16,709
Discount rate adjustment and imputed interest (change in estimates)	1	(138)	67	—	(70)
Unused amounts reversed	8	513	(125)	114	510
Arising due to acquisitions of subsidiaries	—	—	—	—	—
Disposal of Nvision Group	115	—	245	9	369
Other	—	—	(62)	(2)	(64)
December 31, 2020	(621)	(5,273)	(8,199)	(4,495)	(18,588)
Current portion	(621)	(229)	(8,115)	(4,495)	(13,460)
Non-current portion	—	(5,044)	(84)	—	(5,128)
January 1, 2021	(621)	(5,273)	(8,199)	(4,495)	(18,588)
Arising during the year	(74)	(2,329)	(17,860)	(1,862)	(22,125)
Utilised	161	31	13,258	1,736	15,186
Discount rate adjustment and imputed interest (change in estimates)	—	(145)	4	—	(141)
Unused amounts reversed	488	226	580	(2)	1,292
Arising due to acquisitions of subsidiaries	(207)	—	(159)	(3)	(369)
Other	(1)	—	(18)	(3)	(22)
December 31, 2021	(254)	(7,490)	(12,394)	(4,629)	(24,767)
Current portion	(254)	(284)	(12,312)	(4,629)	(17,479)
Non-current portion	—	(7,206)	(82)	—	(7,288)
January 1, 2022	(254)	(7,490)	(12,394)	(4,629)	(24,767)
Arising during the year	(88)	(2,118)	(23,513)	(5,766)	(31,485)
Utilised	24	68	17,537	3,069	20,698
Discount rate adjustment and imputed interest (change in estimates)	—	(173)	—	—	(173)
Unused amounts reversed	132	4,597	205	6	4,940
Arising due to acquisitions of subsidiaries	(117)	—	(160)	(7)	(284)
Other	—	20	—	6	26
December 31, 2022	(303)	(5,096)	(18,325)	(7,321)	(31,045)
Current portion	(303)	(133)	(16,000)	(7,321)	(23,757)
Non-current portion	—	(4,963)	(2,325)	—	(7,288)

27. FAIR VALUE OF FINANCIAL INSTRUMENTS

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity. Financial assets include, in particular, cash and cash equivalents, trade and other receivables, bank loans to customers, investments (mainly deposits with original maturity of more than three months, originated loans other than bank loans to customers as well as debt securities) and derivative financial assets. Financial liabilities generally substantiate claims for repayment in cash or another financial asset. In particular, this includes bonds, trade and other payables, bank loans, lease obligations and derivative financial liabilities. Financial instruments are recognized as soon as the Group becomes a party to the contractual provision of the instrument.

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Financial assets and financial liabilities are recognized initially at fair value plus transaction costs that are directly attributable to the acquisition or issue of the financial asset or financial liability, except for a financial asset or liability accounted for at fair value through profit or loss, in which case transaction costs are expensed. Subsequently they are measured either at amortized cost or fair value depending on the classification of those assets and liabilities.

Financial assets can be classified as 1) financial assets at amortized cost; 2) financial assets at fair value through other comprehensive income; 3) financial assets at fair value through profit or loss. If the financial assets are held for collecting contractual cash flows in the form of principal and interest on the specified dates, it is classified as carried at amortized cost. If the financial assets are held not only for collecting contractual cash flows in the form of principal and interest on the specified dates, but also for potential sale, they are classified as measured at fair value through other comprehensive income. All other financial assets are classified as measured at fair value through profit or loss.

Financial liabilities can be classified as measured at fair value or at amortized costs. The Group measures its derivative instruments, contingent consideration recognized in business combination as well as liability under put option agreement at fair value. All other financial liabilities of the Group are measured at amortized cost.

Derivative instruments activities – The Group uses derivative instruments, including interest rate and foreign currency swaps, to manage foreign currency and interest rate risk exposures. The Group measures derivatives at fair value and recognizes them as either other current or other non-current financial assets or liabilities in the consolidated statement of financial position. Cash flows from derivatives are classified according to their nature. The Group reviews related fair value hierarchy classifications on a quarterly basis. The fair value measurement of the Group's derivative instruments is based on the observable yield curves for similar instruments.

Gains and losses from changes in the fair value of derivative instruments are recorded immediately in profit or loss.

Assets and liabilities related to multiple derivative contracts with one counterparty are not offset by the Group.

Liability under put option agreement – To optimize the structure of business acquisitions and to defer payment of the purchase price, the Group enters into put and call option agreements to acquire the remaining non-controlling stakes in newly acquired subsidiaries. Upon initial recognition, the commitment to purchase non-controlling interests is recognized as a financial liability for the present value of the redemption amount, which approximates its fair value. Subsequent changes in the value of the commitment are recognized in profit or loss for the reporting period.

Netting – The Group offsets its financial assets and financial liabilities only if it has a legally enforceable right to set off the recognized amounts and intends either to settle on a net basis or to realise the asset and settle the liability simultaneously.

Fair value of financial instruments – Fair value of financial assets and liabilities is defined as an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. The three-tier hierarchy for inputs used in measuring fair value, which prioritizes the inputs used in the methodologies of measuring fair value for assets and liabilities, is as follows:

Level 1 – Quoted prices in active markets for identical assets or liabilities;

Level 2 – Observable inputs other than quoted prices in active markets for identical assets and liabilities;

Level 3 – No observable pricing inputs in the market.

Financial assets and financial liabilities are classified in the three-tier hierarchy based on the lowest level of input that is significant to the fair value measurements. The Group's assessment of the significance of a particular input to the fair value measurements requires judgment which may affect the valuation of the assets and liabilities being measured and their placement within the fair value hierarchy.

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1. Financial assets of the Group

	December 31,	
	2022	2021
Cash and cash equivalents (Note 13)	78,292	40,590
Trade and other receivables (Note 17)	38,058	39,795
Accounts receivable, related parties (Note 30)	4,410	7,287
Other financial assets:		
Financial assets at amortized cost:		
Deposits and loans issued	238,816	208,018
Notes	3,096	9,158
Other	4,031	2,138
Total financial assets at amortized cost	245,943	219,314
Financial assets at fair value through profit or loss:		
Securities (notes, shares and other)	23,815	46,780
Investments in equity	2,208	1,228
Derivative instruments	761	4,627
Contingent consideration (Note 10)	473	1,867
Call and put options	112	112
Embedded derivatives in a lease agreement	82	434
Currency forwards, swaps and options not designated as hedges	—	110
Total financial assets at fair value through profit or loss	27,451	55,158
Financial assets at fair value through other comprehensive income:		
Notes	22,394	—
Total financial assets at fair value through other comprehensive income	22,394	—
Total other financial assets	295,788	274,472
Total financial assets	416,548	362,144
Less current portion	(262,767)	(224,862)
Total financial assets, non-current	153,781	137,282

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2. Financial liabilities of the Group

	December 31,	
	2022	2021
Trade and other payables	67,166	72,078
Accounts payable, related parties (Note 30)	1,451	4,107
Other financial liabilities:		
Financial liabilities at amortized cost:		
Bank and other loans (Note 23)	290,211	270,143
Bank deposits and liabilities (Note 29)	273,141	221,368
Notes (Note 23)	195,929	191,996
Lease obligations (Note 24)	143,502	154,509
Total financial liabilities at amortized cost	902,783	838,016
Financial liabilities at fair value through profit or loss:		
Call and put options (Note 4)	2,780	—
Securities (notes, shares and other)	2,450	—
Contingent consideration and other	1,220	383
Total financial liabilities at fair value through profit or loss	6,450	383
Total other financial liabilities	909,233	838,399
Total financial liabilities	977,850	914,584
Less current portion	(469,701)	(413,990)
Total financial liabilities, non-current	508,149	500,594

The fair value measurement of the Group's derivative instruments and securities (Level 2 assets and liabilities) is based on the observable yield curves for similar instruments and represents the estimated amount the Group would receive or pay to terminate these agreements at the reporting date, taking into account current interest rates, foreign exchange spot and forward rates.

The fair value measurement of the Group's Level 3 assets and liabilities is based on the construction of business models using forecasts and assumptions based on the Group's internal estimates.

The liability under put option agreement for redeemable non-controlling interests in Gulfstream in the amount of RUB 2,081 million as of December 31, 2022 is measured at fair value using a discounted cash flow technique. The most significant quantitative inputs used to measure its fair value are presented in the table below:

Unobservable inputs	December 31, 2022
Discount rate	15 %
Revenue growth rate	20.7–22.4 % (av. 21.5%)
OIBDA margin	7.0–10.5 % (av. 8.7%)

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The liability under put option agreement for redeemable non-controlling interests in Webinar in the amount of RUB 700 million as of December 31, 2022 is measured at fair value using a discounted cash flow technique. The most significant quantitative inputs used to measure its fair value are presented in the table below:

Unobservable inputs	December 31, 2022
Discount rate	14.4 %
Revenue growth rate	29.3 - 24.9 % (av. 27.1%)

Other Level 3 assets and liabilities measured at fair value are individually insignificant.

The table below presents the fair value of financial instruments carried at fair value within the statement of financial position:

		December 31,	
	Level of inputs	2022	2021
Assets			
Notes	Level 1	21,715	25,687
Securities (notes, shares and other)	Level 2	24,494	21,093
Derivative instruments	Level 2	761	4,737
Cross-currency swaps		719	4,627
interest rate swaps		42	
Currency forwards, swaps and options		—	110
Embedded derivatives in a lease agreement	Level 2	82	434
Investments in equity	Level 3	2,208	1,228
Contingent consideration	Level 3	473	1,867
Call and put options	Level 3	112	112
Liabilities			
Securities (notes, shares and other)	Level 2	(2,450)	—
Call and put options (Note 4)	Level 3	(2,780)	—
Contingent consideration and other	Level 3	(1,220)	(383)

Net realized gains and losses of Level 3 assets and liabilities resulting from fair value measurements were included in other non-operating (income)/loss and loss from discontinued operations in the consolidated statements of profit or loss in the following amounts:

	For the years ended December 31,		
	2022	2021	2020
Net realized gains of Level 3 assets	1,032	2,263	3,083
Net realized losses of Level 3 liabilities	(40)	(420)	(20)
	992	1,843	3,063

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Net unrealized gains and losses of Level 3 assets and liabilities resulting from fair value measurements were included in other non-operating (income)/loss in the consolidated statements of profit or loss in the following amounts:

	For the years ended December 31,		
	2022	2021	2020
Net unrealized (losses)/gains of Level 3 assets	(1,446)	385	1,130
Net unrealized (losses)/gains of Level 3 liabilities	(3,657)	391	(39)
	(5,103)	776	1,091

Financial instruments at amortised cost

The carrying value of the Group's financial instruments accounted for at amortized cost approximates their fair value due to their short-term nature and market interest rates, except for bank deposits and loans to customers and borrowings, gross of debt issuance cost, as disclosed in the table below:

	Level of inputs	December 31, 2022		December 31, 2021	
		Fair value	Carrying value	Fair value	Carrying value
Bank deposits and loans to customers	Level 3	236,485	234,334	210,623	205,936
Total bank deposits and loans to customers		236,485	234,334	210,623	205,936
Notes	Level 1	(145,143)	(145,565)	(173,903)	(174,984)
Notes	Level 2	(22,203)	(23,365)	—	—
Unquoted notes	Level 3	(27,000)	(27,000)	(17,012)	(17,012)
Bank and other loans (Note 23)	Level 3	(289,735)	(290,211)	(267,405)	(270,143)
Total borrowings		(484,081)	(486,141)	(458,320)	(462,139)

During the year ended December 31, 2022, Eurobonds of Russian issuers held by MTS Bank, accounted for at fair value, in amount of RUB 2,233 million were transferred in the hierarchy level from Level 1 to Level 2 due to the Moscow Exchange suspension of main trading mode for these securities. There were no transfers between levels of inputs within the hierarchy for the years ended December 31, 2021 and 2020.

During the year ended December 31, 2022, corporate, bank and government debt securities held by MTS Bank, accounted for at fair value, in amount of RUB 24,770 million as of December 31, 2021, were transferred from the category “financial assets at fair value through profit or loss” to the “financial assets at fair value through other comprehensive income” due to the change in investment policy, reviewed to include both sale and receipt of contractual cash flows for the reclassified securities. At the date of reclassification, the fair value of the securities remained unchanged. As of December 31, 2022, the fair value of reclassified securities amounted to RUB 22,394 million. Interest income on reclassified securities for the year ended December 31, 2022 amounted to RUB 1,663 million. There were no transfers between the accounting categories of financial instruments for the years ended December 31, 2021 and 2020.

28. FINANCIAL RISK MANAGEMENT

As part of its business the Group is exposed to several types of financial risks: capital risk (mainly by MTS Bank), market risks, credit (or counterparty) risks, and liquidity risks. Risks mitigating activities are mainly performed at the Group headquarters by the corporate finance personnel and are subject to the approval of the Group's supervisory bodies – the Board of Directors and its Budget Committee.

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Capital risk

MTS Bank, a subsidiary of the Group, is subject to regulations of the Central Bank of Russia which require that banks comply with minimum capital adequacy ratios calculated on the basis of statutory standalone financial statements as follows:

- 8.00% for own capital;
- 4.50% for base capital;
- 6.00% for main capital.

MTS Bank meets the requirements established by the CBR. As of December 31, 2022 and 2021, the capital adequacy ratio of MTS Bank in accordance with CBR requirements were:

- 16.07% and 12.54% for own capital;
- 12.55% and 9.65% for base capital;
- 13.78% and 10.83% for main capital, respectively.

Market risk

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate due to changes in market prices. The Group is primarily exposed to the following types of market risks: interest rate risk and currency exchange rates fluctuations. Financial instruments affected by market risk include loans and borrowings, deposits, accounts payable and accounts receivables denominated in foreign currencies and derivative financial instruments. The sensitivity analyses in the following sections relate to the financial position as of December 31, 2022 and 2021.

Interest rate risks

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate due to changes in market interest rates. The Group manages its interest rate risk by having a balanced portfolio of fixed and variable rate loans and borrowings.

Fixed interest rate risk

A part of the Group's notes denominated US Dollars and Rubles bear fixed interest rates. To eliminate the exposure of changes in the value of debt obligations, the Group enters into fixed-to-variable cross-currency and interest rate swap agreements. In aggregate, the Group entered into fixed-to-variable cross-currency and interest rate swap agreements designated to manage the exposure of changes in value of the debt related to 10.6% and 8.3% of the Group's notes and bank loans with fixed rates outstanding as of December 31, 2022 and 2021.

The notional amounts of interest rate derivative instruments outstanding amounted to RUB 25,000 million and RUB 22,288 million as of December 31, 2022 and 2021, respectively.

Sensitivity analysis

A reasonably possible increase of 100 basis points in short term interest rates would have resulted in RUB 2,157 million, RUB 1,523 million and RUB 1,166 million future increases of interest expense for the years ended December 31, 2022, 2021 and 2020, respectively. The same decrease in short term interest rates would have resulted in RUB 2,157 million, RUB 1,523 million and RUB 1,166 million future decreases of interest expenses for the years ended December 31, 2022, 2021 and 2020, respectively. There will be no material impact on equity.

The interest rate sensitivity analysis was performed based on a constant level of fixed and floating rate debt.

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Foreign currency risks

Foreign currency risk is the risk that the fair value of financial instruments will fluctuate because of changes in foreign exchange rates. The Group's exposure to these changes in foreign exchange rates relates primarily to the Group's financing activities. The Group manages its currency risk by operation derivatives and by using money market instruments.

The Group has entered into several cross-currency swap agreements. These contracts are mainly designated to manage the exposure of changes in currency exchange rate. The contracts assumed periodic exchange of principal and interest payments from RUB-denominated amounts to USD-denominated amounts at a specified exchange rate. The exchange rate was determined by the market spot rate upon issuance. Cross-currency interest rate swap contracts mature in 2023-2024.

In aggregate the Group entered into cross-currency interest rate swap agreements designated to manage the exposure of changes in currency exchange rate for nil and 66.8% of its USD-denominated notes and bank loans outstanding as of December 31, 2022 and 2021 respectively.

The notional amounts of currency derivative instruments amounted to nil and RUB 22,288 million as of December 31, 2022 and 2021 respectively.

The Group has entered into currency forward and swaps agreements to minimize the foreign currency risk. The contracts assumed the purchase or sale of the agreed amount of currency at a specified exchange rate and on a specific date. The rate was determined by the market spot rate upon issuance. As the result of currency forward and swap agreements, unfulfilled as of December 31, 2022, 2021 and 2020, the Group recognized RUB 617 million loss, RUB 83 million loss and RUB 1,136 million gain the consolidated statement of profit and loss for the years ended December 31, 2022, 2021 and 2020, respectively.

The notional amounts of currency forward and swap instruments, unfulfilled as of December 31, 2022 and 2021, amounted to RUB 3,145 million and RUB 9,993 million, respectively.

As of December 31, 2022 and 2021 the carrying amounts of the Group's foreign currency denominated monetary assets and monetary liabilities are as follows:

	December 31, 2022		December 31, 2021	
	Assets, RUB mln	Liabilities, RUB mln	Assets, RUB mln	Liabilities, RUB mln
USD	24,720	48,917	44,251	49,960
EUR	7,880	14,315	3,359	10,106

The following tables demonstrate the sensitivity of profit before tax to a reasonably possible change in USD and EUR exchange rates, with all other variables held constant.

	Change in rate, USD	USD - effect on profit before tax RUB mln	Change in rate, EUR	EUR - effect on profit before tax RUB mln
2022	+15%	(3,630)	+15%	(965)
	-15%	3,630	-15%	965
2021	+15%	(856)	+15%	(1,012)
	-15%	856	-15%	1,012
2020	+10%	786	+10%	(682)
	-10%	(1,291)	-10%	682

The movement in the pre-tax effect is a result of a change in monetary assets and liabilities denominated in US dollars and Euro, where the functional currency of the entity is a currency other than US dollars and Euro.

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There will be no material impact on equity.

The Group's exposure to foreign currency changes for all other currencies is not material.

MTS Bank credit limits committee determines stop-loss limits related to security portfolio and to foreign exchange transactions, as well as limits for net foreign exchange position. The limits for net foreign exchange position conform fully to CBRF requirements. Monitoring of adherence to the limits restricting the amount of MTS Bank's market risk is performed day-to-day.

Liquidity risk

Liquidity risk is the risk of a shortage of funds. The Group's policy is to borrow centrally using a mixture of long-term and short-term borrowing facilities. These borrowings, together with cash generated from operations are utilized to meet anticipated funding requirements. The Group assessed the concentration of risk with respect to refinancing its debt and determined it to be of low level.

The Group manages liquidity risk on long-term borrowings by maintaining a varied maturity profile and a required net debt position, therefore minimizing the refinancing risk. Long-term borrowings mature between one and 5 years.

Securities held by MTS Bank which are accounted for at fair value through other comprehensive income and investments at amortized cost are included in liquidity analysis on the basis of remaining maturity. Most of these securities are included in the CBR Lombard list and if required may be used to obtain Repurchase Agreement (REPO) financing from the CBR. MTS Bank's demand for medium-term liquidity is fully satisfied by the availability of interbank loans and customer deposits (obtaining new and prolongating existing deposits), secured loans and conclusion of REPO agreements. Analysis of the liquidity and interest rate risks of MTS Bank is presented in Note 29.

As at December 31, 2022, the Group's consolidated current liabilities exceeded current assets by RUB 250,461 million. The management believes the Group has sufficient existing and continuing access to liquidity through both operating cash flows and the availability of committed credit facilities of RUB 206,099 million (Note 23).

Credit risk

Credit risk is the risk that the counterparty will not meet its obligations arising from entering into financial instrument, leading to a financial loss.

In accordance with IFRS 9 the Group records an allowance for expected credit losses (ECL) for all financial assets not held at fair value through profit or loss. ECLs are based on the difference between the contractual cash flows due under the contract and all cash flows that the Group expects to receive. The shortfall is discounted at an approximation to the asset's original effective interest rate.

The expected credit-loss approach uses three stages for allocating impairment losses:

Stage 1: expected credit losses within the next twelve months

Stage 1 includes all contracts with no significant increase in credit risk since initial recognition and usually contains new contracts that are fewer than 31 days past due date. The portion of the lifetime expected credit losses resulting from default events possible within the next 12 months is recognized.

PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS***(Amounts in millions of Russian Rubles unless otherwise stated)***Stage 2: expected lifetime credit losses – not credit impaired**

If a financial asset has a significant increase in credit risk since initial recognition but is not yet credit impaired, it is moved to stage 2 and measured at lifetime expected credit loss. This is defined as the expected credit loss that results from all possible default events over the expected life of the financial instrument.

In all cases, the Group considers that there has been a significant increase in credit risk when the contractual payment is more than 30 days past due.

Stage 3: expected lifetime credit losses – credit impaired

If a financial asset is defined as credit impaired or in default, it is transferred to stage 3 and measured at lifetime expected credit loss. Objective evidence for a credit-impaired financial asset includes 91 days past due date as well as other information indicating significant financial difficulties of the borrower. The Group considers a financial asset to be in default when the borrower is unlikely to pay its credit obligations to the Group in full, without recourse by the Group to actions such as realizing security (if any is held).

The determination of whether a financial asset has experienced a significant increase in credit risk is based on an assessment of the probability of default, which is made at least quarterly, incorporating external credit rating information as well as internal information on the credit quality of the financial asset. For debt instruments that are not receivables from financial services, a significant increase in credit risk is assessed mainly based on past-due information.

For contract assets, trade and other receivables, a simplified approach is applied whereby ECL are initially measured over the lifetime of the instrument.

The Group considers its exposure to credit risk as of December 31, 2022, and 2021 to be as follows:

	December 31,	
	2022	2021
Deposits and loans issued	238,816	208,018
Cash and cash equivalents	78,292	40,590
Securities (notes, shares and other)	49,305	54,988
Trade and other receivables	38,058	39,795
Derivative financial instruments	2,208	5,171
Contingent consideration	843	1,867
Investments in equity	473	1,228
Call and put options	112	112
Other	4,031	3,088
	412,138	354,857

Information on the Group's exposure to credit risk on guarantees issued and commitments on loans of MTS Bank is presented in Note 29.

In accordance with the provisions of the internal Group regulations on allocate of free funds, the aggregate credit risk exposure the Group may have to one counterparty is limited. The Group maintains a mixture of cash and cash equivalents, investments, derivatives and certain other financial instruments within various financial institutions. Those are approved as required by internal procedure related to selection of financial institutions to allocate funds.

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MTS Bank performs daily monitoring of future expected cash flows on the operations of both clients and banks, which is a part of the management process of assets and liabilities. The credit risk exposure is monitored on a regular basis to ensure that the credit limits and credit worthiness guidelines established by the MTS Bank's risk management policy are not breached.

Concentrations of credit risk with respect to trade receivables are limited given that the Group's customer base is large and unrelated. Therefore, management believes there is no further credit risk provision required in excess of the normal provision for bad and doubtful receivables.

29. MTS BANK FINANCIAL ASSETS AND LIABILITIES

To present the influence of current macroeconomic conditions the Group refined main approaches, which have the most significant influence on the amounts reflected in consolidated financial statements, to valuation of the level of expected credit losses on bank loans.

Loans to corporate customers:

1. As of December 31, 2022 the Group has updated macroeconomic scenarios for Probability of default (PD) model using the updated macroeconomic forecasts by the Central Bank of Russian Federation and World Bank;
2. Decrease of risk appetite caused by:
 - Enhancement of authorization procedures for new loans and tranches for existing lines of credit;
 - Review of new loan applications in light of stressful scenario of economic development according to budget and business plan;
 - Tendency to replace revolving and non-revolving lines of credit with products that have more preferable risk profile, like overdrafts and factoring;
 - Launch of enhanced monitoring of existing borrowers.

Loans to individuals, small and medium businesses:

1. As of December 31, 2022 the PD model considered the effect of macroeconomic situation and its impact on the portfolio behavior;
2. Decrease of risk appetite caused by:
 - Review of new loan applications in light of stressful scenario of economic development;
 - Launch of enhanced monitoring of existing borrowers;
 - Launch of restructuring programs for troubled borrowers.

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Bank deposits and loans to customers

The table below represents the structure and amounts of current and non-current bank deposits and loans to customers as of December 31, 2022 and 2021.

	December 31,	
	2022	2021
Loans to customers	267,700	223,566
Due from banks	3,432	3,514
Allowance for ECL	(36,798)	(21,144)
Total bank deposits and loans to customers, net	234,334	205,936
Less: current portion	(96,135)	(87,594)
Bank deposits and loans to customers, non-current	138,199	118,342

The structure and amounts of bank loans to customers as of December 31, 2022 and 2021 is presented in the table below:

	December 31,	
	2022	2021
Loans to legal entities		
Corporate borrowers	16,132	28,409
Medium-sized enterprises and small businesses	1,454	1,706
Total loans to legal entities	17,586	30,115
Loans to individuals		
Mortgage loans	22,730	16,553
Consumer loans	168,024	139,766
Credit cards	59,315	36,933
Other	45	200
Total loans to individuals	250,114	193,452
Due from banks		
Time deposits with banks	1,175	1,781
Obligatory reserves with the Central Banks	2,257	1,733
Total due from banks	3,432	3,514
Total bank deposits and loans to customers	271,132	227,081
Less: allowance for expected credit losses	(36,798)	(21,144)
Total bank deposits and loans to customers, net	234,334	205,937

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The table below summarizes carrying value of loans to customers aggregated by types of collateral obtained by the Group:

	December 31,	
	2022	2021
Pledge of real estate	26,012	19,115
Guaranties	9,085	22,380
Securities	131	284
Pledge of equipment	—	1
Unsecured loans	232,472	181,787
Allowance for expected credit losses	(36,654)	(21,114)
Total loans to customers, net	231,046	202,453

The balances above do not necessarily reflect the fair value of collateral received.

Movements in the allowance for impairment losses attributable to bank deposits and loans to customers for the year ended December 31, 2022 and 2021 are presented in the table below:

	Loans to customers	Due from banks	Total
Balance as at January 1, 2022	21,114	30	21,144
Provision charge/release	22,490	155	22,645
Recovery of previously written-off assets	522	—	522
Bad debt written-off	(3,735)	(41)	(3,776)
Sale of loans	(3,226)	—	(3,226)
Other movements	(511)	—	(511)
Balance as at December 31, 2022	36,654	144	36,798

	Loans to customers	Due from banks	Total
Balance as at January 1, 2021	16,436	10	16,446
Provision charge/release	11,046	20	11,066
Recovery of previously written-off assets	1,557	—	1,557
Bad debt written-off	(3,361)	—	(3,361)
Sale of loans	(4,324)	—	(4,324)
Other movements	(240)	—	(240)
Balance as at December 31, 2021	21,114	30	21,144

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Movements in provision for expected credit losses on loans to legal entities for the year ended December 31, 2022 and 2021 were as follows:

	Stage 1	Stage 2	Stage 3	Total
Balance as at January 1, 2022	818	25	2,295	3,138
- Transfer to stage 1	29	(28)	(1)	—
- Transfer to stage 2	(135)	136	(1)	—
- Transfer to stage 3	—	(89)	89	—
New financial assets originated or purchased	194	—	—	194
Change due to change of credit risk	(57)	46	(184)	(195)
Sale of loans	—	—	(6)	(6)
Write-offs	—	—	(15)	(15)
Recovery of previously written-off assets	—	—	235	235
Other movements	(635)	—	124	(511)
Balance as at December 31, 2022	214	90	2,536	2,840

In June 2022 the Group has performed renovation of several loans that were given to legal entities. According to the novation loan claims in amount of 5,106 mln RUB, including allowance for expected credit losses in amount of 635 mln RUB, were replaced with claims on investment property. As of December 31, 2022 these claims in amount of 2,361 mln RUB, including allowance for expected credit losses in amount of 619 mln RUB, were included in Other assets.

	Stage 1	Stage 2	Stage 3	Total
Balance as at January 1, 2021	899	141	2,704	3,744
- Transfer to stage 1	119	(119)	—	—
- Transfer to stage 2	(46)	49	(3)	—
- Transfer to stage 3	(105)	(26)	131	—
New financial assets originated or purchased	317	—	—	317
Change due to change of credit risk	(126)	(20)	(1,433)	(1,579)
Write-offs	—	—	(79)	(79)
Recovery of previously written-off assets	—	—	975	975
Other movements	(240)	—	—	(240)
Balance as at December 31, 2021	818	25	2,295	3,138

Movements in provision for expected credit losses attributable to loans to individuals for the year ended December 31, 2022 and 2021 were as follows:

	Stage 1	Stage 2	Stage 3	Total
Balance as at January 1, 2022	6,093	3,361	8,522	17,976
- Transfer to stage 1	1,844	(1,690)	(154)	—
- Transfer to stage 2	(2,600)	3,086	(486)	—
- Transfer to stage 3	(115)	(10,263)	10,378	—
New financial assets originated or purchased	4,644	—	—	4,644
Change due to change of credit risk	(3,813)	12,497	9,163	17,847
Write-offs	—	—	(3,720)	(3,720)
Sales	—	—	(3,220)	(3,220)
Recovery of previously written-off assets	—	—	287	287
Balance as at December 31, 2022	6,053	6,991	20,770	33,814

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	Stage 1	Stage 2	Stage 3	Total
Balance as at January 1, 2021	3,099	1,446	8,147	12,692
- Transfer to stage 1	1,809	(1,633)	(176)	—
- Transfer to stage 2	(939)	1,220	(281)	—
- Transfer to stage 3	(278)	(4,691)	4,969	—
New financial assets originated or purchased	3,821	—	—	3,821
Change due to change of credit risk	(1,419)	7,019	2,887	8,487
Write-offs	—	—	(3,282)	(3,282)
Sales	—	—	(4,324)	(4,324)
Recovery of previously written-off assets	—	—	582	582
Balance as at December 31, 2021	6,093	3,361	8,522	17,976

The following valuation categories represent the Group's classification of credit quality of the loans:

- *Low to fair risk* – loans of high credit quality and low probability of default, not past due or immaterially overdue;
- *Monitoring* – loans with increased probability of default including restructured loans;
- *Impaired* – impaired loans including more than 90 days overdue.

The table below summarizes information regarding the quality of loans to individuals:

As of December 31, 2022	Stage 1	Stage 2	Stage 3	Total
Low to fair risk	197,198	16,268	—	213,466
Monitoring	—	8,105	5,034	13,139
Impaired	—	—	23,509	23,509
Loss allowance	(6,053)	(6,991)	(20,770)	(33,814)
Total	191,145	17,382	7,773	216,300
As of December 31, 2021	Stage 1	Stage 2	Stage 3	Total
Low to fair risk	174,667	756	—	175,423
Monitoring	—	7,125	832	7,957
Impaired	—	—	10,072	10,072
Loss allowance	(6,093)	(3,361)	(8,522)	(17,976)
Total	168,574	4,520	2,382	175,476

The table below summarizes information regarding the quality of loans to legal entities:

As of December 31, 2022	Stage 1	Stage 2	Stage 3	Total
Low to fair risk	9,928	4,236	—	14,164
Monitoring	179	191	—	370
Doubtful	—	—	2	2
Impaired	—	—	3,050	3,050
Loss allowance	(214)	(90)	(2,536)	(2,840)
Total	9,893	4,337	516	14,746

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As of December 31, 2021	Stage 1	Stage 2	Stage 3	Total
Low to fair risk	20,575	721	—	21,296
Monitoring	5,700	72	—	5,772
Doubtful	—	—	767	767
Impaired	—	—	2,280	2,280
Loss allowance	(818)	(25)	(2,295)	(3,138)
Total	25,457	768	752	26,977

Analysis by credit quality of loans to individuals outstanding as of December 31, 2022 is as follows:

As of December 31, 2022	Gross loans	Provision for ECL	Net loans	Provision for ECL to gross loans
Collectively assessed				
Not past due	213,465	(9,922)	203,543	5 %
Overdue:				
up to 30 days	6,203	(1,718)	4,485	28 %
31 to 60 days	3,588	(1,904)	1,684	53 %
61 to 90 days	3,037	(1,930)	1,107	64 %
91 to 180 days	6,578	(4,779)	1,799	73 %
over 180 days	16,775	(13,513)	3,262	81 %
Total collectively assessed loans	249,646	(33,766)	215,880	14 %
Individually impaired				
Not past due	308	(18)	290	6 %
Overdue:				
up to 30 days	—	—	—	0 %
31 to 60 days	3	—	3	0 %
61 to 90 days	—	—	—	0 %
91 to 180 days	18	—	18	0 %
over 180 days	139	(30)	109	22 %
Total individually impaired loans	468	(48)	420	10 %
Total	250,114	(33,814)	216,300	14 %

Analysis by credit quality of loans to medium-sized enterprises and small businesses outstanding as of December 31, 2022 is as follows:

As of December 31, 2022	Gross loans	Provision for ECL	Net loans	Provision for ECL to gross loans
Collectively assessed				
Not past due	760	(10)	750	1 %
Overdue:				
up to 30 days	20	(4)	16	18 %
31 to 60 days	17	(16)	1	91 %
61 to 90 days	7	(6)	1	82 %
91 to 180 days	29	(25)	4	87 %
over 180 days	621	(446)	175	72 %
Total collectively assessed loans	1,454	(507)	947	35 %

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Analysis by credit quality of loans to individuals outstanding as of December 31, 2021 is as follows:

As of December 31, 2021	Gross loans	Provision for ECL	Net loans	Provision for ECL to gross loans
Collectively assessed				
Not past due	175,422	(6,297)	169,125	4 %
Overdue:				
up to 30 days	3,989	(1,090)	2,899	27 %
31 to 60 days	2,007	(1,240)	767	62 %
61 to 90 days	1,584	(1,093)	491	69 %
91 to 180 days	3,248	(2,499)	749	77 %
over 180 days	6,641	(5,659)	982	85 %
Total collectively assessed loans	192,891	(17,878)	175,013	9 %
Individually impaired				
Not past due	364	(22)	342	6 %
Overdue:				
up to 30 days	—	—	—	0 %
31 to 60 days	8	—	8	0 %
61 to 90 days	3	(1)	2	33 %
91 to 180 days	5	(1)	4	20 %
over 180 days	181	(74)	107	41 %
Total individually impaired loans	561	(98)	463	17 %
Total	193,452	(17,976)	175,476	9 %

Analysis by credit quality of loans to medium-sized enterprises and small businesses outstanding as of December 31, 2021 is as follows:

As of December 31, 2021	Gross loans	Provision for ECL	Net loans	Provision for ECL to gross loans
Collectively assessed				
Not past due	1,079	(22)	1,057	2 %
Overdue:				
up to 30 days	19	(8)	11	42 %
31 to 60 days	15	(14)	1	93 %
61 to 90 days	11	(10)	1	91 %
91 to 180 days	14	(11)	3	79 %
over 180 days	568	(374)	194	66 %
Total collectively assessed loans	1,706	(439)	1,267	26 %

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Bank deposits and liabilities

The table below represents the structure and amounts of current and non-current bank deposits and liabilities as of December 31, 2022 and 2021.

	December 31,	
	2022	2021
Customer accounts	249,696	192,177
Due to banks and other financial institutions	10,984	21,430
Debt securities issued	10,481	5,581
Other financial liabilities	1,980	2,180
Total bank deposits and liabilities	273,141	221,368
Less: current portion	(260,744)	(207,055)
Total bank deposits and liabilities, non-current	12,397	14,313

The structure and amounts of customer accounts of December 31, 2022 and 2021 are presented below:

	December 31,	
	2022	2021
Legal entities		
- Current/settlement accounts	40,276	13,311
- Term deposits	67,469	63,003
Individuals		
- Current/settlement accounts	30,767	20,654
- Term deposits	111,184	95,209
Total customer accounts	249,696	192,177

The structure and amounts of due to banks as of December 31, 2022 and 2021 are presented below:

	December 31,	
	2022	2021
Loans under repurchase agreements	4,002	9,333
Loans and term deposits from banks and other financial institutions	1,894	9,474
Correspondent accounts of other banks	5,088	2,623
Total due to banks	10,984	21,430

Loans under repurchase agreements were secured by the following collateral:

- Securities measured at fair value through profit/loss with the value of RUB 0 million and RUB 1,946 million as of December 31, 2022 and 2021 respectively;
- Securities measured at amortized cost with the value of RUB 0 million and RUB 8,624 million as of December 31, 2022 and 2021 respectively;
- Securities measured at fair value through other comprehensive income with the value of RUB 4,456 million and RUB 0 million as of December 31, 2022 and 2021 respectively.

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In November 2015, MTS Bank received a subordinated debt of RUB 7,246 million in the form of OFZ from the state corporation DIA with the date of maturity January 22, 2025. In accordance with the terms of the contract, MTS Bank should return the securities to the creditor at the end of the contract period. The Group does not recognize the securities and the obligation to return them to the creditor in the consolidated statement of financial position as of December 31, 2022 and 2021. In accordance with the contract, MTS Bank should comply with certain covenants with respect to capital, loan portfolio, employee benefits. If the above conditions are not met, DIA may apply penalties to MTS Bank. The contract also includes certain restrictions on sale or repledge of the securities by MTS Bank. The securities received from DIA were not pledged as a collateral as of December 31, 2022 and 2021.

An analysis of liquidity and interest rate risk inherent to bank assets as of December 31, 2022 and 2021 is presented in the following table.

The following tables, based on the information provided to the management of the Group, reflect the structure of assets and liabilities in accordance with the contractual maturity, with the exception of trading securities at fair value through other comprehensive income.

In the liquidity analysis, the deposits of individuals are disclosed by maturities in accordance with the agreement. According to Russian legislation these deposits can be withdrawn upon a request within 1 month. However, on the basis of the analysis of the Group's history and experience, such deposits are extended rather than withdrawn. Additionally, on the ground of the Group's forecasts based on different behaviour of deposit holders, the scenario of withdrawing all deposits within a horizon up to 1 month is considered as extremely stressed and is not used for liquidity management and, thus, for financial statements disclosure.

As of December 31, 2022	Up to 1 month	1 month to 3 months	3 months to 1 year	1 year to 5 years	Over 5 years	Maturity undefined	Total
Financial assets							
Cash and cash equivalents	20,117	—	—	—	—	—	20,117
Financial assets at fair value through other comprehensive income	377	1,215	665	10,971	8,355	812	22,395
Financial assets at fair value through profit or loss	697	—	—	—	—	—	697
Loans to customers	10,967	19,970	61,906	112,482	19,554	6,167	231,046
Investments in securities	9	211	1,286	1,299	—	—	2,805
Total interest bearing financial assets	32,167	21,396	63,857	124,752	27,909	6,979	277,060
Cash and cash equivalents	38,103	—	—	—	—	—	38,103
Financial assets at fair value through profit or loss	—	—	—	—	—	—	—
Due from banks	—	—	—	—	—	3,427	3,427
Other financial assets	4,038	7	3	—	—	2,300	6,348
Total non-interest bearing financial assets	42,141	7	3	—	—	5,727	47,878
Total financial assets	74,308	21,403	63,860	124,752	27,909	12,706	324,938

The Group stable sources of funding as:

- OFZ received from the SC DIA, reflected on off-balance accounts, but recorded in the report as stable sources of financing with a maturity of up to 1 month (5% discount from the current market price was also applied to them);
- Investments into debt securities measured at fair value through profit and loss. The amount of investments attributed in the table for a period of up to 30 days is adjusted, based on the following approach: for securities included in the Lombard List of the CBR, 85% of the investments amount is assigned for a period of up to 30 days; all others – to maturity. The possibility of attracting liquidity for direct REPO transactions with an effective discount of 15% is simulated;

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- Investments into securities measured at amortized cost and fair value through other comprehensive income: for investments included in the CBR Lombard List, which are adjusted for a 15% discount, are recognized as stable sources of financing. These securities are classified as measured at amortized cost. The Group does not plan to dispose of these securities under the current business model, but can sell them with a repurchase obligation (under a direct REPO transaction) to satisfy liquidity needs in times of stress;
- Time deposits of individuals: a part of the planned deposits amounts is reflected within stable sources of funding, as the Group expects that they will be either prolonged or replaces. Shares are determined in accordance with the conservative estimate based on scenario modeling, which does not contradict current historical statistics;
- Settlement accounts of individuals and legal entities: a part of small account amounts in accordance with the conservative estimate of the level of settling balances are reflected under stable sources of funding, as the Group expects that there will be neither movement nor replacement among these amounts. Shares are determined in accordance with the conservative estimate based on scenario modeling, which does not contradict current historical statis.

As of December 31, 2022	Up to 1 month	1 month to 3 months	3 months to 1 year	1 year to 5 years	Over 5 years	Maturity undefined	Total
Financial liabilities							
Due to banks and other financial institutions	(6,220)	—	—	(64)	—	—	(6,284)
Customer accounts	(52,665)	(18,956)	(107,500)	(7,316)	—	—	(186,437)
Debt securities issued	(322)	(114)	(5,057)	(4,988)	—	—	(10,481)
Lease obligations	(22)	(45)	(222)	(393)	(3)	—	(685)
Total interest bearing financial liabilities	(59,229)	(19,115)	(112,779)	(12,761)	(3)	—	(203,887)
Due to banks and other financial institutions	(4,700)	—	—	—	—	—	(4,700)
Customer accounts	(62,546)	—	—	—	—	(713)	(63,259)
Other financial liabilities	(2,277)	(297)	(2,446)	—	—	—	(5,020)
Total non-interest bearing financial liabilities	(69,523)	(297)	(2,446)	—	—	(713)	(72,979)
Total financial liabilities	(128,752)	(19,412)	(115,225)	(12,761)	(3)	(713)	(276,866)
Liquidity gap	(54,444)	1,991	(51,365)	111,991	27,906		
Stable sources of funding	88,179	(22,598)	56,312	(19,814)	(102,092)		
Net liquidity gap	33,748	(20,607)	4,947	92,177	(74,186)		
Cumulative liquidity gap	33,748	13,141	18,088	110,265	36,079		

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As of December 31, 2021	Up to 1 month	1 month to 3 months	3 months to 1 year	1 year to 5 years	Over 5 years	Maturity undefined	Total
Financial assets							
Financial assets at fair value through profit or loss	24,769	—	—	—	—	1	24,770
Due from banks	1,781	—	—	—	—	—	1,781
Loans to customers	9,985	18,848	50,342	109,949	11,346	1,983	202,453
Investments in securities	9	514	5,555	2,808	—	—	8,886
Total interest bearing financial assets	36,544	19,362	55,897	112,757	11,346	1,984	237,890
Cash and cash equivalents	15,974	—	—	—	—	—	15,974
Due from banks	—	—	—	—	—	1,733	1,733
Other financial assets	2,272	6	15	—	—	31	2,324
Total non-interest bearing financial assets	18,246	6	15	—	—	1,764	20,031
Total financial assets	54,790	19,368	55,912	112,757	11,346	3,747	257,920
	Up to 1 month	1 month to 3 months	3 months to 1 year	1 year to 5 years	Over 5 years	Maturity undefined	Total
Financial liabilities							
Due to banks and other financial institutions	(18,788)	—	—	(19)	—	—	(18,807)
Customer accounts	(35,294)	(13,801)	(95,472)	(9,114)	—	—	(153,681)
Debt securities issued	(32)	—	(350)	(5,199)	—	—	(5,581)
Lease obligations	(17)	(44)	(200)	(471)	—	—	(732)
Total interest bearing financial liabilities	(54,131)	(13,845)	(96,022)	(14,803)	—	—	(178,801)
Due to banks and other financial institutions	(2,623)	—	—	—	—	—	(2,623)
Customer accounts	(38,496)	—	—	—	—	—	(38,496)
Other financial liabilities	(2,857)	(1,147)	(2,262)	—	—	—	(6,266)
Total non-interest bearing financial liabilities	(43,976)	(1,147)	(2,262)	—	—	—	(47,385)
Total financial liabilities	(98,107)	(14,992)	(98,284)	(14,803)	—	—	(226,186)
Liquidity gap	(43,317)	4,376	(42,372)	97,954	11,346		
Stable sources of funding	43,901	(2,392)	43,814	(3,519)	(81,804)		
Net liquidity gap	584	1,984	1,442	94,435	(70,458)		
Cumulative liquidity gap	584	2,568	4,010	98,445	27,987		

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Analysis of the liquidity and interest rate risks as of December 31, 2022 and 2021 is presented in the following table. The amounts in the table below represent future aggregate undiscounted cash flows.

As of December 31, 2022	Weighted average interest rate	Up to 1 month	1 month to 3 months	3 months to 1 year	1 year to 5 years	Over 5 years	Maturity undefined	Total
Interest bearing financial liabilities								
Due to banks	6.9 %	(6,230)	—	—	(72)	—	—	(6,302)
Customer accounts	8.1 %	(53,465)	(19,323)	(112,681)	(13,139)	—	—	(198,608)
Debt securities issued	8.9 %	(329)	(128)	(5,561)	(5,819)	—	—	(11,837)
Lease obligations	8.3 %	(22)	(46)	(234)	(479)	(6)	—	(787)
Total interest bearing financial liabilities		(60,046)	(19,497)	(118,476)	(19,509)	(6)	—	(217,534)
Non-interest bearing financial liabilities								
Due to banks		(4,700)	—	—	—	—	—	(4,700)
Customer accounts		(62,546)	—	—	—	—	(713)	(63,259)
Other financial liabilities		(2,277)	(297)	(2,446)	—	—	—	(5,020)
Total non-interest bearing financial liabilities and commitments		(69,523)	(297)	(2,446)	—	—	(713)	(72,979)
Total financial liabilities		(129,569)	(19,794)	(120,922)	(19,509)	(6)	(713)	(290,513)
As of December 31, 2021	Weighted average interest rate	Up to 1 month	1 month to 3 months	3 months to 1 year	1 year to 5 years	Over 5 years	Maturity undefined	Total
Interest bearing financial liabilities								
Due to banks	8.4 %	(18,788)	—	(19)	—	—	—	(18,807)
Customer accounts	6.3 %	(35,402)	(13,964)	(98,665)	(10,164)	—	—	(158,195)
Debt securities issued	7.3 %	(33)	—	(695)	(5,389)	—	—	(6,117)
Lease obligations	5.2 %	(11)	(45)	(200)	(471)	(1)	—	(728)
Total interest bearing financial liabilities		(54,234)	(14,009)	(99,579)	(16,024)	(1)	—	(183,847)
Non-interest bearing financial liabilities								
Due to banks		(2,623)	—	—	—	—	—	(2,623)
Customer accounts		(38,496)	—	—	—	—	—	(38,496)
Other financial liabilities		(2,857)	(1,147)	(2,262)	—	—	—	(6,266)
Total non-interest bearing financial liabilities and commitments		(43,976)	(1,147)	(2,262)	—	—	—	(47,385)
Total financial liabilities		(98,210)	(15,156)	(101,841)	(16,024)	(1)	—	(231,232)

The Group has contingent liabilities (future period obligations) represented by bank guarantees in amount of RUB 18,691 million as at December 31, 2022 (RUB 21,869 million as at December 31, 2021).

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Information on the maximum amount of credit risk on guarantees issued and commitments on loans is presented below:

As of December 31, 2022	Stage 1	Stage 2	Stage 3	Total
Commitments on loans	66,258	1,314	57	67,629
Guarantees issued	16,434	1,979	213	18,626
Less provision	(826)	(25)	(192)	(1,043)
Total commitments on loans and guarantees issued	81,866	3,268	78	85,212
As of December 31, 2021	Stage 1	Stage 2	Stage 3	Total
Commitments on loans	36,759	745	33	37,537
Guarantees issued	13,798	2,257	100	16,155
Less provision	(687)	(15)	(50)	(752)
Total commitments on loans and guarantees issued	49,870	2,987	83	52,940

30. RELATED PARTIES

Related parties include the Sistema Public Joint-Stock Financial Corporation or “Sistema”, a shareholder of the Group, subsidiaries and shareholders of Sistema, affiliated companies, associates and joint ventures.

Terms and conditions of transactions with related parties – Outstanding balances as of December 31, 2022 and 2021, were unsecured except accounts receivable from Business Nedvizhimost in amount of RUB 1,399 million, which were secured by buildings pledged as collateral. Settlements with related parties are made on a cash basis. There have been no guarantees provided or received for any related party receivables or payables. As of December 31, 2022, the Group had no significant amounts of credit impairment relating to the receivables owed by related parties as well as impairment expenses recognized during the years ended December 31, 2022, 2021 and 2020.

The Group has neither the intent nor the ability to offset the outstanding accounts payable and accounts receivable with related parties under the terms of existing agreements.

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Balances of related parties' transactions were as follows:

	December 31,	
	2022	2021
ASSETS FROM RELATED PARTIES		
NON-CURRENT ASSETS:		
Advances for property, plant and equipment		
Sistema's subsidiaries	1,211	1,347
Other related parties	11	34
Right-of-use assets, Gross Book Value		
Sistema's subsidiaries	3,832	4,432
Other related parties	101	111
Right-of-use assets, Accumulated Depreciation		
Sistema's subsidiaries	(1,017)	(1,586)
Other related parties	(48)	(46)
Other investments		
Sistema's subsidiaries	3,211	117
The Group's associates	2,035	625
Other related parties	3	2
Accounts receivable, related parties		
Sistema's subsidiaries	1,290	5,000
Key management personnel of the Group, its parent and shareholders	477	—
Bank deposits and loans to customers		
Sistema's subsidiary	693	1,179
Sistema's associates	283	2,587
Other assets		
Key management personnel of the Group, its parent and shareholders	355	—
Total non-current assets	12,437	13,802
CURRENT ASSETS:		
Accounts receivable, related parties		
Sistema's subsidiaries	1,502	1,255
The Group's associates	823	911
Other related parties	318	121
Bank deposits and loans to customers		
Sistema's subsidiaries	5,550	820
Key management personnel of the Group, its parent and shareholders	341	87
Sistema's associates	287	2,078
Short-term investments		
Sistema's subsidiaries	4,125	2,377
Sistema, parent company	2,156	1,443
Cash and cash equivalents		
Sistema's subsidiaries	520	1,311
Other financial assets		
Sistema, parent company	2,010	1,829
Sistema's subsidiaries	509	300
Other related parties	109	109
Other assets		
Key management personnel of the Group, its parent and shareholders	1,402	—
Sistema's subsidiaries	1,026	1,059
Other related parties	585	83
Total current assets	22,054	13,783
TOTAL ASSETS FROM RELATED PARTIES	34,491	27,585
LIABILITIES TO RELATED PARTIES		
NON-CURRENT LIABILITIES:		
Borrowings		
The Group's associates	2,745	—
Lease obligations		
Sistema's subsidiaries	3,103	3,968
Other related parties	49	70
Bank deposits and liabilities		
Key management personnel of the Group, its parent and shareholders	2,920	1,433
Other financial liabilities		
The Group's associates	2,081	—
Total non-current liabilities	10,898	5,471
CURRENT LIABILITIES:		
Accounts payable, related parties		
Sistema's subsidiaries	658	2,756
Sistema's associates	523	632
The Group's associates	270	711
Other related parties	—	8
Borrowings		
The Group's associates	454	2,129
Other related parties	12	11
Lease obligations		
Sistema's subsidiaries	487	551
Other related parties	10	13
Bank deposits and liabilities		
Key management personnel of the Group, its parent and shareholders	38,276	32,886
Sistema's subsidiaries	26,426	22,312
Sistema's associates	5,797	9,163
Sistema, parent company	946	2,042
Other related parties	470	376
Total current liabilities	74,329	73,590
TOTAL LIABILITIES TO RELATED PARTIES	85,227	79,061

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Operating transactions – During the twelve months ended December 31, 2022, 2021 and 2020 the Group provided the following services to related parties – electricity supply by LLC “MTS Energo”, Internet and video/image transmission services, integration services, roaming, interconnect and other telecommunication services, banking services.

At the same time, the Group incurred security expenses, roaming and interconnect expenses, transfer of line-cable structures, dismantling equipment expenses, rent expenses and other expenses, and recognized income from scrap metal sales and other operations.

	2022	2021	2020
Revenue			
<i>Sistema's subsidiaries</i>	5,252	4,294	4,371
<i>Sistema's associates</i>	1,013	752	615
<i>The Group's associates</i>	289	622	418
<i>Other related parties</i>	418	691	428
TOTAL REVENUE	6,972	6,359	5,832
Cost of services			
<i>Sistema's subsidiaries</i>	4,182	2,143	599
<i>Key management personnel of the Group, its parent and shareholders</i>	1,719	1,476	1,830
<i>Sistema, parent company</i>	571	233	141
<i>Other related parties</i>	666	454	272
Selling, general and administrative expenses			
<i>Key management personnel of the Group, its parent and shareholders</i>	5,079	4,256	2,003
<i>Other related parties</i>	864	812	691
Other operating income / (expense)			
<i>Sistema's subsidiaries</i>	74	2,831	2,160
<i>Other related parties</i>	(1)	59	(13)
OPERATING PROFIT / (LOSS)	(6,036)	(125)	2,443
Finance income / (loss)			
<i>Sistema's subsidiaries</i>	852	935	1,492
<i>Other related parties</i>	(81)	(28)	239
Other non-operating income / (expense)			
<i>The Group's associates</i>	(221)	—	(278)
<i>Other related parties</i>	(116)	41	—
PROFIT BEFORE TAX	(5,602)	823	3,896

During the years ended December 31, 2022, 2021 and 2020, the Group acquired property, plant and equipment and intangible assets from the related parties in the amount of:

	2021	2021	2020
<i>Sistema's subsidiaries</i>	15,061	10,330	3,324
<i>Sistema's associates</i>	270	2,530	6,299
<i>Other related parties</i>	87	122	239
Total purchases of property, plant and equipment, intangible assets and other assets, related parties	15,418	12,982	9,862

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As of December 31, 2022 and 2021, the Group had Contingent liabilities on loans and undrawn credit lines from the related parties in the amount of:

	December 31,	
	2022	2021
<i>Sistema's subsidiaries</i>	188	634
<i>Other related parties</i>	41	64
Total contingent liabilities on loans and undrawn credit lines	229	698

Guarantees are contracts that provide compensation if another party fails to perform a contractual obligation. Such contracts do not transfer credit risk. The risk under the performance guarantee contract represents the possibility that an insured event will occur (i.e. another party to the contract fails to perform a contractual obligation). Warranty claims must be made prior to the expiration of the contract. During the years ended December 31, 2022, 2021 and 2020, the Group provided Guarantees and similar commitments to the related parties in the amount of:

	2022	2021	2020
<i>Sistema's subsidiaries</i>	658	14	344
<i>Other related parties</i>	976	1,077	679
Total guarantees and similar commitments	1,634	1,091	1,023

Lease payments

During the years ended December 31, 2022, 2021 and 2020, the Group made lease payments (capitalized in accordance with IFRS 16) in the amount of RUB 1,240 million, RUB 1,361 million and RUB 1,530 million, respectively, to the related parties.

Business Nedvizhimost

In December 2021, the Group purchased 5-year 10.8% coupon notes of JSC “Business-Nedvizhimost” or “Business-Nedvizhimost”, in the amount of RUB 2,100 million. The notes were accounted as financial assets at fair value through profit and loss and disclosed within short-term investments in the accompanying consolidated statements of financial position. As of December 31, 2022 and 2021, the investment amounted to RUB 2,105 million and RUB 2,105 million respectively.

In April 2022, the Group entered into a novation agreement in respect to the disposal of property to Business Nedvizhimost in 2019. Under the terms of new agreement part of the receivables were converted to a loan with a similar repayment schedule and interest rate. The loan is payable by “Sistema-Invest” JSC, Sistema’s subsidiary. As of December 31, 2022, the amount of the loan was recognized as part of other investments and short-term investments in the accompanying consolidated statements of financial position totaled to RUB 3,095 million and RUB 164 million, respectively. During the year ended December 31, 2022 the Group recognized expenses from discounting in the amount of RUB 380 million as part of financial expenses.

Sistema

The Group holds Sistema notes that were accounted as financial assets at fair value through profit and loss and disclosed within short-term investments in the accompanying consolidated statements of financial position. As of June December 31, 2022 and 2021, the investment amounted to RUB 1,459 million and RUB 1,443 million respectively.

Nvision Group

The Group acquires software, services and other intangible assets from Nvision Group, a subsidiary of Sistema

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The purchases of software, services and other intangible assets during the years ended December 31, 2022 and 2021, amounted to RUB 11,466 million and RUB 7,181 million, respectively.

Visionlabs Group

In February 2022, the Group purchased of 24% in Visionlabs Group from Sistema Venture Capital Fund I, and since then it is considered a subsidiary instead of related party of the Group.

Remuneration of key management personnel

Key management personnel of the Group are members of the Board of Directors and Management Board. During the years ended December 31, 2022, 2021 and 2020, their total remuneration amounted to RUB 2,864 million, RUB 2,406 million and RUB 1,309 million, respectively, including social contributions of RUB 730 million, RUB 501 million and RUB 214 million, respectively. These amounts comprised of RUB 1,453 million, RUB 1,008 million and RUB 690 million in base salaries and 1,412 RUB million, RUB 1,398 million and RUB 619 million in bonuses paid pursuant to a bonus plan, respectively (including social contributions).

The management and directors are also entitled to cash-settled and equity-settled share-based payments. Related compensation accrued during the years ended December 31, 2022, 2021 and 2020, amounted to RUB 3,465 million, RUB 3,328 million and RUB 694 million, respectively, including social contributions amounted to RUB 254 million, RUB 338 million and RUB 79 million, respectively. For more details, see Note

31. STOCK-BASED COMPENSATIONS

The Group has a number of share plans used to award shares to directors, executive officers and employees as part of their remuneration package. The Group share plans include both equity-settled and cash-settled compensations.

Equity-settled share based awards are measured at fair value (excluding the effect on non-market-based conditions) at the date of grant. The fair value determined at the grant date of equity-settled share-based award is based on the Group's estimate of the shares that will eventually vest and adjusted for the effect of non-market based conditions.

For cash-settled based awards the fair value is newly determined at each reporting date and at the settlement date, the changes in the fair value are recognized in profit or loss, until the liability under the share plan is settled.

The share awards granted in 2021 have an attached market condition based on Group's market capitalization. The share awards granted before 2021 had only performance condition related to certain financial target (Free Cash Flow), which were treated as non-market vesting conditions.

The fair value of share awards is based on the observed market price of the Group's ordinary shares, adjusted for expected dividends reduced to the current value using a risk-free interest rate.

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The equity-settled share based awards displayed the following development in the financial years 2022 and 2021:

	Twelve month ended December 31,			
	2022		2021	
	Shares (in thousands)	Weighted- average fair value per share (in RUB)	Shares (in thousands)	Weighted- average fair value per share (in RUB)
Outstanding at the beginning of the period	20,666	327	3,194	424
Granted during the period	10,767	240	18,733	249
Forfeited during the period	(2,747)	400	(447)	407
Exercised during the period	(4,594) ⁽¹⁾	240	(814) ⁽²⁾	406
Outstanding at the end of the period	24,092	339	20,666	327
Exercisable at the end of the period	11,063	312	6,246	361

(1) The weighted-average exercise price of shares was RUB 297.

(2) The weighted-average exercise price of shares was RUB 375.

The equity-settled share based awards were estimated using the following range of exercise prices and the weighted-average remaining contractual terms:

	December 31, 2022		
	Shares (in thousands)	Range of exercise prices (in RUB)	Weighted- average remaining contractual term (in month)
Outstanding shares	24,092		
Incl. to be exercised in 2023	11,063	230-240	3
to be exercised in 2024	10,099	320-330	15
to be exercised in 2025	2,930	320-660	27

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The cash-settled share based awards displayed the following development in the financial years 2022 and 2021:

	Twelve month ended December 31,			
	2022		2021	
	Shares (in thousands)	Weighted- average fair value per share (in RUB)	Shares (in thousands)	Weighted- average fair value per share (in RUB)
Outstanding at the beginning of the period	3,485	373	725	707
Granted during the period	5,189	328	3,788	423
Forfeited during the period	(585)	515	(298)	678
Exercised during the period	(1,593) ⁽¹⁾	591	(729) ⁽¹⁾	707
Outstanding at the end of the period	6,496	333	3,485	402
Exercisable at the end of the period	2,468	319	1,598	638

(1) The weighted-average exercise price of shares is equal weighted-average fair value.

The liability under cash-settled awards was estimated using the following range of exercise prices and the weighted-average remaining contractual terms:

	December 31, 2022		
	Shares (in thousands)	Range of exercise prices (in RUB)	Weighted- average remaining contractual term (in month)
Outstanding shares, Incl.	6,496		
to be exercised in 2023, based on ordinary shares	2,468	236	3
to be exercised in 2024, based on ordinary shares	2,091	320-330	15
to be exercised in 2025, based on ordinary shares	1,938	320-488	27

Due to high volatility of Russian stock market at the end of the financial year 2021, the market performance condition for equity-settled share based awards granted in 2021 was modified. The resulting change in the incremental fair value of the share-based compensation totaled to RUB 145 per share for instruments to be executed as of December 31, 2021, RUB 68 per share for instruments to be executed as of December 31, 2022, and RUB 49 per share for instruments to be executed as of December 31, 2023, respectively.

Total expense in respect of Group's share plans included in the consolidated statement of profit or loss in the financial year 2022 and 2021 totaled to RUB 5,662 million and RUB 4,767 million, respectively, thereof RUB 4,423 million and RUB 3,690 related to equity-settled share based awards.

As of December 31, 2022 and 2021, total liabilities recorded for share-based awards amounted to RUB 5,286 million and RUB 2,285 million, respectively.

The fair value of share-based awards vested at December 31, 2022 and December 31, 2021 was RUB 1,545 million and RUB 1,530 million, respectively.

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32. SHAREHOLDERS' EQUITY

Common stock (ordinary shares) – The Group had 1,998,381,575 authorized and issued ordinary shares with par value 0.1 RUB as of December 31, 2022 and 2021. Preferred shares have not been authorized and issued.

Shares of common stock repurchased by the Group are recorded at cost as treasury stock and reduce the shareholders' equity in the Group's consolidated financial statements. As of December 31, 2022, the total shares in treasury stock comprised 315,427,725 and 1,682,953,850 shares were outstanding. As of December 31, 2021, the total shares in treasury stock comprised 335,757,457 and 1,662,624,118 shares were outstanding.

Information on shares repurchased by the Group is presented as follows:

Repurchased from:	December 31,					
	2022		2021		2020	
	Shares	RUBm	Shares	RUBm	Shares	RUBm
Open market	—	—	42,512,570	13,963	26,038,847	8,525
Sistema Finance	—	—	22,796,040	7,503	22,758,872	7,485
Total	—	—	65,308,610	21,466	48,797,719	16,010

Nature and purpose of reserves

Additional paid in capital is used to recognize equity-settled share-based payment transactions, results of capital transactions under common control; changes in ownership interest in subsidiaries that do not result in gain/loss of control and the excess of cash received over the acquisition cost of treasury shares.

Share-based payment programs – Equity-settled share-based payment transactions are measured at fair value on the grant date. The fair value of the obligation is recognized as personnel costs over the vesting period and offset against capital reserves.

Foreign currency translation reserve is used to record exchange differences arising from the translation of foreign subsidiaries financial statements from their functional to the presentation currency.

Financial instruments revaluation reserve is used to record the accumulated impact of derivatives designated as cash flow hedges and revaluation of investments available for sale.

Remeasurements of the net defined benefit liability is used to recognize actuarial gains and losses related to the pension program set for employees of the Group's subsidiary MGTS.

Non-controlling interests

As of December 31, 2022 and 2021, MGTS was the only subsidiary of the Group, which had material non-controlling interests.

The summarized financial information of MGTS is presented as follows:

MGTS	2022	2021	2020
Non-controlling interests opening balance	(4,909)	(4,055)	(3,328)
Profit for the year attributable to non-controlling interests	(869)	(803)	(675)
Dividends to non-controlling interests	—	—	—
Other	(52)	(51)	(52)
Non-controlling interests closing balance	(5,830)	(4,909)	(4,055)

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MGTS	December 31,	
	2022	2021
Current assets	34,752	34,282
Non-current assets	70,279	57,631
Current liabilities	(12,778)	(13,497)
Non-current liabilities	(14,940)	(17,691)

MGTS	Year ended December 31,		
	2022	2021	2020
Revenue, gross of intercompany	(43,015)	(41,255)	(41,103)
Profit for the year, gross of intercompany	(15,381)	(14,203)	(11,811)

Dividends

As a leading telecommunications group with a home base in developing markets, the primary need of the Group is to maintain sufficient resources and flexibility to meet financial and operational requirements. At the same time, the Group continually seeks ways to create shareholder value through both its commercial and financial strategies, including organic and non-organic development as well as the Group's capital management practices.

The Group continues to include dividend payments as part of its commitment to maximizing shareholder value. Decisions on dividends are proposed by the Board of Directors and voted upon thereafter at a General Meeting of Shareholders. In determining the Company's dividend payout, the Board of Directors considers a number of factors, including cash flow from operations, capital expenditures, and the Group's debt position.

The Group may take decisions on the dividend payout based not only on annual results but also on interim results for three, six or nine months of the fiscal year. Annual and interim dividend payments, if any, must be recommended by the Board of Directors and approved by the shareholders.

In accordance with Russian laws, earnings available for dividends are limited to profits determined under Russian Accounting Standards (RAS), denominated in Russian Rubles, after certain deductions.

The following table summarizes the Group's declared cash dividends for the years ended December 31, 2022, 2021 and 2020:

	2022	2021	2020
Dividends declared (including dividends on treasury shares of 9,318, 12,082 and 6,936 respectively)	66,334	74,049	58,948
Dividends, RUB per ADS	67.70	74.12	59.00
Dividends, RUB per share	33.85	37.06	29.50

As of December 31, 2022 and 2021, dividends payable were RUB 16,591 million and RUB 68 million, respectively, and included in the trade and other payables within the consolidated statement of financial position. See Note 33.

33. COMMITMENTS AND CONTINGENCIES

Capital commitments – As of December 31, 2022 and 2021, the Group had entered into purchase agreements of approximately RUB 25,369 and 67,614 million to acquire property, plant and equipment, intangible assets and costs related thereto.

Taxation – Management believes that it has adequately provided for tax liabilities in the accompanying condensed consolidated financial statements. However, the risk remains that the relevant tax authorities could take different positions with regard to interpretive issues and the effect could be significant.

PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS***(Amounts in millions of Russian Rubles unless otherwise stated)*

The Group estimates the following contingent liabilities in respect of additional tax settlements:

	December 31,	
	2022	2021
Contingent liabilities for additional taxes other than income tax	498	860
Contingent liabilities for additional income taxes	1,222	1,132

Licenses – Management believes that as of December 31, 2022 the Group complied with conditions of the licenses used.

Litigation – In the ordinary course of business, the Group is party to various legal, tax and customs proceedings, and subject to claims, some of which relate to developing markets and evolving fiscal and regulatory environments within MTS's markets of operation.

Litigation related to operations in Turkmenistan - In September 2017, the Group's subsidiary in Turkmenistan MTS Turkmenistan or MTS-TM, suspended the provision of telecommunication services to its subscribers, due to the termination by Turkmen state-owned companies and state authorities of line rental, frequency allocation, interconnect, and other agreements necessary to provide telecommunication services. The license for the provision of telecommunication services on the territory of Turkmenistan was valid until July 2018.

In July 2018, the Group filed a Request for Arbitration against the Sovereign State of Turkmenistan with the World Bank's International Center for Settlement of Investments Disputes ("ICSID") in order to protect its legal rights and investments in Turkmenistan. As of December 31, 2022 the case is pending.

Antimonopoly proceedings – In August 2018, the Federal Antimonopoly Service of Russia ("FAS Russia") charged MTS and other federal operators with violation of antimonopoly laws in respect to establishing discriminatory terms and conditions for bulk SMS pricing for the banks with state-owned equity interest as compared to the terms and conditions for other banks and later – with establishing unreasonably high bulk SMS prices. In May 2019, FAS Russia considered that MTS had breached the provisions of antimonopoly laws in respect to establishing discriminatory terms and conditions for bulk SMS pricing and charging unreasonably high bulk SMS prices, prescribing MTS to cease its violations. MTS contested the decision and the prescription of FAS Russia, however courts at different levels upheld the position of FAS Russia. In August 2021, the Group paid the fine imposed by FAS Russia in full amount of RUB 189 million.

In 2021, certain financial institutions in Russia initiated litigations against the Group, claiming reimbursement for losses incurred in connection with violation of antimonopoly laws in respect to establishing unreasonably high bulk SMS prices. The arbitration courts at three levels have dismissed all the claims in full. It's currently impossible to predict the possibility or outcome of new litigations on violation of antimonopoly laws in respect to establishing unreasonably high bulk SMS prices. Management of the Group believes that as of December 31, 2022 it has adequately provided for claims related to antimonopoly proceedings.

Potential adverse effects of economic volatility and sanctions in Russia – In February 2022, following the conflict between Russia and Ukraine, the EU, US, UK and certain other countries have imposed significant new sanctions and export controls on Russian and Belarusian persons and entities. These sanctions resulted in reduced access of the Russian businesses to international capital and some export markets, volatility of the Russian ruble, rise of inflation, decline in capitals markets, restrictions targeting several major Russian financial institutions and the Central Bank of Russia ("CBR"), a number of companies and individuals, technology export controls and other negative economic consequences (see Note 34).

On February 28, 2022, trading on the Moscow Exchange in all equity securities was suspended (including MTS PJSC ordinary shares), with the suspension later extended to March 28. Also on February 28, the New York Stock Exchange halted trading in the Company's American depositary shares ("ADSs") and those of certain other Russian companies.

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Developments relating to these matters are highly unpredictable, occur swiftly and often with little notice and are mostly outside the control of the Group, and the risk that any Group member, or individuals holding positions within the Group as well as its counterparties, may be affected by future sanctions designations cannot be excluded. Current and future risks to the Group include, among others, the risk of reduced or blocked access to capital markets and ability to obtain financing on commercially reasonable terms (or at all), the risk of restrictions on the import of certain equipment and software, as well as the risk deviations of the conversion rate of Russian ruble against other currencies. In addition, Central Bank's of Russia increase of its key rate to 20% on February 28, 2022, impacted floating-rate credit facilities and consequently increased the Group's finance costs. Further in 2022, the Central Bank of Russia has gradually decreased its key rate to 7.5% as of December 31, 2022.

Furthermore, the CBR has prohibited Russian companies from making any payments, including dividends, on securities of Russian companies to non-Russian residents, with the result that any non-Russian resident holders of our ADSs were ineligible to receive such dividends. In May 2022, the Decree of the President of Russian Federation No. 254 set temporary procedures for making dividend payments on securities of Russian companies to non-Russian residents, which includes making payments in Russian rubles through special accounts.

In April 2022, Russian Federal Law No. 114-FZ, requiring Russian companies to terminate their depositary receipt programs, came into force. In May, the Russian Government Commission on Monitoring Foreign Investment ("the Commission") approved the Company's request to maintain its American Depositary Receipts (ADR) program. The Commission's decision provided for the continuation of circulation of MTS ADRs until July 12, 2022 (inclusive). Following the Commission's decision and requirements of the law the Group initiated the termination process of its depositary receipt program, starting from July 13th, 2022. MTS' ADSs were delisted from the NYSE effective August 8, 2022. The existing ADSs could have been converted into MTS' ordinary shares at the ratio of 1:2. The guaranteed conversion period expired on January 12, 2023 (inclusive). In August 2022, the Group initiated ADSs automatic conversion into ordinary shares. If holders of depositary receipts held with foreign brokers and/or custodians were restricted by foreign brokers and/or custodians from the conversion of receipts and allotment of shares due to sanctions, holders of receipts could have their shares converted through a forced conversion mechanism. The deadline for submitting forced conversion applications expired on November 11, 2022.

Management remains focused on ensuring operational continuity and providing uninterrupted connectivity and other services for customers. In making its going concern assessment, management considered principal risks and existing uncertainties, the Group's liquidity position (Note 28), including the Group's borrowings and available credit facilities, its expectations on compliance with covenants, capital expenditure commitments and other factors.

Compliance monitorship – In March 2019, the Group reached a resolution with the United States Securities and Exchange Commission ("SEC") and the United States Department of Justice ("DOJ") relating to the previously disclosed investigation concerning the Group's former subsidiary in Uzbekistan, consented to the entry of an administrative cease-and-desist order (the "Order") by the SEC and entered a deferred prosecution agreement ("DPA"). Under the DPA and the Order in September 2019 the Group appointed an independent compliance monitor for, inter alia, review, testing and perfecting MTS' anti-corruption compliance code, policies, and procedures.

As of December 31, 2022 the Group has not received notice from the SEC, the DOJ or the monitor of any breach of the terms of the DPA or the Order. In 2021 given a variety of factors, including the COVID-19 pandemic, the Group has agreed to a one-year extension of the DPA and the monitorship with the DOJ and the SEC to (i) provide the Group with adequate time to implement necessary enhancements to certain critical components of the Group's anti-corruption compliance and ethics program and (ii) allow the monitor sufficient time to be able to complete its review of the remedial efforts, including the Group's implementation of the monitor's recommendations and an assessment of the sustainability of the Group's remedial actions. The term of the monitorship will continue until September 2023.

In connection with compliance monitorship, certain transactions were identified relating to the Group's subsidiary in Armenia, and such transactions were disclosed to the DOJ and SEC. The DOJ and SEC have requested information regarding the transactions and the Group has initiated an investigation into the matter. It's currently impossible to predict the timing or outcome of the investigation.

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In December 2020, the Group received a request for information from the DOJ concerning certain historical transactions with a supplier of telecommunication and information technology. Currently, the Group is cooperating to provide information to the DOJ and the SEC responsive to the request.

Class action complaint - In March 2019, a proposed class action complaint on behalf of Shayan Salim and all other persons similarly situated was filed in the United States District Court for the Eastern District of New York against MTS PJSC and certain of its managers. On March 1, 2021, US District Judge of Eastern District Court of New York granted MTS's motion to dismiss with prejudice and dismissed the complaint in full. The plaintiff filed an appeal of the dismissal by the Eastern District Court of New York. On March 31, 2022, United States Court of Appeals for the Second Circuit affirmed the dismissal by the Eastern District Court of New York and concluded the plaintiff's claims are without merit.

34. SUBSEQUENT EVENTS

Purchase of stake in Buzzoola – In February 2023 the Group purchased 67% stake in Buzzoola Internet Technologies LLC ("Buzzoola"), provider of digital advertising services. Total consideration contains cash payment of RUB 371 million and contingent consideration. The purchase of 67% stake was accounted as investment in joint venture.

Sanctions on MTS Bank - In February 2023, the US Office of Foreign Assets Control (OFAC) and the UK Office of Financial Sanctions Implementation (OFSI) designated MTS Bank as a sanctioned person pursuant to applicable sanctions regulations adopted by the US and the UK, respectively. Accordingly, MTS Bank became subject to so-called "blocking" (asset-freeze) sanctions maintained by the US and the UK. Among other matters, these sanctions require US and UK third parties, including banks, to block or freeze assets which MTS Bank holds with such parties or otherwise block the settlement of payments to or from MTS Bank and its counterparties. The full impact and potential implications of the imposed sanctions on MTS Bank on the Group's operations, assets and liabilities cannot be reliably estimated at this time. Management believes it is taking the appropriate measures to mitigate the related negative effects.

I, Vyacheslav K. Nikolaev, certify that:

1. I have reviewed this annual report on Form 20-F/A of Mobile TeleSystems Public Joint Stock Company;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
4. The company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and
5. The company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: September 14, 2023

/s/ Vyacheslav K. Nikolaev

Vyacheslav K. Nikolaev
Chief Executive Officer

I, Andrey M. Kamenskiy, certify that:

1. I have reviewed this annual report on Form 20-F/A of Mobile TeleSystems Public Joint Stock Company;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
4. The company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and
5. The company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: September 14, 2023

/s/ Andrey M. Kamenskiy

Andrey M. Kamenskiy

Chief Financial Officer

**CERTIFICATION PURSUANT TO
SECTION 906 OF
THE SARBANES-OXLEY ACT OF 2002**

Pursuant to 18 U.S.C § 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned officer of Mobile TeleSystems PJSC (the “Company”) hereby certifies, to such officer’s knowledge, that:

- (i) the accompanying Annual Report on Form 20-F/A of the Company for the year ended December 31, 2022 (the “Report”) fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
- (ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: September 14, 2023

/s/ Vyacheslav K. Nikolaev
Vyacheslav K. Nikolaev
Chief Executive Officer

**CERTIFICATION PURSUANT TO
SECTION 906 OF
THE SARBANES-OXLEY ACT OF 2002**

Pursuant to 18 U.S.C § 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned officer of Mobile TeleSystems PJSC (the “Company”) hereby certifies, to such officer’s knowledge, that:

- (i) the accompanying Annual Report on Form 20-F/A of the Company for the year ended December 31, 2022 (the “Report”) fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
- (ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: September 14, 2023

/s/Andrey M. Kamenskiy

Andrey M. Kamenskiy
Chief Financial Officer
