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

## 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, 2018**

**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**

**Date of event requiring this shell company report**
**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)

**Polina V. Ugryumova**
**Director, Investor Relations**
**Mobile TeleSystems PJSC**
**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:

| Title of Each Class | Name of Each Exchange on which Registered |
|---|---|
| AMERICAN DEPOSITARY SHARES, EACH REPRESENTING 2 SHARES OF COMMON STOCK | NEW YORK STOCK EXCHANGE |
| COMMON STOCK, PAR VALUE 0.10 RUSSIAN RUBLES PER SHARE | NEW YORK STOCK EXCHANGE[1] |

Securities registered or to be registered pursuant to Section 12(g) of the Act:

**NONE**
(Title of Class)

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

**NONE**
(Title of Class)

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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, 2018.

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.

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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 the definitions 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 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

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

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Unless otherwise indicated or unless the context requires otherwise, references in this document to (i) "MTS," "the Group," "we," "us," or "our" refer to Mobile TeleSystems Public Joint Stock Company and its subsidiaries; (ii) "Vodafone Ukraine" and "VF Ukraine" are to Private Joint Stock Company "Vodafone Ukraine" (formerly PJSC MTS Ukraine); (iii) "Uzdunrobita" is 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; (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" is 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; and (viii) "MTS Bank" is to MTS Bank PJSC, our subsidiary which provides banking services; (ix) "UMS" is to Universal Mobile Systems LLC, our former subsidiary in Uzbekistan which was deconsolidated in 2016; (x) NVision our subsidiaries which provides integration services and (xi) "Sistema" is to Sistema Public Joint Stock Financial Corporation, our majority shareholder. We refer to Mobile TeleSystems LLC, our 49% owned equity investee in Belarus, as "MTS Belarus." We refer to MTS Bank PJSC, our subsidiary as "MTS Bank." 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, "hryvnias" are to the lawful currency of Ukraine, "soms" are to the lawful currency of Uzbekistan, "manats" are to the lawful currency of Turkmenistan, "dram" are to the lawful currency of Armenia 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" refers to our ordinary shares, "ADSs" refers to our American depositary shares, each of which represents two ordinary shares, and "ADRs" refers 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.

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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.

| | Rubles per U.S. dollar | | | |
|---|---|---|---|---|
| **Years ended December 31,** | **High** | **Low** | **Average[1]** | **Period End** |
| 2014 | 67.79 | 32.66 | 39.34 | 56.26 |
| 2015 | 72.88 | 49.18 | 60.96 | 72.88 |
| 2016 | 83.59 | 60.27 | 67.03 | 60.66 |
| 2017 | 60.75 | 55.85 | 58.35 | 57.60 |
| 2018 | 69.97 | 55.67 | 62.71 | 69.47 |

(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 2018 | 63.49 | 62.10 |
| August 2018 | 68.53 | 62.35 |
| September 2018 | 69.97 | 65.59 |
| October 2018 | 66.97 | 65.22 |
| November 2018 | 68.00 | 65.58 |
| December 2018 | 69.52 | 66.24 |
| January 2019 | 69.47 | 65.92 |
| February 2019 | 66.70 | 65.26 |
| March 2019 | 66.08 | 63.74 |

Source: CBR.

The exchange rate between the ruble and the U.S. dollar quoted by the CBR for April 18, 2019 was 63.95 rubles per U.S. dollar.

## 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. Organizational Structure—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.

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, Ukraine and certain other countries of the CIS;
- risks relating to legislation, regulation and taxation in Russia, Ukraine 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, Ukraine and other countries where we operate and taxation legislation relating to entities in Russia, Ukraine and other countries where we operate, and their official interpretation by governmental and other regulatory bodies and by the courts of Russia, Ukraine and the CIS;
- political stability in Russia, Ukraine and certain other CIS countries; 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. Selected Financial Data

On January 1, 2018 we adopted three new IFRS standards—IFRS 9, "Financial Instruments," IFRS 15, "Revenue from Contracts with Customers," and IFRS 16 "Leases." Prior period comparatives were not restated. The effects of new standards on our retained earnings are presented in Note 2 to our consolidated financial statements.

Our results of operations for the financial year ended December 31, 2018 are affected by acquisition of controlling stake in MTS Bank. In 2018, we increased effective ownership share in MTS Bank from 26.6% to 55.4% and obtained control over the entity. Consideration paid to our shareholder Sistema for additional share in MTS Bank amounted to RUB 8,273 million. The acquisition was accounted for as a transaction with entities under common control directly in equity.

The selected financial data should be read in conjunction with our audited consolidated financial statements, included elsewhere in this document, "Item 3. Key Information—D. Risk Factors" and "Item 5. Operating and Financial Review and Prospects." Certain industry and operating data are also provided below.

| | Years Ended December 31, | | | | |
|---|---|---|---|---|---|
| | 2018 | 2017 | 2016 | 2015 | 2014 |
| | Amounts in millions of Russian rubles, except share and per share amounts, industry and operating data and ratios | | | | |
| **Consolidated statements of profit or loss data:** | | | | | |
| Services revenue | 410,890 | 390,761 | 386,486 | 386,159 | 381,143 |
| Sales of goods | 69,403 | 52,150 | 49,206 | 40,480 | 29,535 |
| **Total operating revenues** | **480,293** | **442,911** | **435,692** | **426,639** | **410,678** |
| **Operating expenses:** | | | | | |
| Cost of services | 112,401 | 123,779 | 130,158 | 126,805 | 119,053 |
| Cost of goods | 63,869 | 45,623 | 45,574 | 36,555 | 25,445 |
| Selling, general and administrative expenses | 87,946 | 95,186 | 94,046 | 87,340 | 88,095 |
| Depreciation and amortization | 104,588 | 79,912 | 81,582 | 77,843 | 74,734 |
| Operating share of the profit of associates | (3,799) | (3,210) | (3,115) | (3,456) | (3,459) |
| Provision for investment in distressed Ukrainian banks | — | — | — | 1,698 | 5,138 |
| Impairment of non-current assets | 149 | 3,775 | — | 3,516 | — |
| Other expenses/ (income)[1] | (1,046) | 1,746 | (222) | 2,415 | 1,814 |
| **Operating profit** | **116,185** | **96,100** | **87,669** | **93,923** | **99,858** |
| Finance income | (5,981) | (5,548) | (5,273) | (8,368) | (4,519) |
| Finance costs | 38,165 | 26,064 | 27,136 | 26,422 | 17,252 |
| Currency exchange loss/(gain) | 3,594 | (1,301) | (3,241) | 6,154 | 17,926 |
| Non-operating share of the loss of associates | 909 | 436 | 1,287 | 3,780 | 6,537 |
| Change in fair value of financial instruments | (5,384) | (110) | (166) | (1,014) | 95 |
| Other expenses/(income), net | 1,031 | 992 | 317 | (54) | 937 |
| **Profit before tax** | **83,851** | **75,567** | **67,609** | **67,003** | **61,630** |
| Income tax expense | 16,969 | 18,977 | 15,138 | 13,931 | 15,909 |
| **Profit for the period from continuing operations** | **66,882** | **56,590** | **52,471** | **53,072** | **45,721** |
| **(Income)/Loss from discontinued operations, net of tax** | **59,050** | **—** | **4,021** | **5,668** | **(5,775)** |
| **Profit for the period** | **7,832** | **56,590** | **48,450** | **47,404** | **51,496** |

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| | Years Ended December 31, | | | | |
|---|---|---|---|---|---|
| | 2018 | 2017 | 2016 | 2015 | 2014 |
| | Amounts in millions of Russian rubles, except share and per share amounts, industry and operating data and ratios | | | | |
| **Attributable to:** | | | | | |
| Owners of the company | 6,848 | 56,042 | 48,474 | 49,489 | 51,306 |
| Non-controlling interests | 984 | 548 | (24) | (2,085) | 190 |
| Dividends declared[2] | 51,958 | 51,958 | 51,958 | 52,011 | 51,247 |
| Earnings per share, basic, RUB | 3.65 | 28.68 | 24.37 | 24.88 | 25.80 |
| Earnings per share, diluted, RUB | 3.65 | 28.66 | 24.35 | 24.87 | 25.78 |
| Earnings per share from continuing operations, basic, RUB | 35.17 | 28.68 | 26.06 | 26.31 | 22.67 |
| Earnings per share from continuing operations, diluted, RUB | 35.13 | 28.66 | 26.04 | 26.29 | 22.66 |
| Earnings per share from discontinued operations, basic, RUB | (31.52) | — | (1.69) | (1.43) | 3.13 |
| Earnings per share from discontinued operations, basic and diluted, RUB | (31.48) | — | (1.69) | (1.42) | 3.13 |
| Annual Dividends declared per share, RUB | 26.00 | 26.00 | 25.99 | 25.17 | 24.80 |
| Semi—annual Dividends declared per share, RUB | 2.6 | 10.4 | 11.99 | 5.61 | 6.20 |
| Number of common shares outstanding | 1,920,799,197 | 1,912,042,419 | 1,986,899,529 | 1,988,892,399 | 1,988,912,130 |
| Weighted average number of common shares outstanding—basic | 1,873,562,676 | 1,953,778,999 | 1,989,281,930 | 1,988,728,000 | 1,988,757,022 |
| Weighted average number of common shares outstanding—diluted | 1,875,720,966 | 1,955,558,196 | 1,990,693,983 | 1,990,195,552 | 1,989,977,971 |
| **Consolidated statement of cash flows data:** | | | | | |
| Cash provided by operating activities | 154,390 | 144,640 | 130,565 | 144,088 | 158,979 |
| Cash used in investing activities | (78,389) | (81,510) | (57,302) | (145,356) | (105,008) |
| (of which capital expenditures)[3] | (99,568) | (76,431) | (86,149) | (106,537) | (91,929) |
| Cash used in financing activities | (25,924) | (50,445) | (83,038) | (27,595) | (33,212) |
| **Consolidated statement of financial position (end of period):** | | | | | |
| Cash, cash equivalents and short-term investments | 131,938 | 81,343 | 27,127 | 83,304 | 71,352 |
| Property, plant and equipment, net | 278,620 | 263,470 | 272,841 | 302,662 | 299,023 |
| Right-of-use assets | 149,007 | — | — | — | — |
| Total assets | 915,993 | 551,070 | 544,470 | 653,378 | 599,304 |
| Total debt (long-term and short-term)[4] | 368,135 | 291,713 | 273,274 | 334,073 | 280,570 |
| Total shareholders' equity | 77,565 | 124,205 | 143,948 | 168,371 | 178,622 |
| Common stock less treasury stock | (44,608) | (22,444) | (548) | (24,261) | (24,257) |
| **Financial ratios (end of period):** | | | | | |
| Total debt/total capitalization[5] | 82.5% | 70.1% | 65.4% | 66.4% | 61.1% |
| **Mobile industry and operating data:[6]** | | | | | |
| Mobile penetration in Russia (end of period) | 179% | 179% | 179% | 176% | 168% |
| Mobile penetration in Ukraine (end of period) | 127% | 131% | 136% | 134% | 136% |
| Mobile subscribers in Russia (end of period, thousands)[7] | 78,011 | 78,291 | 80,032 | 77,277 | 74,562 |
| Mobile subscribers in Ukraine (end of period, thousands)[7] | 19,655 | 20,805 | 20,856 | 20,431 | 20,221 |
| Overall market share in Russia (end of period) | 31% | 31% | 31% | 31% | 31% |
| Overall market share in Ukraine (end of period) | 37% | 36% | 36% | 35% | 34% |

(1) "Operating expenses" consist mainly of allowance for doubtful accounts, gain/losses on disposal of property, plant and equipment and intangible assets as well as any gain/losses resulting from stock-taking.

(2) Dividends declared in each of the years ended December 31, 2018, 2017, 2016, 2015 and 2014 consisted of dividends in respect of the prior fiscal year (*i.e.*, in respect of each of the years ended December 31, 2017, 2016, 2015 and 2014, respectively) and semiannual dividends in respect of the current fiscal year (RUB 5,196 million, RUB 20,783 million, RUB 23,961 million, RUB 11,592 million and RUB 12,812 million, respectively). Amounts include dividends on treasury shares RUB 3,022 million, RUB 1,319 million, RUB 220 RUB, 435 million and RUB 1,996 million, in respect of the years ended December 31, 2018, 2017, 2016, 2015 and 2014, respectively. At a meeting held on April 10, 2019, the Board recommended that an annual general meeting of shareholders approve annual dividends of RUB 19.98 per ordinary MTS share (RUB 39.96 per ADS), or a total of approximately RUB 39.93 billion, based on the full-year 2018 financial results.

(3) Capital expenditures include purchases of property, plant and equipment and intangible assets.

(4) Includes notes payable, bank loans and other debt. Prior period balances were restated to exclude capital lease obligations.

(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 4 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. Mobile penetration and overall market share in Ukraine for the financial year 2018 are presented based on our own estimates.

(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.

## 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 a certain degree of risk. 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 occur, our business, prospects, 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 Business Operations in Emerging Markets

***Emerging markets such as the Russian Federation, Ukraine 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, Ukraine, 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, Ukraine and other CIS countries are subject to rapid change and that the information set out herein may become outdated relatively quickly.

When conducting business in different CIS countries, we may face risks similar to those (and sometime even more substantial) we have in Russia and Ukraine.

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

- instability 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").

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 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 is subject to rapid and significant changes in technology and is characterized by the continuous introduction of new products and services. The mobile telecommunications industry in Russia is also experiencing significant technological change, as evidenced by the introduction in recent years of new standards for radio telecommunications, such as Wi-Fi, Worldwide Inter-operability for Microwave Access ("**Wi-Max**"), Enhanced Data Rates for Global Evolution ("**EDGE**"), Universal Mobile Telecommunications System ("**UMTS**"), and Long Term Evolution ("**LTE**"), 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 wireless telecommunications services markets in which we operate are highly competitive, particularly in Russia and Ukraine. Competition is generally based on price, product functionality, range of service offerings and customer service.

Generally, increased levels of competition, including from the potential entry of new mobile operators, government-backed operators, mobile virtual network operators and alternative fixed line operators in the markets where we operate, as well as the strengthening of existing operators, increased use of Internet protocol 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 market. This in turn could result in reduced operating margins and a loss of market share, as well as necessitating different pricing, service or marketing policies, which 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" ("**VimpelCom**"), 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 Long-Distance and International Telecommunications "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. Mass media reported that Rostelecom was determined by the Governmental Decree to be the only provider of Internet services for state and commercial medical institutions. It was also reported that Rostelecom may be the only provider of telecommunications services except mobile

communications services for federal state institutions. Implementation of these Decrees requirements could have a material adverse effect on our business and results of operations.

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*

The Association Agreement with the European Union signed by Ukraine, which came into force on September 1, 2017, may adversely affect our business, financial condition and results of operations due to a possible increase in competition. The implementation of the Association Agreement requires the harmonization of Ukrainian legislation and the adoption of certain EU regulations on telecommunications services. In this regard, no assurance can be given as to the exact nature of the intended changes, their potential implementation and possible impact on our business.

In Ukraine, competition in the markets within which we operate has been affected by the launch of 4G/LTE services. The competitive situation in Ukraine may be further affected by (i) the planned introduction of a mobile number portability service ("**MNP**"); (ii) the possible emergence of new and development of existing virtual mobile network operators in the market; (iii) the regulator's plans to reduce tariffs for international roaming; and (iv) interconnect fees for termination of international traffic.

In Belarus, our associate, MTS Belarus, faces increasing competition and aggressive pricing from Best CJSC, a subsidiary of System Capital Management and Turkcell Iletisim Hizmetleri A.S. ("**Turkcell**"), which operates in Belarus under the "life:)" brand. Additionally, in 2011, the government of Belarus announced its intention to hold a public tender to privatize a 51% stake in MTS Belarus with an opening price of approximately USD 1 billion. The public tender was scheduled to be held on December 23, 2011 but was cancelled due to a lack of bidders. The latest attempt to find an investor for the 51% stake in MTS Belarus took place in February 2014. However, it was unsuccessful for the same reason. A date for the next tender has not yet been specified. The terms of the share disposal have not yet been determined, although it may be conducted either through a public tender or by entering into a direct contract with a prospective purchaser. If 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.

We also face competition in Armenia. On July 22, 2015, Orange announced its decision to leave the Armenian market and 100% of Orange Armenia's shares were sold to an Armenian internet service provider, Ucom. The transaction was approved by the Public Services Regulatory Commission of the Republic of Armenia on August 20, 2015.

***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 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 and the United States Department of Justice relating to an investigation of the Group's former subsidiary in Uzbekistan. See also Note 34 to our audited consolidated financial statements. In March 2019, the Group reached a resolution with the SEC and the United States Department of Justice ("**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 (RUR 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 statements 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" and "Item 8. Financial Information—A. Consolidated Statements and Other Financial Information—7. Litigation—Uzbekistan."

***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 a DPA with the DOJ and the SEC Order. See "Item 8. Financial Information—A. Consolidated Statements and Other Financial Information—7. Litigation—Uzbekistan" and Notes 10 and 34 to our audited consolidated financial statements included elsewhere in this Annual Report on Form 20-F. In conjunction with the DPA and pursuant to the SEC Order, we are required to retain, at our own expense, an independent compliance monitor. The independent compliance monitor is in the process of being appointed. Pursuant to the DPA and the SEC Order, the monitorship will continue for a period of three years from the date of appointment and the term of the monitorship may be terminated early or extended depending on certain circumstances, as ultimately determined and approved by the DOJ and the SEC. The monitor will assess and monitor our compliance with the terms of the DPA and the SEC Order as well as review and evaluate 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 make 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 orders, 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 the 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. The complaint was filed by an individual securities holder on behalf of himself and all similarly situated securities holders and alleges violations of Sections 10(b) and 20(a) and Rule 10b-5 of the Exchange Act with respect to certain public disclosures made by us regarding our former business in Uzbekistan and investigations carried out by the SEC and DOJ related thereto. The complaint further alleged that such disclosure omissions led to a decline in the market value of our securities resulting in losses and damages to the plaintiff and other securities holders. The plaintiff seeks damages in an unspecified amount, prejudgment and post-judgment interest and attorneys' fees, expert fees and other costs and other and further relief.

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.

***The controlling shareholder has a possibility to determine certain decisions of our governing bodies.***

Sistema, which is a public company, owns a controlling stake in MTS. According to the applicable Russian legislation, Sistema has a possibility to exercise its controlling rights, which may become decisive during consideration of a number of issues by our General Meeting of Shareholders, including, but not limited to (i) making decisions on the issues, requiring simple majority of votes our shareholders participating at the General Meeting, for example, in case of making decisions on dividends payment or approval of the our annual reports; (ii) appointment of the majority or dismissal of all members of our Board of Directors members and other matters. Thus, 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 can be affected by our controlling shareholder's activity and (or) its ratings. See also "—Risks Relating to our Financial Condition—A change in control could have a material adverse effect on our financial condition and results of operations."

Controlling shareholder as well as other our shareholders has a right 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.

***Failure to effectively implement our geographic expansion strategy as well as difficulties with operational management of the 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 that represent new operating environments for us and, in many instances, may be located a great distance from our corporate headquarters in Russia. 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 the countries into which we may expand will be emerging markets and, as with countries of our current presence, subject to greater political, economic, social and legal risks than more developed markets.

For example, see "—Legal Risks and Uncertainties—The inability of MTS-Turkmenistan to sustain its operations in Turkmenistan on commercially acceptable terms or at all may adversely affect our business, financial condition and results of operations" and "—The 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 in the CIS and in growing markets outside the CIS, as well as other complementary businesses. In 2015, our acquisition focus covered regional mobile operators, as well as one of the largest system integrators and

complex IT solutions providers in Russia, NVG JSC ("**NVision Group**"). In 2016, we acquired 100% of shares in SMARTS Yoshkar-Ola JSC ("**Smarts-Yoshkar-Ola**") and participated in MTS Bank's additional share issuance. In 2017 and 2018, 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—The 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.

As of December 31, 2017, we held a 26.61% stake in MTS Bank. In 2018, we acquired a 28.63% stake in MTS Bank from Sistema for RUB 8.27 billion, thus increasing our effective ownership in MTS Bank to 55.4%. In February 2019, we acquired a 39.48% stake in MTS Bank for RUB 11.4 billion, as a result of which our effective ownership in MTS Bank reached 94.97%. The increase of our share in MTS Bank is in line with our strategy to diversify the business, achieve synergies and develop innovative financial services.

In September 2016, we entered into a purchase agreement to acquire 100% of shares in Smarts-Yoshkar-Ola for RUB 13 million.

On July 27, 2017, we acquired 100% of the shares of Bashkortostan Cellular Communication OJSC in order to gain access to the frequency resource in the range of 2100 MHz in the territory of the Republic of Bashkortostan. On September 29, 2017, we acquired 30% in the share capital of Sistema-Capital Management Company LLC, one of the largest management companies in Russia in terms of collective investment volume. In October 2017, we acquired a 50.82% stake in Oblachny Retail LLC (operating under LiteBox trademark), a Russian retail software developer. In December 2017, we entered the gaming market through the acquisition of Praliss Enterprises, which manages the Gambit Esports team.

In September 2018, we acquired 100% in the share capital of Avantage LLC for RUB 8.9 billion (including net debt) from a group of private investors. Avantage LLC owns the Avantage data processing center project in Lytkarino, Moscow region, one of the largest data centers in Russia by number of racks.

In September 2018, we acquired a 13.7% stake in Youdo Web Technologies Limited (Cyprus), the owner of YouDo, one of the largest Russian online service providers matching freelance labor demand and supply for everyday and business tasks for USD 12 million.

In December 2018, we acquired 100% in the share capital of IT-Grad 1 Cloud LLC, one of the largest cloud providers on the Russian Infrastructure-as-a-Service market. The company, which holds all IT-Grad group's cloud assets, was bought through our Dutch subsidiary Vostok Mobile B.V. from a group of private investors for a total of RUB 2,491 million, including net debt.

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 5 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.

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 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, Ukraine 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. Similar requirements regarding the import of hardware exist in Ukraine.

***Our inability to develop additional sources of revenue and competitive services 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 data services in the markets in which we operate. As a result, data services became the key driver of our revenue growth and we will therefore need to continue to develop new competitive services, including value-added, 3G, LTE, and others, and to consider vertical integration opportunities through the development or acquisition of dealers in order to provide us with sources of revenue in addition to standard voice services. Our inability to develop additional sources of revenue could have a material adverse effect on our business, financial condition, results of operations and prospects.

***The failure to launch and develop distribution network in Ukraine could have a material adverse effect on our business.***

VF Ukraine is in the process of developing a distribution network in Ukraine. The retail business of telecommunications operators is sensitive to changes in the economic environment, state regulation and economic policies and can be affected by the national currency exchange rate volatility. An economic downturn or an increased national currency exchange rate volatility may significantly increase price competition and thereby hinder our subscriber growth rate, which could lead to loss of revenues and retail margin. The inability to develop and sustain a distribution network in Ukraine, could have a material adverse effect on our business, financial condition, results of operations and prospects.

***Changes in the governmental regulation of SMP operators in Ukraine could adversely affect our results of operations.***

The interconnect fees charged by us and our competitors for terminating calls connecting to any of our respective networks are subject to regulation by the National Commission for the State Regulation of Communications and Informatization (the "**NCCIR**"). See "Item 4—Information on Our Company—B. Business Overview—Regulation of Telecommunications in the Russian Federation and Ukraine—Regulation in Ukraine—Interconnect Arrangements and Telephone Numbering Capacity" for additional information.

A qualification as an SMP has been assessed with reference to the market as defined by the NCCIR According to the Telecommunications Law, an operator qualifies as an SMP in a particular market if its share of gross revenue from the provision of services during the last 12 months exceeded 25% of the total gross revenue of all telecommunications operators for the same services during the same period. The legislation separates fixed and mobile telecommunications networks and the regulation of those networks by the NCCIR. The NCCIR has a right to set different rates for different types of networks. Accordingly, rates for traffic termination on fixed-line networks might be higher than on the network of VF Ukraine. Different rates could lead to a decrease in our revenue share in Ukraine and an increase in costs.

In the fourth quarter of 2016, a new draft law "On Electronic Communications" was registered in the Verkhovna Rada of Ukraine. The draft law provides for, *inter alia*, introduction of a "virtual operator" concept, tougher regulation of SMP operators, submission of tariffs in certain electronic communication services markets for approval by the national regulator, mandatory registration of subscribers by providers of electronic communications services (this implies provision of individuals' personal data to communication services providers in case contracts are concluded in other than written form), mutual use of operators' infrastructure, as well as financing of radio frequency monitoring within radio frequency ranges set for public use to be paid for out of the state budget. The draft law is still under consideration. Some of the initiatives mentioned above have been also included in the draft law of Ukraine "On State Administration and Regulation in the Sphere of Electronic Communications." In addition, a draft resolution related to the segregation of powers between the NCCIR and the central executive communications authority was registered. The draft law "On Electronic Communications" introduced a power for the central executive communications authority to control and freely access networks and regulations relating to networks operation terms during wartime and/or emergencies. If this law or any other law containing similar provisions is adopted and comes into force, this may influence our revenues and could have an adverse effect on our business, financial condition and results of operations.

The majority of international mobile operators have recently increased fees for interconnecting to their networks for VF Ukraine. A further raise of interconnect fees is likely to result in an increase in costs. In addition, interconnect fees for SMP operators for rendering international roaming may become subject to further governmental regulation.

To comply with the Presidential Decree No. 146/2017 "On Measures Aimed at Introduction of a Visa-free Regime with the European Union," the NCCIR approved an action plan for abolishing roaming charges on the territory of the European Union. According to this plan, tariffs reduction is planned in 2019 and 2020 for the countries specified in this plan.

In September 2017, the European Parliament preliminary approved a possibility of abolition of roaming charges between the European Union and the members of the Eastern Partnership. A decrease in such tariffs may have an adverse effect on our revenue from international roaming charges.

Additionally, in February 2019, a new procedure for the telecommunications market analysis and identification of SMP operators entered into force, which had been previously developed by the

NCCIR. It describes a procedure for analysing markets to identify SMP companies and implementing by the NCCIR the preliminary regulation of these companies in accordance with the Association Agreement signed by Ukraine and the European Union. In accordance with the Association Agreement, it is planned to, *inter alia*, increase a number of telecommunications markets (to up to 17) where the NCCIR will be responsible for regulating the activities of SMP operators. The procedure might lead to an increased level of regulation of SMP operators and the reconsideration of current procedure for identifying SMP operators in markets of traffic transfer and traffic termination services.

The adoption of new procedures, an increased regulation of international tariffs for subscribers and fees for traffic transfer, in addition to an increase in international interconnect fees by the members of the European Union may negatively affect revenues of VF Ukraine.

See also "—Legal Risks and Uncertainties—Changes in Ukrainian telecommunications legislation have caused uncertainty in relation to the regulation of the Ukrainian telecommunications industry and may adversely affect our business, financial condition and results of operations."

***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, Ukraine 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. In Ukraine, the connection fees for the SMP operators' networks and interconnect fees for the termination of traffic on such networks are established and regulated by the NCCIR.

Since October 1, 2015, the NCCIR has several times substantially lowered interconnect fees for the termination of traffic on SMP operators' networks. According to the latest decision of the NCCIR dated October 9, 2018, the new lowered rates for termination of traffic on the networks of SMP operators at national level became effective on January 1, 2019. In case fees for the termination of traffic on the networks of SMP operators (including at international level) are further reduced in the future, it may adversely affect VF Ukraine's revenues.

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."

In addition, as part of the restructuring of Svyazinvest, a fourth national mobile operator in Russia was established by the combination of "Tele2 Russia" and the mobile assets of Rostelecom in 2014, which started its operations in 2015 under the "Tele2" brand. As Svyazinvest controlled regional fixed-line operators in all regions of Russia (other than Moscow), a mobile operator established as part of the Svyazinvest group (mobile assets were consolidated into LLC "T2 RTK Holding") may receive preferential terms for interconnecting with these operators, which would allow it greater flexibility in

setting tariffs and could put us at a competitive disadvantage. See also "—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."

***We may not realize the benefits we expect to receive from our investments in 3G and 4G wireless services and Internet of Things (IoT) technologies, which could have a material adverse effect on our business and results of operations.***

In May 2007, the Federal Service for Supervision in the Area of Communications and Mass Media awarded MegaFon, VimpelCom and us a license to provide 3G services in the Russian Federation. In July 2012, these three companies and Rostelecom were awarded licenses to provide 4G services.

Following the integration of Rostelecom's mobile assets and Tele2 Russia in 2014, Tele2 Russia got control over licenses to provide 3G and 4G services. The 3G license allows us to provide mobile radiotelephone services using the International Mobile Telecommunications-2000 ("**IMT-2000/UMTS**") standard. The 4G license allows us to provide services using the LTE standard. The 4G wireless services provide faster, higher quality data transfer and streaming capabilities, as compared to 2G and 3G, and may pose additional competition for 3G providers. In December 2017, the State Commission for Radio Frequencies issued a decision allowing the use of frequency bands previously allocated for LTE mobile communications for NB-IoT technology. Historically, mobile operators that developed 3G and 4G networks experienced various difficulties and challenges, including a limited supply of compatible handsets, limited international roaming capabilities, as well as various 3G and 4G software and network related problems. We may experience similar problems or encounter new difficulties when developing our 3G and 4G 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 and NB-IoT network in a timely manner or within the time frame stipulated by the license terms;
- our 3G and 4G networks and services (including NB-IoT) will deliver the quality and level of service that our customers demand or expect;
- we will be able to provide all contemplated 3G and 4G services (including NB-IoT) at reasonable prices and within a reasonable timeframe;
- manufacturers and content providers will develop and offer new marketable products and services for our 3G and 4G networks (including NB-IoT) on a timely basis;
- demand for our 4G services (including NB-IoT) will not be lower than expected;
- our 3G and 4G networks will be commercially viable in all of the locations we are required to operate pursuant to our 3G and 4G licenses;
- 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 military authorities also use frequencies in the 3G and 4G spectrum, which may limit the availability of 3G and 4G frequencies for commercial use in certain areas. During the construction of our 3G and 4G networks, there is also a risk that the frequencies assigned to us for commercial use may overlap with those used by the Russian military authorities. For example, conflicts over the availability of frequency reserved for military use in Moscow caused delay in the commercial launch of 3G services by all 3G license-holders in Moscow, despite the fact that some of these

frequencies were cleared for commercial use in 2009. If a similar conflict were to occur, it could cause problems or delays in the development and operation of our 3G and 4G networks in Russia.

Potential competition from other 3G and 4G providers, together with any problems relating to the rollout of our 3G and 4G networks and provision of 3G and 4G services in the future, could materially adversely affect our business, financial condition and results of operations.

In December 2013, July 2014 and in July 2017, the State Commission for Radio Frequencies introduced several modifications to the conditions of using the frequency band for mobile radio communication networks. These changes resulted in the implementation of the principle of technological neutrality for frequency bands 900 MHz (UMTS and LTE), 1800 MHz (LTE) and 2100 MHz (LTE), and included the imposition of certain additional obligations on network operators. Pursuant to these modifications, 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.

***If we are unable to successfully develop and/or deploy 4G 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 wireless services, it may have a material adverse effect on our business and results of operations in the long term.***

The next step in the development of telecommunications in the countries where we operate is the evolution of 4G/LTE mobile telecommunication technology. The cost of 4G/LTE 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 September 2011, the Russian government announced its intention to auction frequencies for LTE use on a national level in 2012. Additionally, 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 in exchange for the 4G frequencies held by Scartel for Wi-Max technology with a total bandwidth of 70MHz. Four sets of frequencies in the 791-862 MHz band were planned to be sold during the auction in 2012, after which the successful bidders would receive frequencies in the 2.5-2.7 GHz band. The remaining frequencies, 40 MHz of the 2.5-2.7 GHz band, were allocated evenly during the auction among four major market participants (VimpelCom, MegaFon, Rostelecom and us).

Initially, it was planned that all operators would receive equal access to the Scartel infrastructure, which would allow each operator to reduce its 4G/LTE network development costs. In March 2011, MTS, MegaFon, VimpelCom and Rostelecom signed a non-binding memorandum of understanding with Scartel, according to which MTS, MegaFon, VimpelCom and Rostelecom were to receive access to Scartel's 4G network infrastructure (which was yet to be built) and were to receive options to purchase shares in Scartel in 2014 at a price determined by an independent appraisal. MTS considered the preliminary value assessment of Scartel to be unduly high.

In July 2012, Alisher Usmanov and Scartel shareholders (Telconet Capital and Rostechnologyi) formed a telecommunications holding company, Garsdale. In exchange for an 82% stake in Garsdale, AF Telecom, which is controlled by Alisher Usmanov, contributed 50% of MegaFon's shares into Garsdale's share capital. Rostechnologyi and Telconet Capital, which held 25.1% and 74.9% stakes in Scartel, respectively, contributed 100% of Scartel shares into Garsdale's share capital, in return for which they received an 18% stake in Garsdale, which was split equally between Rostechnologyi and Telconet Capital. On July 12, 2012, the Federal Service for Supervision of Communications, Information Technology and Mass Media (the "**Roskomnadzor**") awarded each of MTS, MegaFon,

VimpelCom and Rostelecom a license to provide 4G services using LTE and its subsequent modifications in the frequency range of 791-862 MHz.

On October 1, 2013, MegaFon acquired Maxiten Co Limited, which had acquired 100% of shares in Scartel and Yota Ltd. from Garsdale. The transaction was approved by a general shareholders' meeting of MegaFon and by the Federal Antimonopoly Service (the "**FAS**"). At present, MegaFon holds a 4G/LTE network through Scartel as well as controlling the continuous spectrum of frequencies 2-40 MHz in the band of LTE FDD 2600 MHz. 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. In addition, as a result of this deal, MegaFon consolidated the financial and operational indicators of Scartel/Yota, which increased its formal market share in the mobile communications market.

Two tenders for 4G/LTE licenses were held in Ukraine in 2018 (for frequencies in 2600 MHz and 1800 MHz frequency bands). According to the Plan for the Use of Radio Frequency Resource of Ukraine, the commercial use of the 1800 MHz band has been allowed since July 1, 2018. In January 2019, the NCCIR announced the successful implementation of the first part of the license terms by all three licensees (Kyivstar PrJCS, VF Ukraine, Lifecell LLC), which implied the provision of network coverage to 90% of population in regional centers of Ukraine within 12 months since obtaining the licenses.

At the same time, the implementation of the "Eliminating digital inequality" program aimed at increasing the penetration of internet access in small settlements is among key priorities for the NCCIR. The regulator announced the initiative regarding refarming the 900 MHz spectrum band under the aforementioned program, with the subsequent issuance of 4G licenses in this frequency band.

According to the regulator, the cost of licenses in the 900 MHz band will depend on the willingness of operators to undertake obligations with respect to a wide coverage of settlements. Thus, significant investments may be required from operators to further develop communication networks in small settlements. In addition, the current distribution of the 900 MHz spectrum among operators can create a market advantage in the implementation of the fourth generation of mobile communications for those market participants who obtain a wider bandwidth.

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 network, because our network capacity would be constrained and our ability to expand limited. Moreover, if we cannot develop a commercially viable 4G network, 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.

***Service disruptions on our networks could lead to a loss of subscribers, damage to our reputation, violations of the terms of our licenses and subscriber contracts and penalties.***

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

In addition, to the extent that any disruption or security breach results in a loss of or damage to customers' personal data or applications, or inappropriate disclosure of confidential information, we

may incur liability as a result, including costs to remedy the damage caused by these disruptions or security breaches.

While we maintain back-up systems for our telecommunications equipment, network management, operations and maintenance systems, these systems may not ensure recovery in the event of a network failure. 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. 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 technical and software safeguards. However, it is still vulnerable to fire, storm, flood, loss of power, telecommunications failures, interconnect 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, Ukrainian 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. A suspension or termination of our licenses or other necessary governmental authorizations could therefore have a material adverse effect on our business and results of operations.

For example, in February 2015, MTS Ukraine won the bid for the use of the 1950-1965/2140-2155 MHz frequency bands in a tender allocating 3G licenses. On March 24, 2015, MTS Ukraine paid the full amount and received the UMTS license that is valid for a period of 15 years. According to the tender terms, all regional centers of Ukraine were covered with 3G communication (within the bands granted to the successful bidder) within 18 months from the date of the license issuance, all settlements with a population of over 10,000 have to be covered with 3G communication within the period of six years.

Our inability to comply with the license conditions may negatively affect our business. Additional investment may also be required for the conversion of radio frequencies and the deployment of 3G services. Either of the foregoing may have a material adverse effect on our business, financial condition, results of operations and prospects.

***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. For a list of the telecommunications licenses held by us, see "Item 4. Information on Our Company—B. Business Overview—Regulation of Telecommunications in the Russian Federation and Ukraine—Licenses."

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.

For example, in 2013 NCCIR refused to renew MTS Ukraine license to construct and maintain telecommunication networks that had been granted in 2010. As a result, MTS Ukraine and NCCIR were involved in litigation. In 2015 MTS Ukraine received an equivalent license for the term of 15 years, however it was technologically neutral. Furthermore, NCCIR cancelled the foregoing license of VF Ukraine that had been granted in 2010 in the view of the change of the legal entity name from MTS Ukraine to VF Ukraine. This decision had no material impact on the operational activities of VF Ukraine since the company used its main telecommunication license granted in 2015. Receiving a new license involves additional costs in comparison with the renewal of the current one. Failure to renew our telecommunications licenses, or receive renewed or new licenses with similar terms to existing licenses, could significantly limit our operations, which could have a material adverse effect on our business, financial condition and results of operations.

With effect from January 1, 2018, the licensing of certain activities in the telecommunications sector has been canceled in accordance with the Law of Ukraine "On Licensing of Certain Types of Economic Activity." The NCCIR has to prepare the relevant amendments to the Law of Ukraine "On Telecommunications" and the licensing of telecommunication activities must be terminated after adoption of those amendments. However, to date, the NCCIR continues to exercise powers of the licensing body in telecommunications sphere referring to requirements of the Law of Ukraine "On Telecommunications."

Until March 2014, telecommunications operators carried out activities and received licenses in Crimea in compliance with Ukrainian legislation. However, following the referendum in Crimea on March 16, 2014 where a vote in favor of Crimea joining the Russian Federation was declared and the subsequent developments in the region, certain countries recognized Crimean secession whereas others did not, which means that our licensing status in Crimea and ability to receive continuous cash flow has been uncertain. In addition, due to technical issues that have curtailed our ability to provide telecommunications services to our customers, we suspended our operations in Crimea on August 6, 2014. In October 2014, MTS Ukraine sold its base stations, network infrastructure, IT and telecom equipment and certain other assets located in Crimea through an open tender procedure.

See also "—Political and Social Risks—Political instability in Ukraine could have a material adverse effect on our operations in Ukraine and on our business, financial condition and results of operations" and "—A deterioration in relations between Russia and other former Soviet republics as well as other politically related disagreements and allegations between Russia and other countries 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 ADSs."

***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 were supplemented with a requirement to provide the settlements of over 1,000 people with communication services within seven years (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. A number of projects implemented by MTS in 2016 - 2018, as well as a number of normative acts previously adopted by the Ministry of Communications, resulted in expansion of the range of frequencies that have to be paid for.

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.

Fees are directly calculated according to the "Methodology of calculation of a single fee and annual fee for the use of the radio spectrum of the Russian Federation" approved by the order of the Ministry of Communications dated June 30, 2011 No. 164. The rates and coefficients of the aforementioned Methodology are subject to revision at least once every two years.

For example, in December 2017 the State Duma approved the Law on federal budget for 2018 and the planned period of 2019 and 2020, which resulted in the increase in rent payments for the radio spectrum usage both in the third quarter of 2018 and in the fourth quarter of 2018. In 2019 the rates turned back to the level of the beginning of 2018. Any increase in payments for the radio spectrum will likely increase our costs and may adversely affect our results of operations.

With effect from January 1, 2015, the fee for radio spectrum usage in Ukraine was transformed into a rent payment. When adopting a state budget for 2016, the Verkhovna Rada introduced a number

of amendments to the Tax Code of Ukraine, including the increase in rent payment for radio spectrum usage by 13.35% commencing January 1, 2016.

The amount of rent payments in 2017 increased insignificantly as compared to the previous years.

In 2018, a draft law providing for revision of rent payments in line with the consumer price index starting from January 1, 2019, was registered with the Verkhovna Rada of Ukraine. However it was rejected and rent payments remained unchanged.

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.

Uncertainty in the international financial markets, further tightening in credit conditions and contraction of the global economy and markets in which MTS Bank operates, has adversely impacted, and 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;
- 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, centralise 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, unauthorised 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 is a part of the Sistema group and may potentially enter into agreements with other members of the group (i.e. related parties transactions) on terms, which are different from those that would be obtainable on an open market.***

We have purchased interests in the following companies from Sistema: Stream, Nvision Group, NVision Software solutions LLC and MTS Bank. We have entered into agreements with other companies within the Sistema group for the provision of advertising services ("Maxima Advertising" JSC), supply of switching and network equipment ("SITRONICS SMART TECHNOLOGIES" LLC), medical services, license agreements ("Medsi Group" JSC), agreements on providing access to the infrastructure for installation of communication equipment (Bashkirenergo LLC, Business Nedvizhimost JSC), leasing of non-residential real-estate (SITRONICS JSC, Inturavtoservis PJSC) and other services. According to the applicable Russian legislation and notwithstanding certain control procedures in respect of related parties transactions (including mandatory procedures with respect to consideration of related parties transactions with the companies within the Sistema by the Audit Committee), such 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 open market. See "Item 7—Major Shareholders and Related Party Transactions—B. Related Party Transactions."

***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. The provisions of Russian law No. 208 "On Joint-Stock Companies" dated December 26, 1995, as amended (the "**Joint Stock Companies Law**") relating to "interested party transactions" have been amended and may be subject to different interpretations taking into account, *inter alia*, the lack of court practice in respect of the new amendments. As a result, 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.

***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 key personnel 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. As a result, we attempt to 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 or dismissal 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 loss or decline in services of members of our senior management team or an inability to attract, retain and motivate qualified key personnel could have a material adverse effect on our business, financial condition and results of operations.

***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.***

On December 29, 2008, the Ministry of Communications and Mass Media adopted an order establishing the requirements for mobile virtual network operators ("**MVNOs**"). 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 the order, 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.

By introducing this regime, the Ministry aims to increase competition in the Russian mobile services market, which is currently dominated by MTS, VimpelCom and MegaFon. 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.

For example, Skartel (under the "Yota" brand), MGTS, Rostelecom, Tinkoff Bank operate as MVNOs in the Russian mobile communications market.

It is currently unclear how the emergence of new MVNOs in the market or any of the foregoing trends might affect market competition and subscriber churn, but this 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.

In part, relevant legislation in certain cases restricts the acquisition 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 legislation, or find our actions insufficient to rectify past violations of antimonopoly laws, or issue new warnings and requests in the future, it could impose administrative sanctions and require the divestiture of such company or other assets, which 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.

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

Under Ukrainian legislation, a company that is found to have acted in contravention of antimonopoly legislation may be subject to fines and claims from the Antimonopoly Committee of Ukraine (the "**AMC**"). The AMC may investigate us from time to time and, should such investigations identify any violations, impose penalties (including fines).

Based on the complaint filed by Astelit LLC concerning illegal establishment of regional tariffs, in April 2016, the AMC initiated proceedings relating to a violation of legislation on the protection of economic competition. On October 3, 2018, the AMC issued a decision on termination of the case without any sanctions with respect to VF Ukraine. Lifcell (Astelit) LLC applied to the court for the cancellation of this AMC decision. The case is currently under consideration.

In July 2016, the AMC sent requests to the big three operators asking to provide it with information on the establishment of settlement rates for international roaming and interconnect fees with foreign telecommunications operators.

In August 2016, the AMC began an investigation in relation to antimonopoly restrictions that affect content services market. The case is currently under consideration.

Following complaints from citizens, the AMC is investigating the case on possible violation of legislation on protection against unfair competition, relating to pricing of service packages for 4 weeks (28 days) by the big-three (VF Ukraine, Kyivstar PrJSC and Lifecell LLC).

Based on the complaint filed by Lifecell LLC, in April 2017, the AMC initiated proceedings relating to a violation of legislation on the protection of economic competition (the legitimate use of "The leader of 3G speed" slogan in advertisement). On December 11, 2018, the AMC recommended that the slogan should be removed by VF Ukraine. The recommendations have been implemented; the case is expected to be closed in the second quarter of 2019.

If we are found by the AMC to have violated antimonopoly legislation in the above or any other matters, we may be subject to fines, which may have a material adverse effect on our business, financial condition and results of operations. In addition, we may be required to adjust our current marketing practices. See also "—Changes in the governmental regulation of SMP operators in Ukraine could adversely affect our results of operations" and "Item 4—Information on Our Company—B. Business Overview—Regulation of Telecommunications in the Russian Federation and Ukraine—Regulation in Ukraine—Competition" for additional information.

***If we are found to have a dominant position in the markets where we operate and are determined to have abused this position, the FAS may be entitled to regulate our subscriber 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 even if its share of the corresponding market is less than 35%. 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, was 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 "—MGTS is subject to extensive regulation of tariffs, and these tariffs may not fully compensate us for the cost of providing required services."

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 and Ukraine—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, we may be subject to either fixed penalty fine 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 and from 1% to 15% of revenue for other violations (with 8% being the base level of the fine for all types of violations).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 and Ukraine—Regulation in the Russian Federation."

At present, the foregoing regulations apply only to fixed-line operators in Russia, including our fixed-line business. Draft legislation was introduced in 2008 that would extend the law to apply to mobile operators. Although the proposed law was not adopted, the risk that similar legislation will be proposed and adopted in the future remains. 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 "—MGTS is subject to extensive regulation of tariffs, and these tariffs may not fully compensate us for the cost of providing required services."

***MGTS is subject to extensive regulation of tariffs, and these tariffs may not fully compensate us for the cost of providing required services.***

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 2017, a draft law was submitted for consideration to the State Duma, which was intended to cancel international roaming charges between Russia and Belarus and is currently under consideration. In case the aforementioned law is adopted, any revision of roaming charges may lead to a reduction in our revenues.

Moreover, on 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. The implementation of this initiative may adversely affect our revenues from roaming charges in Belarus and increase our expenditure incurred in connection with the provision of these services.

In July 2017, the FAS sent a warning to mobile operators, in which it demanded to cancel intra-network roaming. In March 2018, the FAS opened an antimonopoly case against VimpelCom, MTS and MegaFon (in connection with the non-fulfilment of the warning). In August 2018, the FAS found MTS, VimpelCom and MegaFon to have violated the antimonopoly legislation. In December 2018, the FAS imposed a fine in the amount of RUB 737,500 on each of MTS, VimpelCom and MegaFon. As of September 30, 2018 MTS changed charging principles for communication services outside "home" region for all subscribers. Such changes to the charging principles for communication services will lead to a reduction of income of MTS and other mobile carriers in Russia.

In August 2017, the FAS opened an antimonopoly case against VimpelCom, MTS, MegaFon and T2 Mobile LLC on the grounds of establishing and maintenance of monopolistically high prices for communication services in national roaming and inter-operator roaming agreements. On February 22, 2018 the FAS rendered a decision and found MTS responsible for establishing monopolistically high prices for subscribers for communication services in national roaming. VimpelCom, MegaFon and T2 Mobile were also found guilty for establishing monopolistically high prices for subscribers for communication services in national roaming. In September 2018, following the examination of the case, the FAS imposed administrative fines in respect of each of the operators. The case related to inter-

operator roaming agreements against MTS was canceled due to the fact that there had been no violation. See also "—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."

On December 27, 2018, the Federal Law No. 527 was adopted, under which the intra-network roaming is cancelled, and MTS is obliged to provide subscribers with communication services on its network under the same conditions, regardless of whether a subscriber is in or outside the bounds of his "home network" when moving across the country. In addition, this law excludes the possibility of charging subscribers for incoming calls in intra-network and national roaming. The law will come into force on June 1, 2019, and its practical implementation may lead to revenue losses.

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.***

A draft law that enables each mobile communications subscriber to register a user terminal under certain conditions on an International Mobile Equipment Identity ("**IMEI**") numbers database of the Ukrainian State Center of Radio Frequencies, primarily to prevent their unlawful use, was previously proposed in Ukraine. Aimed at discouraging theft, the draft law required operators to suspend or block the traffic transmission of the terminal upon the application of a subscriber (within a 3-month period after the first registration of a subscriber in the network). In July 2015, the draft law was withdrawn from consideration.

Additionally, the Cabinet of Ministers of Ukraine adopted the decision "On Introduction of Amendments to the Regulation of the Cabinet of Ministers of Ukraine "On Introduction of Rules Relating to Rendering and Using Telecommunications Services," which, *inter alia*, cancels a requirement to block IMEI numbers of terminal equipment not included in the database of the Ukrainian State Center of Radio Frequencies ("**USCRF**"). A similar draft law was submitted for consideration to the Russian State Duma in 2012 but was rejected.

If similar initiatives are proposed in the future, we may be required to develop a system to monitor IMEI numbers and may need to establish and maintain a database of IMEI numbers, which would necessitate the expenditure of significant technical and financial resources.

***The accession of Russia to the World Trade Organization (the "WTO") may lead to legislative and business changes.***

On August 22, 2012, the Russian Federation became a member of the WTO. This may lead to potentially significant changes in Russian legislation including, among others, regulation of foreign investments in Russian companies, competition laws, telecommunications laws, changes in the taxation system and customs regulations in Russia. In addition, the implementation of the WTO rules may lead to increased competition in the markets where we operate. During the period of 2012 to 2018, Russia adopted certain changes to its legislation related to the accession to the WTO, for example, regarding intellectual property laws, tax legislation; however, it is still unclear if, and when, all necessary legislative changes related to the WTO accession will take place. If further new legislation is implemented in Russia as a result of its accession to the WTO, this could have a material adverse effect on our 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 construction of broadband optical networks employing the Gigabit-capable Passive Optical Network ("**GPON**") technology with a direct connection of subscribers to an optical network. The applied part of the GPON project's progress is the creation of a digital platform of IMS core, which enables MGTS to render a larger range of services, including services for the B2G segment. See "Item 4—Information on Our Company—A. History and Development—Capital Expenditure" for further information.

MGTS attracts contractors for the construction and upgrade of its network. Due to the currently unfavorable market conditions, some of MGTS' contractors may face a lack of own current assets and/or external finance sources 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 MGTS projects' implementation and lead to higher costs. If MGTS is not able to expand and upgrade its 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.

***If leaks of confidential information (including any information relating to our subscribers) occur, it may negatively impact our reputation and our brand image and lead to a loss of market share, which could materially adversely affect our business, financial condition, results of operations and prospects.***

Despite our continuous efforts to protect confidential information, breaches of security and leaks of confidential information, including information relating to our subscribers, may negatively impact our reputation and our brand image and result in a loss of market share or otherwise have a material adverse effect on our business, financial condition and results of operations. For example, in January 2003, part of our database of subscribers, containing private subscriber information, was illegally copied and stolen. In addition, in May 2003, certain subscriber databases of several operators in the North-West Region, including those of MTS, MegaFon, Delta Telecom and two other operators, were

stolen. In each case, the stolen databases were thereafter available for sale in Russia. 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.

**Risks Relating to our Financial Condition**

***We may be adversely affected by the current economic environment.***

As a result of the credit market crisis (including uncertainties with respect to financial institutions and the global capital markets), decreased prices for major export commodities (including oil and metals) and other macro-economic challenges currently affecting many of the markets in which we operate, our subscribers' disposable incomes and our vendors' cash flows may be adversely impacted.

Consequently, subscribers may modify or decrease their usage of our services or fail to pay the outstanding balances on their accounts, and vendors may significantly increase their prices, eliminate vendor financing or reduce their output.

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 impact our business and financial condition.

The strained political situation in Ukraine coupled with an economic downturn resulted in financial difficulties in the banking system, including, notably, increased liquidity risks. As we hold the bulk of excess hryvnia and foreign currency cash in Ukrainian banks, a banking crisis or the bankruptcy or insolvency of the banks through which we receive or with which we hold our funds could result in the loss of our deposits or limit our ability to perform banking transactions in Ukraine and other countries, which could have a material adverse effect on our business, financial condition and results of operations. For example, we realized losses in the fourth quarter of 2014 due to an impairment of cash balances stemming from the insolvency of DeltaBank in Ukraine. In 2015, the Group wrote off certain cash balances deposited in distressed Ukrainian banks. As of April 1, 2019, these banks are being liquidated.

See also "—Inflation could increase our costs and adversely affect our results of operations."

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.

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

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

For example, certain Russian banks have in the past experienced difficulties that have caused them to become insolvent and have their licenses revoked, such as Bank Yugra, or to recognize large loan impairment provision losses that required steps to replenish their capital, as in the case of the Promsvyazbank, Bin Bank and Otkritie Bank.

During the period from 2016 and 2017 the cost of funding was decreasing, as the Central Bank of Russia periodically cut the key rate. However, in 2018, the rate cut cycle ended taking into account the dynamics of inflation and inflation expectations, as well as risks posed by external conditions and the reaction of financial markets. In September 2018 (for the first time since 2014), the Board of Directors of the Central Bank of Russia decided to raise the key rate by 0.25 p.p. (up to 7.5%). In December 2018, the key rate was further raised up to 7.75%. Should the key rate continue to grow in the future, this may negatively affect the cost of funding.

A continuation or repetition of the downturn in the global 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 and ADSs 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. As of December 31, 2018, our consolidated total debt, excluding capital lease obligations and debt issuance costs, was RUB 368,722 million. Our finance cost for the year ended December 31, 2018 was RUB 38,165 million, net of the amounts of interest capitalized.

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. For example, the terms of some of our loan agreements may require us to prepay the loan in certain circumstances, such as a deterioration in our credit rating, a delisting of our shares or a drop in our retained earnings below a certain level. 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 ADSs.***

The ruble has weakened significantly against the U.S. dollar during the period of 2014 to 2016, which can be explained by external geopolitical factors, limited financial markets, decrease in oil prices, international ratings agencies' downgrades of Russia's sovereign rating, reduction in internal consumption and other factors.

For example, on December 31, 2014, the official exchange rate published by the CBR was 56.26 rubles per U.S. dollar. The ruble continued to depreciate against the U.S. dollar reaching 72.88 rubles per one U.S. dollar on December 31, 2015, whereas on December 31, 2016, it amounted to 60.66 rubles per one U.S. dollar. On December 31, 2017, ruble amounted to 57.60 per one U.S. dollar. The ruble remained under pressure in 2018, against the backdrop of geopolitical tensions as well as investors outflow from the emerging markets. As of December 31, 2018, ruble amounted to 69.47 per one U.S. dollar.

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 and borrowings 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 on the shares represented by the ADSs will be declared and paid to the depositary in rubles and will be converted into U.S. dollars by the depositary and distributed to holders of the ADSs. Accordingly, the value of dividends received by holders of ADSs will be subject to fluctuations in the exchange rate between the ruble and the U.S. dollar. Any further depreciation of the ruble against the U.S. dollar could therefore materially adversely affect our financial condition, results of operations and prospects and the value of our ADSs. 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.***

A significant portion of our expenditure and liabilities, including capital expenditure and borrowings (including our U.S. dollar denominated notes), are either denominated in, or closely linked to, the U.S. dollar and/or euro, while substantially all of our revenues are denominated in local currencies of the countries where we operate. If the local currencies of the countries where we operate decline against the U.S. dollar and/or euro and our costs increase so that we cannot keep pace, we could have difficulty repaying or refinancing our U.S. dollar and/or euro-denominated indebtedness, including our U.S. dollar denominated notes. At the same time, 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 (for example, Ukraine) 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.

Ukraine's economic crisis combined with political unrest and events in the Eastern part of Ukraine have led to the weakening of the hryvnia, with the exchange rate rising from 15.77 hryvnias per one U.S. dollar on December 31, 2014 to 24.00 and 27.19 hryvnias per one U.S. dollar on December 31, 2015 and on December 31, 2016, respectively, as a result of substantial capital outflow in response to the continuing political instability in Ukraine. As of December 31, 2017, the exchange rate amounted to 28.07 hryvnias per one U.S. dollar. As of December 31, 2018, the exchange rate amounted to 27.69 hryvnias per one U.S. dollar.

See also "—Political and Social Risks—Political instability in Ukraine could have a material adverse effect on our operations in Ukraine and on our business, financial condition and results of operations."

The Belarusian ruble depreciated against the U.S. dollar, whereby the exchange rate increased from 11,850 Belarusian rubles per one U.S. dollar on December 31, 2014, to 18,569 Belarusian rubles per one U.S. dollar on December 31, 2015. On July 1, 2016, Belarus redenominated its currency on a scale of 10,000:1. As of December 31, 2016, the official exchange rate published by the National Bank of the Republic of Belarus amounted to 1.96 Belarusian rubles per one U.S. dollar. As of December 31, 2017 and December 31, 2018, the official exchange rate published by the National Bank of the Republic of Belarus amounted to 1.97 and 2.16 Belarusian rubles per one U.S. dollar, respectively. The possible devaluation of the Belarusian ruble in the future may 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. We had capital expenditure in the amounts of RUB 83,551 million (excluding costs of RUB 2.598 billion for the acquisition of a 4G license in Russia) in 2016, RUB 76,431 million in 2017 and RUB 94,041 million (excluding costs of RUB 5.527 billion for the acquisition of a 4G license in Ukraine) in 2018. Further, the acquisition of 3G and 4G licenses and frequency allocations and the build-out of our 3G, 4G and broadband Internet networks will require additional capital expenditure. See "Item 4—Information on Our Company—A. History and Development—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.

During the period from 2014 to 2018, the United States and the European Union announced sanctions applying to a number of Russian and Ukrainian individuals and associated institutions. The sanctions may be extended and our ability to gain external funding may be affected. See also "—Political and Social Risks—Political instability in Ukraine could have a material adverse effect on our operations in Ukraine and on our business, financial condition and results of operations" and "—A deterioration in relations between Russia and other former Soviet republics as well as other politically related disagreements and allegations between Russia and other countries 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 ADSs."

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. In addition, we are currently unable to raise equity financing through newly issued depositary receipts, such as ADSs, due to Russian securities regulations providing that no more than 25% of a Russian company's shares may be circulated abroad through sponsored depositary receipt programs. Prior to December 31, 2005 and at the time of our initial public offering, this threshold was 40% and our current ADSs program is near its full capacity. 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 and Ukrainian economies have 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.

In 2014, the Bank of Russia implemented an inflation targeting program. As a result of this, inflation in Russia amounted to 5.4% in 2016, which was significantly lower as compared to 12.9% in 2015, according to the Federal Statistics Service. In 2017, inflation decreased to lower than 3% as compared to the target level of 4%. By the end of 2017, consumer inflation reached its historically lowest level of 2.5% year-to-year. In 2018, consumer inflation in Russia amounted to 4.3%. According to the Bank of Russia, in 2019 the end-of-year annual inflation forecast will range from 4.7% to 5.2%. The Bank of Russia plans to maintain inflation at the 4% target level in the long-term. To achieve this target, the Bank of Russia will more likely change main parameters of monetary policy. However, despite its plans to maintain inflation at the target level, there are risks of inflation increase due to the following factors:

- possible unfreezing of monopolies' tariffs. During last 10 years tariffs of infrastructure monopolies significantly affected inflation parameters, and contributed more than 40% to the total price volatility in certain years;

- import of inflation due to exchange rate of the Russian ruble. Cumulative effect of domestic prices change in response to change of exchange rate of the Russian ruble is defined as an effect of transferring dynamics of an exchange rate to prices, it has been salient during rubble depreciation in 2014 and 2015; and

- low monetization of the Russian economy. The degree of monetization of the Russian economy is lower than in developed countries and in countries of the Eastern Europe. Attempts to increase the monetization of the Russian economy by raising money supply will likely lead to an increase in inflation due to the lack of confidence on the part of residents and non-residents in the Russian banking system.

According to the State Statistics Service of Ukraine, in December 2018, the annual consumer price index amounted to 9.8% (as compared to 13.7% for 2017). The decline in inflation was primarily achieved by the monetary policy of the National Bank of Ukraine (NBU) and the repeated increase in the discount rate. According to the forecasts of both the National Bank and the Government of Ukraine and the International financial organizations, it is expected that inflationary pressure on the economy of Ukraine will further decrease in the future as the budget value of the inflation rate for 2019 is set at 7.4%.

In addition, a further decline in global oil prices coupled with capital outflow from growing markets and depreciation of national currencies might cause a rise in inflation. High inflation levels may lead, *inter alia*, to increased marketing expenditure that could, in turn, affect our operating margins and profitability.

At the end of 2016 and 2017, inflation in Belarus amounted to 10.6% and 4.6%, respectively. In December 2018, the annual rise of consumer prices published by the National Bank of the Republic of Belarus amounted to 5.6%.

High rates of inflation in Russia, Ukraine 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."

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 and Sistema's loan agreements contain, restrictive covenants, which limit our ability to incur debt and to engage in various activities.***

Covenants in the agreement relating to our Eurobonds 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. Additionally, the indentures governing our U.S. dollar-denominated notes due 2020 contain covenants limiting our ability to incur debt, create liens on our properties, enter into sale and lease-back transactions, merge or consolidate with another person or convey our properties and assets to another person, as well as our ability to sell or transfer any of our or our subsidiaries' GSM licenses for the Moscow, St. Petersburg, Krasnodar and Ukraine license areas. 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.

In addition, Sistema, which owns a controlling stake in MTS and consolidates our results in its financial statements, is subject to various covenants in its credit facilities. These covenants impose restrictions on Sistema and its restricted subsidiaries (including us) with respect to, *inter alia*, incurrence of indebtedness, creation of liens and disposal of assets. In its indentures, Sistema undertakes that it will not, and will not permit its restricted subsidiaries (including us) to, incur indebtedness unless a certain indebtedness level / EBITDA ratio is met. In addition to us, Sistema has various other businesses that require capital and, therefore, the consolidated Sistema group's capacity to incur indebtedness otherwise available to us could be diverted to its other businesses. Sistema may also enter into other agreements in the future that may further restrict it and its subsidiaries (including us) from engaging in these and other activities. We expect Sistema to exercise control over us in order for Sistema, as a consolidated group, to meet its obligations under its current and future financings and other agreements, which could materially limit our ability to obtain additional financing required for the implementation of our business strategy. The inability to implement our business strategy may have a material adverse effect on our financial condition and results of operations.

***A change in control could have a material adverse effect on our financial condition and results of operations.***

Under the terms of our outstanding notes, if a change in control occurs, our noteholders will have the right to require us to redeem notes not previously called for redemption. The price we will be required to pay upon such event will be 101% of the principal amount of the notes, plus interest accrued prior to the redemption date. A change in control will be deemed to have occurred in any of the following circumstances:

- with respect to the notes due 2020, any person 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, provided that the following transactions would not be deemed to result in a change of control:

    - any acquisition by Sistema or its subsidiaries that results in the 50% threshold being exceeded;

    - any acquisition by us, our subsidiary or our employee benefit plan; and

- a contribution by Sistema of all or part of its ownership interest in us into a partnership, joint venture or other indirect holding vehicle as long as any other person who is an owner of or party interested in that partnership, joint venture or other indirect holding vehicle does not acquire beneficial ownership of or control over more than 50% of our issued shares, does not acquire ownership of or control over more than 50% of the voting interests in our share capital and does not obtain the power to elect not less than half of our directors.

Some of our loan agreements contain similar change of control provisions. If a change in control occurs, 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. If Sistema were to dispose of its stake in us, our company may be deprived of the benefits and resources that it derives from Sistema, which could harm our business.

**Risks Relating to Economic Risks in Our Countries of Operation**

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

Since the dissolution of the Soviet Union in 1991, the economies of Russia and other countries where we operate have experienced periods of considerable instability. For example, GDP level significantly impacted basic commodity prices as was detected during the crisis in 2008 and 2009.

In 2016, the decline in the GDP of Russia was 0.2%, compared to 3.7% in 2015, according to the Federal State Statistics Service. In 2017, the GDP growth amounted to 1.5%, according to the Federal State Statistics Service.

In November 2018, the Ministry of Economic Development forecasted that the Russian economy would grow 1.8% in 2018. In January 2019, the Ministry of Economic Development estimated that the Russian economy grew by 2% in 2018.

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. The August 1998 financial crisis resulted in the bankruptcy and liquidation of many Russian banks and almost entirely eliminated the developing market for commercial bank loans at that time. 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.

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, including subsidiaries of foreign 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.

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

The physical infrastructure in Russia, Ukraine and the other countries where we operate largely dates back to Soviet times and 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. For example, in August 2009, a major accident occurred at Russia's largest power plant, the Sayano-Shushenskaya hydroelectric power station, resulting in flooding of the engine and turbine rooms and the death of 75 people. Power generation from the station ceased completely following the incident, which led to a major power outage in the nearby residential areas and at certain industrial facilities as well as pollution of the rivers and soil as a result of an oil spill from the transformer.

In addition, the road conditions throughout our countries of operation are poor with many roads not meeting minimum quality standards, causing disruptions and delays in the transportation of goods to and within these countries. The Russian and Ukrainian governments are actively considering plans to reorganize their national rail, electricity and communications systems. Any such reorganization may result in increased charges and tariffs while failing to generate the anticipated capital investment needed to repair, maintain and improve these systems. The deterioration of the physical infrastructure in Russia, Ukraine and the other countries where we operate harms the national economies, adds costs to doing business in these countries and generally disrupts normal business activities. 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, Ukraine 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, Ukraine 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. Recent military conflicts and international terrorist activity have significantly impacted the oil and gas prices globally, and pose additional risks to the Russian economy. Both Russia and Ukraine are also major producers and exporters of metal products and their economies are vulnerable to world commodity prices and the imposition of 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.

**Political and Social Risks**

***Political and governmental instability 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 and ADSs.***

The political and economic situation in Russia has been negatively affected by the global financial crisis, the economic sanctions imposed by the United States and the European Union and the ongoing volatile economic conditions. Other countries where we operate may pose similar challenges, for example, Ukraine, where political tensions and uncertainty are continuing. See also "—Political instability in Ukraine could have a material adverse effect on our operations in Ukraine and on our business, financial condition and results of operations." 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 disrupt or reverse economic and regulatory reforms. This could, in turn, lead to further political instability 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 and ADSs. A deterioration of the socio-political situation in Russia could also trigger an event of default under some of our loan agreements.

***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 instability. 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 further 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 and ADSs. In Ukraine, the political instability and the tensions in eastern Ukraine may also have negative effect on our business operations.

See also "—Political instability in Ukraine could have a material adverse effect on our operations in Ukraine and on our business, financial condition and results of operations."

***A deterioration in relations between Russia and other former Soviet republics, as well as other politically related disagreements and allegations between Russia and other countries 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 ADSs.***

Relations between Russia and certain other former Soviet republics are or have in the past been strained. For example, in August 2008, an armed conflict erupted between Russia and Georgia over the self-appointed republics South Ossetia and Abkhazia, culminating in Russia's recognition of their independence from Georgia. The political and economic relationships between Ukraine and Russia have also been strained in recent years, see also "—Political instability in Ukraine could have a material adverse effect on our operations in Ukraine and on our business, financial condition and results of operations" and "—Risks Relating to our Financial Condition—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 United States and the European Union have imposed sanctions on certain Russian and Ukrainian persons and entities. No individual or entity within our group has been designated with sanctions introduced by either the United States or the European Union. However, additional designations may be made, or additional categories of sanctions may be created, at any time, and we can give no assurance that any member of our group, or individuals holding positions within our group, will not be affected by future sanctions designations. Several pieces of legislation directed at amplifying United States sanctions against the Russian Federation have been introduced in the U.S. Congress and are currently under consideration. It is currently unclear at which point, if at all, any of these bills

could be signed into law and what would be the scope of any new sanctions that may be imposed pursuant to such law.

Non-compliance with any potential sanctions could result in, among other things, the inability of the relevant group entities to contract with the governmental authorities of the United States or the decision-making and executive bodies of the European Union, or their agencies, potential civil or criminal liability for the sanctioned individuals and entities and their associates under the US and/or EU law, the imposition of significant fines and reputational damage.

Further tensions between Russia and other countries and any escalation of the existing tensions, the imposition of further sanctions, or continued uncertainty regarding the scope thereof, could have a negative effect on the Russian economy, the financial condition of our partners and suppliers, the financial condition of partners and suppliers of our subsidiaries, our ability to conduct trade and financial transactions, our ability to obtain financing on commercially reasonable terms (or at all), and the level and volatility of the trading price of our shares and ADSs.

The Ukrainian Cabinet of Ministers initiated adoption of the Law "On Sanctions" by the Verkhovna Rada of Ukraine which came into force on September 12, 2014. The law provides for special economic and other restrictive measures against foreign states, foreign legal entities and individuals involved in activities threatening the national security, sovereignty and territorial integrity of Ukraine and the rights and freedoms of its citizens. The law stipulates 25 types of sanctions which include, among others:

- asset freezing;
- temporary limitation of a right to use or dispose of property;
- cancellation or suspension of licenses and other permits, including special permits for subsoil use;
- prohibition to use radio frequency resources in Ukraine; and
- termination or suspension of rendering telecommunications services or utilizing telecommunications networks of general use.

On June 28, 2015, amendments to the Law of Ukraine "On Licensing of Certain Types of Economic Activity" came into force expanding the terms of license cancellation, including adoption of an "act on documentary proof of control over licensee actions by other states, carrying out armed aggression against Ukraine or whose actions create preconditions either for military conflict or use of military force against Ukraine." With effect from January 1, 2018, the licensing of certain activities in the telecommunications sector has been canceled in accordance with the Law of Ukraine "On Licensing of Certain Types of Economic Activity."

Furthermore, the Law of Ukraine "On amendments to the Law of Ukraine "On the protection of economic competition" came into force and is aimed to improve the procedures for control over the concentration of economic entities, and gives the Antimonopoly Committee of Ukraine the right to refuse to consider applications for concentration submitted by companies included in the sanctions list.

The draft law "On Amendments to Article 9 of the Law of Ukraine "On State Registration of Legal Entities, Individual Entrepreneurs and Public Organizations" was introduced in Ukraine, which requires economic entities to publish information relating to their beneficial owners in the unified state register (in the event that the beneficial owner of the company is a resident of a country carrying out armed aggression against Ukraine). In addition, the draft law "On amendments to some legislative acts relating to labeling of products (or services) produced by suppliers tied with an aggressor country" stipulates that the suppliers of goods (or services) might be obliged to mark the advertising of products (or services) with the information on their ties with an aggressor country. As of April 1, 2019, the draft

laws have not been considered by functional committee of the Verkhovna Rada and the Parliament of Ukraine.

The Presidential Decree No. 133/2017 "On the Decision of the National Security and Defense Council of Ukraine "On the Imposition of Personal Special Economic and Other Restrictive Measures (Sanctions)" dated May 17, 2017 imposed new sanctions and determined a new sanction list against 1,228 individuals and 468 legal entities. VF Ukraine was not subject to these sanctions.

According to that Decree:

- mobile operators and providers of telecommunications services must restrict access to a number of Internet resources listed in the annexes to the Decree;
- software usage of a number of legal entities listed in the annexes to the Decree is prohibited; and
- rendering of telecommunications services and access to telecommunications networks is prohibited for a number of legal entities listed in the annexes to the Decree.

In November 2016, NBU adopted a resolution that is aimed to, *inter alia*, impose restrictions on operations with persons and entities targeted by sanctions.

In March 2017, pursuant to the Resolution of the National Security and Defense Council of Ukraine dated March 15, 2017 "On the Imposition of Personal Special Economic and Other Restrictive Measures (Sanctions)," as approved by the Decree of the President of Ukraine No. 63/2017, NBU introduced sanctions aimed at Ukrainian subsidiaries of a number of Russian banks in order to prohibit financial operations, including any payments of dividends, in favor of the parent banks. This supplements a set of measures in respect of Russian entities subject to the sanctions introduced in accordance with the NBU Board Resolution No. 654 dated October 1, 2015 "On Ensuring the Implementation and Monitoring of the Effectiveness of Personal Special Economic and Other Restrictive Measures (Sanctions) and the Resolution No. 399 dated November 1, 2016 "On Amendments to the Resolution of the Board of the National Bank of Ukraine No. 654 dated October 1, 2015."

On May 8, 2018, a draft law "On Amendments to the Law "On Sanctions" (No. 8340) was registered in the Verkhovna Rada of Ukraine, which provides for new types of sanctions: nationalization and termination of activities of a business entity being under control of the state that is subject to sanctions/ residents of such states/ any other person included in the sanction list.

On September 21, 2018, a draft law "On Amendments to the Law "On Sanctions" (No. 9116) was registered in the Verkhovna Rada of Ukraine providing for extension of the grounds for the application of sanctions by Ukraine. In particular, it is proposed to add the following grounds: decisions of the authorized bodies of the United Kingdom and Northern Ireland; decisions of the authorized US bodies. Thus, the draft law introduces an automatic mechanism for synchronization of Ukrainian sanctions with its international partners.

In 2018, the National Security and Defense Council of Ukraine (the "**NSDC**") imposed a number of new sanctions and restrictive measures against certain individuals and legal entities who are the residents of Russia, Ukraine and other states. None of these sanctions imposed by NSDC were introduced against VF Ukraine.

In June 2017, the Board of the National Bank of Ukraine adopted Resolution No. 46 "On Amendments to the Resolution of the Board of the National Bank of Ukraine No. 654 dated October 1, 2015." The Resolution set out the requirements for banks dealing with persons designated in the sanctions list, in particular, prohibiting them from executing payment documents of any customers designated in the sanction list and transferring any funds to their accounts. On July 3, 2018,

the NBU introduced amendments to this decision allowing the banks to execute certain categories of such payment orders strictly within the territory of Ukraine.

The Decree of the President of Ukraine No. 57/2018 dated March 6, 2018 enacted the Decision of the NSDC dated March 1, 2018 "On the Imposition of Personal Special Economic and Other Restrictive Measures (Sanctions)." The restrictive measures were extended in respect of subsidiaries of a number of Russian banks, which provide for the prevention of the withdrawal of capital outside Ukraine in favor of persons affiliated with the banks.

The Administration of the State Service of Special Communications and Information Protection of Ukraine developed a draft government resolution which provides further actions of authorized state bodies when blocking access to the information resources designated in the sanction list. The project provides, *inter alia*, connection to operators' networks of equipment to monitor the blocked information resources. Regarding the draft law special equipment might be connected to the operator's network, which may lead to additional costs. The document is currently under consideration.

On February 13, 2017, the Decree of the President of Ukraine No. 32/2017 provided the directions of legislative changes, that could lead to restriction of the use of software and telecommunications equipment produced in Russia and simplification for the regulators to access data from communication channels (for the purposes of the identification of service providers, blocking of certain information resources and facilitating the storage of telecommunications data by operators). These decisions may affect our operations to the extent that they allow access to information resources of Russian origin. Pursuant to this Decree, the draft law "On Amendments to the Law "On Sanctions" was submitted for public discussion, which proposes to impose additional sanctions, in particular, with regard to the prohibition or restriction of the use of software and telecommunications equipment originated in countries that are subject to sanctions, as well as software developed by companies in such countries (that are subject to sanctions). The draft law is currently under consideration.

There is still significant uncertainty regarding how these measures might affect VF Ukraine and our group, the extent and timing of any further sanctions, or the ultimate impact of these sanctions on our operations. These measures and any further measures and sanctions may have a negative effect on our business, financial condition, results of operations, prospects and the value of our shares and ADSs.

See also "—Legal Risks and Uncertainties—The inability of MTS-Turkmenistan to sustain its operations in Turkmenistan on commercially acceptable terms or at all may adversely affect our business, financial condition and results of operations" and "The 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 "Political instability in Ukraine could have a material adverse effect on our operations in Ukraine and on our business, financial condition and results of operations."

***Political instability in Ukraine could have a material adverse effect on our operations in Ukraine and on our business, financial condition and results of operations.***

Economic crisis, deterioration of key aspects of the economy and the lack of investment into the social infrastructure, has, amongst other things, led to the instability of the political situation in Ukraine where we have significant operations. Furthermore, the refusal of the Ukrainian Government to enter into an association agreement with the European Union in November 2013, incited mass protests in Kyiv and other regions of the country. These protests caused, amongst other things, a downgrade of Ukraine's international ratings and significant depreciation of the national currency, see "—Risks Relating to our Financial Condition—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."

On March 16, 2014, a referendum in favor of joining the Russian Federation was held in Crimea with the consequent declaration of independence Crimea from Ukraine and the accession to the Russian Federation by the parliament of Crimea.

The armed conflict in Eastern Ukraine that has taken place since April 2014 has destabilized the region and caused uncertainty in our operation in the region of the armed conflict. It has also led to damage of our network equipment in the region followed by related losses. Should the economic and political situation in Eastern Ukraine become further destabilized, should local operators enter the market or other external factors affect the region, this may adversely affect our business, financial condition, corporate image and results of operations as well as cause regulatory uncertainties.

These events have resulted in heightened tensions between Ukraine and the Russian Federation and have strained relationships of the Russian Federation with the United States and the European Union, which may adversely impact our business. Furthermore, should the tensions between the Russian Federation and Ukraine continue or increase, or should the economic, social and political situation in Ukraine become further destabilized, our business interests in Ukraine and other impacted regions may be adversely affected or targeted. The continued impact of these events and any continuing or escalating military action, public protests, unrest, political instability or further sanctions could have a further adverse effect on our business in Ukraine, our financial condition and reputation.

See also "—A deterioration in relations between Russia and other former Soviet republics, as well as other politically related disagreements and allegations between Russia and other countries and sanctions imposed as a result thereof, could materially adversely affect our business, financial condition, results of operations and prospects and the value of our shares and ADSs."

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

The political and economic changes in recent years in the countries where we operate have resulted in significant dislocations of authority. In addition, the local and international press have reported high levels of corruption, including the bribing of officials for the purpose of initiating investigations by government agencies. Press reports have also described instances in which government officials engaged in selective investigations and prosecutions to further the commercial interests of certain government officials or certain companies or individuals. Additionally, some members of the media in the countries we operate in regularly publish disparaging articles in return for payment. The depredations of organized or other crime or demands of dishonest officials 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. 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 negatively affect our reputation and lead to an increase in subscriber churn, which could materially adversely affect our business, financial condition, results of operations and prospects.

***Social instability could increase support for renewed centralized authority, nationalism or violence and thus materially adversely affect our operations.***

The failure of the government and many private enterprises to pay full salaries on a regular basis and the failure of salaries and benefits generally to keep pace with the rapidly increasing cost of living

have led in the past, and could lead in the future, to labor and social unrest. Labor and social unrest may have political, social and economic consequences, such as increased support for a renewal of centralized authority; increased nationalism, including restrictions on foreign involvement in the economies of the countries where we have operations; and increased violence. An occurrence of any of the foregoing events could restrict our operations and lead to the loss of revenues, materially adversely affecting our operations. See also "—Political instability in Ukraine could have a material adverse effect on our operations in Ukraine and on our business, financial condition and results of operations."

**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 and ADSs.***

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;
- the lack of judicial and administrative guidance on interpreting certain legislation as well as conflicting interpretations of supreme general jurisdiction and arbitrazh courts;
- 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 place the enforceability and underlying constitutionality of laws in doubt and 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.

***The 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 or regulatory scrutiny, this may adversely affect our business, financial condition and results of operations. For example, in June 2012, the authorities of the Republic of Uzbekistan began audits of the financial and operating activities of our wholly owned subsidiary, Uzdunrobita. Further various claims for violation of tax, antimonopoly and industry legislation were made against Uzdunrobita, which resulted in significant amounts of fines and penalties, revocation of

all licenses and suspension of services. Total amount of damages was calculated and determined on the basis of all the aforementioned claims against Uzdunrobita and amounted to approximately RUB 18,375 million payable in equal installments over eight months.

Uzdunrobita paid two scheduled installments in November and December 2012 totaling approximately RUB 4,583.4 million. On January 14, 2013, further to its partial payment of the third installment due in January 2013 totaling approximately RUB 481 million and constituting the remaining amount of cash held in its bank accounts, Uzdunrobita filed a petition for voluntary bankruptcy to the Tashkent Economic Court on the grounds of its inability to meet further obligations.

On April 22, 2013, the Tashkent Economic Court declared Uzdunrobita bankrupt and initiated a liquidation process. Uzdunrobita was later liquidated. In 2012, we filed a claim against the Republic of Uzbekistan in the International Center for Settlement of Investment Disputes ("**ICSID**"), part of the World Bank Group, in Washington, D.C.

On July 31, 2014, we and the Republic of Uzbekistan signed a settlement agreement (the "**Settlement Agreement**") and MTS agreed to reenter the Uzbekistan market through a joint enterprise with MTS holding a 50.01% in the charter capital of the joint enterprise, while the remaining 49.99% belongs to a state-owned unitary enterprise established and managed by the

State Committee for Communications, Development of Information Systems and Telecommunications Technologies of the Republic of Uzbekistan. The Settlement Agreement is governed by English law and provides for the resolution of any disputes arising out of the Settlement Agreement in the International Court of Arbitration under International Chamber of Commerce in Paris.

On September 24, 2014, in accordance with the Settlement Agreement, the authorities of the Republic of Uzbekistan granted the joint enterprise 2G, 3G and LTE licenses, provided necessary frequencies and numbering capacity, fostered entrance into lease agreements for communication channels and issued all permissions required to the joint enterprise so it could operate and offer full telecommunications services throughout Uzbekistan. The joint enterprise has also received guaranties for investment protection and return of investments in accordance with the laws of the Republic of Uzbekistan.

In November 2014, ICSID discontinued international arbitration proceedings between MTS and the Republic of Uzbekistan following the submission of a joint application by both parties.

On December 1, 2014, the joint enterprise, named UMS, launched sales of SIM cards through its proprietary network of 20 stores and through another 230 independent locations throughout Uzbekistan and started provision of 2G/3G telecommunications services on the entire territory of Uzbekistan.

On August 5, 2016, we sold our 50.01% stake in UMS to the State Unitary Enterprise Centre of Radio Communication,

Radio Broadcasting and Television of the Ministry of Development of Information Technologies and Communications of the Republic of Uzbekistan. The loss on disposal of investment in Uzbekistan was recorded in the financial report for the third quarter of 2016. See Note 10 to our audited consolidated financial statements.

See also "—Political and Social Risks—A deterioration in relations between Russia and other former Soviet republics as well as other politically related disagreements and allegations between Russia and other countries 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 ADSs" and "Political instability in Ukraine could have a material adverse effect on our operations in Ukraine and on our business, financial condition and results of operations."

***The inability of MTS-Turkmenistan to sustain its operations in Turkmenistan on commercially acceptable terms or at all may adversely affect our business, financial condition and results of operations.***

In December 2010, the Group suspended its operations in Turkmenistan following notification by the Ministry of Communications of Turkmenistan of a decision to suspend licenses held by BCTI, the Group's wholly owned subsidiary in Turkmenistan, initially for a period of one month starting from December 21, 2010, and then permanently.

On May 24, 2012, we concluded an agreement with the state-owned telecom operator Turkmentelekom relating to our terms of operations in Turkmenistan, which resulted from negotiations between the Turkmenistan government and ministries. The agreement had a five-year term and could be extended for the following five years, provided certain terms and conditions are satisfied. Under this agreement, we were obliged to pay Turkmentelekom a monthly amount calculated as 30% of our net profit in Turkmenistan based on accounting rules of Turkmenistan.

On July 25, 2012, we, our subsidiary BCTI, the Republic of Turkmenistan, the Ministry of Communications of Turkmenistan, the state-owned company, Turkmentelecom, and a mobile operator, Altyn Asyr, signed a settlement agreement (which included the dismissal of all international lawsuits) concerning the suspension of our operations in Turkmenistan in December 2010.

In August 2012, we restarted our mobile communication network in Turkmenistan and resumed providing services to subscribers who had not canceled their contracts. Since October 1, 2012 we resumed our operations in Turkmenistan entirely and started entering into contracts with new subscribers.

MTS-Turkmenistan was compelled to suspend communication services in Turkmenistan from 00:00 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. Our total losses are currently estimated to be USD 1.5 billion. Unless resolved to our satisfaction, we intend to vigorously pursue our claims in arbitration and seek all available remedies.

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

Certain provisions of Russian law 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 at the end of its third or any subsequent financial 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, and the company's creditors will have the right to accelerate their claims or demand early performance of the company's obligations as well as demand compensation of any damages.

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. Ukrainian law also contains provisions similar to Russian law, whereby a company's failure to comply with certain legal requirements concerning its formation, net assets or operation may be grounds for its liquidation.

***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 and Ukraine's transformation from centrally planned economies to market economies, legislation has been enacted in both countries 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.

***Selective or arbitrary government action could have a material adverse effect on our business, financial condition, results of operations and prospects.***

Governmental authorities in the countries where we operate have a high degree of discretion and, at times, act selectively or arbitrarily, without hearing or prior notice, and sometimes in a manner that is inconsistent with legislation or influenced by political or commercial considerations.

Selective or arbitrary governmental actions have reportedly included the denial or withdrawal of licenses, sudden and unexpected tax audits and claims, criminal prosecutions and civil actions. Federal and local government entities have also used ordinary defects in matters surrounding share issuances and registration as pretexts for court claims and other demands to invalidate such issuances and registrations or to void transactions. Moreover, the government also has the power in certain circumstances, by regulation or government acts, to interfere with the performance of, nullify or terminate contracts.

In addition, the Russian tax authorities have brought tax evasion claims relating to Russian companies' use of tax-optimization schemes, and press reports have speculated that these enforcement actions have been selective. Selective or arbitrary government action, if directed at us, could have a material adverse effect on our business, financial condition, results of operations and prospects.

***Failure to comply with existing laws and regulations 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 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, Ukraine 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. At times, there can be a significant number of base stations or other communications facilities and other aspects of our networks for which we do not have final permits to operate and there can be delays in obtaining the final permits, approvals and authorizations for particular base stations or other communications facilities and other aspects of our networks. Furthermore, 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 Federal Law No. 257 "On Amending Federal Law "On Mass Media" and Federal Law "On Communications" dated July 13, 2015 introduced a number of amendments to the national mandatory free television channels list. Requirements on sequence of channels, sound and image quality and signal reception points of national mandatory free television channels were adopted in September 2015. The inability of operators to comply with such requirements 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.

Our failure to comply with existing laws and regulations of the countries where we operate 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.

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.

In addition, in 2015 the Prosecutor General's Office of Ukraine started criminal proceedings on the fact of "unauthorized intervention" in the operation of MTS Ukraine telecommunications network in Crimea on March 15 and 16, 2014. The outcome of the investigation is currently unclear. Possible legal risks or risks concerning the fulfillment of conditions arising from the proceedings might adversely affect our business, financial condition and results of operations.

***The level of development of corporate and securities laws and regulations in Russia could limit our ability to attract future investment.***

The regulation and supervision of the securities market, financial intermediaries and issuers are less developed in Russia than, for example, in the United States and Western Europe. Securities laws, including those relating to corporate governance, insider trading, disclosure and reporting requirements, are relatively new, while other laws concerning anti-fraud and directors' and officers' liabilities remain underdeveloped. The Russian securities market is regulated by several state authorities, which poses certain risks.

In addition, Russian corporate and securities rules and regulations can change rapidly, which may materially adversely affect our ability to conduct capital markets transactions. The regulatory requirements imposed on Russian issuers may lead to delays in the placement of securities and access to capital markets. It is often unclear whether or how regulations, decisions and letters issued by the various regulatory authorities apply to us. As a result, we may be subject to fines and/or other enforcement measures despite our best efforts at compliance, which could have a material adverse effect on our business, financial condition and results of operations.

Furthermore on July 1, 2016, provisions of the Federal Law No. 210 stipulating the procedure for corporate actions became effective which, *inter* alia, provides for a possibility of remote participation at general meetings of security holders (e-voting) for those shareholders who hold their shares either directly on a share register or through a depositary. These procedures may lead to delays in voting process and inconsistencies and may entail additional risks due to their novelty to the Russian market.

***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 and ADSs.

While the Federal Law on Joint Stock Companies provides that shareholders owning not less than 1% of the company's 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. In 2009, legislation was adopted which

contemplates class action litigation and in 2015 mechanism of class action regarding corporate disputes was introduced. 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.

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

***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 amendments to the Civil Code of the Russian Federation, which came into effect on September 1, 2014, 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 us. Should such claims be brought, this 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.

For example, during 2015-2019 we repurchased MTS ordinary shares, for more details see "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 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 FAS. In addition, a company may be considered to be strategically important due to our offering of services involving the use of cryptographic technologies.

Starting from the effective date of the Strategic Foreign Investment Law, a foreign investor (including Russian citizens having foreign citizenship according to the amendments which came in force on July 1, 2017) seeking to obtain direct or indirect control over a strategically important company is required to have the respective transaction pre-approved by a special governmental commission on control of foreign investments. On December 6, 2014, the amendments to the Strategic Foreign Investment Law came into effect. The law 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 180 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.

Commencing December 6, 2014, a foreign investor is also obliged to notify the authorized governmental body about the fact of conducting the pre-approved transactions. With effect from July 1, 2017, according to the amendments, offshore companies (and companies under their control) are 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. According to the amendments that came into force on July 1, 2017, 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, including the reduction of settlement rate, regulation of other inter-carrier and subscriber tariffs and others, as well as regulatory changes at the international level may have a material adverse effect on our financial condition and results of operations.***

Following an amendment to the Federal Law on Communications, which became effective July 1, 2006, fixed-line operators began charging their subscribers for calls to mobile phone users and started to transfer a percentage of the charge to mobile operators terminating such calls. The percentage transferred to mobile operators is established by the regulator and is known as the "settlement rate."

The Ministry of Communications and Mass Media is considering altering the approach to inter-carrier settlements in Russia and the subsequent lowering of the settlement rate. Any reduction of the settlement rate by the regulator could have a negative impact on our average monthly service revenues per subscriber and margins. In September 2013, the Government commission on telecommunications supported the proposal of the Ministry of Communications and Mass Media to simplify the process of traffic transmission within one sub-federal region, as well as to simplify the process of traffic transmission within the voice and data networks while transmitting voice information within one sub-federal region of the Russian Federation. The exact changes to the current regulations may be significant, including the regulation of interconnect leading to operators' inability to determine the autonomous pricing of interconnect rates.

In November 2014, the Government of Russia considered a proposal on reconsideration of the interconnect regulation approach submitted by the Ministry of Communications. In December 2018, the Ministry of Communications developed new initiatives relating to the reframing of interaction between operators. It is unclear yet how this proposal may be implemented, however it may potentially lead to a reduction in traffic transmission revenues and an increase in traffic transmission costs. The final decision on the implementation of this proposal has not been made yet.

The agreement on the conditions of inter-carrier mutual settlements while delivering international communication services in CIS-countries was signed on the CIS Heads of Government Council meeting

held in Dushanbe on October 30, 2015 (the "**Agreement**"). The enforcement of certain provisions of the Agreement may adversely affect our operation in terms of the execution of inter-carrier mutual settlements among CIS-operators. In order to be implemented, the corresponding provisions should be introduced to the Russian legislation. To date, the provisions have not been implemented yet.

In December 2013 and July 2014, the State Commission for Radio frequencies introduced a number of modifications to the conditions of using the frequency band for 3G and 4G. These changes resulted in implementation of the principle of technological neutrality for frequency bands 900 MHz (UMTS and LTE) and 1800 MHz (LTE). The Government Regulation No. 480 dated May 24, 2014, requiring that tenders shall be held mainly in the form of auctions, came into force on June 6, 2014.

These changes may strengthen competition in the market as well as add costs for development of the network infrastructure.

According to press reports, a proposal on carrying international traffic from the country's territory through the networks of nationwide operators is being considered. The list of nationwide operators has not been specified yet. In case such initiative is implemented and MTS is not included in the list of nationwide operators, this may lead to an increase in our traffic transmission costs.

According to Government Regulation No. 1240 dated November 24, 2014, starting from January 1, 2015, federal public bodies were vested with a right to make decisions on using data transmission network of government bodies, which is a part of infrastructure ensuring information and technological interaction with the information systems used for rendering state and municipal electronic services for the purposes of exercising public functions. To date, the single operator of infrastructure of electronic state services is Rostelecom. Adoption of the Regulation may adversely affect our revenues with regard to the B2G market segment due to competitive disadvantage.

With the entry into force of the Treaty on the Eurasian Economic Union (the "**EEU**") on January 1, 2015, a supra-national antimonopoly body empowered to control compliance with general competition rules on cross-border markets and to apply antitrust measures was established. Should 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.

The amendments introduced to Article 5 of the Federal Law No. 115 "On Combating Legalization (Laundering) of Criminally Gained Income and Financing of Terrorism" dated August 7, 2001, entered into force on March 1, 2015. The list of organizations carrying out cash/other property operations, to whom the law requirements are applied, was expanded according to those amendments. In addition to telecommunications operators entitled to independently render mobile radio telecommunications services, the telecommunications operators occupying "substantial position" in public switched telephone networks entitled to independently provide data transmission services and render services on the basis of contracts with individual subscribers, have been also included in the list. A telecommunications operator which meets the specified criteria is obliged to provide the Federal Financial Monitoring Service with the information on cash/other property operations (that is subject to compulsory control or that seems suspicious while implementing the rules of internal control), as well as to take measures for freezing of cash assets / other property (in case there is an information on its involvement in extremist activities or terrorism). Lack of law enforcement practice may cause difficulties in interpreting the above-mentioned amendments and lead to additional burden for telecommunications operators.

On July 8, 2017, the Federal Law No. 110 "On Amendments to Article 66 of the Federal Law "On Communications" and Article 35 of the Federal Law "On Mass Media" dated June 7, 2017 came into force, which requires operators to transmit warning signals to telecommunications services users or inform them about dangers arisen by threat of occurrence of emergencies or occurrence of

emergencies. Expenditure related to the transmission of warning signals is not compensated to operators.

On April 4, 2016, the Ministry of Communications of the Russian Federation adopted the order No. 135 "On the Approval of Requirements for Communication Networks Operation With Respect to the Use of Services Provided by Third Parties." The order came into force on July 26, 2017.

According to the requirements, a telecommunications operator is obliged (on a quarterly basis) to provide authorities with data on foreign companies and foreign citizens that are engaged to provide works or services related to exploitation and management of its communication network. In addition, a telecommunications operator is obliged to store information concerning all actions on communication facilities executed by servicing staff or third parties engaged in exploitation and management of communication networks both from workplaces and with the use of a remote access.

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" was adopted on July 6, 2016. Pursuant to that law, operators are obliged to store information on the facts of receiving, transferring, delivery and/or processing of voice information and text messages, as well as images, sounds, video- and other messages of telecommunications services users (for a three-year period) and the contents of such communications, including voice data, text messages, pictures, sounds, video or other communications (for up to six months). The requirement relating to the storage of messages contents entered into force on July 1, 2018. The Government of the Russian Federation is responsible for approving the rules, terms and volume of information to be stored. 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" was adopted on April 12, 2018 (the "Rules on Storage"). According to this regulation, commencing July 1, 2018, communication operators that render intercity and international communication services (as well as personal radio call services, mobile radio services in a public communication network, mobile radiotelephone and satellite communication services, data transmission services for the purposes of transferring voice information, zonal and local telephone communication services) are required 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. Starting from October 1, 2018, operators that render telematics services, as well as data transmission services (except for data transmission services for the purposes of transferring voice information) are 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) during 30 days before the commissioning date of the technical equipment. Moreover, the capacity of the data traffic storage system is required to be increased by 15% annually during 5 years from the date the data storage technical equipment was put into operation. Significant additional costs will be required in order to comply with these requirements.

The Ministry of Communications of the Russian Federation has developed a draft decree on the introduction of amendments and additions to the Rules on Storage. According to the proposed amendments, technical means for the accumulation of information must have confirmation of their production in the territory of the Russian Federation. The possibility of applying these restrictions is not yet clear since there are not many Russian producers of this equipment. If this draft law is adopted, it may have a material adverse effect on our operations.

In December 2018, a draft law aimed at ensuring safe and sustainable functioning of the internet in the Russian Federation was submitted for consideration to the State Duma. On April 16, 2019, the State Duma adopted this draft law. Under this initiative, operators (including us) may be required to install new equipment on their networks, which could adversely affect the networks' stability and the

quality of provided communication services. Additional costs for maintenance and operation of this equipment may be required from the operators, which cannot be estimated currently.

On January 14, 2019, the Government of the Russian Federation published a list of instructions aimed at encouraging the procurement of telecommunication equipment of Russian origin. According to the document, ministries should prepare proposals by May 1, 2019, relating to an increase in the import customs duty rate to a level of up to 20% with respect to telecommunication equipment. Currently, there can be no certainty as to the form of the implementation of these initiatives; therefore, it is difficult to assess how such changes will affect the company's operations. Should the import customs duty rate increase in respect of the equipment we purchase, this may have a material adverse effect on our financial condition and results of operations.

Currently, the Russian Civil Code is undergoing the process of substantial revisions with new provisions being introduced relating to a number of sectors. At present, the potential interpretation of these amendments by state authorities (including the courts), along with their impact on our activities are unknown.

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 concluding a contract for the provision of mobile radiotelephone communication services without appropriate identification of a subscriber (*i.e.*, a user) of communication services. On November 17, 2018, the Decree of the Government of the Russian Federation came into force, which introduced amendments to the Rules for the provision of telephone services and specified the procedure for compliance with the requirements of this federal law. Additional costs were required from operators to provide a set of measures to improve the filling of databases with information about subscribers and the organization of interaction with state systems to verify the reliability of information about subscribers. Adoption of similar legislation in the future may lead to incurring additional costs by the operators, which may have a material adverse effect on our financial condition and results of operations.

A roadmap for 2018-2022, for the development of competition in economic sectors of the Russian Federation and the transition of particular sectors from the state of natural monopolies to the competitive market was approved by the Order of the Government of the Russian Federation No. 1697-r dated August 16, 2018. The roadmap provides for the adoption of a number of regulatory legal acts, *inter alia*, in the telecommunication sphere. Currently, it is difficult to assess how such changes and their interpretation by state bodies, particularly by courts, may affect our operation.

Russian companies are obliged to pay various and significant taxes including income tax, VAT, real estate tax, excise tax, payroll tax and others. Along with tax liabilities there are different obligatory non-tax payments. These include payments into Universal Service Fund, which currently amounts to 1.2% of our annual revenue on telecommunications services. Furthermore, potential regulatory changes that may be enacted in the future, such as the introduction of new rules regulating MVNOs, new rules concerning our pricing policy and others, 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 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 can lead to application of certain liability measures with respect to our 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 can 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, the FAS may be entitled to 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 represented by the following legal acts: Federal laws "On Communication," "On Information, Information Technologies and Information Protection," "On Personal Data," "On Trade Secret," "On Electronic Signature," by-laws of the Government, FSTEC, FSS, Ministry of Communication and The Federal Service for Supervision of Communications, Information Technology and Mass Media of the Russian Federation, among others. Main risks, posed by organization of processing and providing security of personal data include the following factors:

- ambiguity of applicability of legislation on communication, personal data, trade secret, etc. to a single object of legal regulation. Data may be simultaneously attributed to different categories of limited access information, which fall under different information security requirements under different sections of the Russian legislation;

- responsibility of personal data operators for the actions of the third parties, processing personal data at the request of personal data operators;

- ambiguity of the criteria for determining personal data protection level during its processing in the information systems (for example, in case undocumented possibilities in system and/or applied software exist), set by Government Decree No.1119, dated November 1, 2012;

- high level of requirements to the personal data protection;

- significant costs on creation of information protection system and support of protection level;

- necessity to use the means of information protection, which have undergone a special conformity assessment procedure; replacement of the existing means of information protection with the ones, certified by FSTEC and FSS of Russia may require additional costs on certification of the existing means of information protection and later on certificates renewal (because of the limited period of certificates validity);

- in case of untimely obtaining licenses or untimely 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; and

- ambiguity of the requirement of Federal law No. 152 to localize processing of the Russian citizens personal data on the territory of Russia, keeping the possibility of cross-border transfer of this data.

In case of non-compliance with the Russian legislation on information security and personal data protection, the company cannot rule out the possibility of imposing sanctions by the regulatory bodies in the form of fines, confiscation of uncertified means of information protection, suspension of business processes for 90 days as well as suspension or withdrawal of the license, allowing to provide communication services, technical and cryptographic protection of confidential information.

In addition, it is possible that subscribers will file legal claims, seeking to reimburse tangible and moral damage in connection with the violation of the legislation requirements. With effect from May 25, 2018, the General Data Protection Regulation came into force in the European Union. Our basic business processes and our subsidiaries were audited in order to determine applicability and compliance with the GDPR requirements. In addition, a control mechanism for determination of compliance with the specified requirements was proposed to be established for new business processes (if they are initiated). If the resources required to maintain, develop and implement data protection and information security systems meeting the legislation requirement are greater than expected, or we fail to comply with the data protection and information security laws despite our best efforts to do so, our business, financial condition and results of operations could be materially adversely affected.

On October 5, 2017, the Law of Ukraine "On the Basic Principles of Ensuring the Cybersecurity of Ukraine" was adopted and entered into force on May 9, 2018. It provides the requirements and procedures for identifying critical infrastructure objects to ensure cybersecurity. All enterprises in the field of information and communications technologies might be recognized as objects of critical infrastructure that can bear the risks of additional costs and additional responsibility for ensuring cybersecurity. The drafts of the decisions of the Cabinet of Ministers of Ukraine relating to the implementation of procedures for identification of critical infrastructure objects, their audit, etc. are being developed by the State Service of Special Communications and Information Protection of Ukraine.

On October 19, 2017, The Ministry of Economic Development and Trade developed and submitted for public discussion the draft law "On Amendments to the Law of Ukraine "On Foreign Economic Activities," which proposed to grant the Ministry of Economic Development and Trade a right to suspend foreign economic activities for a period of one year according to a submission of the Security Service of Ukraine if subjects of foreign economic activity carry out activities connected with the financing of terrorism and encroachment of national interests, national security and territorial integrity of Ukraine.

On July 20, 2018, the Ministry of Economic Development and Trade developed and submitted for public discussion the draft law of Ukraine "On Critical Information Infrastructure and Its Protection." The draft law is aimed at creating an environment for the development and effective implementation of state policy with regard to protection of critical infrastructure. The Security Service of Ukraine is vested, *inter alia*, with the following powers: takes part in investment review and verifies the origin of the capital allocated to critical infrastructure, takes part in inspections to ensure that telecommunication operators are in compliance with the national security interests, gets access to automated information and referral information systems, registers and databases, whose holders (administrators) are operators of critical infrastructure objects. In case the company or objects of the company's infrastructure are classified as critical infrastructure objects in the future, it may entail enhanced control of the NCCIR, the State Service of Special Communications and Information Protection, the Security Service of Ukraine, as well as pose additional requirements with regard to business continuity and preservation of information.

***Changes in Ukrainian telecommunications legislation have caused uncertainty in relation to the regulation of the Ukrainian telecommunications industry and may adversely affect our business, financial condition and results of operations.***

In November 2012, the NCCIR issued the decision regarding the rules governing the provision of MNP service, which enables the subscribers to retain their telephone number after switching from one operator of mobile communications to another. MNP law came into legal force on July 5, 2013 with the beginning of switching to other operators from December 20, 2013. On December 30, 2013 a resolution that postponed the beginning of service provision to July 2014 came into legal force, however, implementation of MNP service was cancelled later on by a court decision. On July 31, 2015, the

NCCIR approved the procedure for MNP service rendering and introduced amendments to the basic requirements of agreements for the provision of telecommunications services. The decision entered into force on September 8, 2015, after which the NCCIR appointed the USCRF as an administrator of the centralized database of the ported numbers.

In May 2017, operators received approved documents including technical requirements for MNP service. The court proceedings regarding the choice of a supplier for the centralized database have been finished. According to the decision of the NCCIR dated November 27, 2018, the MNP service is to be launched into a commercial use on May 1, 2019.

The Verkhovna Rada of Ukraine regularly reviews different versions of draft laws "On Electronic Communications." The key one of these draft laws requires, *inter alia*, the identification of the entire subscriber base of operators. The draft law provides for a period of compulsory registration, being six months. The inability to identify subscribers within the prescribed timeframe could have a negative effect on business operations of VF Ukraine. The request of VF Ukraine and Kyivstar PrJSC with regard to extending the transition period to two years was passed to legislators by way of an official letter. As of April 1, 2019, the draft law has not been considered.

In addition, the NCCIR approved a new procedure for the identification of anonymous subscribers, which obliged operators to register subscribers in electronic form, including with the use of an electronic subscriber identification system. The new procedure came into force in December 2018.

Legislative changes regulating the telecommunications industry may materially adversely affect our business, financial condition and results of operations. See "Item 4—Information on Our Company—B. Business Overview—Regulation of Telecommunications in the Russian Federation and Ukraine—Regulation in Ukraine—Legislation."

***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.***

The discussion below provides general information regarding the Russian tax regime and is not intended to be inclusive of all issues. Investors should seek advice from their own tax advisors as to these tax matters before investing in our shares and ADSs. See also "Item 10—Additional Information—E. Taxation."

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.

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 and ADSs.

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 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.

On November 4, 2014, the President of the Russian Federation signed the Federal law No. 325 "On Ratification of the Convention on Mutual Administrative Assistance in Tax Matters." Ratification of this Convention will enable the Russian Federation to receive tax information from all participating countries, which include a number of offshore jurisdictions.

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 off shore jurisdictions.

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

***The tax system in Ukraine is undergoing a reform and various tax laws are subject to different interpretations.***

Taxes and statutory charges are levied in accordance with the Tax Code of Ukraine ("**TCU**") that came into effect in 2011. Along with TCU requirements, Ukrainian taxpayers are obligated to follow

other legal acts and legislative provisions. Applicable taxes include value added tax ("**VAT**"), corporate income tax ("**CIT**"), customs duties, payroll taxes and other taxes. Ukrainian legislation is ambiguous, which could result in various tax disputes due to a number of mutually controversial or incomplete provisions.

For example, payments for computer software can be treated as royalty or payments for intangible assets depending on whether a company purchases end-user rights or not. VF Ukraine purchases limited rights for the use of computer software, which are currently determined as end-user rights with an appropriate taxation. However, such treatment could still be disputed.

Also, rules established by the TCU for recalculation of the input tax credit for non-current assets are unclear. Uncertain transfer pricing rules and their inconsistent application by the Ukrainian tax authorities and courts may also adversely affect VF Ukraine's operations. VF Ukraine's transactions with its non-resident related parties as well as certain transactions with other non-residents registered in low-tax jurisdictions (exhaustive list of these jurisdictions is established by the Cabinet of Ministers of Ukraine) may fall under transfer pricing ("TP") rules. For 2017 such transactions should be treated as controlled ones provided the following two conditions are met: (i) taxpayer's annual income exceeds UAH 150 mln; (ii) total volume of transactions with one counterparty for the respective year exceeds UAH 10 mln. Based on TP legislation, Ukrainian entities engaged in controlled transactions are required to submit report on controlled transactions and prepare transfer pricing documentation to substantiate the price in a particular controlled transaction. However, we may not exclude the risk that the tax authorities might challenge the prices in intercompany transactions taking into consideration the fact, that TP practice in Ukraine is relatively new and there is lack of practical cases describing approach applied by tax authorities regarding intra-group pricing. In case of any price adjustments, VF Ukraine's effective tax rate may increase and its financial results may be adversely affected.

Starting from 2018, to determine whether or not the taxpayer's business transactions are to be treated as controlled, the volume of such transactions should be calculated based on arm's length prices (instead of contractual prices as was previously commonly used in practice). These changes are intended to eliminate possible abuses such as a deliberate understatement of contractual prices; however, they may give rise to disputes with the tax authorities concerning the determination of whether the transactions should be treated as controlled.

Generally, tax returns as well as primary documents in Ukraine can be subject to inspection for a three-year period and, for issues of transfer pricing—for a seven-year period. However, this term may be extended under certain circumstances, including criminal investigation.

In 2017, VF Ukraine submitted adjustments to CIT-returns for the years ended December 31, 2015 and 2016 in order to eliminate double taxation, arising from different profit calculation for accounting and tax purposes in earlier periods.

During 2017 there was an obligation to register VAT invoices within 15 days from the date of issuance the act of acceptance or from the date of prepayment. In case VAT invoice is not registered, tax authorities may impose penalties up to 100%.

CIT regulation may undergo significant changes in the nearest future. The move from tax regime under which all companies' profits are subject to taxation to a system where tax is paid only if corporate profits are distributed was delayed for a year (previously it was expected to occur on January 1, 2019). Ukrainian companies are expected to be taxed on their actual and deemed distributed profits, including expenses incurred or other payments unrelated to economic activities, etc. It is not stated yet if the companies will be able to use deferred tax assets or set off CIT-overpayments against future tax payable. These and other changes could have a material adverse effect on our results of operations and financial condition.

While we believe that we currently comply with the tax laws affecting our operations in Ukraine, it is possible that relevant authorities may take differing positions with regard to interpretative issues resulting in additional payment obligations and penalties, which may result in a material adverse effect on our results of operations and financial condition.

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

Russian transfer pricing legislation became effective in the Russian Federation on January 1, 1999.

This legislation allowed the tax authorities to make transfer pricing adjustments and impose additional tax liabilities with respect to all "controlled" transactions, provided that the transaction price differed from the market price by more than 20%. "Controlled" transactions included transactions with related parties, barter transactions, foreign trade transactions and transactions with significant price fluctuations (*i.e.*, if the price with respect to such transactions differs from the prices on similar transactions conducted within a short period of time by more than 20%). Special transfer pricing provisions were established for operations with securities and derivatives. Russian transfer pricing rules were vaguely drafted, generally leaving wide scope for interpretation by Russian tax authorities and courts. There has been very little guidance (although some court practice is available) as to how these rules should be applied. These transfer pricing rules apply with respect to transactions that occurred before January 1, 2012.

New transfer pricing rules became effective on January 1, 2012. The implementation of these new rules should help to align domestic rules with OECD principles. The new rules are expected to considerably toughen 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.

If the Russian tax authorities were to impose significant additional tax liabilities through the introduction of transfer pricing adjustments, they could have a material adverse impact on our business, financial condition and results of operations. The adoption of the new 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 new transfer pricing rules complicate tax planning and related business decisions. It will also require us to ensure compliance with the new transfer pricing documentation requirements proposed in such rules. Uncertainty of the new rules may also require us to expend significant additional time and material resources for implementation of our internal compliance procedures. 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, Ukraine 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 Ukraine 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.

***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 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 imposed on officials owning significant CII objects if the security requirements in respect of such significant CII objects are not met and damage is incurred. Information on CII security measures, on the status of its protection against computer attacks is classified as a state secret. CII subjects, including communication operators, are required to, among other things:

- categorize CII objects;
- agree the results of CII objects categorization with the authorized body (FSTEC - Federal Service for Technology and Export Control of the Russian Federation);
- 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; and
- set up and provide the operations of means for attacks search on the communication network with the transfer of management to the authorized body (FSS of Russia).

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. Introduction of similar regulations, which may require additional costs to be incurred by us or otherwise negatively affect us 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**

***Government regulations may limit the ability of investors to deposit shares into our ADS facility.***

The ability of investors to deposit shares into our ADS facility may be affected by current or future governmental regulations. For example, under Russian securities regulations, no more than 25% of a Russian company's shares may be circulated abroad through sponsored depositary receipt programs. Prior to December 31, 2005, and at the time of our initial public offering, this threshold was 40%. Although we believe that the new lower threshold does not apply to our ADSs, in the future, we may be required to reduce the size of our ADS program or amend the depositary agreement for the ADSs.

Because our ADS program is regularly at or near capacity, purchasers of our shares may not be able to deposit these shares into our ADS facility, and ADS holders who withdraw the underlying shares from the facility may not be able to re-deposit their shares in the future. As a result, effective arbitrage between our ADSs and our shares may not always be possible. Our shares are listed and traded on the Moscow Exchange. Due to the limited public free float of our common stock, the public market for our shares is significantly less active and liquid than for our ADSs. The cumulative effect of these factors is that our shares may from time to time, and for extended periods of time, trade at a significant discount to our ADSs.

***Failure to comply with requirements on the disclosure of certain information on ADSs and ADS holders may restrict your ability to vote.***

Pursuant to the Russian securities laws, depositaries, and as a result, ADS holders are not able to vote in connection with the shares underlying ADSs on behalf of the ADS holders unless they provide certain information to the issuer. At a minimum, this information includes the identity of the holder of the ADSs, registration details including a state registration number (for legal entities), and the number of shares attributable to each ADS holder.

Nevertheless, the legislation stipulates that the issuer, CBR, Russian courts and pretrial investigation agencies may request such lists of depositary receipt holders from the holder of depositary program depo account. The holder of depositary program depo account shall take all reasonable measures in order to provide such information. In case of non-compliance with the above requirements, the CBR may suspend, or impose limitations on, transactions with securities held in the relevant accounts of Russian custodians for a period of up to six months. As a result, the shares underlying the ADSs may be blocked and it may be impossible to deposit or withdraw the shares into or from the depositary program. In addition, uncertainties with respect to exercise of certain rights attaching to shares underlying ADS holders could complicate the exercise of right to, and the ability to derive benefits from, the shares represented by ADSs.

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

The market price of our ADSs experienced, and may continue to experience, significant volatility.

For information on the closing price of our ADSs on the New York Stock Exchange, see "Item 9—Offer and Listing Details—A.4. Market Price Information."

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

- periods of regional or global macroeconomic instability;
- announcements of technological or competitive developments;
- 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;
- the value of local currencies in the markets where we operate compared to the US dollar;
- 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 or ADSs 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.

For example, market price of our ADSs experienced volatility in 2017 due to legal proceedings relating to Sistema, initiated by Rosneft, Bashneft and the Ministry of Land and Property Relations of Republic of Bashkortostan, and arrest of 31.76% of shares in our authorized capital held by Sistema, which was lifted as a result of execution of the settlement agreement.

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 ADSs, regardless of our operating performance.

***Voting rights with respect to the shares represented by our ADSs are limited by the terms of the deposit agreement for our ADSs and relevant requirements of Russian law.***

ADS holders will have no direct voting rights with respect to the shares represented by the ADSs.

They are able to exercise voting rights with respect to the shares represented by ADSs only in accordance with the provisions of the deposit agreement relating to the ADSs and relevant requirements of Russian law. Therefore, there are practical limitations upon the ability of ADS holders to exercise their voting rights due to the additional procedural steps involved in communicating with them. For example, the Joint Stock Companies Law and our charter require us to notify shareholders no less than 30 days prior to the date of any meeting and at least 50 days prior to the date of an extraordinary meeting to elect our Board of Directors. Our ordinary shareholders will receive notice directly from us and will be able to exercise their voting rights by either attending the meeting in person or voting by power of attorney.

ADS holders by comparison, will not receive notice directly from us. Rather, in accordance with the deposit agreement, we will provide the notice to the depositary. The depositary has undertaken, in turn, as soon as practicable thereafter, to mail to ADS holders the notice of such meeting, voting instruction forms and a statement as to the manner in which instructions may be given by ADS holders.

To exercise their voting rights, ADS holders must then instruct the depositary how to vote the shares represented by the ADSs they hold. Because of this additional procedural step involving the depositary, the process for exercising voting rights may take longer for ADS holders than for holders of the shares and we cannot assure ADS holders that they will receive voting materials in time to enable them to return voting instructions to the depositary in a timely manner. ADSs for which the depositary does not receive timely voting instructions will not be voted.

Given the above, we cannot provide any assurance that holders and beneficial owners of ADSs will (i) receive notice of shareholder meetings to enable the timely return of voting instructions to the

depositary, (ii) receive notice to enable the timely cancellation of ADSs in respect of shareholder actions or (iii) be given the benefit of dissenting or minority shareholders' rights in respect of an event or action in which the holder or beneficial owner has voted against, abstained from voting or not given voting instructions.

See also "—Failure to comply with requirements on the disclosure of certain information on ADSs and ADS holders may restrict your ability to vote."

***ADS holders may be unable to repatriate distributions made on the shares and ADSs.***

We anticipate that any dividends we may pay in the future on the shares represented by the ADSs will be declared and paid to the depositary in rubles and will be converted into U.S. dollars by the depositary and distributed to holders of ADSs, net of the depositary's fees and expenses. The ability to convert rubles into U.S. dollars is subject to the availability of U.S. dollars in Russia's currency markets.

Although there is an existing, albeit limited by size, 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. 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.

***ADS holders may be subject to Russian regulatory restrictions.***

Prior to the amendments to the Russian securities laws introduced in 2011, a depositary bank could be considered the owner of the shares underlying the ADS, and as such could be subject to the mandatory public tender offer rules, anti-monopoly clearance rules, governmental consents or reporting requirements in respect of acquisition of shares and other limitations contemplated by Russian law. The amendments to the Russian securities laws introduced in 2011 provide that a depositary bank is not an owner of underlying shares, and as such, these requirements should apply to ADS holders.

***ADS holders may be unable to benefit from the United States—Russia income tax treaty.***

Under Russian law, dividends paid to a non-resident holder of the shares generally will be subject to Russian withholding tax at a rate of 15%. 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. However, according to the recent amendments to the Russian Tax Code, U.S. holders will only be able to utilize the 5% reduced rate through tax reimbursement procedures, as the tax agent is required to use the baseline tax rate established by the code or the applicable tax treaty, whichever is appropriate. See also "Item 10—Additional Information—E. Taxation—United States—Russia Income Tax Treaty Procedures."

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 depo account with the shares underlying the ADSs acting 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 program 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 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. See also "Item 10—Additional Information—E. Taxation" for additional information.

***Capital gain from the sale of shares and ADSs 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 ADSs by non-residents.

Where the 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 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 developed practice relating to share registration system in Russia may result in improper record ownership of our shares, including the shares underlying the ADSs, and other problems connected with the rights attributed to the relevant shares such as dividend payments.***

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, the central registration system in Russia is under development. Since October 1, 2014, share registers of all joint stock companies are maintained by licensed registrars. Regulations were issued regarding the licensing conditions for such registrars, as well as the procedures to be followed by both companies maintaining their own registers and licensed registrars when performing the functions of registrar; however, companies are no longer able to maintain the registers themselves. Nevertheless, in practice registrars tend to have relatively low levels of capitalization and insufficient insurance coverage.

On December 7, 2011, amendments to the relevant legislation were adopted, substantially reforming the registration system by introducing the CSD. In the course of this reform of the share keeping system, numerous different depositaries with accounts in the registers of companies were replaced by a single central depositary, whose primary function is the custody of shares in all major companies. These changes became effective on January 1, 2012 and are still being implemented. On November 6, 2012, FSFM officially appointed the National Settlement Depositary as the central depositary. Since the central depositary opened its account in MTS' register in March 2013, all the other custodians are restricted from opening their accounts in the register. Currently the central depositary is the only custodian with an account in MTS' register and other custodians hold custodial accounts with the central depositary.

In addition, certain amendments to the Civil Code of the Russian Federation entered into force on October 1, 2013 regarding the transfer and restitution of securities that are aimed at protection of rights of security holders and on September 1, 2014 regarding the regulation of legal entities and their corporate governance. However, we cannot entirely exclude that transactions in respect of a company's shares could be improperly or inaccurately recorded, and share registration could be lost through fraud, negligence, official and unofficial governmental actions or oversight by registrars incapable of compensating shareholders for their misconduct. This creates risks of loss as well as difficulties relating to dividend payments not normally associated with investments in other securities markets.

***The depositary reform in Ukraine, as well as regulation of issues relating to repatriation of dividends outside Ukraine may lead to an increase in terms of dividend payments with respect to VF Ukraine shareholders, as well as adversely affect our cash flows, which may have adverse impact on our financial condition and results of operations.***

The National Securities and Stock Market Commission of Ukraine, by its decision No. 391 "On Procedure of Payment of Dividends by a Joint Stock Company" dated April 12, 2016 stated that joint stock companies might carry out dividend payments either through the depository system of Ukraine or directly to shareholders. The specific method of the dividend payment is determined by a relevant decision of the general shareholders meeting with respect to the entire issue of securities of the joint stock company. The Regulation No. 591 of the National Bank of Ukraine "On Amendments to Certain Legislative Acts of the National Bank of Ukraine" that entered into force on September 23, 2014 was prolonged by the corresponding regulations of the NBU (the latest regulation expired on June 8, 2016).

The regulations set the restriction on a number of operations in foreign currency, including repatriation of dividends to the foreign investor.

According to the NBU Board Resolutions No. 342, 386, 410 "On Resolving the Situation in the Money and Foreign Exchange Markets of Ukraine" adopted in 2016, key currency restrictions have been re-extended until introduction of new resolutions of the NBU. The dividends may be repatriated with certain limitations. The Resolution of the NBU dated November 22, 2016 continued gradual mitigation of temporary restrictions on the currency market, by expanding opportunities for the clients of resident banks to purchase foreign currency in the interbank market.

On April 13, 2017, the NBU adopted a resolution that allows the repatriation of dividends not only for the period of 2014 to 2015, but also for 2016, and simplifies the mechanism of such payments, allowing the repatriation of dividends for the specified years in a total amount of up to 5 million U.S. dollars within one month. The NBU adopted a resolution, which changes the terms of the repatriation of dividends to foreign shareholders of Ukrainian companies with effect from November 15, 2017. Accordingly, the repatriation of dividends accrued until 2016 is permitted. The monthly limit on the repatriation of dividends for the period of up to 2013 is equivalent to 2 million U.S. dollars. In March 2018 the NBU adopted another resolution, which permits repatriation of dividends to foreign shareholders of Ukrainian companies irrespective of the period they were accrued in a total amount of up to 7 million U.S. dollars per month.

On January 4, 2019, the NBU approved a new system of currency regulation and published a currency liberalization roadmap providing for the gradual removal of FX restrictions as Ukraine's macroeconomic conditions improve. However, in case restrictions on the repatriation of dividends remain or are tightened in the future, it may adversely affect our cash flows, which may have adverse impact on our financial condition and results of operations.

See also "—Failure to comply with requirements on the disclosure of certain information on ADSs and ADS holders may restrict your ability to vote."

***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 and ADSs. The deposit agreement provides for actions brought by any party thereto against us to be settled by arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association, provided that any action under the U.S. federal securities laws or the rules or regulations promulgated thereunder may, but need not, be submitted to arbitration. 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.

**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 ADSs.

## Item 4. *Information on Our Company*

### A. History and Development

Mobile TeleSystems CJSC ("MTS CJSC") our predecessor, 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 44.57% of our share capital (50.07% excluding treasury shares). See "Item 7. Major Shareholders and Related Party Transactions—A. Major Shareholders."

Our legal name is Mobile TeleSystems Public Joint Stock Company (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 www.ir.mts.ru. The information on our website is not a part of this report. We have appointed Puglisi & Associates, 850 Library Avenue, Suite 204, Newark, Delaware 19715 as our authorized agent for service of process for any suit or proceeding arising out of or relating to our shares, ADSs or the deposit agreement.

MTS is the new legal name of Mobile TeleSystems Open Joint Stock Company (MTS OJSC) registered on July 1, 2015 in order to comply with the regulations of Chapter 4 of the Civil Code of Russian Federation (as amended). MTS OJSC was created on March 1, 2000, through the merger of MTS CJSC and RTC CJSC, a wholly owned subsidiary. 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.

In September 2001, we won a tender held by the Telecommunications Ministry of the Belarus Republic to form a joint venture with a GSM 900/1800 license to operate in Belarus. On June 26, 2002, MTS Belarus received all of the governmental approvals and licenses required to commence operations in Belarus and it began operations on June 27, 2002. In 2003 through a number of purchases we acquired a 100% stake in MTS Ukraine (now Vodafone Ukraine) for RUB 11,872 million. Starting from 2007 until 2015, we operated under the MTS brand in Ukraine. In 2015, as part of our strategic partnership with Vodafone, we introduced Vodafone brand in Ukraine.

We started operations in Uzbekistan, following the two step acquisition of 100% ownership interest in Uzdunrobita in 2004 and 2007. In July 2012, we suspended providing services in Uzbekistan per the order from the State Agency for Communications and Information ("SACI") of Uzbekistan on the temporary suspension of the operating license of Uzdunrobita for a period of 10 business days which was subsequently extended to three months. On April 22, 2013, the Tashkent Economic Court declared Uzdunrobita bankrupt and initiated liquidation procedures. As a result, we lost control over the subsidiary and deconsolidated Uzdunrobita. In July 2014 the disputes between us and Republic of Uzbekistan were resolved. The parties signed the Settlement Agreement and according to its terms all mutual claims were eliminated. Furthermore, a new mobile operator, UMS, was established by governmental authorities of Republic of Uzbekistan. On September 24, 2014, an ownership interest of 50.01% in UMS was transferred to us as an incentive for reentrance into the country by the State Unitary Enterprise "Center of radio communications, radio broadcasting and television," the second shareholder of an operator, on behalf of the Republic of Uzbekistan. We started operations in Uzbekistan in December 2014. On August 5, 2016, we sold our 50.01% stake in UMS to the State Unitary Enterprise "Center of radio communications, radio broadcasting and television."

Please see "Item 3. Key Information—D. Risk Factors—Legal Risks and Uncertainties—The 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" regarding recent suspension of our services in Uzbekistan and "Item 8. Financial Information—A. Consolidated Statements and Other Financial Information—7. Litigation—Uzbekistan."

In two separate purchases in June and November 2005, we acquired 100% of BCTI, the leading wireless operator in Turkmenistan, for $46.7 million (RUB 1,343 million) in cash. Since October 2006, we have operated under the MTS brand in Turkmenistan. On December 21, 2010, the Ministry of Communication of Turkmenistan suspended our primary operating license and we ceased providing mobile telecommunications services in Turkmenistan. In August 2012, we restarted our mobile communication operations in Turkmenistan via MTS-Turkmenistan and resumed providing services for subscribers who did not cancel their contracts. Since October 1, 2012, we resumed our operations in Turkmenistan entirely and started entering into contracts with new subscribers. On September 29, 2017, we stopped providing communication services in Turkmenistan due to the actions of the state-owned telecommunication company Turkmentelekom, which resulted in the disconnection of international and long-distance zonal communication services and internet access. See "Item 3. Key Information—D. Risk Factors—Legal Risks and Uncertainties—The inability of MTS-Turkmenistan to sustain its operations in Turkmenistan on commercially acceptable terms or at all may adversely affect our business, financial condition and results of operations."

In September 2007, we acquired an 80% stake in International Cell Holding Ltd., a 100% indirect owner of K-Telecom, the leading wireless operator in Armenia, for €260.0 million (RUB 9,142 million), and entered into a call and put option agreement initially valid until 2012 (and later extended until 2018) for the remaining 20%. Under the option agreement, we had a right to exercise a call option up to December 31, 2018. In December 2018 we served a call notice on the minority shareholders of MTS Armenia (formerly K-Telecom) to purchase the remaining 20% stake.K-Telecom operates in the GSM-900/1800 standard, covering the entire territory of Armenia. It historically operated under the VivaCell brand, and was re-branded as VivaCell-MTS in September 2008.

In October 2009, we acquired a 50.91% stake in Comstar, a leading fixed line operator in Russia, from Sistema, and subsequently increased our ownership interest to 61.97% (or 64.03% excluding treasury shares) in December 2009 and to 70.97% (or 73.33% excluding treasury shares) in September 2010 through a voluntary tender offer. On December 23, 2010, the extraordinary general meetings of shareholders of Comstar and MTS approved a merger, which was completed on April 1, 2011. As a result, Comstar ceased to exist as a separate legal entity and MTS became the legal successor of Comstar in respect of all its rights and obligations.

Prior to April 1, 2011, Comstar operated in both the Moscow and other fixed line communications markets, offering voice telephony, broadband Internet and pay-TV, operator interconnect and other services to its subscribers. As of now we still continue to provide these services. One of Comstar subsidiaries was MGTS, Moscow's incumbent fixed line operator with "last mile" access (the final phase of delivering connectivity from a communications provider to a customer) to approximately 96% of the households in Moscow. In 2011, we completed the re-branding of Comstar with our main MTS brand. MGTS continues to provide services under its own brand.

In 2009, we started to develop our sales and distribution network both organically and through the acquisition of several national and regional retail chains. We organized our retail operations under a wholly owned subsidiary, Russian Telephone Company ("RTC"). RTC handles all functions relating to our retail operations, including the management of points-of-sale, the purchase and sale of handsets and accessories and subscriber enrollment at our retail outlets.

Between 2009 and 2014 we acquired controlling stakes in various regional fixed line operators as we are determined to develop broadband Internet through regional expansion.

In April 2013, we acquired a 25.095% stake in MTS Bank for 5.09 billion rubles through an additional share issuance by the bank. As of December 31, 2017 our interest comprised 26.61% of the bank's shareholding. In July 2018, we acquired additional stake in MTS Bank for RUB 8.27 billion from Sistema and our ownership share increased to 55.4%, providing control over the bank. The acquisition allows us to consolidate MTS business in the Russian FinTech market, simplify corporate and operational management, and accelerate the launch of new products.

In December 2014, we acquired controlling stakes in Penza-GSM, SMARTS-Ivanovo and SMARTS-Ufa, operating in Penza, Ivanovo and the Bashkortostan Republic, respectively. The acquired companies hold rights to use 900 and 1800 MHz radio frequencies within the regions mentioned. The acquisition enhances our spectrum resources in the above mentioned regions. The purchase price comprised of cash consideration and a deferred payment, payable in 18 months after the acquisition date. These companies were subsequently merged with MTS.

In April 2014, we acquired a 10.82% stake in OZON, a leading Russian e-commerce company, through the purchase of OZON Holdings Limited's additional share issuance for RUB 2,702 million. Cooperation with OZON creates new distribution channels available to us through its extensive online retail platforms. As of December 31, 2017 our interest comprised 11.19% and was further increased to 18.69% as of December 31, 2018. In March 2019 we sold our stake in OZON to Sistema.

In December 2015, we have completed the acquisition of NVision Group and its subsidiaries for RUB 11.2 billion. Through this transaction, we have obtained proprietary rights over our billing systems which will allow us to reduce the time-to-market for new products and better manage billing and IT-related expenses. NVision Group is also one of the largest system integrators and complex IT solutions providers in Russia.

In September 2016, we acquired controlling stake in Smarts-Yoshkar-Ola, a company, operating in the Republic of Mari El and holding rights to use 1800 MHz radio frequencies. The acquisition enhances our spectrum resources in the Republic of Mari El.

In July 2017, we acquired a 100% ownership interest in Bashkortostan Cellular Communication OJSC, a company which operates in the Republic of Bashkortostan and holds rights to use 450 MHz and 2,100 MHz radio frequencies. The acquisition enhances our spectrum resources in the Republic of Bashkortostan.

In October 2017, we acquired 50.82% of ownership interest in the Russian retail software developer Oblachny Retail LLC, operating under trademark LiteBox, with a call and put option arrangement existing over another 49.18% of shares. The deal allows us to enter the cloud-based cash register market as a fully licensed fiscal data operator ("FDO") and a provider of integrated digital cash management solutions for B2B clients.

In December 2017, we purchased a 100% stake in Praliss Enterprises, thus acquiring one of the world's leading eSport clubs—Gambit Esports. The acquisition is a part of our digital innovation strategy.

In January 2018, we acquired a 78.2% stake in Kulturnaya Sluzhba LLC, operating under the trademark Ponominalu.ru. In February 2018, we acquired a 100% ownership interest in Moskovskaia Direktciia Teatralno-Kontcertnyh i Sportivno-Zrelishchnyh Kass LLC, operating under the trademark Ticketland.ru. These acquisitions allow us to enter the event ticket market, while broadening our suite of digital services, and integrate a key new product into existing loyalty program and mobile applications ecosystem.

In August 2018, we purchased a 99% stake in Progressivniye Technologii CJSC, provider of fixed-line services in the cities of Zhukovskiy and Anapa, which allowed us to strengthen our position in the local markets and benefit from the expected synergies from the acquisition.

In October 2018, we acquired Dekart property complex in full from Sistema. The property complex comprises office facilities, parking premises and engineering networks and is partly occupied by us and partly used as investment property.

In December 2018, we acquired a 100% interest in IT-Grad 1 Cloud LLC, one of the largest cloud providers on the Russian IaaS (Infrastructure as a Service) market. This acquisition allows the Group to strengthen its presence in the Russian cloud services market.

In December 2018, we acquired Serebryaniy Bor property complex in full from Sistema. The property complex comprises administrative facilities, land and engineering networks and is partly occupied by us and partly designated as investment property. In December 2018, we also acquired Serebryaniy Bor administrative property complex from Sistema.

**Capital Expenditures**

We spent in total RUB 99,568 million in 2018 for network development in Russia and the other countries where we operate, which included RUB 72,290 million in cash expenditures on property, plant and equipment (RUB 7,559 million thereof for acquisition of Avantage data center), and RUB 27,278 million for the purchase of intangible assets (RUB 5,527 million thereof for acquisition of 4G license in Ukraine). We expect to spend up to RUB 90 billion (excluding potential capital

expendures for acquisition of 4G licences) in 2019 for the construction of radio subsystem and additional storage, processing and indexing centers to comply with requirements of "Yarovaya-Ozerov bundle of laws," maintenance capital expenditures, further network expansion, special projects relating to development of clouds, artificial intelligence, smart education, esport and E-health as well as commercial 5G solutions, roll-out of LTE networks in Ukraine, construction of new sites and purchase of software for network managing in Armenia and other. 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 2019 may vary depending on subscriber growth, demand and network development, as well as currency volatility, vendor terms and the availability of external financing. The capital expenditure estimate for 2019 excludes expenditures that may be made in connection with acquisitions. A breakdown of our capital expenditures in 2018 by country is set forth below.

We spent RUB 3,444 million, 367 million and 5 million in 2018, 2017 and 2016, respectively, for acquisitions of subsidiaries, net of cash acquired from third parties. In addition, in 2018, we spent RUB 13,242 million, net of cash acquired, for acquisition of bisinesses under common control.

***Russia***

We spent RUB 82,701 million in 2018 for network development in Russia, including RUB 64,688 million in cash expenditures on property, plant and equipment (thereof RUB 7,559 million for acquisition of Avantage data center), and RUB 18,013 million for the purchase of intangible assets.

***Ukraine***

We spent RUB 14,867 million in 2018 for network development in Ukraine, including RUB 6,373 million in cash expenditures on property, plant and equipment, and RUB 8,495 million for the purchase of intangible assets (thereof RUB 5,527 million for acquisition of 4G license in Ukraine).

***Armenia***

We spent RUB 1,986 million in 2018 for network development in Armenia, including RUB 1,220 million in cash expenditures on property, plant and equipment, and RUB 766 million for the purchase of intangible assets.

***Belarus***

MTS Belarus spent RUB 2,812 million in 2018 for network development, including RUB 2,046 million in cash expenditures on property, plant and equipment, and RUB 766 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 a leading telecommunications 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. According to AC&M Consulting, we are the largest provider of mobile cellular communications services in Russia and the second largest in Ukraine in terms of mobile subscribers. According to our own estimates, we are also the largest provider of mobile cellular communication services in Armenia in terms of mobile subscribers.

As of December 31, 2018, we had a mobile subscriber base of approximately 99.8 million (approximately 78.0 million in Russia, 19.7 million in Ukraine and 2.1 million in Armenia) which is a decrease of 1.4% compared to December 31, 2017. As of December 31, 2017, we had a mobile

subscriber base of approximately 101.2 million (approximately 78.3 million in Russia, 20.8 million in Ukraine and 2.1 million in Armenia) which is a decrease of 3% compared to December 31, 2016. As of December 31, 2016, we had a mobile subscriber base of approximately 104.6 million (approximately 80.0 million in Russia, 20.9 million in Ukraine, 2.1 million in Armenia and 1.7 million in Turkmenistan).

We are also the largest operator in the Moscow residential broadband market in terms of subscribers, with a 35% market share as of December 31, 2018, based on TMT consulting data.Our revenues for the year ended December 31, 2018, were RUB 480,293 million, representing 8.4% increase from the year ended December 31, 2017. Our revenues for the year ended December 31, 2017, were RUB 442,911 million, which is an increase of 1.7% from RUB 435,692 million for the year ended December 31, 2016. Our net income for the year ended December 31, 2018, was RUB 7,832 million, which is an decrease of 86.2% from the year ended December 31, 2017. Our net income for the year ended December 31, 2017, was RUB 56,590 million, which is an increase of16.8% from RUB 48,450 million for the year ended December 31, 2016.

Russia is our principal market, both in terms of subscribers and revenues. For the year ended December 31, 2018 approximately 92% of our revenues came from operations in Russia; approximately 6% of our revenues came from operations in Ukraine; and approximately 2% of our revenues came from operations in other countries, respectively.

In July 2018, we started rendering banking services made possible by the acquisition of control over MTS Bank (see Note 5 to the consolidated financial statements). Banking services revenue for the period from the date of consolidation to the end of 2018 was RUB 11,851 million, representing 2.5% of our total revenues for the year ended December 31, 2018. MTS Bank's net operating profit was positive and amounted to RUB 1,291 million. MTS Bank activities (financial assets and liabilities, management of liquidity risks connected with the activities) are described in Note 29 to the consolidated financial statements. Outstanding deposits and loans to customers as at December 31, 2018 came to RUB 63,038 million. Loans to legal entities made up 42.5% of that total, 56% were loans to individuals.

Detailed segment information for MTS Bank is presented in Note 6 to the consolidated financial statements.

As of December 31, 2018, approximately 78% of our mobile subscriber base was in Russia and approximately 20% was in Ukraine. According to AC&M-Consulting, as of December 31, 2018, we had a 31% market share of total mobile subscribers in Russia.

The table below sets forth our total mobile subscribers as of the end of the last five years:

| Period | Subscribers[1] (in million) |
|---|---|
| 2014 | 98.6[2] |
| 2015 | 101.4[2] |
| 2016 | 104.6[2] |
| 2017 | 101.2[3] |
| 2018 | 99.8[3] |

(1) Excludes MTS Belarus subscribers as its results of operations are not consolidated in our financial statements. 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.

(2) Excludes Uzbekistan subscribers.

(3) Excludes Turkmenistan subscribers.

In August 2016, we ceased our operations in Uzbekistan. In September 2017, we suspended the provision of telecommunication services to our subscribers in Turkmenistan, due to the termination by Turkmen state-owned companies and state authorities of line rental, frequency allocation, interconnect, and other agreements necessary to servicing MTS clients. For more information, see "Item 3. Key Information—D. Risk Factors—Legal Risks and Uncertainties—The inability of MTS-Turkmenistan to sustain its operations in Turkmenistan on commercially acceptable terms or at all may adversely affect our business, financial condition and results of operations."

According to AC&M Consulting, overall mobile cellular penetration in Russia was approximately 179% as at December 31, 2018 and 179% as of December 31, 2017. According to our estimates, mobile cellular penetration in Ukraine was approximately 126.5% as at December 31, 2018 and 130.5% as of December 31, 2017, which represents a decrease, compared to 136.3% as of December 31, 2016. According to our estimates, mobile cellular penetration in Armenia was approximately 125.5% as at December 31,2018 and 121.5% as of December 31, 2017, as compared to approximately 119% as of December 31, 2016.

Our consolidated mobile subscriber base changed insignificantly in the first two months of 2019. Specifically, according to our estimates at April 1, 2019, we had approximately 99.3 million subscribers, including approximately 77.6 million in Russia, 19.6 million in Ukraine and 2.1 million in Armenia.

As of December 31, 2018, according to our estimates, MTS Belarus had approximately 5.5 million subscribers and a leading market share of 45.9%. As of December 31, 2017, according to our estimates, MTS Belarus had approximately 5.2 million subscribers and a leading market share of 44.8%. As of December 31, 2016, according to our estimates, MTS Belarus had approximately 5.2 million subscribers and a leading market share of 44.4%. Belarus, a country with a population of approximately 9.5 million, had a mobile cellular penetration rate of approximately 126.2% as of December 31, 2018, according to our estimates.

As of December 31, 2018, we had mobile licenses to operate and commercial mobile operations throughout the entire territory of Russia with a population of approximately 146.8 million people, throughout the entire territory of Ukraine with a population of approximately 42.2 million people and throughout the entire territory of Armenia with a population of approximately 3.0 million people. See "Item 3. Key Information—D. Risk Factors—Risks Relating to Our Business—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," and "—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."

In 2018, we offer fixed line communications services in over 185 cities across Russia, covering a population of over 53 million people.

Our Moscow fixed line operations contemplate communications services provided through incumbent operator MGTS. Our Moscow fixed line operations included 2.9 million unique residential subscribers as of December 31, 2018. We are the largest operator in the Moscow residential broadband market, with a 35% market share. 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 fixed line operations in other cities include the following communications services: voice, data and 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. As of December 31, 2018, we had 2.8 million unique residential subscribers according to our estimates. Fixed line services are also provided in Ukraine and Armenia with digital telephony communications services, data transmission, Internet access and the renting of channels.

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**

Our key strategic goal is leadership on all markets of presence, delivering the best-on-the-market experience to our clients, including high-speed Internet access at home and on the go, cable and satellite TV entertainment with access to best content portfolio and top quality mobile and fixed voice services. We do our best to be at the forefront of LTE development in Russia and CIS and we are focused on building the fastest and most reliable 4G wireless networks and providing the best service to our customers by bringing access to the connected world.

Starting from 2016 our strategic motto is **3D:** "**Data—Digital—Dividends**," which is focused on digitalization:

- "**Data**" stays the core of our business, the backbone, allowing us to expand into adjacent business-areas, widen our products portfolio, enabling us to be in-line with customers' data-driven lifestyles. We bring the best available technology to our subscribers both individuals and corporations, such as building high-speed 4G LTE and IoT-oriented networks (Internet of Things) which allows us to meet growing needs for data consumption. We follow further technological development towards 5G through participating in a wide range of discussions with industry players and authorities on approaches to spectrum allocation and network building principles and preparing our technological platform by building experimental 5G zones using innovative technological solutions, which we used, for example, during the World Cup 2018 in Russia. The ultimate goal of the "Data" component of our 3D strategy is to ensure customers have the best possible connectivity experience at their homes, workspace and places in between.

- "**Digital**" is the main point where we plan to evolve in the nearest future. At the moment it contains several major areas of our efforts located on 3 layers. The first layer is traditional products such as Digital commerce, Internet of Things and System integration which are very close to our main business. The second layer includes adjacent high-tech areas of Fintech (financial technologies), Mobile Applications and Big Data. The third level is represented by a number of prospective experimental areas which we invest in (such as e-ticketing, cloud storage and computing), GPRS technology with download data rate of up to 85.6 Kbit/s and the projects which we develop within the Center of Innovations - a special business unit that was dedicated to lower corporative borders in order to give more freedom, agility and flexibility to go as fast as possible in a very vivid and dynamical environment of digital competition. The list of areas is flexible as we continuously seek for new opportunities and perspectives. "Digital" plays an important role in our traditional business-directions too.

- "**Dividends**" is the result of our efforts to make our operations effective both revenue- and profitability-wise. We continuously improve the operational and investment efficiency of MTS, develop the organizational capabilities of our company, constantly work on organizational effectiveness and keep it responsive to market challenges and customer needs. By using benefits of digitalization for further operational improvements we sustain high level of business profitability and aim to enhance shareholder returns.

In addition to 3D there is another dimension of "**Digital Transformation**." It is aimed at transforming everyday operations, corporate culture and managerial techniques to make the company fit in the digital world in the best way. The most recent implementation of digitalization principles is our corporate program called iDA (internal Digital Automation), which we started in 2018 with plans to run it for the next 4 years. It incorporates the initiatives on internal processes digitalization giving

each employee an opportunity to take part in it and to benefit from the initiatives as a part of the positive financial effect is transferred into payout to the initiator.

We strongly believe that our strategy and our approach to further development will enable us to stay at the forefront of the telecommunication industry and perspective digital areas on all markets where we have presence, to provide our customers with best user experience, to be a valuable and credible business-partner, trustworthy and effective investment for our shareholders.

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.

**Current Operations**

We are a provider of wireless and fixed line communications services in Russia, Ukraine, Armenia and Belarus.

In addition, we provide system integration services, IoT solutions, banking service, e-ticketing and cloud services.

***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, 2018 MTS Mobile core network in Russia includes the following nodes:

- Mobile switching centre-server (MSC-S): 102 nodes, servicing 60 mln. subs.;
- Media gateway (MGW): 136 nodes, maximum capacity 3.7 mln. Erl.;
- Subscriber Data Management (SDM) includes 22 nodes (Home Location Register (HLR) / Home Subscriber Server (HSS)).

15 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 2018:

- MSC-S/MGW and S/P-GW nodes were expanded as a result of voice and data traffic growth;
- Network modernization: obsoleted MSS APZ212 50 and MGW GMPv3 Ericsson nodes were replaced by new MSS BSP-C and MGW GMPv4/MRS Ericsson;
- Upgrade IMS (IP Multimedia Subsystem) Core Nokia launched VoLTE (Voice over LTE) in 25 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.

As of December 31, 2018, we had bilateral roaming contracts with 863 wireless operators/networks in 232 countries, including 17 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. Some basic value-added services that we offer include:

**Basic telephony**
- Call Divert/Forwarding
- Caller ID Display and anti-Caller ID Display
- Conference Calling
- Voicemail
- Call Barring
- Call Waiting
- Missed Call Alert
- Intelligent call assistant
- Collect call
- Black List
- VoLTE/WiFi Calling

**Customer care**
- Itemization of Monthly Bills
- Information and Directory Service
- Automatic Customer Care System and Customer Care System via the Internet
- My MTS service app

**Other services**
- Ring Back Tone
- Second Memory (Cloud storage)
- Parental control for internet, calls, sms
- MTS Music
- MTS TV
- MTS Books
- MTS Fitness
- MTS Razvivayka (for kids)
- VoD (Video on Demand)
- Location Based Service ("LBS")
- Mobile banking
- Security and Privacy services for B2C
- MTS Connect Branded App for calls
- Mobile Electronic Signature on a SIM card

**Messaging**
- SMS P2P, A2P
- MMS
- Application MTS Connect

**Mobile internet**
- 3G, 4G (LTE)
- Data share plan
- Real IP
- E shop
- APN remote access point
- Fixed Mobile Convergence
- MTS Modem
- MTS Tablet
- Mobile Office
- Wi Fi

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

*GPRS, EDGE services*

We launched our commercial 2G network in 1994 based on GSM-900 technology. From 1999, we significantly improved our 2G network capacity based on GSM- 1800 technology. From 2001, we implemented wireless data communication services based on GPRS technology with download data rate of up to 85.6 Kbit/s. In 2005, we modernized our GSM network to support EDGE technology and tripled data services rates. Today we continue supporting and modernizing our 2G network and we put the prime focus at the development of our 3G and LTE networks in order to provide our subscribers with high-speed broadband wireless services. As of December 31, 2018, we provided GSM, GPRS and EDGE services with more than 40,000 2G sites over the geographic area with more than 94.7% of population of Russia.

*3G Technology*

In April 2007, we received a nationwide 3G/UMTS (Universal Mobile Telecommunications System) license in Russia. The license was valid till May 21, 2017 and covers the entire territory of Russia with frequencies 1950-1965 MHz and 2140-2155 MHz. In February 2017 the 3G/UMTS license in Russia was prolonged by the Federal Service for Supervision of Communications, Information Technoligy and Mass Media till May 21, 2022. We currently have commercial 3G networks launched in all regions of Russia with the exception of Crimea. By the end of 2018, we installed 42,216 3G sites throughout Russia.

Starting from 2010, we implement HSPA+ technology, which supports up to 21 Mbit per second 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 per second data transmission speed in more than 43,200 sites in Russia.

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 multiple standard mobile devices. Femtocells deliver a strong signal and high-quality voice service to standard mobile devices in homes, small and large offices. A femtocell network also provides for high speed of data upload and download. In 2016 we launched offer of femtocells for consumers as B2C market segment. The total number of femtocells installed in Russia reached 10,834 by the end of 2018.

In February 2015, we obtained UMTS spectrum in 2100 MHz band in Ukraine through an open tender held by the National Commission for the State Regulation of Communications and Informatization. Upon completion of critical network upgrades, we started providing our own 3G services in major Ukrainian cities under the Vodafone brand starting from November 2015. HSPA+ (QAM64 and Dual Carrier) technology, which is available in our 3G network from the start, allows to download speeds up to 42 Mbit\s.

In January and March 2018, we obtained LTE spectrum in 2600 MHz and 1800 MHzA bands as the result of national auctions and launched LTE services in Ukraine in April 2018. In 2018, VF Ukraine provided telecommunications services using GSM-900/1800, UMTS-2100 and LTE-1800/2600 technologies. By the end of 2018 we had over 8000 sites with UMTS services.

MTS Armenia, our subsidiary in Armenia, have operated commercial 3G network since 2009. In 2011, MTS Armenia started to provide telecommunications services based on HSPA+ technology in Yerevan, six northern regions and in some southern regions of the country. At present HSPA+ technology with QAM64 and Dual Carrier features is available to almost 99% of the Armenian population.

In 2018 we launched a major network upgrade project in Armenia, which is expected to result in significant increase of 3G and 4G services coverage as well as of network capacity. It includes a refarming of 900 MHz frequency band to UMTS and 1800 MHz band to LTE with implementation of Carrier Aggregation technology. New Core network nodes were put in operation in 2018, marking the end of a bigger CS and PS Core modernization project.

*LTE Technology*

In July 2012, the Russian Ministry of Communications and Mass Media announced the results of a tender for national-wide LTE-FDD frequencies. MTS is among the four companies, including Rostelecom, MegaFon, and VEON Ltd. (VimpelCom) which obtained LTE-FDD frequencies in 700, 800 and 2600 MHz bands.

In September 2012, we began offering LTE-based commercial services in Moscow region.

In 2014, we started DCS 1800 spectrum refarming to LTE and rolled out LTE-1800 network, while expanding LTE 800/2600 coverage. In February 2016 MTS won Russian Ministry of Communications and Mass Media tender for nationwide LTE-TDD license and obtained LTE-TDD frequencies in following band: 2595 - 2620 MHz for the whole territory of Russia, except Moscow region (obtained earlier). We plan to use LTE-TDD as a capacity layer to cope with increase of network utilization due to growth of data traffic. As of December 31, 2018, we had 54,607 LTE sites in 83 regions of Russia. In 2019, we are going to further roll out LTE in available frequency bands, implementing LTE-Advanced technologies.

In 2018, we launched IoT services based on NB-IoT technology (Narrow Band IoT) in 20 largest Russian cities, including Moscow, St. Petersburg, Novosibirsk, Kazan, Nizhny Novgorod, Vladivostok and others. We plan to continue NB-IoT rollout in the smaller cities of Russia in 2019.

In May 2018, we launched a commercial broadband Gigabit Class LTE network with LAA (License Assisted Access) technology. The network showed downlink user throughput of up to 979 Mbps due to the aggregation of licensed LTE spectrum in the 1800 MHz (4x4 MIMO, 256-QAM) and three 20 MHz carriers (2x2 MIMO, 256-QAM) in the 5 GHz unlicensed spectrum.

In June 2018, at the FIFA 2018 World Cup MTS performed world's first commercial launch of massive MIMO (Multiple Input Multiple Output) technology at mass event of such scale and complexity. The technology was introduced in the LTE-TDD 2600 MHz band (B38) in more than 40 sites in seven out of the 11 tournament cities, including Moscow, St. Petersburg, Kazan, Rostov-on-Don, Nizhny Novgorod, Ekaterinburg and Samara. The new technology allowed us to increase efficiently network capacity around the stadiums, at railway stations, at airports, in fan zones, and recreation areas. During the same FIFA World Cup event, in cooperation with our partners we have demonstrated the potential of the 5G technology in several demo zones in Moscow and Saint Petersburg for various use cases.

In Ukraine we acquired LTE frequencies in 2600 and 1800 MHZ bands through open auctions held in January and March of 2018. By the end of 2018 we had over 3500 sites with LTE base stations. We implemented Carrier Aggregation in 1800 and 2600 MHz LTE bands to ensure better customer experience in priority locations. Hundreds of new "green field" multi technology sites were also rolled out to expand the coverage and quality of service for our customers.

In 2018, we continued upgrading our transmission network to accommodate increased data traffic volumes and new services requirements in Ukraine. Those upgrades included new IP microwave links, fiber optics lines, new IP MPLS (Multiprotocol Label Switching) and DWDM (Dense Wavelength Division Multiplexing) nodes, increased SON (Self Optimized Network) coverage. A new virtualized Evolved Packet Core was put in operation in terms of our NFV (Network Function Virtualization) and Cloud services strategy.

In 2019 in Ukraine we aim at significant increase of LTE coverage by providing 4G services in all cities with more than 10,000 inhabitants. A launch of IMS platform with VoLTE services is also foreseen in 2020.

MTS Armenia provides LTE based telecommunication services since 2010 and by the end of 2018 we had more than 64% of Armenian population covered by our LTE network.

In 2019, we plan to continue network upgrades in Armenia. We also plan to take part in announced government tenders for 800 MHz and 1800 MHz frequencies, which would allow us to offer better LTE and LTE Advanced services to the population of the Republic of Armenia. The launch of VoLTE services is planned in Armneia as well.

*Banking Services*

In July 2018, we started rendering banking services made possible by the acquisition of control over 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 it under the MTS Group umbrella allows us to offer our customers new integrated services, unlocking new revenue streams and consolidating our brand in the wider consumer space.

*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.

*Strategic Partnership with Vodafone*

In October 2008, we announced a strategic agreement with Vodafone aimed at drawing on Vodafone's expertise in building and developing 3G networks and mobile broadband products, working with leading global equipment providers and deploying innovative client relationship management ("**CRM**") practices to enhance quality and further improve the efficiency of our operations. In addition, the agreement allows us exclusive access to a range of products, services and devices from Vodafone for our markets of operation in Russia, Ukraine and Armenia.

In 2015, the Group extended its strategic partnership agreement with Vodafone to introduce the Vodafone brand in Ukraine. In 2017 under the partnership, MTS Ukraine (now Vodafone Ukraine) and Vodafone continued to roll out 3G networks and to develop a number of new services, which have proved extremely popular in Europe, including bundled offers, competitive long-distance international calls and worry-free roaming when abroad, in the Ukrainian market. Other areas of cooperation remain in full force.

In 2018 agreement with Vodafone was prolonged until 2020.

***Sales and Marketing***

*Target Customers*

Our service model is based on the provision of services to differentiated levels of customers to meet the needs of distinctive customer segments as such segments have developed. We are not just a mobile operator brand. Our strategy is to build an umbrella brand which provides digital services and

innovative products. We continued to work with youth audience with the main focus on digital channels, such as social media, banners, pre-rolls and branded content.

In 2018, we focused our efforts on the following directions:

- promoting "Smart" V&D (voice & data) billing plans;
- promoting the "ALL MTS" new convergent offer;
- promoting devices with special operator offers;
- promoting new innovative products;
- promoting fixed broadband business and satellite TV; and
- promoting our services specifically for teenage audience.

*Advertising and Marketing*

Our advertising and public relations initiatives include:

- brand and image advertising and public relations to position us as the leading mobile cellular operator in Russia, Ukraine, Belarus and Armenia;
- category and loyalty campaigns to inform our current and potential customers of the advantages of the high quality and variety of our services and the extensive coverage we offer; and
- product and tariff related advertising and promotions, pricing discounts for various target audiences to demonstrate value for money and cover specific needs.

The key subjects for our advertising campaigns in 2018 included promotion of "Smart" V&D (voice & data) billing plan and its benefits, including the "Zabugorishe" special option with advantageous conditions in roaming, new innovative products, such as Telemedicine, Online education and Corporate accelerator, devices and advantageous data offers for active Internet users, including households, which we target with our fixed broadband, satellite TV and convergence offer "ALL MTS."

In order to build brand awareness and stimulate demand we use a combination of various advertising formats, including television, outdoor, newspaper, magazine and radio. Increasingly, we also advertise on-line and in mobile (with the help of traditional as well as innovative and novel projects) to market and promote our products and services to the broad audiences of current and potential customers. Additionally, our indirect advertising includes sponsorship of selected television programs, sport events, music shows and other popular events. We also coordinate the advertising policies of our dealers and partners, such as MTS Bank, 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 of effective communications, especially in the digital channel, we launched special activations with partner websites and several collaborations with popular Russian bloggers and other formats of online advertising (branded content, mobile app, collaborations with fashion designers, artists and bloggers; tests, advertorials, product placements, etc.) in 2018.

To support our key directions, we undertook the following initiatives in 2018 in Russia and in other countries where we operate:

*Smart billing plans*

In 2018, we continued improving our Smart V&D billing plan range and updated it to meet the requirements of Russia's changing telecom market:

- The first Smart campaign of 2018 communicated the new opportunity to customize the Smart billing plan to your needs. We gave people a chance to decide themselves how much Internet traffic, SMS and minutes they really need in their billing plan.

- A special billing plan for the whole family. In spring, we launched a billing plan giving subscribers the opportunity to share their traffic, minutes and SMS with family so that 5 people can use the traffic package from one contract.

- Unlimited mobile Internet returned to the Russian telecom market with the new "Tarifishe" billing plan. MTS launched Tarifishe in August 2018, the time when none of competitors had unlimited billing plans. Tarifishe includes not only unlimited Internet traffic, but also the opportunity to make calls throughout Russia all at one price.

- Promoting "Tarifishe" for youth audience:

2018 was a year of experiments. We launched a marketing campaign called "Dostup" (Access) to support the "Tarifishe" unlimited billing plan among teenagers. The idea was to stress the value of unlimited mobile Internet with restricted access to the unique AR (Augmented Reality) content that was developed in collaboration with more than 40 artists, musicians and content makers, and making it available only to digital users outdoors who use the AR application.

*Mobile payments and financial services*

In 2018, we released a new product - no-commission money transfers between MTS and MegaFon subscribers. The product was promoted mainly in digital.

*Devices*

In 2018, the majority of devices-related communication campaigns were targeted at supporting smartphone sales (of various price categories) in MTS retail, as well as supporting launches of global specialty products (iPhone Xs, Samsung Galaxy, Honor 10, etc.).

Most of these campaigns were developed and implemented in cooperation with major device vendors, such as Samsung, Honor, Apple and Alcatel.

The main mechanics used in promotion (and communication) were: loans, cashback, price offers, as well as trading-in and bundled package offers (device and billing plan as one subscription).

*GPON and Satellite TV*

- In Moscow, we continued to promote the benefits of the GPON technology (fixed broadband and TV through optic cable) focusing on communication of our high-speed Internet. In 2018, we launched a TV campaign focusing on our leader's image communication "200 Mbit for 490 rubles."

- We continued to promote the benefits of Internet and Home TV. Our federal TV campaign focus was on a the variety of great content offered that is easy to get at home. We attracted attention with a special offer: thousands of movies and series for free for new Internet and Home TV subscribers.

- We continued to promote the benefits of the GPON technology / fast Internet with a special offer "250 Mbit for just 550 rubles per month." The idea was not only stressing the valuable promo offer, but also reminding users about the new technologies at home which require advanced Internet connectivity with the slogan "Modern Internet technologies for your modern devices."

- Satellite television was promoted in 2018 with two major federal TV campaigns. Both campaigns focused communication on special billing plans for new subscribers, overcoming the barrier that "Satellite TV is expensive." In spring 2018, we showed celebrities in a countryside setting, hence making an additional emphasis on the summer season and the opportunity for people to install Satellite TV in almost any Russian country house. In autumn 2018, we additionally stressed the "half the price for half a year" offer and a package of quality content with a slogan that it was so tempting even "celebrities chose to stay at home and watch Satellite TV from MTS at such a great price."

*ALL MTS Convergent offer*

- In 2018, we launched the "All MTS" convergent product line. It was promoted in 2018 with a federal TV campaign. The offer includes broadband Internet access, TV and mobile telephony with unlimited data with the data access free of charge. Convergence is one of the business directions with the high prospects today. In 2019, we will proceed mixing all our products in convergent offers.

*Innovative products*

- In 2018, we released a new product developed in partnership with the Medsi clinic network—Smartmed, a telemedicine application which provides telehealth services and consultation with doctors of various specializations. The product was promoted mainly in digital and POSm (point of sale materials).

- In 2018, we launched the Smart University education platform. Smart University is a platform of online preparation for the unified state exam (general education certificate) with professional teachers. We promote this product in digital with banners and pre-rolls and at education events.

- In 2018, we launched MTS Startup Hub - an accelerator of start-ups of various areas that may be useful for our business customers. The product was promoted in digital, on special web resources about business and startups.

*Investors offers*

APPLE

In 2018, we and Apple became partners with the following strategic goals:

- ensuring MTS leadership and innovativeness through a partnership with a major global brand - Apple;

- obtaining loyalty of customers; and

- attracting new clients (increase sales and traffic to retail stores).

In spring - summer 2018, we ran two multichannel promo campaigns including federal TV, digital, OOH (out of home), Indoor placement for two operator's offers:

- two terabits of internet for purchasing iPhone in MTS; and

- six months of Apple Music for all MTS users for free.

During the next year we plan to run second wave of Apple Music Promo Campaign.

*B2B offers*

The key initiatives for the corporate segment have amplified the idea of our B2B positioning "MTS B2B products and services help companies to perform efficiently now and in future."

In 2018, we launched a number of products, including:

- "MTS Kassa," focusing on small and medium business. "MTS Kassa" is a comprehensive solution that includes a cash register, software, Internet access and OFD (fiscal data operator) services. The product was promoted mainly in TV and digital.
- "MTS Marketolog" ("Marketing Expert") focusing on small and medium business. "MTS Marketolog" is a platform that helps companies to launch advertising campaigns without agencies. The product was promoted mainly in digital.
- "Cloud MTS" focusing on medium and large business. "CloudMTS" is an innovative cloud IT platform. The product was promoted mainly in digital.

*Roaming*

In 2018, we continued promoting the "Zabugorishe" ("Abroadest"), an offer for international roaming (both a billing plan and add-on option). Any "Zabugorishe" subscriber can make calls and use Internet both in Russia and abroad just like at home (within the usual home package).

*Global recognition*

In 2018, we received several awards at the international Effie festival: Seasonal Marketing category (Gold) award for the "Zabugorishe" international roaming option, Telecom category (Silver) award for the "Hype" billing plan and Media Ideas category (Bronze) award for "Nagiev Calling."

*Sales and Distribution*

We have historically enrolled the vast majority of our subscribers through a network of independent dealers that operate numerous points-of-sale in places with high consumer activity, such as supermarkets, shopping centers, transportation hubs and markets. In 2009, in response to changes in the independent retail market, we began to develop our own proprietary retail network to more effectively control sales of SIM-cards and provide a platform to sell handsets and accessories. We organized our retail operations under a wholly owned subsidiary, RTC. RTC handles all functions relating to our retail operations, including the management of points-of-sale, the purchase and sale of handsets and accessories and subscriber enrollment at our retail outlets. It also requires us to secure optimal locations for our points-of-sale and monitors the effectiveness of their operations.

At the same time, in 2010, we focused on improving cooperation with a certain few of the large national and regional mobile handset retailers, such as Euroset and Svyaznoy, through which we had previously sold our products and serviced. In 2009, VEON Ltd. (VimpelCom), one of our main competitors, acquired a minority stake in Euroset, while in 2012, its ownership structure changed to accomodate an investment by MegaFon, another one of our main competitors, which equalized ownership with VEON Ltd. (VimpelCom) at 50/50. Throughout 2013 Euroset prioritized sales of its owners at the expense of MTS which impaired our ability to attract higher-quality subscribers and impacted profitability. Thus, we terminated its agreement with Euroset in May 2014.

In 2013, we entered into an agreement with Svyaznoy to distribute SIM-cards and our sales through its outlets increased significantly during the year. We also continued to develop our monobrand retail chain, and in 2014, we could boast of attracting over half of our subscribers through our own proprietary distribution network. In 2014, Svyaznoy was the second in sales volume among MTS sales channels. In November 2014, Svyaznoy experienced changes in its ownership which led to the

deterioration of MTS sales and an increase in competitors' sales beginning April 2015. While volumes declined throughout 2015, as of August 2015, MTS entirely ceased sales at Svyaznoy outlets. MTS designed a range of activities including the development of proprietary distribution network and stimulation of sales growth in regional distributors channel to compensate for the losses in subscriptions and achieve sales targets. We now realize over 53% of our SIM-card sales through our own monobrand retail chain while our retail arm is an increasingly important component of our differentiation strategy and ability to offer affordable handsets and accessories to our customers. See "Item 3. Key Information—D. Risk Factors—Risks Relating to Our Business—The failure to launch and develop distribution network in Ukraine could have a material adverse effect on our business."

Our competitors VEON Ltd. and MegaFon agreed on the termination of their joint ownership of Euroset outlets. Thus, MegaFon purchased the brand and the business. VEON Ltd. purchased 50% of points-of-sale.

In 2018, VEON Ltd. rebranded points-of-sale that were obtained as a result of the Euroset division. These points-of-sale began to work under the "Beeline" brand. The deal affected the improvement of the mobile retail market. This was the start of the transformation from the multibrand retail network to the monobrand retail network. In 2017, sales in the market reduced for the first time in Russian Federation and continued to reduce at a higher rate in 2018. Moreover, the churn rate reduced also, which confirmed the improvement of the mobile retail market.

Our proprietary distribution network consists of MTS-branded franchise points-of-sale (third-party dealers operating under the MTS brand) and MTS-branded points-of-sale owned by us. As of December 31, 2018, we operated 5,867 points-of-sale, including 1,801 franchise points-of-sale and 4,066 points-of-sale owned by us. In 2018, we increased the efficiency of retail points-of-sale, as a result that the number of points-of-sale has increased by 220 year-to-year.

For newly acquired mobile subscribers in Russia, we link commissions payable to a dealer on a monthly basis to the amount of revenues we receive during six- to 12-month period from the date a subscriber is activated by a dealer. In addition, we have established caps, or a maximum commission amount payable to our dealers. The dealer commissions in Russia currently range between RUB 80 and RUB 2,800 per subscription.

In Ukraine, we link dealer commissions to the tariff package sold, category of subscriber, subscriber revenue, the duration of a subscriber being active, city of subscription and sales channel. We have different commission structures based on whether the subscriber is Prepaid or Postpaid. For each new subscriber, a dealer typically receives a one-time commission payment at the time the contract is signed or monthly payments based on the revenue generated from the subscriber.

The dealer commissions in Ukraine for Postpaid tariffs consist of one-time commissions of RUB 50 to RUB 250, which depends on the cost of tariff plan connected. In addition, we may also pay monthly commission in an amount ranging from 40% to 55% of the revenues generated by the subscriber for 6 months depending on the region of activation and on the cost of tariff plan. Dealers are also rewarded ((from RUB 13 to RUB 225) for providing a range of services for prepaid and postpaid subscribers, as well as a monthly amount of RUB 4,390 and RUB 188,177 to exclusive dealers who sell exclusively VF Ukraine products and services.

Prepaid tariff commissions for activation of a subscriber are linked to the territory where a dealer operates. The period during which we pay a dealer commission depends on our market share in that territory and may vary from 4 to 8 months and from 35% to 50% of the subscriber's monthly invoice. The amount of the dealer commissions is adjusted on the coefficients between 0.8 and 1.2, which depends on the dealers plan achievement and on quality of activation.

We believe that our method for paying commissions provides dealers with greater incentives to add new subscribers, reduces the risk of dealer fraud and improves our cash-flow management.

***Competition***

*The Russian wireless telecommunications market*

Demand for wireless communications services in Russia has grown rapidly over the last years due to increased business activity, declining prices due to intensified competition among wireless communications providers and growth of new emerging consumers of telecom services such as IoT. As of December 31, 2018, overall wireless penetration in Russia was approximately 179%, or approximately 255.7 million subscribers, according to AC&M-Consulting.

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

| | As of December 31, | | |
|---|---|---|---|
| | 2018 | 2017 | 2016 |
| Subscribers[1] | 255.7 | 255.1 | 255.6 |
| Subscriber penetration (%) | 179 | 173.7 | 179 |

According to AC&M-Consulting

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

The primary mobile providers in Russia include us, MegaFon and VEON (VimpelCom), 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."

The following table illustrates the number of wireless subscribers for each network operator in Russia as of December 31, 2018, 2017 and 2016:

| | As of December 31, | | |
|---|---|---|---|
| **Operator** | 2018 | 2017 | 2016 |
| | (amounts in millions) | | |
| MTS | 78.0 | 78.3 | 80.0 |
| MegaFon | 75.2 | 75.4 | 75.6 |
| VEON Ltd. (VimpelCom) | 55.3 | 58.2 | 58.3 |
| T2 RTK Holding (Tele2+Rostelecom) | 42.3 | 40.6 | 39.0 |
| Others | 4.9 | 2.6 | 2.7 |

According to our estimates

*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. According to our estimates, MegaFon had a subscriber base of approximately 75.2 million subscribers in Russia, which represented a 29.4% market share as of December 31, 2018.

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

According to our estimates, VEON had a subscriber base of approximately 55.3 million in Russia at December 31, 2018. At December 31, 2018, VEON had a 21.6% market share of total wireless subscribers in Russia.

*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, 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 2018, Tele2 LTE networks were launched in all 65 regions. In 2019, the operator plans to launch a network in the Ivanovo and Yaroslavl regions in the 2G / 3G / 4G standard.

According to our estimates, Tele2 had a subscriber base of approximately 42.3 million in Russia and 16.7% market share as at December 31, 2018.

*Other Operators.* The number of subscribers of other operators, including MVNO operators, is about 4.9 million customers as of December 31, 2018.

*The Ukrainian wireless telecommunications market*

The history of mobile communications in Ukraine began in 1993. The first company in the mobile market of Ukraine was UMC (Ukrainian Mobile Communication), afterwards it became MTS Ukraine and finally, Vodafone Ukraine (PrJSC "VF Ukraine") in May 2017. In 1997, the mobile operator Kyivstar launched services under GSM 900/1800 standard. While Astelit, another GSM 900/1800 standard operator and joint venture between Turkcell and local Ukrainian shareholders, began operations in 2005. The two largest wireless telecommunications providers in Ukraine (in terms of subscribers) are Vodafone Ukraine and Kyivstar sharing 86.3% of the market, with 36.9% and 49.4%, respectively, as of December 31, 2018, according to official financial and operational reports of operators.

In Ukraine, we compete primarily with Kyivstar, which provided services to approximately 26.4 million subscribers as of December 31, 2018. Kyivstar offers wireless services using GSM 900/1800 and UMTS technologies under the "Kyivstar" brand and fixed line services by the fiber-to-the-building technology ("FTTB") under the brand "Kyivstar Home Internet." Astelit offers services in GSM 900/1800 and UMTS standards under the "lifecell" brand.

Customer base in Ukraine decreased in the fourth quarter of 2018 by 1.1 million subscribers (y-o-y). Average price per minute (APPM) increased by 46.3% in RUB (increased by 19.6% in UAH) y-o-y in 2018. ARPU increased by 35.5% in RUB (increased by 10.9% in UAH) and MOU decreased by 7.3% y-o-y.

Overall wireless penetration in Ukraine in 2018 decreased to 126.5%, or approximately 53.3 million subscribers, as compared to 130.7%, or approximately 55.3 million subscribers, in 2017.

The following table shows the number of subscribers of the top mobile operators in Ukraine as of the dates indicated and the coverage area of Vodafone Ukraine and our competitors in Ukraine:

| | As at December, | | |
|---|---|---|---|
| **Operator** | **2018** | **2017** | **2016** |
| | (amounts in millions) | | |
| Kyivstar | 26.4 | 26.5 | 26.1 |
| Vodafone Ukraine | 19.7 | 20.8 | 20.9 |
| Astelit | 7.3 | 8.0 | 9.2 |

Source: Subscriber information based on operators' official financial and operational reports, taking into account the number of three-month active subscribers.

*The Armenian wireless telecommunications market*

As of December 31, 2018, overall wireless penetration in Armenia was around 125.5%, or total 3.72 million active subscribers, according to published Socio-Demographic Data report published by Statistical Committee of Republic of Armenia (about 2.97 million population) and estimated active subscriber base of the competitors.

The following table illustrates number of active subscribers and the coverage area of MTS Armenia and competitors—Beeline (VEON Armenia) and Ucom, as of indicated dates.

| | As of December 31, | | |
|---|---|---|---|
| **Operator** | **2018** | **2017** | **Coverage Area** |
| | (amounts in thousands) | | |
| MTS Armenia | 2,128.13 | 2,119.69 | Nationwide |
| Beeline | 1,002.35 | 933.83 | Nationwide |
| Ucom | 590.53 | 570.21 | Nationwide |

Sources: https://beeline.am; https://www.ucom.am; http://mts.am.

As of December 31, 2018, MTS Armenia reported total 2.13 million 3-month active subscriber base, reflecting increase of 0.40%, y-o-y. Market share from 3-month active subscriber base was around 57% as of end of the year.

***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 and Ukraine for the periods indicated:

| | As of December 31, | | |
|---|---|---|---|
| | **2018** | **2017** | **2016** |
| **Russia** | | | |
| Prepaid | 36% | 43% | 49% |
| Contract and corporate | 64% | 57% | 51% |
| **Ukraine** | | | |
| Prepaid | 90% | 91% | 91% |
| Other | 10% | 9% | 9% |

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 as follows:

- *Prepaid:* Prepaid tariff plans are geared towards consumers who use their mobile phones for personal communication. These plans do not have monthly subscription fees and the per-minute fee charges depend largely on the tariff plan chosen. We offer tariff plan "Super MTS" which varies depending on the region of the customer. Subscribers to our prepaid plans can reduce the price of their calls by using tariff options which have a subscription fee. After our customers subscribe to a particular prepaid plan, they have the option of switching to a different prepaid plan by sending an SMS message (USSD request) to a designated number.

- *Smart:* "Smart" is the family of integrated voice and data tariff plans for customers with active mobile data usage, which we believe will remain the main offer for a long period of time. "Smart" has a monthly fee for a bundle of all-net minutes and Internet. On-net calls above the bundle are free. Versions of "Smart" ("Smart" "My Smart," "X" for Youth segment, "Tarifische" with unlimited Internet and "Smart Top") differ by amount of minutes and megabytes included in the bundle and the corresponding monthly fee. "My Smart" is a personal tariff plan, where each user can adjust the tariff for their needs and select the required package of minutes and Internet. "Tarifische" was launched in 2018 and it is the the first tariff with unlimited Internet and option to adjust the tariff for personal needs and select the required package of minutes. In 2018, we also launched the new tariff plan "Our Smart" for family segment with opportunity to share bundle of all-net minutes and Internet with 5 devices.

- *Premium:* "Premium" tariff plans are designed for heavy users who call primarily within their domestic region. Subscribers of unlimited tariff plans are provided an unlimited number of local minutes, an opportunity to pay through our credit payment system and access to personal customer care service. In the Moscow region, for those subscribers issued a local number, monthly fees start from RUB 2,881.4 and those using a federal number pay from 2,457.6 per month. The "Ultra" tariff plan includes unlimited calls to MTS numbers as long as the recipient and the caller are in the same region (defined as "home region"), free domestic calls from the MTS network to any number regardless of carrier up to a certain limit of minutes, no roaming charges within Russia, up to 20 gigabytes of mobile Internet access and 5000 SMS messages within the network.

- *Data:* For active users of mobile Internet devices (e.g., 4G capable USB-modems and routers) we offer an unlimited tariff plan with limited speed 4Mbit/second after certain threshold.

- *IoT:* For smart devices with special consumption needs we developed unique tariff plan "Smart device" with annual subscription fee. In 2018, we launched a new tariff plan adaptive for different IoT devices.

- *Convergent:* "All MTS" is a brand new family of integrated mobile and fixed line services with digital or satellite television that was launched in 2018. The purpose of "All MTS" is to strengthen the user base and reduce customer churn. "All MTS" has a monthly fee for a bundle (mobile, fix Internet and TV). The price for this tariff varies by region and depends on the competitive situation in the market.

- *Corporate:* We offer different tariff plans in each region targeted to meet the demands of our corporate clients, each plan allowing them to optimize their communication expenses in accordance with their individual consumption patterns. These plans feature specialized customer

care, payment through our credit system and volume and tenure discounts. In addition, we provide customized pricing offers and technical solutions to our biggest clients.

Our tariffs vary from plan to plan. The description of tariffs and charges are, in each case, exclusive of VAT. As of December 31, 2018, the per-minute tariff for local calls within the MTS network varied from zero per minute to RUB 2.12 per minute. Different rates apply to local calls to other networks and vary from RUB 0.72 per minute to RUB 3.39 per minute. Higher rates apply to domestic long distance calls and rates for international calls vary from RUB 1.27 per minute for calls to the CIS to RUB 59.32 per minute for calls to other parts of the world. Periodically, we run various promotional campaigns, either on the federal or regional level, in which we provide temporary discounts to our regular prices.

*Tariff Plans in Ukraine*

We offer unified tariffs throughout Ukraine with special conditions and segmented tariff plans that focus on the differentiation of subscribers' needs in the various market segments under brand Vodafone. Our tariffs in Ukraine are oriented towards the following three main segments: "Postpaid Business," "Postpaid Private" and "Prepaid."

Vodafone Ukraine (PrJSC "VF Ukraine") has the following Postpaid tariff plans:

- *Postpaid Business:* Propositions for corporate clients "Vodafone Red Business" operate throughout Ukraine and offer all services in accordance with the "worry free" principles. Vodafone offers wide range of tariff plans for corporate clients to meet all their business needs: "Red Business VIP," "Red Business XXL," "Red Business XL," "Red Business L+," "Red Business L," "Red Business M," "Red Business S" and "Red Business XS." All tariffs offer all-in-one services: unlimited calls within corporation, Vodafone Ukraine customers; GB of mobile EDGE/3G/4G internet; bundled minutes for calls (excluding "Red Business XS") and SMS/MMS to other networks in Ukraine and other 62 countries of the world. Also subscribers can use the same volume of the services in roaming as well as in Ukraine, when they have activated "Roam like home" service for an additional fee for 30 days. Moreover, there are tariffs for Internet of Things "Vodafone IoT." They are represented by 6 tariff plans: "Vodafone IoT M," "Vodafone IoT L," "Vodafone IoT 3G S," "Vodafone IoT 3G M," "Vodafone IoT 3G L" and "Vodafone IoT 3G XL," "Vodafone IoT 3G XXL." All tariffs offer mobile EDGE/3G/4G Internet, CSD data transmission and SMS/MMS to other networks in Ukraine and 62 countries of the world. There is an opportunity to activate "Roam like home" service for 30 days, which gives advantageous conditions in Roaming, for additional fee.

  A set of Postpaid Business corporate tariff plans "Smart Office," which have unlimited calls within the network and mobile internet, bundled minutes of calls and SMS to other mobile operators, special prices for international calls, no connection fees and per minute charging intervals. We offer a unique product "ULTRA" for the high-value customers who have unlimited calls and SMS in the network, unlimited mobile internet and special prices for international calls and roaming. We also have special tariff plans for the machine-to-machine (M2M) segment "Telematika," "Navigator" and "Monitor," which combine service packages for M2M-cards, personalized service, special tariffs for data roaming, special heavy duty SIM cards and consulting support services.

- *Postpaid Private:* Mass-market proposition "Vodafone Red L" and tariffs "Vodafone Red S" and "Vodafone Red Light" (for individual proposal only) operate throughout Ukraine. We offer all-in-one services in accordance with the "worry free" principles and are suitable for active voice and data users. In May 2018, Vodafone Ukraine offered contract customers a new line of tariffs: "Vodafone Red" (S, M, L XL, and XXL) and Vodafone Ultra (Ultra, Ultra VIP). Vodafone Red tariff line includes tariffs with 4G Internet - from 2 GB to unlimited bundle,

bundled minutes to any other Ukrainian networks—from 50 to unlimited messages to Ukrainian and foreign numbers from 50 to 2500 units and bundles up to 750 minutes of international calls.

Vodafone Ukraine has the following Prepaid tariff plans:

- There are tariff plans for mass-market subscribers that operate throughout Ukraine and vary in value of included services and monthly fees: "Vodafone Red XS+/S/M/ L." Also we have tariff plans with greater volumes of services: "Vodafone EXTRA S," "Vodafone EXTRA M," "Vodafone EXTRA L," with unlimited messenger and social network. All these services are fully available also in roaming at most popular European countries with special roaming service for 7 days - "Roam like home." Moreover, there are voice oriented Pay-Per-Use tariff "Light" with unlimited calls within the network and Pay Per Month tariff "Light +." We also offer tariff plans which are targeted directly at the users of tablets, GPS/ GSM-car alarms and other smart devices and have Pay Per Use charging: "Vodafone Device S," "Vodafone Device M," "Vodafone Device L." Moreover, there is a new tariff plan for Lvov region "Zahid" with unique service—unlimited calls to Poland. We have as well the tariff line "Vodafone Family," which includes social networks, domestic and international calls. In second part of 2018 new 4G tariff plans were launched: "SuperNet Start," "SuperNet Pro," "SuperNet Pro-1" and "SuperNet Unlim," which included large traffic volume of Internet—from 4GB to unlimited, bundled minutes to any other Ukrainian networks -from 65 to 150 minutes, bundled 30 minutes of international calls, unlimited messenger and social network, unlimited YouTube. In 2018, we offered data-oriented tariffs: "SuperNet Pro-1," "SuperNet Turbo" and tariff line "Vodafone Family," which includes social networks, domestic and international calls.

As of December 31, 2018, the standard per minute tariff for calls to mobile network operators in Ukraine varied from RUB 0.50 per minute to RUB 3.76 per minute. Tariffs for calls to fixed lines in Ukraine varied from RUB 0.50 per minute to RUB 3.76 per minute. The standard per minute tariff for calls within the VF Ukraine network ranged from 0 RUB per minute with limitations in minutes per day or month to RUB 0.50 per minute. International tariffs ranged from RUB 1.25 per minute to RUB 326.17 per minute in standard international tariffs for satellites. All tariffs for Vodafone Ukraine subscribers are quoted in hryvnias. The tariffs set forth above are translated from hryvnias to Russian rubles using the official exchange rate of 0,398561 hryvnias per RUB 1 as of December 31, 2018.

***Customer Payments and Billing***

We enroll new prepaid subscribers in an advance payment program. As of December 31, 2018, 75% of our consolidated subscriber base was enrolled in the advance payment program and 25% 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, 2018, 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, 2018, subscribers using the "in full confidence" service had a maximum credit limit of RUB 283.8 thousands. 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 now receive a single invoice, whereas our previous billing system could not support such a service.

In Ukraine, our Postpaid corporate and high-end subscribers receive an invoice which must be paid by a specified date. If the subscriber fails to pay, we block the phone number until the balance is settled. Our contract subscribers, who make an advance payment, are able to continue using our services once they reach a zero balance or until their accounts reach the credit limit specified in their service agreements. When the limit for such a subscriber is reached, we suspend our services until the balance is settled. We determine account terms and credit limits for each subscriber based on the subscriber's account age, payment history and tariff plan.

In Ukraine we provide services to our Prepaid customers for as long as the balance on their accounts remains above zero and/or the tariff plans allow to use free-of-charge services without having the positive balance on the account.

In Ukraine we offer our subscribers various ways to pay for our services, including cash or card payment at the cash desk of the bank, through the recharge terminals, bank transfer from the current account (for legal entities), via internet and payment card of fixed nominal value.

In Armenia, we use the "Eskadenia" billing system.

***Customer Service***

*Russia*

In order to attract and retain customers, we must ensure a high level of service at all points of customer assistance, care and billing. In each region where we operate, we have contact centers that provide customer service 24 hours a day, seven days a week. Contact centers provide different services to our clients through various channels (telephone, email, chat). Customer service representatives respond to various issues such as phone lock due to lack of payment, handset operation, roaming capabilities, service coverage and billing. A particular group of customer service representatives handles customer complaints and helps those who want to change their service terms. We use automatic systems and independent analysis for monitoring availability and customer satisfaction level of service in our contact centers regularly. We conduct outbound campaigns with the assistance of our employees in the outbound contact center and the laboratory of the customer relationship management inasmuch as we need to improve customer loyalty and promote our services.

In 2018, we continued to develop "Situational IVR." When calling the Contact Centre, customers listen to information about some cases, which correspond to their needs with respect to the events and

statistics. More than 140 relevant scripts were created. This project decreased the number of calls to the contact-center up to 19% year-on-year.

In 2018, we started the intellect chatbot based on the artificial intelligence (AI) for solution of a number of questions and service of mobile business customers excluding the transfer to the chat operator. Chatbot is available for all mobile business customers to chat through the mobile application and our website. At the end of the 4th quarter 2018, the share of unique customers who had completed the service using chatbot without the transfer to the chat operator was 70%. This reduced the average work load of chat operators per month in the regions with active chatbot by 40%. We believe that in the 4th quarter 2018 the efficiency of the chatbot was 70%.

In 2018, we continued to develop online robot for any incidents at back-office. We developed and implemented the service of the tariff plan change. Thus, the automation of this operation is about 80%. The correction process of an erroneous payment transfer was also automated. More than 60% of erroneous payments are corrected automatically without the contact center operator.

In 2018, we presented the project "from consultant to expert" in order to start provision of services directly to the customer and to implement new employee motivation system based on the monthly rating. Now the operator award directly depends on the personal efficiency and the work quality in comparison with other contact center operators (thus, the award can be up to 75% of the salary).

We have developed a new instrument for the contact center operators to initiate service requests, "Usability Siebel." Therefore, access to information that is mostly required by customer service was simplified.

The process of SMS-informing on status of solving technical complaints was optimized. Customers receive more personalized recommendations after solving their issues. If additional time is required to resolve the incident, an interim SMS with new terms is sent.

*Ukraine*

In Ukraine we made the customer assistance process more personalized by anticipating customer needs. We have enhanced the quality of our customer service as a result of the complete integration of our IVRs and billing. We have improved IVRs menu that enhance its utility. We continued to work on the improvement and expansion of self-service channels for subscribers. As part of online "self-service," we continued developing "self-care" functions through the web and IVRs (which provide, among other things, details of the subscriber's account, tariff plan specifications, amounts charged on credit cards, management of on-line service and charge details for contract subscribers). We also developed special services, such as shortened phone numbers, for broadband users and premium customers who require assistance. We increased the number of services available to our customers in contact centers. We have a mobile version of the Internet Helper for smartphones. In 2013, we launched a new mobile application for Android OS. The application allows users to manage their account directly from their smartphones. We started the process of implementing an operational CRM system and the process of renewal of our contact centre technical platform. We also changed the approach to subscriber differentiation. In 2013, we finished the process of integration of our broadband subscribers into our system of customer service.

*Customer Relationship Management (CRM)*

In 2016, the mobile application for Android OS and iOS was developed, final completions of internal systems are carrying out. We performed equipment procurements within the New Contact Center project for Genesys platform implementation, which responds to all modern requirements in customer care. Also we paid the considerable attention to the solution of customer questions from the

first contact in the most short time. The solution of requests from the first contact grew from 76% to 82%, and more than 81% customers complaints are solved in 24 hours. The Interactive Voice Response system was updated according to needs of customers and now more than 71% of customers are solve their questions via the IVR. Internet requests servicing was provided not only in Facebook official group and web site, but also was expanded on all space of social media (Facebook, Vkontakte, Forums, Internet editions etc.).

In 2017, the first part of the project Operational CRM was implemented. Mobile application MyVodafone for Android OS and iOS was successfully launched, and the number of users exceeded one million subscribers at the end of the year. Genesys infrastructure was deployed within the framework of the New Contact Center Project and preparations for launching chat channels and outbound were completed. Service of the B2B segment - key account / national customers was successfully launched in own contact centers. Customer service processes are constantly being improved - first contact resolution rate (FCR24) has grown from 82% to 85%, more than 93% of customer complaints are resolved in 24 hours.

In 2018, the New Contact Center project was implemented - launching a channel for incoming and outgoing calls, chat processing and Work Force Management. The mobile application MyVodafone was actively developing, the number of users increased by more than 3 times and reach more than 3.3 million users. The "Requests" and "Sales" modules of operational CRM were launched. Service standards were launched in the contact center and more than 500 stores. Thanks to the optimization of service processes and redirection of calls to digital channels, the number of calls decreased by 25% year to year. The contact center successfully launched sales to B2B segment subscribers (key accounts / national customers).

In 2019, it is planned to launch "Complaints work flow" - the last module of operational CRM. The implementation of operational CRM for B2B segment subscribers - key account / national customers is planned to be launched. As part of Contact Center development, it is planned to launch flexible IVR structures (situational IVR), chat and voice bots, and further develop the functionality of the MyVodafone application. We will continue optimization activity, for reducing the load on the contact center and redirection of calls to digital channels. Due to launch of the Mobile number portability project in May 2019, the contact center will play a key role in acquisition and retention processes. Thanks to the implementation of a unified service model, work on reducing of customer service flow to stores has begun and will continue. One of the main activities will be work with customer loyalty and tNPS (transactional Net Promoter Score) in all channels of interaction with the client. Two remote sales centers were created in 2019 with the main directions of development being sales to B2C subscribers, sales to B2B subscribers and sales via online store and digital channels.

*Network Infrastructure—Technology Strategy*

Our technology strategy is formed in accordance with overall company's business strategy and intended to support the existing business operations, as well as to introduce new technologies allowing to launch new services in the future. Our technology strategy considers world technology trends in telecommunications.

The main focus of the technology strategy is consequent development of the network meeting future technology requirements: higher throughputs, lower latencies and flexible network core as enabler of the new services.

LTE has the main priority while deploying Radio Access Network (58% of the RAN deployment was LTE in 2018) and 2G/3G investments decrease gradually in accordance with changes in network UE penetration structure and traffic migration.

According to Technology Strategy we deploy LTE primarily in most efficient 1800 MHz band and use Carrier Aggregation, 256 QAM, MIMO 4×4 and other cutting edge techniques for better user experience. In 2019, we plan to start LTE deployment in 2100 MHz band.Our technology strategy implies consistent innovative technologies introduction to make our network futureproof and ready for the new services introduction. We have already deployed the Nb-IoT network in 19 regions and plan to expand coverage throughout Russia by the end of 2019.We have an understanding of how we will deploy first 5G networks, we have therefore started testing and initial preparation for 5G launch which is planned to take place in 2020.

*Network Infrastructure—Site Construction and Sharing*

In October 2014 MTS and VEON Ltd. (VimpelCom) has 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.

During 2018, 2017 and 2016 scope of the projects has expanded: shared networks are deployed in 42 of 85 regions of Russia.

By the end of 2018 we had 4,416 LTE base stations shared with VEON Ltd. (VimpelCom) in 22 regions and VEON Ltd. (VimpelCom) had 3,957 LTE base stations shared with MTS in other 20 regions of Russia. Total amount of shared infrastructure nodes is 8,373 base stations servicing in 800 MHz, 1800 MHz and 2600 MHz bands.

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 2018 networks in ten regions of Russia run in shared 2600 band spectrum usage mode (MOCN concept). The area of MOCN implementation will be expanded in 2019. In 2018, LTE TDD networks (3GPP Band 38) was added to the project scope.

*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 the Moscow license area, we have been allocated frequencies spanning 2 × 11.4 MHz of spectrum in the 900 frequency band and 2 × 24.6 MHz of spectrum in the 1800 frequency band for operation of a dual GSM 900/1800 network and UMTS900 network and LTE1800 network. In St. Petersburg and the Leningrad region, we have been allocated frequencies spanning 2 × 9.6 MHz of spectrum in the 900 frequency band (including 2 × 1.6 MHz in the E-GSM band) and 2 × 18.2 MHz of spectrum in the 1800 frequency band for operation of a dual GSM 900/1800 network, UMTS900 network and LTE1800 network.

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, 2010-2015 MHz and 2140-2155 MHz for UMTS and LTE network deployment for the entire territory of the Russian Federation.

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.

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.

We have frequencies allocated to us for the operation of GSM 900 and GSM 1800 frequency bands in all regions of Ukraine. The radio frequencies allocated to us for the operation of GSM 900 span from 2 × 4.4 MHz of spectrum in Chernigov region to 2 × 5.8 MHz in the Nikolaev, Lugansk, Chernovtsy and Kirovograd regions and in Kyiv. We also have been allocated frequencies spanning from 2 × 20.0 MHz in the Kyiv region to 2 × 26.6 MHz in the Dnepropetrovsk region for operation of GSM 1800 base stations. In addition, we have been allocated frequencies spanning from 453.35-457.1 MHz and 463.35-467.1 MHz in the CDMA-450 core frequency and bands spanning 3 × 1.25 MHz for CDMA-450 network deployment for the entire territory of the Ukraine. In June 2018 we terminated CDMA services and shut down CDMA network due to providing faster 3G and 4G data services and focusing on UMTS and LTE networks construction (such networks tend to upload and download data faster than CDMA). In addition, in July 2018 CDMA-450 frequency licences were cancelled.

In 2015, we were allocated frequencies1950-1965 MHz and 2140-2155 MHz for UMTS network deployment for the entire territory of Ukraine. In 2018 we were allocated frequencies 2510-2520 MHz, 2630-2640 MHz and 1750-1770 MHz, 1780-1785 MHz, 1845-1865 MHz and 1875-1880 MHz for LTE network deployment in Ukraine.

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

*Network Infrastructure—Virtual Infrastructure*

The following projects have been launched in 2018:

- IMS (IP Multimedia Subsystem) for 5G on NFV platform:

2nd stage was finished; and

3rd stage was launched;

- EPC (New Product Code);
- DPI (Deep Packet Inspection) Statistic was finished;
- NetAct was finished;
- U2000 was launched;
- SON (Self Optimized Network) was launched;
- POC (Proof Of Concept) TCP Optimization was finished;
- POC SD-WAN (Software Defined—Wide Area Network) was finished.

A new multi-purpose module data-center started operating in Nizhny Novgorod for deployment of virtual platforms for telecommunication services and cloud services in 2018.

*Network Infrastructure—Energy Infrastructure*

One of the main goals in Energy Infrastructure is to decrease operational costs for electric energy.

According to legislative acts of Russian Federation electric energy payment categories were introduced in 2012. This payment category can be chosen by a consumer in a case of introduction electric energy accounting system, which allows hourly monitoring of electric energy usage and reporting to energy company with accepted procedure.

Considering these conditions we decided to deploy Electric Energy Accounting Automatic System (EEAAS). According to this trial projects of different EEAAS solutions were executed in different regions of Russia (Moscow, Nizhny Novgorod, Vologda, Saint Petersburg, Novosibirsk, Ekaterinburg and Republic of Karelia) in 2014-2015.

EEAAS deployment projects was accepted in 2016 based on the analysis of those trials, System implementation started in 2016.

Introduction of the EEAAS will allow to:

- Reduce electricity payments and thus reduce operational costs;
- Increase level of precise accounting;
- Implement energy usage management and control; track energy usage dynamics.

The project implementation leads to reduction of payments for the electric energy: in 2018 implementation coverage reached 21 regions and the weighted average share of economy was 12%. In 2019 we plan to increase the coverage to 70 regions and the weighted average share of economy to 7%.

We are planning to deploy EEAAS in all regions of Russia.

*Base Station Site Procurement and Maintenance*

The process of obtaining appropriate sites requires that our personnel coordinate, among other things, site-specific requirements for engineering and design, leasing of the required space, obtaining all necessary governmental permits, construction of the facility and equipment installation. In Russia, we use special radio planning software supplied by TEOCO Corporation to assess new sites so that the network design and site development are coordinated. This software can create digital cellular coverage maps of our licensed areas, taking into account the peculiarities of the urban landscape, including the reflection of radio waves from buildings and moving automobiles and supports all necessary technologies, such as 2G, 3G, LTE andNB-IoT. To use these tools more effectively we purchase high quality 3D digital maps for more precise planning. 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.

Base station site contracts are essentially cooperation agreements that allow us to use space for our base stations and other network equipment. The terms of these agreements range from one to 49 years, with the term of the majority of these agreements being one to five years. Under these agreements, we have the right to use premises located in attics or on top floors of buildings for base stations and space on roofs for antennas. In areas where a suitable base station site is unavailable, we construct towers to accommodate base station antennas, mainly on leased plots of land. We anticipate that we will be able to continue to use our existing GSM 900 base station sites and to co-locate GSM 1800, UMTS 2100 and UMTS 900 base stations at some of the same sites. In 2018, we continued to rollout LTE network and started the large-scale development of LTE 1800 network, the latter amounted to 85% of the newly installed LTE base stations. In 2018, we started the NB IoT technology on 8,178 base stations of LTE.

*Network Monitoring Equipment*

We constantly control and monitor the performance of our network, call completion rate and other major key technical performance indicators. We use monitoring systems to optimize our network and to locate and identify the cause of failures or problems, and also to analyze our network performance and obtain network statistics. 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.

To provide high quality service to our subscribers in Russia, we have a global network operation center ("**GNOC**") in Krasnodar and additionally a local operation and maintenance center in Voronezh which takes the form of outsourcing partnership with Nokia Solutions and Networks. The GNOC experts and a staff of the local operation and maintenance center have the technical ability to monitor

network problems and unusual situations online in all regional branches of MTS in Russia around the clock. Our maintenance department, staffed 24 hours per day, performs daily network integrity checks and responds to reported problems. Our technicians inspect base stations and carry out preventative maintenance at least once every six months.

The GNOC in Krasnodar allows us to centralize such functions as monitoring and controlling of equipment, network planning and optimization, and also helps to solve incidents related to service interruptions. The GNOC strengthens our network's reliability and safety, as well as creates the necessary conditions to launch and implement new technologies and network standards.

In November 2015, a Global Fixed Network Operation Center (GFNOC) was launched in Nizhny Novgorod, thus completing the centralization process of the MTS mobile and fixed network management. The GFNOC combined functions of monitoring and controlling the equipment in 54 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. Under the GFNOC project a centralized unit was also set up which is responsible for the quality of the services provided to corporate customers with bundled packages of mobile and fixed communications. Our subsidiary company MGTS performs these functions in Moscow region of Russia.

With the Global Fixed Network Operation Center deployed, we put together all resources for management of the quality of provided mobile and fixed line voice services, data transmission via mobile and fixed networks, leased dedicated digital circuits and VPN channels and digital TV.

In 2016, we also opened satellite TV operation and maintenance center in Moscow, which is used for monitoring head-end station and satellite TV services.

Our networks in Ukraine, Armenia and Belarus are monitored by our local operation and maintenance centers in each country. In addition to the monitoring of network performance, those centers analyze network quality parameters, provide troubleshooting, regular and extraordinary reporting to the management and our headquarters. The monitoring of our network in Turkmenistan has been ceased in September 2017 due to cancelation of providing telecommunication services.

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

***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 and in Ukraine. We have also built our own local networks in certain cities within Russia (including Moscow) to provide local telephone numbering capacity to our subscribers. Federal 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-time connection fee per 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 ranges from five years to an unlimited period of time. As a result of our merger with Comstar, we have decreased the use of local numbering capacity of other operators. As of December 31, 2018, we had numbering capacity (federal and local) for approximately 34.68 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, MTT (an affiliate of Sistema until March 18, 2009), 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-time connection fee and 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 and Ukraine—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: MTT, Rostelecom and VEON Ltd. (VimpelCom). For ILD traffic transit we primarily use our DLD/ILD network which is interconnected with 51 international carriers. We also have an interconnect between the DLD/ILD MTS network and the ILD networks of our subsidiaries, Vodafone Ukraine and MTS Armenia, in order to provide transit for international traffic.

In Ukraine, mobile operators are allocated numbering capacity by the NCCIR (National Commission for the State Regulation of Communications and Informatization). We believe that sufficient numbering capacity has been allocated to us in Ukraine for the development of our mobile network. We also believe that we have been allocated sufficient fixed line numbering capacity with respect to the cities in which we are developing our fixed line networks.

***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 1800 MHz (Band 3), 2600 MHz (Band 7), 800 MHz (Band 20) and LTE-TDD 2600 MHz (band 38), also there are smartphones in our sales with LTE Advanced support. In 2018, we continued the process of implementation Voice over LTE and WiFi Calling functions.

From 2009, RTC, our wholly-owned subsidiary, started handling all functions relating to our retail operations, including the purchase and sale of handsets and accessories and subscriber enrollment at our retail outlets. RTC has entered into arrangements with Apple, Sony, Samsung, Nokia, Alcatel, Xiaomi, Philips, Huawei, Honor and others to purchase handsets. In 2018, we continued our cooperation with A-brand smartphone vendors. We also offer an array of mobile telephone accessories. Since 2009 we have been successfully selling MTS branded phones.

**Fixed Line Services**

We offer fixed line communications services in over 185 cities across Russia, covering a population of over 53 million people.

Our other fixed line operations include the following communications services: voice, data and 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. Based on TMT Consulting data, as of December 31, 2018, we were the largest operator in the Moscow residential broadband market in terms of subscribers, with a 35% market share. We also operate in Ukraine and Armenia, where we provide digital telephony communications services, data transmission, Internet access and the renting of channels. For a list of the telecommunications licenses held by us, see "Item 4. Information on Our Company—B. Business Overview—Regulation of Telecommunications in the Russian Federation and Ukraine—Licenses."

***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, 2018, MGTS had approximately 3.47 million active lines in service, a cable network of over 53,372 km, a fiber optic network of over 41,175 km and 2,079 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 1.05 million numbers on the TDM area (Time Division Multiplexing) and 5.18 million numbers on the IMS area (IP Multimedia Subsystem) as of December 31, 2018.

Residential subscribers accounted for approximately 84% of MGTS' total lines, corporates for 8% and public sector subscribers for 8%, as of December 31, 2018. Residential subscribers accounted for approximately 83% of MGTS' total lines, corporates for 9% and public sector subscribers for 8%, as of December 31, 2017. Residential subscribers accounted for approximately 83% of MGTS' total lines, corporates for 9% and public sector subscribers for 8%, as of December 31, 2016.

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; and
- 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 part 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 38% of service operating revenues of our Moscow fixed line operations in 2018, 42% in 2017 and 49% in 2016. The percentage decline is connected with gradual growth of operating revenues from non-regulated services as a proportion of the overall operating revenues in 2018, 2017 and 2016. 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.

The following table presents certain operating data for our Moscow fixed line operations as of and for the years ended December 31, 2018, 2017 and 2016.

| **Moscow fixed line operations** | **December 31, 2018** | **December 31, 2017** | **December 31, 2016** |
|---|---|---|---|
| Installed telephone lines on TDM (000s)[1] | 1,050 | 2,750 | 3,731 |
| Installed telephone lines on IMS (000s)[1] | 5,180 | 5,180 | 5,180 |
| *Residential* | | | |
| Number of subscribers (000s) | 2,686 | 3,012 | 3,148 |
| CPP traffic (millions of minutes) | 307 | 399 | 526 |
| *Corporate*[2] | | | |
| Number of active lines (000s) | 561 | 612 | 654 |
| Number of subscribers (000s) | 49 | 52 | 54 |
| CPP traffic (millions of minutes) | 248 | 301 | 369 |

(1) Telephone lines on TDM and IMS can be installed at one household.

(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.

The following table illustrates MGTS' regulated tariff development:

| MGTS Regulated Tariffs | March 1, 2019 | March 1, 2018 | March 1, 2017 |
|---|---|---|---|
| *Residential*[1] | | | |
| Line rental | | | |
| RUB per month | 214 | 205 | 205 |
| Per minute tariff plan—local connection fee | | | |
| RUB per minute | 0.60 | 0.60 | 0.60 |
| Unlimited tariff plan—connection fee (unlimited connection) | | | |
| RUB per month | 294 | 294 | 294 |
| Combined tariff plan—fee for fixed amount of minutes[2] | | | |
| RUB per month | 224 | 224 | 224 |
| Combined tariff plan—fee for each additional minute | | | |
| RUB per minute | 0.58 | 0.58 | 0.58 |
| *Corporate (non-governmental)*[1] | | | |
| Line rental | | | |
| RUB per month | 225 | 220 | 220 |
| Per minute tariff plan—local connection fee | | | |
| RUB per minute | 0.60 | 0.60 | 0.60 |
| Unlimited tariff plan—connection fee (unlimited connection) | | | |
| RUB per month | 416 | 416 | 416 |
| Combined tariff plan—fee for fixed amount of minutes[2] | | | |
| RUB per month | 224 | 224 | 224 |
| Combined tariff plan—fee for each additional minute | | | |
| RUB per minute | 0.58 | 0.58 | 0.58 |
| *Corporate (governmental and state-funded organizations)*[1] | | | |
| Line rental | | | |
| RUB per month | 215 | 215 | 215 |
| Per minute tariff plan—local connection fee | | | |
| RUB per minute | 0.60 | 0.60 | 0.60 |
| Unlimited tariff plan—connection fee (unlimited connection) | | | |
| RUB per month | 416 | 416 | 416 |
| Combined tariff plan—fee for fixed amount of minutes[2] | | | |
| RUB per month | 224 | 224 | 224 |
| Combined tariff plan—fee for each additional minute | | | |
| RUB per minute | 0.58 | 0.58 | 0.58 |

(1) Tariffs for residential subscribers are shown including VAT; tariffs for non-governmental corporate subscribers and governmental/state-funded organizations are shown excluding VAT.

(2) The plan included 400 minutes per month.

*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.

***Customers and Services Offered—Other Fixed Line Operations***

We provide fixed line communications services to corporate, operator and residential subscribers in over 185 cities 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.

The following table presents certain operating data for our other fixed line operations in Russia as of and for the years ended December 31, 2018 and 2017.

| **Other fixed line operations** | **December 31, 2018** | **December 31, 2017** |
|---|---|---|
| *Residential* | | |
| Number of subscribers (000s)[1] | 2,827 | 2,909 |
| *Corporate*[2] | | |
| Number of subscribers (000s) | 104 | 138 |

(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. As of December 31, 2018, we had approximately 33,000 voice and 56,600 Internet corporate subscribers.

As further described below, we offer voice, data transmission and Internet and various value-added services to our corporate subscribers.

*Voice Services.* We provide a full range of other fixed line voice services to corporates in Moscow, the Moscow region and other selected regions of Russia, which include local, zonal, and DLD/ILD services using our transmission network and leased capacity between major Russian cities. We also provide integrated voice and data services, voice over frame relay and certain integrated services digital network ("ISDN") services.

*Data Transmission and Internet Services.* We offer high quality data transmission services to corporates, which allow for data exchange between their various branches or offices located within Russia and internationally. For data transmission services, our network is capable of transferring data at speeds of up to 10 Gbps and utilizes various technologies, such as 10 GE, GE, ATM, TDM, VPN-MPLS/VPLS, GPON, Microwave radio relay (MRR), xDSL, LTE and Wi-Fi to provide high quality solutions at a relatively low cost. We endeavor to ensure the reliability of network connections by utilizing a full reservation approach to back up all elements of the network.

In addition, we offer a wide range of Internet services to corporates, including broadband Internet access, VoIP, VPNs and data center services using the following technologies: (1) NGN (up to

10 Gbps), (2) GPON (up to 1 Gbps), (3) xDSL (up to 100 Mbps), (4) radio Ethernet (up to 300 Mbps), (5) MRR (up to 1 Gbps), (6) Wi-Fi (up to 600 Mbps), and (7) LTE (up to 100 Mbps). We also provide continuous flexibility to upgrade their network capacity to handle additional Internet services. For example, we often integrate data transmission and Internet services for our clients as they expand their operations and need to interconnect and exchange data with newly opened offices and/or branches.

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. Corporates with GPON broadband Internet packages generally experience data transfer speeds between 1 Mbps and 1 Gbps. In addition, we offer a premium broadband Internet service over our NGN in which subscribers enjoy data transfer speeds between 1 Mbps and 10 Gbps. The NGN provides subscribers with the benefit of the same uploading and downloading data transfer speeds, whereas Internet subscribers using an xDSL/GPON connection upload at speeds that are much slower than the one at which they can download.

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

*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 corporates 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 corporates manage the reception and servicing of a large volume of incoming calls. The unique multi- channel telephone number assigned to customers will not change even if the customer moves to a different location in Moscow, and does not require the customer to install any equipment. In addition, this service allows all incoming calls to be transferred to other fixed or mobile telephone numbers in Russia or in other countries. The IN identifies a subscriber by phone number, phone card or password, which allows our customers to bill their subscribers for services and, if necessary, block access for subscribers who have a negative balance on their account.

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. Each solution is customized for subscriber- specific needs. 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 providing 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. In order to lower the costs of intercity and international traffic transition, we put into operation an intercity international network in December 2008.

According to our estimates, together with MGTS, we had approximately 77% of the total active numbering capacity in Moscow as of December 31, 2018. We had approximately 204 local fixed nodes in 62 regions of Russia, including Moscow, and 40 zonal fixed networks to provide telephony services to subscribers as of December 31, 2018. Our integrated intercity/international network is interconnected to more than 49 international operators. As of December 31, 2018, we had total more than 1,660 interconnect agreements with national and international operators for interconnection of our networks, including fixed, mobile and Intercity/International networks.

*Residential subscribers*

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

*Voice Services.* We provide voice services to residential and corporate subscribers. Like corporate subscribers, residential subscribers in each of the regions that we are present in seek a full range of high quality voice services equivalent to those provided in Western Europe. In addition to "basic" voice telephony services, we provide a number of additional services, such as call forwarding, call transferring, call waiting, conference, voicemail and Caller ID, among others.

*Internet Services.* We offer broadband Internet services to residential subscribers throughout Russia. As of December 31, 2018, we had 10% market share in the Russian Federation together with Moscow where we had a 35% share, based on TMT Consulting data. Depending on the Internet connection speed, we charge residential subscribers a subscription fee of RUB 200-RUB 1,499 per month in Moscow and a subscription fee of RUB 190-RUB 3,500 in other regions of Russia. We do not charge a connection fee in Moscow and in most of the Russian regions.

*Pay-TV.* We operate a TV service based on IPTV service over ADSL and GPON technologies in Moscow. In addition, we offer pay-TV services based on DVB-C (digital television via cable connection), analog cable transmission and MMDS (wireless cable) technologies in most of the regions in which we are present. Since November 2013, we connect our subscribers only to the TV with digital quality and since 2017 we broadcast in 4K ultra HD quality. Special auxiliary equipment (set-top box) allows pay-TV subscribers to access more than 170 channels of digital quality, including 40 channels of HD quality from a home television and 4 channels of 4K ultra HD quality. International and Russian channels are included as part of the base services package.

Our pricing structure is designed to appeal to large numbers of consumers with various interests and purchasing power, and varies significantly between regions. We charge a subscription fee between RUB 50-RUB 1,060 per month in Moscow and a subscription fee of between RUB 200-RUB 460 in other regions of Russia, depending on the number of channels included in the package. We also offer bundled Internet and pay-TV services for RUB 320-RUB 1,699 per month in Moscow and RUB 250-RUB 3,850 in certain other regions of Russia, depending on the speed of the Internet connection, the number of pay-TV channels being provided and level of competition in a particular region. In 2018, convergent bundles, that included Internet, TV and mobile services, were introduced in 45 regions and more than 70 thousand subscribers were connected.

***Sales and Marketing***

*Moscow fixed line operations*

In 2018, MGTS continued monetization of its own high-tech fiber-optic network GPON. To achieve this, MGTS signed a number of contracts with video services and online cinemas (ivi, tvigle, Amediateka, Home of HBO, Sony Pictures). Furthermore, MGTS offered the market a Smart Home solution. To increase ARPU and retain subscribers MGTS launched high-speed tariffs for home Internet, including a unique offer of 1 Gb/s, as well as a social tariff with special conditions for certain categories of the population. In order to expand and consolidate its market share, MGTS continued to

enter the Moscow Region market through the construction of its own network, as well as through acquisition of local Internet service providers.

By the end of 2018, 1.94 million subscribers were transferred to GPON. In 2019, MGTS plans to develop and implement new services as part of the concept of Smart Home and Smart City, participate in the cloud solutions market more actively, develop partnerships with delivery services and become a partner of iconic city 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 special bundled product offerings aimed at servicing their communication requirements and enhancing subscriber loyalty. Our advertising and marketing materials are aimed primarily at the promotion of MTS brand. All fixed-line products are offered and marketed under this brand. However, when we enter new markets and acquire companies, we have to use both brands in advertising - MTS brand and the acquired brand. This is done to decrease churn as customers tend to express strong loyalty towards local brands. We then gradually decrease presence of the acquired brand and this allows us to make MTS a market leader in a given region in 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:

- *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 in major cities throughout Russia, Ukraine, Kazakhstan and Uzbekistan. 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.

- *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.

- *Akado Group*, provider of pay-TV, broadband Internet and digital telephony in Moscow. We compete with the Akado Group primarily in the residential fixed line telecommunications markets in Moscow and Ekaterinburg.

- *MegaFon*, swhich 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.

- *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.

*Corporate subscribers*

The following table sets forth the corporate subscriber market shares of the primary fixed line operators in Moscow as of December 31, 2018:

| | |
|---|---|
| MTS | 22% |
| VEON Ltd. (VimpelCom) | 17% |
| Akado | 6% |
| Rostelecom | 18% |
| Other | 37% |
| **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, 2018:

| Company | Russia |
|---|---|
| MTS | 14% |
| Rostelecom | 69% |
| Other | 17% |
| **Total** | **100**% |

Source: TMT Consulting.

As Moscow's only PSTN operator, MGTS faces limited competition in the market for residential local telephony services in Moscow. As of December 31, 2018, MGTS provided local voice telephony services for approximately 96% of all residential subscribers in Moscow, according to TMT Consulting.

In the other voice services market, we generally compete based on the availability of bundled packages comprising broadband Internet access and pay-TV services, value-added services, network quality, installation time and customer service.

*Internet*

According to TMT Consulting, as of December 31, 2018, broadband Internet penetration of households was 59% 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, 2018:

| Company | Russia |
|---|---|
| MTS | 10% |
| TTK | 5% |
| VEON Ltd. (VimpelCom) | 7% |
| Er-Telecom | 11% |
| Rostelecom | 36% |
| Other | 31% |
| **Total** | **100**% |

Source: TMT Consulting.

*Pay-TV*

According to TMT Consulting, as of December 31, 2018, pay-TV penetration was 77% in Russia. The following table sets forth the market shares of the primary operators in the TV market in Russia as of December 31, 2018:

| Company | Russia |
|---|---|
| MTS | 8% |
| Rostelecom | 23% |
| Tricolor TV | 28% |
| Er-Telecom | 8% |
| Orion Express | 7% |
| 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 corporates, 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 2018: downlink (towards users) data throughput reached 3.87 Tbps (2.88 Tbps in 2017), uplink (from users) data throughput reached 1.34 Tbps (1.13 Tbps in 2017).

The size of MTS fiber-optic networks increased by 16,752 km in 2018 and reached 243,187 km in total, thanks to deployment of the following fiber optic lines:

- Okha—Yuzhno-Sakhalinsk (ring reservations of Sakhalin island);
- Ufa—Chelyabinsk (the third reserve route to the Urals); and
- Saransk—Nizhny Novgorod (reservation of the Volga region).

*Convergent network*

According to deployment plans, the following projects were executed in 2018:

- New MBH nodes were deployed: 1,810; replacement of obsoleted MBH equipment is ongoing.
- Micro wave links were deployed: 4,637. According to transport network strategy evolution unlicensed in Russia E-band micro wave link was used for linking base stations (1 Gbps and above), E-band link share increased from 14.5% to 18.8% in 2018, E-band share, among other technologies, is expected to rise in 2019. 10 Gbps E-band equipment was tested and is planned to be deployed in 2019.

We continue the shared network deployment and links interchange projects with other operators and have signed the memorandum of understanding with respect to the potential projects. Memorandum defines a list of directions (parts of fiber-optic communication links) which are mutually interesting for both participants. Summarized length of provided communication links is approximately equal on both sides.

Management and monitoring systems virtualization is ongoing. Unified system for link facilities based on GE Small World solution is launched in production mode in the fourth quarter 2017.

As a part of evolution of IPBB (IP Backbone) network equipment modernization is ongoing. The projects assume replacement Cisco 7600 nodes for ASR9000 nodes due to an end of a support of 7600 nodes. The project is planned to be finished at 2019.

*Satellite Network*

In 2018 we:

- Developed and coordinated the project backup of the project the satellite communication network of MTS, providing a redundant fiber-optic Backbone network in the Northwest region, Siberia and the Far East. The aim of the project is to reduce operating costs for rent backup communication channels, and ensuring that pass voice traffic in case of accidents on major routes. The project was completed in 2018.
- Performed preparation for works on integration of satellite communication systems with 5G / LTE / IoT networks.
- Optimized the existing backbone and VSAT networks.

*Public Switching Telephone networks (PSTN)*

The network infrastructure we maintain in Moscow is substantially different to the infrastructures we use in the 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. Now telephone network in Moscow and Moscow region has a capacity of more than 1,100,000 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, 2018, in Moscow and the Moscow region we had a wireless broadband network including 476 base and subscriber stations in the 5-6 GHz frequency band and also near 108 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 GE channels. In addition, separate routers are used for inter-carrier connections and are connected to the core routers by means of 10 GE interfaces.

Russia

As of December 31, 2018 we provided cable Internet access to about 9.3 million households and cable TV access to about 9.8 million households. The access equipment used are Ethernet switches, IP DSLAM and Optical Receivers. We mainly use FTTB technology for Internet (8,6 million households) and CATV access, which can provide speeds up to 1 Gb/s per building and about 250 channels CATV (analog and digital). In 2011, we started to roll-out DVB-C technology for a cable TV service. Currently, we have digital TV service (DVB-C&DVB-S2) in 187 cities and localities with 3.46 million of subscribers. In 2014, we started to roll-out an advanced hybrid TV service (DVBC/DVB-S2/IPTV+IP/VOD, CatchUp). By December 2017, we launched Hybrid TV platform with an IPTV commercial service in Moscow and other 10 regions, DVB-C/IP Hybrid commercial service in 95 regional cities and DVB-S2/IP Hybrid commercial service all over Russia. During 2018 in DVB-C and DVB-S networks we increased the number of broadcasted 4K/UHD channels using HEVC (H.265) format. Total number of connected hybrid TV users is approximately 0.61 million.

During 2018 we continued to expand set of external interactive services together with different Internet partners (START, TVIGLE), modified VoD service with support of series and SVoD feature and launched TV statistics and usage analysis system.

Also during 2018 we started swap of existing Hybrid TV platform for unified TV platform which will support both fixed and mobile TV segments and allow us to provide same services and look&feel on every TV screen. It is expected to replace current Hybrid TV platform by 2020. Commercial launch of OTT segment on new platform is set for May 1, 2019.

In Moscow and regions as an Internet traffic supplier, we mainly use MTS 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

Principal suppliers

Our principal suppliers are: NVision Group, subsidiary of the Group and integrator; Huawei, Iskratel, Oracle—PSTN switching equipment and SBC; Ericsson, Harmonic, Summavision Teleste—equipment of Digital TV station; Irdeto, Verimatrix—CAS TV systems; Ericsson, Huawei—Hybrid TV platform; Cisco Systems, Huawei, D-Link—FTTB core and access; Juniper Networks, Huawei, ECI Telecom, Tellabs and Alcatel Lucent for a transport network equipment.

All of our equipment is supplied directly through authorized dealers

**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.

**Regulation of Telecommunications in the Russian Federation and Ukraine**

**Regulation in the Russian Federation**

In the Russian Federation, the federal government regulates telecommunications services. The principal law regulating telecommunications in the Russian Federation is the Federal Law on Communications, which 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 came into force on January 1, 2004. 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, which confers broad powers to 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, significantly modifies the system of government regulation of the provision of communications services in Russia. In particular, licenses to provide communications services in territories where frequency and numbering capacity are limited may be issued only on the basis of a tender, whereas according to the Government Decree

No. 480 dated May 24, 2014, licenses to provide communication services with frequency spectrum - only on auction basis. 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. These agencies form a complex, multi-tier system of regulation that resulted, in part, from the implementation of the Federal Law on Communications, as well as from the large-scale restructuring of the Russian government in March 2004 and subsequent restructuring in May 2008. See also "Item 3. Key Information—D. Risk Factors—Risks Relating to Our Countries of Operation—Political and Social Risks—Political and governmental instability 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 and ADSs."

*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 Technologies and Mass Media* is a federal executive body that supervises and controls certain areas of communications and information technologies, including:

- the issuance of licenses and permissions in the area of communications and information technologies;
- the registration of radio-electronic and high-frequency equipment;
- the assignment of radio frequencies based on decisions taken by the State Radio Frequencies Commission and registration of such assignments;
- the technical supervision of networks and network equipment throughout Russia;
- the monitoring of compliance by network operators with applicable regulations, terms of their licenses and terms of the use of frequencies allocated and assigned to them;
- the enforcement of equipment certification requirements;
- the examination of electromagnetic compatibility of equipment with existing civil radio-electronic equipment;
- the organization of tenders with respect to licenses in the sphere of communications;
- the control of activity in processing of personal data; and
- creation, building and maintenance of a unified automated information system Unified Register of Domain Names, Internet Website Page Locators and Network Addresses which Allow to Identify Internet Websites Containing Information Prohibited for Distribution in the Russian Federation.

*The Federal Communications Agency* is a federal executive body that implements governmental policy, manages state property and provides public services in the area of communications, including the allocation of numbering capacity and the certification of equipment for compliance with technical requirements.

*The State Radio Frequencies Commission* 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, develops long-term policy for frequency allocation in the Russian Federation and decides on 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 activity of natural monopolies, including monitoring their execution of certain obligatory contracts, and can issue mandatory orders as provided for in the Federal Law on Natural Monopolies. 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 Federal Service for the Oversight of Consumer Protection and Welfare is responsible for the enforcement of sanitary regulations, including some authority over the location of telecommunications equipment, and supervises the compliance of companies with the regulations relating to the protection of consumer rights. The Federal Service for State Registration, Cadastre and Cartography is responsible for registering certain telecommunications infrastructure that is considered real property in accordance with Government Decree No. 68 dated February 11, 2005. The Federal Service for Financial Monitoring (Rosfinmonitoring) is a federal executive body responsible for countering money laundering and terrorism financing. Mobile operators are to 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. Provided the licensee has conducted its activities in accordance with the applicable law and terms of the license, renewals may be obtained upon application to the Federal Service for Supervision of Communications, Information Technologies and Mass Media. Officials of the Federal Service for Supervision of Communications, Information Technologies and Mass Media have broad discretion with respect to both issuance and renewal procedures.

A company must complete a multi-stage process before the commercial launch of its communications network. A company must:

- receive a license from the Federal Service for Supervision of Communications, Information Technologies and Mass Media to provide communications services;
- obtain approval to use specific frequencies within the specified band from the State Radio Frequencies Commission if providing wireless telecommunications services; and
- obtain permission from the Federal Service for Supervision of Communications, Information Technologies and Mass Media for network operations. To receive this permission, a wireless telecommunications services provider must develop a frequency assignment and site plan, which is then reviewed and certified by the Federal Service for Supervision of Communications, Information Technologies and Mass Media for electromagnetic compatibility of the proposed cellular network with other radio equipment operating in the license area. The Federal Service for Supervision of Communications, Information Technologies and Mass Media has discretion to

modify this plan, if necessary, to ensure such compatibility. Effective 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. Additionally, the Ministry of Digital Development, Communications and Mass Media of the Russian Federation has declared that agreements on the provision of telecommunications services must be concluded and performed by the license holder.

If the terms of a license are not fulfilled or the service provider violates applicable legislation, the license may be suspended or terminated. Licenses may be suspended for various reasons, including:

- detection of violations which may cause damage to rights, interests, life or health of individuals or to interests of government administration including, but not limited to, presidential and government telecommunication networks, defense, security and protection of legal order in the Russian Federation;
- annulment of a frequency allocation if it results in the inability to render communications services;
- failure in a timely requirements of the licensing authority, which commits to eliminate detected violations, including provisions that had been granted under reprimand to suspend the license.

In addition, licenses may be terminated for various reasons by a court, including:

- failure to remedy in a timely manner a violation that led to the suspension of the license;
- provision of inaccurate information in documents on the basis of which a license was issued; and
- failure to fulfill obligations undertaken in the process of a tender or auction.

The license may also be terminated by the Federal Service for Supervision of Communications, Information Technologies and Mass Media in a number of cases, including liquidation of a license holder. A suspension or termination of a license may be appealed in court.

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.

The following one-time license fee is payable irrespective of the number of regions covered by the license: RUB 7,500 for services involving, among other things, the use of a frequency spectrum and the lease of communication channels. The license fee for a license received through a tender or auction is determined by the terms of such tender or auction.

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 universal service fund concept has been used in some developed countries and in Eastern Europe.

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. The list of licensing requirements was enacted by Government Decree No. 87 dated February 18, 2005, as amended. 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. We have either commenced service by the applicable deadline or received an extension of the applicable deadline for all of our licenses.

***Equipment Certification***

Government Decree No. 532 adopted on June 25, 2009, sets forth the types of communications equipment that is subject to mandatory certification. Communications equipment must be certified, or its compliance with the established requirements must be declared and proven in the interconnected communications network of the Russian Federation, which includes all fixed line and wireless networks open to the public. All our networks must be certified. The Federal Communications Agency issues certificates of compliance with technical requirements to equipment suppliers based on the Agency's internal review. In addition, a Presidential decree requires that licenses and equipment certifications should be obtained from the Federal Security Service to design, produce, sell, use or import encryption devices. Some commonly used digital cellular telephones are designed with encryption capabilities and must be certified by the Federal Security Service.

Further, certain high-frequency equipment, a list of which was approved by Government Decree No. 539 dated October 12, 2004 (as amended), manufactured or used in the Russian Federation, requires special permission from the Federal Service for Supervision of Communications, Information Technologies and Mass Media. Failure to receive such certification could result in the mandatory cessation of the use of such equipment. In accordance to Government Decree No. 1252 dated November 27, 2014, the equipment can be shared by operators according to their agreement and certificate of the Federal Service for Supervision of Communications, Information Technologies and Mass Media. In accordance with the Federal Law No. 204 dated June 23, 2016, the radio frequency spectrum can be shared by operators according to their agreement. In the case of shared-use of the radio frequency spectrum for the provision of telecommunications services each operator should have proper 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 provides that telecommunications tariffs may be regulated in cases provided for by legislation. 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) allow 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 by the Government Decree No. 941, dated September 4, 2015) 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, intra-zone and DLD calls.

In addition, the Federal Law on Natural Monopolies No. 147 dated August 17, 1995 establishes the legal basis for federal regulation of natural monopolies, including those in the communications market, and provides for governmental control over tariffs and certain activities of the natural monopolies. The Federal Law on Natural Monopolies outlines the 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 procurement of goods and services.

It should also be noted that our subsidiary Comstar-Regions was added to the Register of Natural Monopolies in 2009, but on November 24, 2015 it was excluded therefrom and on December 5, 2015, it merged into MTS.

In addition, companies which are found to have dominant position on 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.On January 5, 2016, the new version of the Federal law No. 135-FZ "On Protection of the Competition" came into force and the regulations in relation to the register of companies holding market share excess 35% were repealed. Nowadays, dominant position should be determined regarding each case without a register. 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, the FAS may be entitled to 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 and, therefore, is subject to the requirements of the Federal Law on Communications relating to operators occupying a substantial position in the public switched telephone networks including, *inter alia*, the following:

- MGTS must develop interconnect rules and procedures in accordance with the requirements set forth by the federal government;

- MGTS must ensure that interconnect agreements with operators who intend to interconnect to our networks are entered 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 Technologies and Mass Media issued if non-compliance with law 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 Federal Communications Agency.

The Federal Law on Communications and implementation rules adopted by Government Decrees No. 161 dated March 28, 2005, and No. 627 dated October 19, 2005, also provides for government regulation of interconnect tariffs established by operators occupying a substantial position. In addition, such operators, including MGTS, are required to develop standard interconnect contracts and publish them as a public offer for all operators who intend to use such interconnect services.

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."

***Calling Party Pays***

In March 2006, the Federal Law on Communications was amended to incorporate a "calling party pays" scheme effective as of July 1, 2006. Prior to the implementation of the "calling party pays" principle, subscribers of fixed line operators could initiate calls to mobile phone users free of charge. Under the current system, fixed line operators charge their subscribers for such calls and transfer a percentage of the charge to mobile operators terminating such calls. The percentage transferred to mobile operators is regulated by the Federal Service for Supervision of Communications, Information Technologies and Mass Media and is known as the settlement rate.

***Communications Services rules and Mobile Number Portability***

On December 15, 2014, Government Decree No. 1342 concerning fixed and mobile services rules was adopted. This act, *inter alia*, has changed rules and conditions of MNP process (retaining telephone number after switching from one mobile operator to another) of certain types of legal entities and state customers. The period of switching numbers for mentioned subscribers was decreased and the procedure was simplified.

Introduction of renewed procedure on MNP in respect of particular legal entities and state customers affects the mobile services market in Russia and leads to intensification of competition.

***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 (came into force in July, 2018) the telecommunications operators will have to store and to provide to the authorities upon request the information on the facts of 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 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 Communication to prevent the conclusion of the contract on the provision of services of mobile communications without proper identification of the subscriber (user) of communication services.

These amendments (came into force in June, 2018) have material effect on telecommunication operators since it was necessary to implement measures to organize the interaction with state resources for verification of information on subscribers, which subsequently led to changes in the relevant business processes.

**Regulation in Ukraine**

***Regulatory Authorities***

*Administration of State Service on Special Communications and Information Protection of Ukraine.* This body is responsible mainly for establishing and overseeing technical policies and standards in the sphere of telecommunications. Previously these functions were carried out by the State Communications Administration.

*The NCCIR.* The functions of the NCCIR were formerly carried out by the NCRC (National Commission for Communications Regulation of Ukraine). Established by a Decree of the President of Ukraine in August 2004, the NCRC was vested with the powers of the central regulatory body in the sphere of telecommunications on January 1, 2005 pursuant to the Telecommunications Law described below. It consisted of seven members and a chairperson. The NCRC commenced its activity in April 2005 when the chairperson and its members were appointed as required by the Telecommunications Law.

The NCRC has been responsible for issuing licenses for telecommunications services and use of radio frequencies commencing January 1, 2005, as well as various other responsibilities of the SCA from that date. According to the amendments to the Telecommunications Law introduced in July 2011, the NCRC was replaced in August 2011 with the NCCIR, which now consists of six members and a chairperson. The NCCIR is currently responsible for issuing licenses for telecommunications services and use of radio frequencies, and other functions of former NCRC.

*The State Center for Radio Frequencies of Ukraine (the "SCRF").* While licenses for radio frequencies for wireless communications are issued by the NCCIR, SCRF is the authority responsible for all technical issues related to the use of radio frequency resources and, in such proxy, is also involved in the issuance of radio frequency licenses. In particular, the SCRF determines frequency availability and technical aspects of frequency allocation, as well as provides the NCCIR with an expert opinion in relation to each application for radio frequency. The SCRF also monitors use of the frequencies and continued monitoring compliance with the license terms and carried out physical inspections of operators and providers of telecommunications services until the establishment of the State Inspection of Communications, as described below. The SCRF also independently issues individual permissions for the use of radio-electronic and radio-emitting equipment, its development,

import, sale and purchase. In 2018, SCRF started acting as MNP Administrator as MNP launching process started in Ukraine.

*The Antimonopoly Committee of Ukraine (the "AMC")* is charged with the administration of competition legislation and the protection and regulation of economic competition in Ukraine, including economic competition among industry participants in the telecommunications sector.

***Legislation***

The principal legislation regulating the telecommunications industry consists of the Law on Telecommunications dated November 18, 2003, (the "**Telecommunications Law**"), and the Radio Frequencies Law dated June 1, 2000 (the "**Radio Frequencies Law**").

The Telecommunications Law provides for, among other things, equal rights for private entrepreneurs and legal entities to offer telecommunications services, fair competition and freedom of pricing. The Telecommunications Law also sets forth the legal, economic and organizational framework for the operation of companies, associations and government bodies forming part of the telecommunications networks. The licensing of telecommunications services, the requirements for equipment certification and liability for violations of Ukrainian legislation on telecommunications are also determined by this legislation. The Telecommunications Law also governs the relations between the state and local governmental bodies, telecommunications operators and users of telecommunications services and radio frequencies.

The Telecommunications Law addresses various areas of telecommunications services in Ukraine, including numbering requirements, tariff and settlement regulations, interconnect, public telecommunications services, market access rules and licensing issuance and renewal. The Telecommunications Law also significantly expands the definition of the telecommunications services market, including in its scope Internet Protocol telecommunications, transmission of data and facsimile communications.

The Telecommunications Law also restructured the regulatory bodies governing the area of telecommunications. It provided for the creation of the NCRC, which, between January 1, 2005, and July 5, 2011, had been responsible for many of the functions formerly handled by the SCA. In August 2011, the NCRC was replaced with the NCCIR, which is authorized, *inter alia*, to issue regulations for telecommunications services, issue telecommunications licenses to operators and providers, issue frequency licenses, request information from operators, providers and authorities, impose administrative penalties and maintain the register of the operators and providers. The NCCIR is also authorized to conduct hearings and to resolve disputes among operators concerning the interconnect of telecommunications networks.

In July 2010, the Telecommunications Law was amended with provisions on mobile number portability and national roaming obligations. In April 2013 the NCCIR (formerly NCRC) adopted regulations which allow subscribers to retain their mobile telephone numbers when switching from one mobile telecommunications operator to another.

On August 25, 2011, the NCCIR enacted national roaming regulations. Accordingly, telecommunications operators were permitted to conclude agreements on national roaming and prescribed to provide this service as described in the regulations (*e.g.*, must inform users on roaming prices and maintain quality of service on the same level for own subscribers and subscribers of operators with whom roaming agreements are signed). Foreign investments in Ukrainian telecommunications operators are not limited; however, in order to provide telecommunications services in Ukraine an entity must be located on the territory of Ukraine and registered in accordance with Ukrainian legislation.

In 2018, the process of the MNP launching started, all necessary procedures were implemented by NCCIR and SCRF. NCCIR approved the decision "On Launching MNP in Ukraine." MNP is expected to be launched on May 5, 2019.

The Radio Frequencies Law sets forth comprehensive rules regarding the allocation, assignment, interrelation and use of radio frequencies, the licensing of the users of radio frequencies and other relevant issues.

***Licensing of Telecommunications Services and Radio Frequency Allocation***

Commencing January 1, 2005, the NCCIR (formerly NCRC) has assumed responsibility for issuing telecommunications licenses and frequency licenses pursuant to the Telecommunications Law and the 2004 amendments to the Radio Frequencies Law. Licenses are issued for the following types of telecommunications services:

- fixed-line telephone communications services (local, intercity, international);
- fixed-wireless telephone communications services (local, intercity, international);
- mobile telephone communications services; and
- technical maintenance and exploitation of telecommunications networks.

Starting from July 5, 2011, the leasing of electric communications channels no longer requires licensing.

Other telecommunications services do not require licenses.

An operator that is granted a telecommunications license may not commence the provision of wireless telecommunications services until it receives a frequency license. The issuance of a frequency license is, in turn, subject to the availability of radio frequencies in the respective regions of Ukraine. Frequency licenses are issued for specific bandwidths within certain frequency spectrums in specific regions. The GSM and UMTS spectrum is presently considered to be the most commercially attractive for telecommunications operators. It is currently deemed to be virtually impossible to obtain a license for GSM frequencies in major Ukrainian cities because most of the GSM radio frequencies in such cities are already licensed to the existing GSM operators, including us. UMTS radio frequencies are currently allocated for special users, in particular, the Ministry of Defense.

Under applicable legislation, licenses for telecommunications services may be issued and renewed for periods of not less than 5 years, with the actual period generally ranging from 10 to 15 years. Renewal of a license is made by an application submitted to the NCCIR at least four months prior to the expiration of the license term. NCCIR officials have broad discretion with respect to both the issuance and the renewal of licenses. The Telecommunications Law further provides that the NCCIR must grant licenses on a first come-first served basis within 30 days from submission of an application. If resources are limited or consumer interests so require, the NCCIR may adopt a decision to limit the number of licenses. In this event, the law requires that such decision is made public along with the rationale and that the licenses be allocated through a tender.

The Law "On the Licensing of Certain Types of activities" No. 222-VIII dated March 2, 2015 (the "**Licensing Law**") cancelled telecom activities' licensing from the January 1, 2018. This action created legal collision because NCCIR continues to perform all licensing processes on the basis Telecommunications Law, which was not changed in accordance with Licensing Law. From the NCCIR's point of the view, licensing of telecom services will be canceled only after Telecommunications Law is changed respectively. In 2018, two Licensing and Telecommunication Law were acting.

In accordance with the Radio Frequencies Law, the NCCIR issues a frequency license concurrently with the issuance of a telecommunications license for the type of services requiring use of radio

frequency resources. A telecommunications operator that has the respective telecommunications license may apply for licenses for additional radio frequency bands. Frequency licenses may not be issued for a period shorter than the term of the relevant telecommunications license.

Under applicable legislation, a public tender or an auction for a radio frequency license must be held by the NCCIR if demand for radio frequency resources exceeds available resources. Radio frequency licenses issued on the basis of a public tender or an auction for the same type of radio technology must include identical conditions regarding the radio frequency bands and development period. Telecommunications operators are allowed to apply to the NCCIR for redistribution of the radio frequency resources previously allocated to them.

Applicable legislation prohibits the transfer of a license by the licensee, including by means of assignment or pledge of a license as collateral, and agreements regarding the provision of telecommunications services must be executed and performed by the actual licensee.

Licenses generally contain a number of detailed conditions, including the date by which service must be commenced, terms of network deployment and territory coverage, the requirement to use only certified equipment, the technical standards which must be considered and the requirement to comply with all environmental regulations. Frequency licenses issued after January 1, 2005 also contain the date by which the radio frequency resources must be fully utilized.

Telecommunications operators' activities are subject to strict regulations, especially regarding electromagnetic compatibility; construction and technical maintenance of a telecommunications network must be carried out in accordance with specific regulations applicable in Ukraine. Telecommunications operators must submit periodic reports to the NCCIR on the amount and quality of services provided under the telecommunications license. We believe that we are in compliance with the applicable laws and regulations related to our Ukrainian licenses.

Some licenses also provide that services for persons entitled to certain social benefits must be provided at or below certain minimum thresholds established by Ukrainian legislation in effect at that time.

If the terms of a license are not fulfilled or the service provider violates legislation, the license may be suspended or terminated. Both telecommunications services licenses and radio frequency licenses may be terminated for various reasons, including:

- provision of inaccurate information in the application for a license;
- repeated refusal to allow the representatives of the NCCIR to make inspections;
- failure to remedy in a timely manner the circumstances which resulted in a violation of the license terms;
- repeated violation of the license terms;
- transfer or assignment of the license to a third party; and
- other grounds set forth by Ukrainian laws.

Radio frequency licenses may also be terminated for the following reasons:

- failure to commence using radio frequency resources within the time period specified in the license;
- termination of use of radio frequency resources specified in the license for more than one year;
- failure to use radio frequency resources to the full extent within the time period specified in the license; and

- failure to pay monthly fees for the use of allocated radio frequencies for six months or more.

Decisions of the NCCIR with respect to the termination of licenses may be appealed to a court.

MTS' Ukraine license to construct and maintain the telecommunication network and provide services using such network was due to expire on December 3, 2013. In October 2013, MTS Ukraine submitted an application to the NCCIR requesting the renewal of the license. On October 15, 2013, the NCCIR refused to renew the license and recommended that MTS Ukraine receive a new license to provide operations in the telecommunications sphere. On October 21, 2013, MTS Ukraine filed a lawsuit against the NCCIR with a demand to renew the license. On November 19, 2013, a court decision was issued in favour of MTS Ukraine. The decision obliged the NCCIR to renew the license. The NCCIR appealed against the court decision. On January 15, 2014, the court of appeal issued a judgement in which the court refused to sustain the NCCIR appeal. On January 28, 2014, the NCCIR renewed MTS Ukraine license until December, 2018. On January 27, 2014, the NCCIR filed an appeal against the court of appeals' order which was denied by the Court. The cassation procedure was started by Court of Cassation. According to decision of the Highest Administrative Court dated January 22, 2015, the satisfaction of claim dated November 19, 2013 in favor of MTS Ukraine was denied making the resolution of January 28, 2014 to prolong the license for MTS Ukraine illegitimate. In 2016, the case was sent to a new trial. The first instance Court (03/25/2016) and Appeal Court (05/31/2016) refused to satisfy MTS Ukraine demand to prolong the license for MTS Ukraine. On the basis of the resolution of the Superior Court of Ukraine dated July 11, 2016, cassation procedure was opened. Demands of the MTS Ukraine were rejected by Decision of the Superior Court of Ukraine dated October 10, 2018 and the license was canceled. VF Ukraine is acting on the basis of a new license, which is valid until 2030. At the same time MTS Ukraine bought new license for providing all available mobile services in 2G and 3G networks and NCCIR issued a license for MTS Ukraine on January 27, 2015, which is valid until 2030 (the basic acting licence).

In accordance with the terms of obtaining a license for 3G frequency, MTS Ukraine has signed conversion agreements with special users of radio frequency resource. Currently, VF Ukraine complies with all license requirements and makes all necessary payments under the license.

***4G/LTE***

Under the instruction of the President of Ukraine on the introduction of 4G network, the Cabinet of Ministers adopted a decree "On Approval of the Action Plan for Introduction of Mobile Communication of the Fourth Generation" in 2017, which established a tender process for 4G frequency in the second half of 2017, primarily requiring carrying out a research and analysis of the existing radio frequency resource. This research was assigned to foreign consultants with payment to be imposed on telecommunications operators, Analyses Mason LTD (London, UK). The research was completed and new legislation for 4G\LTE launch was approved in 2018. Two tenders were held in January (2600 MHz) and March (1800MHz) of 2018. As a result, VF Ukraine received two spectrum bands in the both diapasons, and in the end of April of 2018 we launched 4G/LTE services in Ukraine. Currently, VF Ukraine complies with all license requirements and had made all necessary payments under the licenses.

***Equipment Certification***

In order to install the vendor's or manufacturer's equipment intended for use within the telecommunication network of Ukraine the vendor or manufacturer should submit to the telecommunication network carrier the document confirming that the above-mentioned equipment meets the regulatory documents requirements being in force in Ukraine, has been included into the technical equipment register and can be used within the telecommunication network of Ukraine. According to the Telecommunications Law of Ukraine the technical equipment register is managed and

supported by the Administration of the State Service of Special Communication and Information Protection of Ukraine

The Radio Frequencies Law includes the provision according to which the users of radio frequency resources should obtain a permission to operate the radio-electronic and radio-emitting equipment (with certain exceptions for equipment which can be used on permission-free basis). In order to obtain the operation permission a company should apply to the Ukrainian Centre of Radio Frequencies. The Radio Frequencies Law also requires that the radio-electronic and radio-emitting equipment intended for use in Ukraine should be registered in a special list managed and supported by the National Commission for the State Regulation of Communications and Informatization by the producers and importers of such equipment.

***Competition***

The Telecommunications Law provides that one of the purposes of the licensing of telecommunications services is to encourage competition and de-monopolization in the telecommunications industry.

Ukrainian antimonopoly legislation prohibits a company operating in Ukraine from abusing its dominant position in its market to gain, *inter alia*, an unfair or anti-competitive advantage in the provision of its services or products. A legal entity is deemed to be in a dominant position if such entity has no competitor in the market or is not subject to substantial competition due to restricted access or entry barriers for other business entities. Further, Ukrainian antimonopoly legislation provides that a company shall be deemed dominant if its market share in the respective product market exceeds 35% unless such company proves that it faces significant competition in the respective product market. A telecommunications operators which are found by the AMC as having a dominant position in the markethave to use the rates for national and international interconnect, which are established by the NCCIR.

According to our estimates, Vodafone Ukraine had a 37% market share of the wireless communications market in Ukraine as of December 31, 2018.

Please see also "Item 3. Key Information—D. Risk Factors—Risks Relating to Our Business—A finding by the AMC that we have acted in contravention of antimonopoly legislation could have a material adverse effect on our business, financial condition and results of operations."

***Tariffs***

According to the Ukrainian laws, NCCIR regulates the following tariffs:

- maximum tariffs on public telecommunication services;
- tariffs on leasing of communication channels for operators with dominant market position;
- maximum tariffs on leasing channels of cable duct system; and
- calculation rates for services of crossing traffic to the telecommunication networks of telecommunications operators with substantial market advantage on the markets of certain telecommunication services.

Under the Law of Ukraine on Telecommunications the Cabinet of Ministers of Ukraine is not authorized to regulate prices for telecommunication services.

Although there are no additional regulations limiting level of maximum tariffs on wireless telecommunications services, if the Antimonopoly Committee believes competition laws are violated, it can assert that tariffs unfair and injurious to market competition. In such cases, the AMC may, *inter alia*, request the telecommunications operator whom AMC considers as one violating the laws to

remedy the situation, in particular, to amend its tariff scheme, and impose fines on the company for an violation.

Subject to the above, wireless operators are free to set tariffs at levels they consider appropriate.

***Interconnect Arrangements and Telephone Numbering Capacity***

In Ukraine, mobile operators are allocated numbering capacity by the NCCIR (National Commission for the State Regulation of Communications and Informatization). We believe that sufficient numbering capacity has been allocated to us in Ukraine for the development of our mobile network. We also believe that we have been allocated sufficient fixed line numbering capacity with respect to the cities in which we are developing our fixed line networks.

Interconnect activity is regulated by the NCCIR. Operators may provide offers for interconnect to the NCCIR, and the NCCIR is required to publish on an annual or regular basis a catalog of such offers. Operators with a dominant position on the market and operators having significant market power (SMP-operators) are obliged to submit interconnect offers to the NCCIR for each catalog.

Interconnect is made pursuant to interconnect agreements between network operators as prescribed by the regulatory authorities. Such agreements are required under the law to contain certain provisions. An operator with a dominant position, as well as SMP-operator, cannot refuse an offer to conclude an interconnect agreement with another operator, if the offeror has offered points of interconnect that were previously published by the NCCIR in the catalog of interconnect proposals.

The NCCIR is authorized to conduct hearings and to resolve disputes among operators concerning the interconnection of telecommunications networks. Decisions of the NCCIR are binding upon the parties in the dispute but a party to the dispute may appeal such a decision in court.

In May 2009, the AMC issued a finding that eight mobile operators, including MTS Ukraine and its closest competitors, have a dominant position in relation to the market for interconnecting to each of their respective networks. In February 2010, the NCRC established regulated interconnect fees for termination of calls on the networks of operators that have a dominant position. See "—Competition."

In October 2011, the NCCIR defined all of operators, including MTS Ukraine, that have operated in the Ukrainian market in the period from 2009 through 2010 as having significant market power for termination traffic on their fixed and mobile networks. Effective 1 January 2012, the NCCIR regulates the interconnection rates for all SMP fixed and mobile operators, including MTS Ukraine. The interconnection rates charged by long-distance operators are set up equal to rates charged by mobile operators.

The NCCIR regularly analyses the telecommunication market to determine operators with significant market power in this market (SMP-operators). In October 2017 and in February 2018 the NCCIR published the results of the latest market analysis according to which 177 fixed and all six mobile operators, including VF Ukraine (former MTS Ukraine), were defined as SMP-operators. On October 9, 2018 the NCCIR adopted a regulatory act which establishes new interconnect rates for termination traffic on the networks of SMP-operators, which are effective since January 1, 2019. As a result, the interconnect rates were decreased:

for long-distance and mobile operators from UAH 0.15 (RUB 0.376354) to UAH 0.12 (RUB 0.301083); and

for local operators from UAH 0.11 (RUB 0.275993) to UAH 0.09 (RUB 0.225812).

Please see also "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" for details of NCCIR' s plans to substantially lower interconnect rates for the termination of traffic.

**Licenses**

***Mobile Services***

The following table shows, as of April 18, 2019, information with respect to the license areas in which we and our subsidiaries and affiliates provide or expect to provide GSM services:

| | GSM 900 | | GSM 1800 | |
|---|---|---|---|---|
| License region | Licensee | Expiry date | Licensee | Expiry date |
| **Moscow License Area** | | | | |
| Moscow | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Moscow region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| **St. Petersburg License Area** | | | | |
| St. Petersburg | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Leningrad region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| **Russian Regional License Areas** | | | | |
| **European Russia** | | | | |
| Adygeya Republic | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Arkhangelsk region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Astrakhan region | MTS PJSC | December 11, 2023 | MTS PJSC | October 18, 2021 |
| Bashkortostan Republic | MTS PJSC | August 22, 2022 | MTS PJSC | August 22, 2022 |
| Belgorod region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Bryansk region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Chuvashia Republic | MTS PJSC | December 30, 2023 | MTS PJSC | December 30, 2023 |
| Chechen Republic | MTS PJSC | June 10, 2019 | MTS PJSC | April 28, 2021 |
| Dagestan Republic | MTS PJSC | December 30, 2023 | MTS PJSC | December 30, 2023 |
| Ivanovo region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Ingushetia Republic | MTS PJSC | December 30, 2023 | MTS PJSC | December 30, 2023 |
| Kabardino-Balkar Republic | MTS PJSC | June 10, 2019 | MTS PJSC | December 30, 2023 |
| Kaliningrad region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Kalmykia Republic | MTS PJSC | January 25, 2021 | MTS PJSC | December 30, 2023 |
| Kaluga region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Karachaevo-Cherkesia Republic | MTS PJSC | December 30, 2023 | MTS PJSC | December 30, 2023 |
| Karelia Republic | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Kirov region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Komi Republic | MTS PJSC | August 22, 2022 | MTS PJSC | August 22, 2022 |
| Kostroma region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Krasnodar region | MTS PJSC | May 30, 2022 | MTS PJSC | May 30, 2022 |
| Kursk region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Lipetsk region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Mari-El Republic | MTS PJSC | January 15, 2022 | MTS PJSC | January 15, 2022 |
| Mordovia Republic | MTS PJSC | December 30, 2023 | MTS PJSC | December 30, 2023 |
| Murmansk region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Nenetsk Autonomous region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Nizhny Novgorod region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Novgorod region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Orel region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Orenburg region | MTS PJSC | April 28,2023 | MTS PJSC | April 28, 2023 |
| Orenburg region | — | — | MTS PJSC | October 21, 2025 |
| Penza region | MTS PJSC | May 6, 2021 | — | — |

| License region | GSM 900 Licensee | GSM 900 Expiry date | GSM 1800 Licensee | GSM 1800 Expiry date |
|---|---|---|---|---|
| Penza region | MTS PJSC | September 2, 2022 | MTS PJSC | September 2, 2022 |
| Perm region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Perm region (excluding Komi-Permyak territory) | MTS PJSC | — | MTS PJSC | October 21, 2025 |
| Perm region (Komi-Permyak territory) | MTS PJSC | — | MTS PJSC | October 21, 2025 |
| Pskov region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Rostov region | MTS PJSC | July 1, 2020 | MTS PJSC | July 1, 2020 |
| Ryazan region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Samara region | MTS PJSC | December 30, 2022 | MTS PJSC | December 30, 2022 |
| Saratov region | MTS PJSC | July 11, 2022 | MTS PJSC | July 11, 2022 |
| Severnaya Osetia-Alania Republic | MTS PJSC | September 1, 2021 | MTS PJSC | September 1, 2021 |
| Severnaya Osetia-Alania Republic | MTS PJSC | — | MTS PJSC | October 21, 2025 |
| Smolensk region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Stavropol region | MTS PJSC | December 30, 2023 | MTS PJSC | December 30, 2023 |
| Tambov region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Tatarstan Republic | MTS PJSC | June 26, 2022 | MTS PJSC | June 26, 2022 |
| Tula region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Tver region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Udmurt Republic | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Ulyanovsk region | MTS PJSC | May 6, 2021 | MTS PJSC | December 30, 2023 |
| Vladimir region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Volgograd region | MTS PJSC | — | MTS PJSC | October 4, 2021 |
| Volgograd region | MTS PJSC | February 26, 2024 | MTS PJSC | — |
| Vologda region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Voronezh region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Yaroslavl region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| **Asian Russia** | | | | |
| Altai region | MTS PJSC | September 8, 2020 | MTS PJSC | September 8, 2020 |
| Altai Republic | MTS PJSC | July 19, 2021 | MTS PJSC | December 30, 2023 |
| Amur region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Amur region | — | — | MTS PJSC | October 21, 2025 |
| Buryatiya Republic | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Chelyabinsk region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Zabaykalsky region | CJSC Sibintertelecom | June 5, 2019 | CJSC Sibintertelecom | June 5, 2019 |
| Zabaykalsky region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Chukotsk Autonomous region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Jewish Autonomous region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Irkutsk region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Kamchatka region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Kemerovo region | MTS PJSC | December 30, 2023 | MTS PJSC | December 30, 2023 |
| Khabarovsk region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Khakassiya Republic | MTS PJSC | September 13, 2021 | MTS PJSC | September 13, 2021 |
| Khanty Mansiysk Autonomous region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Krasnoyarsk region | MTS PJSC | May 7, 2023 | MTS PJSC | May 7, 2023 |
| Kurgan region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Magadan region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |

| License region | GSM 900 Licensee | GSM 900 Expiry date | GSM 1800 Licensee | GSM 1800 Expiry date |
|---|---|---|---|---|
| Novosibirsk region | MTS PJSC | February 21, 2022 | MTS PJSC | February 21, 2022 |
| Omsk region | MTS PJSC | December 20, 2021 | MTS PJSC | December 20, 2021 |
| Primorsky region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Sakha Republic (Yakutia) | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Sakhalin region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Sverdlovsk region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Tomsk region | MTS PJSC | June 5, 2023 | MTS PJSC | June 5, 2023 |
| Tyumen region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| Tyva Republic | MTS PJSC | July 19, 2021 | MTS PJSC | December 30, 2023 |
| Yamalo-Nenetsk Autonomous region | MTS PJSC | April 28, 2023 | MTS PJSC | April 28, 2023 |
| **Ukraine** | | | | |
| Ukraine | PJSC Vodafone Ukraine | March 30, 2030 | PJSC Vodafone Ukraine | March 30, 2030 |
| **Armenia** | | | | |
| Armenia | CJSC MTS-Armenia | November 4, 2019 | CJSC MTS-Armenia | November 4, 2019 |
| **Belarus** | | | | |
| Belarus | LLC Mobile Telesystems | April 30, 2022 | LLC Mobile Telesystems | April 30, 2022 |

**IMT-2000/UMTS/CDMA**

| License Region | Licensee | Expiry date |
|---|---|---|
| Asian Russia | MTS PJSC | May 21, 2022 |
| European Russia, except Crimea Republic, Sevastopol | MTS PJSC | May 21, 2022 |
| Moscow License Area | MTS PJSC | May 21, 2022 |
| St. Petersburg License Area | MTS PJSC | May 21, 2022 |
| Moscow, Moscow region | MTS PJSC | April 28, 2023 |
| St. Petersburg, Leningrad region | MTS PJSC | May 21, 2022 |
| **European Russia** | | |
| Adygeya Republic | MTS PJSC | May 21, 2022 |
| Arkhangelsk region | MTS PJSC | May 21, 2022 |
| Bashkortostan Republic | JSC BCC | November 21, 2021 |
| Bashkortostan Republic | MTS PJSC | May 21, 2022 |
| Bryanks region | MTS PJSC | May 21, 2022 |
| Belgorod region | MTS PJSC | May 21, 2022 |
| Chelyabinsk region | MTS PJSC | May 21, 2022 |
| Chuvash republic | MTS PJSC | May 21, 2022 |
| Dagestan Republic | MTS PJSC | May 21, 2022 |
| Ingushetia Republic | MTS PJSC | May 21, 2022 |
| Irkutsk region | MTS PJSC | May 21, 2022 |
| Ivanovo region | MTS PJSC | May 21, 2022 |
| Kabardino-Balkarian Republic | MTS PJSC | May 21, 2022 |
| Kaliningrad region | MTS PJSC | May 21, 2022 |
| KarachaevoCherkesia Republic | MTS PJSC | May 21, 2022 |
| Karelia Republic | MTS PJSC | May 21, 2022 |
| Kaluga region | MTS PJSC | May 21, 2022 |
| Kemerevo region | MTS PJSC | May 21, 2022 |
| Kirov region | MTS PJSC | May 21, 2022 |

| License Region | Licensee | Expiry date |
|---|---|---|
| Komi Republic | MTS PJSC | May 21, 2022 |
| Kostroma region | MTS PJSC | May 21, 2022 |
| Krasnodar region | MTS PJSC | May 21, 2022 |
| Krasnoyarsk region | MTS PJSC | May 21, 2022 |
| Kurgan region | MTS PJSC | May 21, 2022 |
| Kursk region | MTS PJSC | May 21, 2022 |
| Lipetsk region | MTS PJSC | May 21, 2022 |
| Mordovis republic | MTS PJSC | May 21, 2022 |
| Murmansk region | MTS PJSC | May 21, 2022 |
| Nenetsk Autonomous region | MTS PJSC | May 21, 2022 |
| North Osetia republic | MTS PJSC | May 21, 2022 |
| Novgorod region | MTS PJSC | May 21, 2022 |
| Novosibirsk region | MTS PJSC | May 21, 2022 |
| Omsk region | MTS PJSC | May 21, 2022 |
| Orenburg region | MTS PJSC | May 21, 2022 |
| Orel region | MTS PJSC | May 21, 2022 |
| Penza region | MTS PJSC | May 21, 2022 |
| Perm region | MTS PJSC | May 21, 2022 |
| Perm region | MTS PJSC | April 28, 2023 |
| Pskov region | MTS PJSC | May 21, 2022 |
| Rostov region | MTS PJSC | May 21, 2022 |
| Ryazan region | MTS PJSC | May 21, 2022 |
| Samara region | MTS PJSC | May 21, 2022 |
| Saratov region | MTS PJSC | May 21, 2022 |
| Smolensk region | MTS PJSC | May 21, 2022 |
| Stavropol region | MTS PJSC | May 21, 2022 |
| Sverdlovsk region | MTS PJSC | May 21, 2022 |
| Tambov region | MTS PJSC | May 21, 2022 |
| Tomsk region | MTS PJSC | May 21, 2022 |
| Tula region | MTS PJSC | May 21, 2022 |
| Tver region | MTS PJSC | May 21, 2022 |
| Tyumen region | MTS PJSC | May 21, 2022 |
| Vladimir region | MTS PJSC | May 21, 2022 |
| Volgograd region | MTS PJSC | May 21, 2022 |
| Vologda region | MTS PJSC | May 21, 2022 |
| Voronezh region | MTS PJSC | May 21, 2022 |
| Vologda region | MTS PJSC | May 21, 2022 |
| Ulyanovsk region | MTS PJSC | May 21, 2022 |
| Yaroslavl region | MTS PJSC | May 21, 2022 |
| **Asian Russia** | | |
| Altai Republic | MTS PJSC | May 21, 2022 |
| Amur region | MTS PJSC | May 21, 2022 |
| Buryatiya Republic | MTS PJSC | May 21, 2022 |
| Chechen republic | MTS PJSC | May 21, 2022 |
| Chelyabinsk region | MTS PJSC | April 28, 2023 |
| Chukotsk Autonomous region | MTS PJSC | May 21, 2022 |
| Irkutsk Autonomous region | MTS PJSC | May 21, 2022 |
| Jewish Autonomous region | MTS PJSC | May 21, 2022 |
| Kalmykia republic | MTS PJSC | May 21, 2022 |
| Kamchatka region | MTS PJSC | May 21, 2022 |

| License Region | Licensee | Expiry date |
|---|---|---|
| Khabarovsk region | MTS PJSC | May 21, 2022 |
| Khakassia republic | MTS PJSC | May 21, 2022 |
| Khanty Mansiysk Autonomous region | MTS PJSC | May 23, 2023 |
| Khanty Mansiysk Autonomous region | MTS PJSC | April 28, 2023 |
| Kurgan region | MTS PJSC | April 28, 2023 |
| Magadan region | MTS PJSC | May 21, 2022 |
| Marij El republic | MTS PJSC | May 21, 2022 |
| Primorsky region | MTS PJSC | May 21, 2022 |
| Sakha Republic (Yakutia) | MTS PJSC | May 21, 2022 |
| Sakhalin region | MTS PJSC | May 21, 2022 |
| Sverdlovsk region | MTS PJSC | April 28, 2023 |
| Zabaykalsky region | MTS PJSC | May 21, 2022 |
| Tatarstan | MTS PJSC | May 21, 2022 |
| Tumen region | MTS PJSC | April 28, 2023 |
| Yamalo-Nenets Autonomous dostrict | MTS PJSC | May 21, 2022 |
| Tuva | MTS PJSC | May 21, 2022 |
| Tuva | MTS PJSC | July 19, 2021 |
| Udmurt republic | MTS PJSC | May 21, 2022 |
| **Armenia** | | |
| Armenia | CJSC MTS-Armenia | November 4, 2019 |
| **Belarus** | | |
| Belarus | LLC Mobile Telesystems | April 30, 2022 |
| **Ukraine** | | |
| Ukraine | PJSC Vodafone Ukraine | March 23, 2030 |

**LTE**

| License Region | Licensee | Expiry date |
|---|---|---|
| Asian Russia | MTS PJSC | July 25, 2022 |
| Asian Russia | MTS PJSC | May 21, 2022 |
| Asian Russia | MTS PJSC | April 15, 2026 |
| European Russia, except Crimea Republic, Sevastopol | MTS PJSC | May 21, 2022 |
| European Russia | MTS PJSC | July 25, 2022 |
| European Russia, except Crimea Republic, Sevastopol | MTS PJSC | April 15, 2026 |
| Moscow License Area | MTS PJSC | July 25, 2022 |
| Moscow License Area | MTS PJSC | May 21, 2022 |
| Moscow, Moscow region License Area | MTS PJSC | December 29, 2021 |
| St. Petersburg License Area | MTS PJSC | May 21, 2022 |
| St. Petersburg License Area | MTS PJSC | July 25, 2022 |
| St. Petersburg License Area | MTS PJSC | April 15, 2026 |
| Moscow, Moscow region | MTS PJSC | April 28, 2023 |
| St. Petersburg, Leningrad region | MTS PJSC | April 28, 2023 |
| **Asian Russia** | MTS PJSC | |
| Altai Republic | MTS PJSC | December 30, 2023 |

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| License Region | Licensee | Expiry date |
|---|---|---|
| Altai region | MTS PJSC | September 8, 2020 |
| Amur region | MTS PJSC | April 28, 2023 |
| Amur region | MTS PJSC | October 21, 2025 |
| Buryatiya Republic | MTS PJSC | April 28, 2023 |
| Chelyabinsk region | MTS PJSC | April 28, 2023 |
| Chukotsk Autonomous region | MTS PJSC | April 28, 2023 |
| Zabaykalsky region | MTS PJSC | April 28, 2023 |
| Irkutsk Autonomous region | MTS PJSC | April 28, 2023 |
| Jewish Autonomous region | MTS PJSC | April 28, 2023 |
| Kamchatka region | MTS PJSC | April 28, 2023 |
| Kemerovo region | MTS PJSC | December 30, 2023 |
| Khabarovsk region | MTS PJSC | April 28, 2023 |
| Khakassiya Republic | MTS PJSC | September 13, 2021 |
| Khanty Mansiysk Autonomous region | MTS PJSC | April 28, 2023 |
| Khanty Mansiysk Autonomous region | MTS PJSC | May 23, 2023 |
| Krasnoyarsk Territory | MTS PJSC | May 7, 2023 |
| Kurgan region | MTS PJSC | April 28, 2023 |
| Magadan region | MTS PJSC | April 28, 2023 |
| Novosibirsk region | MTS PJSC | February 21, 2022 |
| Omsk region | MTS PJSC | December 20, 2021 |
| Primorsky region | MTS PJSC | April 28, 2023 |
| Sakha Republic (Yakutia) | MTS PJSC | April 28, 2023 |
| Sakhalin region | MTS PJSC | April 28, 2023 |
| Sverdlovsk region | MTS PJSC | April 28, 2023 |
| Tomsk region | MTS PJSC | June 5, 2023 |
| Tyumen region | MTS PJSC | April 28, 2023 |
| Tyva Republic | MTS PJSC | December 30, 2023 |
| YamaloNenetsk Autonomous region | MTS PJSC | April 28, 2023 |
| **European Russia** | MTS PJSC | |
| Adygeya Republic | MTS PJSC | April 28, 2023 |
| Arkhangelsk region | MTS PJSC | April 28, 2023 |
| Bashkortostan Republic | MTS PJSC | August 22, 2022 |
| Bashkortostan Republic | JSC BCC | November 21, 2021 |
| Belgorod region | MTS PJSC | April 28, 2023 |
| Bryansk region | MTS PJSC | April 28, 2023 |
| Chechen Republic | MTS PJSC | April 28, 2021 |
| Chuvashia Republic | MTS PJSC | December 30, 2023 |
| Dagestan Republic | MTS PJSC | December 30, 2023 |
| Ingushetia Republic | MTS PJSC | December 30, 2023 |
| Ivanovo region | MTS PJSC | April 28, 2023 |
| KabardinoBalkar Republic | MTS PJSC | December 30, 2023 |
| Kaliningrad region | MTS PJSC | April 28, 2023 |
| Kaluga region | MTS PJSC | April 28, 2023 |
| Kalmykia Republic | MTS PJSC | December 30, 2023 |
| Karachaevo-Cherkesia Republic | MTS PJSC | December 30, 2023 |
| Karelia Republic | MTS PJSC | April 28, 2023 |
| Kirov region | MTS PJSC | April 28, 2023 |

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| License Region | Licensee | Expiry date |
|---|---|---|
| Komi Republic | MTS PJSC | August 22, 2022 |
| Kostroma region | MTS PJSC | April 28, 2023 |
| Krasnodar territory | MTS PJSC | May 30, 2022 |
| Kursk region | MTS PJSC | April 28, 2023 |
| Lipetsk region | MTS PJSC | April 28, 2023 |
| Mari El Republic | MTS PJSC | January 15, 2022 |
| Mordovia Republic | MTS PJSC | December 30, 2023 |
| Murmansk region | MTS PJSC | April 28, 2023 |
| Nenetsk Autonomous region | MTS PJSC | April 28, 2023 |
| Nizhny Novgorod region | MTS PJSC | April 28, 2023 |
| Novgorod region | MTS PJSC | April 28, 2023 |
| Orel region | MTS PJSC | April 28, 2023 |
| Orenburg region | MTS PJSC | April 28, 2023 |
| Orenburg region | MTS PJSC | October 21, 2025 |
| Penza region | MTS PJSC | September 2, 2022 |
| Perm region | MTS PJSC | April 28, 2023 |
| Perm region | MTS PJSC | October 21, 2025 |
| Pskov region | MTS PJSC | April 28, 2023 |
| Rostov region | MTS PJSC | July 1, 2020 |
| Ryazan region | MTS PJSC | April 28, 2023 |
| Samara region | MTS PJSC | December 30, 2022 |
| Saratov region | MTS PJSC | July 11, 2022 |
| Severnaya Osetia Alania Republic | MTS PJSC | September 1, 2021 |
| Severnaya Osetia Alania Republic | MTS PJSC | October 21, 2025 |
| Smolensk region | MTS PJSC | April 28, 2023 |
| Stavropol territory | MTS PJSC | December 30, 2023 |
| Tambov region | MTS PJSC | April 28, 2023 |
| Tatarstan Republic | MTS PJSC | June 26, 2022 |
| Tula region | MTS PJSC | April 28, 2023 |
| Tver region | MTS PJSC | April 28, 2023 |
| Udmurt Republic | MTS PJSC | April 28, 2023 |
| Ulyanovsk region | MTS PJSC | December 30, 2023 |
| Vladimir region | MTS PJSC | April 28, 2023 |
| Volgograd region | MTS PJSC | October 4, 2021 |
| Vologda region | MTS PJSC | April 28, 2023 |
| Voronezh region | MTS PJSC | April 28, 2023 |
| Yaroslavl region | MTS PJSC | April 28, 2023 |
| Zabaikalye region | MTS PJSC | April 28, 2023 |
| **Armenia** | | |
| Armenia | CJSC MTS-Armenia | November 4, 2019 |
| **Ukraine** | | |
| Ukraine | PJSC Vodafone Ukraine | March 23, 2030 |

**Mobile Virtual Network**

| License Region | Licensee | Expiry date |
|---|---|---|
| Moscow, Moscow region | MGTS PJSC | August 2, 2023 |
| Zabaykalsky region | CJSC Sibintertelecom | September 8, 2020 |

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 4 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.

***Fixed Line Services***

The following table shows, as of April 18, 2019, information with respect to our fixed line licenses:

| Licensee | License Region(s) | License number | Expiry Date |
|---|---|---|---|
| **International, national, intra-zonal and local communications services** | | | |
| MTS PJSC | Ryazan region | 138952 | December 23, 2020 |
| MTS PJSC | Sverdlovsk region | 140009 | March 15, 2021 |
| MTS PJSC | Tver region | 157431 | August 4, 2022 |
| CJSC City Telecom | Moscow | 155381 | October 24, 2022 |
| MTS PJSC | Saratov region | 149654 | March 15, 2022 |
| MTS PJSC | Penza region | 149649 | March 15, 2022 |
| MTS PJSC | Sverdlovsk region | 149645 | March 15, 2022 |
| MTS PJSC | Kirov region | 149653 | March 15, 2022 |
| MTS PJSC | Ivanovo region | 146068 | October 24, 2021 |
| MTS PJSC | Kurgan region | 170433 | February 17, 2024 |
| MTS PJSC | Bashkortostan Republic | 135028 | November 21, 2020 |
| MTS PJSC | Khanty Mansiysk Autonomous region | 160629 | December 1, 2020 |
| MTS PJSC | St. Petersburg, Leningrad region, Arkhangelsk region, Karelia Republic, Murmansk region, Novgorod region, Vologda region | 150052 | April 17, 2022 |
| MTS PJSC | Altai Republic | 148176 | February 17, 2022 |
| MTS PJSC | Khabarovsk Territory | 149647 | March 15, 2022 |
| MTS PJSC | Primorsky Territory | 149648 | March 15, 2022 |
| MTS PJSC | Kaliningrad region | 156888 | December 17, 2022 |
| MGTS PJSC | Moscow | 166444 | December 11, 2023 |
| MGTS PJSC | Moscow region | 169795 | April 17, 2024 |
| MTS PJSC | Zabaykalsky Territory | 127170 | May 6, 2020 |
| MGTS PJSC | Moscow, Moscow region | 127698 | July 28, 2020 |
| MTS PJSC | Orenburg region | 149644 | March 15, 2022 |
| MTS PJSC | Udmurt Republic | 149650 | March 15, 2022 |
| MTS PJSC | Russian Federation | 104893 | February 16, 2020 |
| MTS PJSC | Krasnoyarsk Territory (except for the Evenk Autonomous District) | 146087 | October 24, 2021 |
| MTS PJSC | Yaroslavl region | 146077 | October 24, 2021 |
| MTS PJSC | Astrakhan region | 146080 | October 24, 2021 |
| MTS PJSC | Rostov region | 146084 | October 24, 2021 |
| MTS PJSC | Krasnodar territory | 146067 | October 24, 2021 |
| MTS PJSC | Chelyabinsk region | 146074 | October 24, 2021 |
| MTS PJSC | Perm region | 146078 | October 24, 2021 |
| MTS PJSC | Kurgan region | 146086 | October 24, 2021 |
| MTS PJSC | Khanty Mansiysk Autonomous region | 164187 | October 24, 2021 |
| MTS PJSC | Tomsk region | 146094 | October 24, 2021 |

| Licensee | License Region(s) | License number | Expiry Date |
|---|---|---|---|
| MTS PJSC | Novosibirsk region | 146071 | October 24, 2021 |
| MTS PJSC | Altai territory | 146073 | October 24, 2021 |
| MTS PJSC | Samara region | 146090 | October 24, 2021 |
| MTS PJSC | Tatarstan Republic | 146082 | October 24, 2021 |
| MTS PJSC | Nizhny Novgorod region | 146075 | October 24, 2021 |
| MTS PJSC | Kirov region | 146089 | October 24, 2021 |
| MTS PJSC | Komi Republic | 146079 | October 24, 2021 |
| MTS PJSC | Sakha Republic (Yakutia) | 146076 | October 24, 2021 |
| MTS PJSC | Khabarovsk Territory | 146066 | October 24, 2021 |
| MTS PJSC | Amur region | 146092 | October 24, 2021 |
| MTS PJSC | Khakassiya Republic | 140458 | June 6, 2021 |
| MTS PJSC | Moscow region | 135027 | November 21, 2020 |
| MTS PJSC | Moscow | 137566 | February 16, 2021 |
| MTS PJSC | Moscow region | 150058 | March 30, 2022 |
| MTS PJSC | Kaluga region | 129946 | July 3, 2020 |
| MTS PJSC | Moscow | 150054 | March 30, 2022 |
| MTS PJSC | Moscow | 150064 | March 30, 2022 |
| MTS PJSC | Orel region | 155416 | October 3, 2022 |
| MGTS PJSC | Moscow | 161957 | July 10, 2023 |
| MTS PJSC | Rostov region | 1163838 | August 1, 2023 |
| MTS PJSC | Severnaya Osetia Alania Republic | 163839 | August 1, 2023 |
| MTS PJSC | Krasnodar territory | 163840 | August 1, 2023 |
| MTS PJSC | Volgograd region | 146085 | November 17, 2021 |
| MTS PJSC | Irkutsk region (except for the Ust-Ordyn Buryat Autonomus District) | 146069 | October 24, 2021 |
| MTS PJSC | Sakhalin region | 146081 | October 24, 2021 |
| MTS PJSC | Primorsky Territory | 146070 | October 24, 2021 |
| MTS PJSC | Ufa, Bashkortostan Republic | 131715 | September 8, 2020 |
| MTS PJSC | Bashkortostan Republic | 149173 | March 5, 2022 |
| MTS PJSC | Orenburg region | 146072 | October 24, 2021 |
| MTS PJSC | Kemerovo region | 168619 | December 26, 2023 |
| MTS PJSC | Astrakhan region | 169454 | January 19, 2024 |
| MTS PJSC | Kemerovo region | 169451 | January 19, 2024 |
| MTS PJSC | Arkhangelsk region | 169456 | January 19, 2024 |
| MTS PJSC | Vologda region | 169452 | January 19, 2024 |
| MTS PJSC | Kaliningrad region | 169457 | January 19, 2024 |
| MTS PJSC | Karelia Republic | 169448 | January 19, 2024 |
| MTS PJSC | Murmansk region | 169455 | January 19, 2024 |
| MTS PJSC | Novgorod region | 169453 | January 19, 2024 |
| MTS PJSC | St. Petersburg | 169450 | January 19, 2024 |
| MTS PJSC | Komi Republic | 169449 | January 19, 2024 |
| MTS PJSC | Volgograd region | 170831 | March 4, 20124 |
| MTS PJSC | Omsk region | 146088 | October 4, 2021 |
| MTS PJSC | Udmurt Republic | 146091 | October 4, 2021 |
| MTS PJSC | Omsk region | 145060 | October 4, 2021 |
| MTS PJSC | Nizhny Novgorod region | 123658 | October 1, 2019 |
| MTS PJSC | Ryazan region | 129950 | July 3, 2020 |
| MTS PJSC | Orel region, Voronezh region | 155415 | October 24, 2022 |

| Licensee | License Region(s) | License number | Expiry Date |
|---|---|---|---|
| MTS PJSC | Belgorod region, Bryansk region, Kursk region, Lipetsk region | 158901 | February 7, 2023 |
| MTS PJSC | Severnaya Osetia Alania Republic | 152518 | June 5, 2022 |
| MTS PJSC | Dagestan Republic | 152517 | June 5, 2022 |
| MTS PJSC | Tomsk region | 158904 | February 27, 2023 |
| MTS PJSC | Altai territory | 158899 | February 27, 2023 |
| MTS PJSC | Krasnoyarsk Territory | 158902 | February 27, 2023 |
| MTS PJSC | Novosibirsk region | 158896 | February 27, 2023 |
| MTS PJSC | Tver region | 158903 | February 27, 2023 |
| MTS PJSC | Smolensk region | 158900 | February 27, 2023 |
| MTS PJSC | Buryatiya Republic | 159602 | April 18, 2023 |
| MTS PJSC | Saratov region | 159597 | April 18, 2023 |
| MTS PJSC | Chuvashia Republic | 159599 | April 11, 2023 |
| MTS PJSC | Mari El Republic | 159600 | April 11, 2023 |
| MTS PJSC | Penza region | 150057 | March 14, 2022 |
| MTS PJSC | Tyumen region, YamaloNenetsk Autonomous region | 135962 | December 1, 2020 |
| MTS PJSC | Tyumen region, YamaloNenetsk Autonomous region | 154794 | August 31, 2022 |
| MTS PJSC | Ulyanovsk region | 149171 | February 28, 2022 |
| MTS PJSC | Tambov region | 149180 | February 28, 2022 |
| MTS PJSC | Perm region | 135956 | December 15, 2020 |
| MTS PJSC | Ulyanovsk region | 135960 | December 15, 2020 |
| MTS PJSC | Chelyabinsk region | 135967 | December 15, 2020 |
| MTS PJSC | Samara region | 123559 | December 31, 2019 |
| MTS PJSC | Leningrad region | 147354 | December 7, 2021 |
| MTS PJSC | Tatarstan Republic | 161954 | May 23, 2023 |
| | **Telematic Services** | | |
| MTS PJSC | Komi Republic, Perm region, Orenburg region, Orel region, Nizhny Novgorod region, Lipetsk region, Moscow, Kostroma region, Smolensk region, Kirov region, Kaluga region, Ivanovo region, Bryansk region, Belgorod region, Moscow region, Kursk region, Voronezh region, Tyumen region, Sverdlovsk region, Omsk region, Kurgan region, Khanty Mansiysk Autonomous region, Chelyabinsk region, Pskov region, Yaroslavl region, Ryazan region, Vladimir region, Udmurt Republic, Tver region, Tula region, Tambov region, YamaloNenetsk Autonomous region, Amur region | 137567 | February 15, 2021 |
| CJSC City Telecom | Moscow | 155382 | October 24, 2022 |
| MTS PJSC | Russian Federation except Moscow, Moscow region, Republic of Crimea, Sevastopol | 142346 | April 15, 2026 |
| MTS PJSC | Bashkortostan Republic | 140459 | June 21, 2021 |
| MTS PJSC | Krasnoyarsk Territory | 161221 | May 7, 2023 |
| MGTS PJSC | Moscow, Moscow region | 145447 | December 11, 2021 |

| Licensee | License Region(s) | License number | Expiry Date |
|---|---|---|---|
| Stream LLC | Russian Federation | 145493 | September 22, 2021 |
| MTS PJSC | Tyva Republic | 128521 | July 28, 2020 |
| MTS PJSC | Krasnodar territory | 129951 | July 15, 2020 |
| MTS PJSC | Chuvashia Republic, Mordovia Republic | 131717 | September 14, 2020 |
| MTS PJSC | Dagestan Republic, Ingushetia Republic, KabardinoBalkar Republic, KarachaevoCherkesia Republic, Severnaya Osetia Alania Republic | 131721 | September 14, 2020 |
| CJSC Sibintertelecom | Zabaykalsky Territory | 132674 | September 14, 2020 |
| MTS PJSC | Rostov region | 134507 | October 26, 2020 |
| MTS PJSC | Khabarovsk Territory | 127169 | June 17, 2020 |
| MTS PJSC | Novosibirsk region | 138258 | April 13, 2021 |
| MTS PJSC | Khakassiya Republic | 128525 | June 17, 2020 |
| MTS PJSC | Tomsk region | 128519 | June 17, 2020 |
| MTS PJSC | Sakha Republic (Yakutia) | 128518 | July 15, 2020 |
| MTS PJSC | Tatarstan Republic | 129944 | July 15, 2020 |
| MTS PJSC | St. Petersburg, Leningrad region, Arkhangelsk region, Kaliningrad region, Karelia Republic, Murmansk region, Nenetsk Autonomous region, Novgorod region, Vologda region | 145056 | October 4, 2021 |
| MTS PJSC | Altai territory | 147352 | December 1, 2021 |
| MTS PJSC | Altai Republic | 152081 | May 22, 2022 |
| MTS PJSC | Penza region | 125651 | April 1, 2020 |
| MTS PJSC | Chukotsk Autonomous region, Jewish Autonomous region, Irkutsk region, Koryak District of the Kamchatka Territory | 130984 | August 13, 2020 |
| MTS PJSC | Mari El Republic | 131716 | September 14, 2020 |
| MTS PJSC | Volgograd region | 127684 | May 30, 2020 |
| MTS PJSC | Primorsky Territory | 135961 | December 21, 2020 |
| MTS PJSC | Buryatiya Republic, Kamchatka region (excluding the excluding the Koryak Autonomous Area), Magadan region, Sakhalin region | 128536 | June 17, 2020 |
| MTS PJSC | Zabaykalsky Territory | 118159 | June 5, 2019 |
| MTS PJSC | Stavropol territory | 127678 | May 26, 2020 |
| MTS PJSC | Samara region | 127680 | May 26, 2020 |
| MTS PJSC | Saratov region | 127688 | May 31, 2020 |
| MTS PJSC | Ulyanovsk region | 127681 | May 31, 2020 |
| MTS PJSC | Republic of Khakassia | 128530 | May 31, 2020 |
| MTS PJSC | Astrakhan region | 129949 | July 15, 2020 |
| MTS PJSC | Adygeya Republic | 129947 | July 15, 2020 |
| MTS PJSC | Kalmykia Republic | 129957 | July 28, 2020 |
| MTS PJSC | Chechen Republic | 156889 | December 6, 2022 |
| MTS PJSC | Russian Federation | 101246 | July 25, 2022 |
| CJSC Teleservice | Voronezh region | 135894 | November 21, 2020 |
| | **Leased Communications Circuits** | | |
| CJSC City Telecom | Moscow | 155379 | October 24, 2022 |
| MTS PJSC | Jewish Autonomous region | 124558 | November 14, 2019 |

| Licensee | License Region(s) | License number | Expiry Date |
|---|---|---|---|
| MTS PJSC | Yamalo-Nenetsk Autonomous region, Tyumen region, Sverdlovsk region, Kurgan region, Khanty Mansiysk Autonomous region, Chelyabinsk region, Amur region, Udmurt Republic, Tambov region, Perm region, Orenburg region | 138262 | April 13, 2021 |
| MTS PJSC | Russian Federation, except Crimea Republic, Sevastopol | 1167992 | December 29, 2021 |
| MTS PJSC | Tatarstan Republic | 161218 | May 7, 2023 |
| MTS PJSC | Kalmykia Republic, Severnaya Osetia Alania Republic | 161219 | May 7, 2023 |
| MTS PJSC | Krasnoyarsk Territory | 161220 | May 7, 2023 |
| MTS PJSC | Bashkortostan Republic | 161223 | May 7, 2023 |
| MTS PJSC | Kemerovo region, Tomsk region | 161214 | May 7, 2023 |
| MTS PJSC | Tyva Republic | 128529 | July 28, 2020 |
| MTS PJSC | Chuvashia Republic | 129943 | July 28, 2020 |
| MTS PJSC | Adygeya Republic, Krasnodar territory | 129948 | July 15, 2020 |
| MTS PJSC | Kaluga region, Pskov region, Ryazan region, Smolensk region, Tula region, Vladimir region | 134506 | October 7, 2020 |
| MTS PJSC | Ivanovo region, Kirov region, Nizhny Novgorod region, Yaroslavl region | 134509 | October 13, 2020 |
| MTS PJSC | Mordovia Republic | 135965 | December 23, 2020 |
| MTS PJSC | Altai territory, Altai Republic, Novosibirsk region | 128528 | July 28, 2020 |
| MTS PJSC | Khakassiya Republic | 128533 | June 17, 2020 |
| MTS PJSC | Kaliningrad region | 149147 | March 1, 2022 |
| MTS PJSC | St. Petersburg, Leningrad region, Arkhangelsk region, Karelia Republic, Murmansk region, Nenetsk Autonomous region, Novgorod region, Vologda region | 149174 | March 1, 2022 |
| MTS PJSC | Omsk region | 147357 | December 27, 2021 |
| MTS PJSC | Chukotsk Autonomous region | 119985 | August 6, 2019 |
| MTS PJSC | Belgorod region, Bryansk region, Kursk region, Lipetsk region, Orel region, Voronezh region | 119295 | July 2, 2019 |
| MTS PJSC | Rostov region, Rostov region | 166424 | October 2, 2023 |
| MTS PJSC | Mari El Republic | 134511 | October 5, 2020 |
| MTS PJSC | Khabarovsk Territory, Sakha Republic (Yakutia), Zabaykalsky Territory (excluding the Aginski Buryatski Autonomous District) | 135026 | November 21, 2020 |
| MTS PJSC | Magadan region | 152080 | May 21, 2022 |
| MTS PJSC | Irkutsk region | 152082 | May 21, 2022 |
| MTS PJSC | Kamchatka region, Koryakski Autonomous region | 152084 | May 21, 2022 |
| MTS PJSC | Sakhalin region | 130986 | August 25, 2020 |
| MTS PJSC | Buryatiya Republic | 130983 | August 25, 2020 |
| MTS PJSC | Primorsky Territory | 127171 | May 10, 2020 |

| Licensee | License Region(s) | License number | Expiry Date |
|---|---|---|---|
| MTS PJSC | Moscow, Moscow region, Komi Republic, Kostroma region, Tver region | 166958 | November 24, 2023 |
| MTS PJSC | Aginski Buryatski Autonomous District of the Penza region | 135963 | December 1, 2020 |
| MTS PJSC | Aginski Buryatski Autonomous District | 135959 | December 1, 2020 |
| CJSC Sibintertelecom | Zabaykalsky Territory | 119279 | June 5, 2019 |
| MTS PJSC | Samara region, Saratov region, Ulyanovsk region | 127686 | May 31, 2020 |
| MTS PJSC | Astrakhan region, Stavropol territory | 127683 | May 31, 2020 |
| MTS PJSC | Dagestan Republic | 152083 | May 21, 2022 |
| MTS PJSC | Ingushetia Republic, KabardinoBalkar Republic, KarachaevoCherkesia Republic, Volgograd region | 159601 | April 18, 2023 |
| MGTS PJSC | Moscow, Moscow region | 166443 | December 11, 2023 |
| Sputnikovoe TV | Russian Federation | 165243 | August 2, 2023 |
| | **Data Transmission Services** | | |
| CJSC City Telecom | Moscow | 155380 | October 24, 2022 |
| MTS PJSC | Russian Federation except Moscow, Moscow region, Republic of Crimea, Sevastopol | 142344 | April 15, 2026 |
| MGTS PJSC | Moscow | 166445 | December 11, 2023 |
| MTS PJSC | Krasnoyarsk Territory | 161217 | May 7, 2023 |
| MGTS PJSC | Moscow region | 169794 | April 17, 2024 |
| MTS PJSC | Tyva Republic | 128517 | July 28, 2020 |
| MTS PJSC | Kalmykia Republic | 129942 | July 28, 2020 |
| MTS PJSC | Krasnodar territory | 129952 | July 15, 2020 |
| MTS PJSC | Chuvashia Republic, Mordovia Republic | 131718 | September 14, 2020 |
| MTS PJSC | Dagestan Republic, Ingushetia Republic, KabardinoBalkar Republic, KarachaevoCherkesia Republic, Severnaya Osetia Alania Republic | 131719 | September 14, 2020 |
| CJSC Sibintertelecom | Zabaykalsky Territory | 132676 | September 14, 2020 |
| MTS PJSC | Rostov region | 138261 | April 3, 2021 |
| MTS PJSC | Bashkortostan Republic | 129955 | June 30, 2020 |
| MTS PJSC | Khabarovsk Territory | 127172 | May 31, 2020 |
| MTS PJSC | Altai Republic | 128534 | July 15, 2020 |
| MTS PJSC | Novosibirsk region | 128526 | July 15, 2020 |
| MTS PJSC | Khakassiya Republic | 128522 | June 17, 2020 |
| MTS PJSC | Tomsk region | 128535 | June 17, 2020 |
| MTS PJSC | Novosibirsk region | 128527 | June 17, 2020 |
| MTS PJSC | Tatarstan Republic | 129953 | July 15, 2020 |
| MTS PJSC | Perm region, Chelyabinsk region, Khanty Mansiysk Autonomous region, Kurgan region, Omsk region, Sverdlovsk region, Tyumen region, YamaloNenetsk Autonomous region | 150060 | April 17, 2022 |
| MTS PJSC | Orenburg region | 150055 | April 17, 2022 |
| MTS PJSC | Kirov region, Nizhny Novgorod region, Udmurt Republic | 150063 | April 17, 2022 |
| MTS PJSC | Moscow, Moscow region | 150056 | April 17, 2022 |

| Licensee | License Region(s) | License number | Expiry Date |
|---|---|---|---|
| MTS PJSC | Amur region | 150053 | April 17, 2022 |
| MTS PJSC | Belgorod region, Bryansk region, Kursk region, Lipetsk region, Orel region, Voronezh region | 150062 | April 17, 2022 |
| MTS PJSC | Ivanovo region, Kaluga region, Kostroma region, Ryazan region, Smolensk region, Tambov region, Tula region, Tver region, Vladimir region, Yaroslavl region | 150059 | April 17, 2022 |
| MTS PJSC | St. Petersburg, Leningrad region, Arkhangelsk region, Kaliningrad region, Karelia Republic, Komi Republic, Murmansk region, Nenetsk Autonomous region, Novgorod region, Pskov region, Vologda region | 150054 | April 17, 2022 |
| MTS PJSC | Penza region | 125652 | April 1, 2020 |
| MTS PJSC | Chukotsk Autonomous region, Jewish Autonomous region, Irkutsk region, Koryak Autonomous Area of the Kamchatka region | 130982 | August 13, 2020 |
| MTS PJSC | Zabaykalsky Territory | 118158 | June 5, 2019 |
| MTS PJSC | Mari El Republic | 131720 | September 14, 2020 |
| MTS PJSC | Altai territory | 166425 | October 31, 2023 |
| MTS PJSC | Volgograd region | 127682 | June 30, 2020 |
| MTS PJSC | Buryatiya Republic, Kamchatka region (excluding the Koryak Autonomous Area), Magadan region, Sakhalin region | 128520 | June 17, 2020 |
| MTS PJSC | Primorsky Territory | 135957 | December 21, 2020 |
| MTS PJSC | Stavropol territory | 127685 | May 26, 2020 |
| MTS PJSC | Samara region | 127689 | May 26, 2020 |
| MTS PJSC | Kemerovo region | 128523 | May 31, 2020 |
| MTS PJSC | Saratov region | 127687 | May 31, 2020 |
| MTS PJSC | Ulyanovsk region | 127679 | May 31, 2020 |
| MTS PJSC | Astrakhan region | 129956 | July 15, 2020 |
| MTS PJSC | Adygeya Republic | 129945 | July 15, 2020 |
| MTS PJSC | Chechen Republic | 156887 | December 6, 2022 |
| MTS PJSC | Russian Federation | 101248 | July 25, 2022 |
| CJSC Teleservise | Voronezh region | 135893 | December 21, 2020 |
| | **Data Transmission Services for Voice** | | |
| CJSC City Telecom | Moscow | 122706 | December 18, 2019 |
| MTS PJSC | Russian Federation except Moscow, Moscow region, Crimea Republic, Sevastopol | 142345 | April 15, 2026 |
| MTS PJSC | Bashkortostan Republic | 138260 | April 11, 2021 |
| MTS PJSC | Arkhangelsk region | 170427 | February 17, 2024 |
| MTS PJSC | Krasnoyarsk Territory | 170428 | February 17, 2024 |
| MTS PJSC | Novosibirsk region | 170431 | February 17, 2024 |
| MTS PJSC | Leningrad region | 170435 | February 17, 2024 |
| MTS PJSC | Nizhny Novgorod region | 170426 | February 17, 2024 |
| MTS PJSC | Omsk region | 170430 | February 17, 2024 |
| MTS PJSC | Smolensk region | 170434 | February 17, 2024 |
| MTS PJSC | Novgorod region | 170429 | February 17, 2024 |

| Licensee | License Region(s) | License number | Expiry Date |
|---|---|---|---|
| MTS PJSC | Tula region | 170432 | February 17, 2024 |
| MTS PJSC | Volgograd region | 170436 | February 17, 2024 |
| MTS PJSC | Kemerovo region | 170425 | February 17, 2024 |
| MTS PJSC | Yaroslavl region | 131138 | June 4, 2020 |
| MTS PJSC | Mordovia Republic | 149158 | March 15, 2022 |
| MTS PJSC | Saratov region | 149165 | March 15, 2022 |
| MTS PJSC | Tomsk region | 149150 | March 15, 2022 |
| MTS PJSC | Mari El Republic | 149148 | March 15, 2022 |
| MTS PJSC | Amur region | 149178 | March 15, 2022 |
| MTS PJSC | Altai territory | 149161 | March 15, 2022 |
| MTS PJSC | Buryatiya Republic | 149156 | March 15, 2022 |
| MTS PJSC | Kalmykia Republic | 149162 | March 15, 2022 |
| MTS PJSC | KarachaevoCherkesia Republic | 149159 | March 15, 2022 |
| MTS PJSC | Pskov region | 149177 | March 15, 2022 |
| MTS PJSC | Kamchatka region | 149181 | March 15, 2022 |
| MTS PJSC | Komi Republic | 149151 | March 15, 2022 |
| MTS PJSC | Murmansk region | 149153 | March 15, 2022 |
| MTS PJSC | Kostroma region | 149175 | March 15, 2022 |
| MTS PJSC | Altai Republic | 149176 | March 15, 2022 |
| MTS PJSC | Vologda region | 149187 | March 15, 2022 |
| MTS PJSC | Dagestan Republic | 149179 | March 15, 2022 |
| MTS PJSC | Orenburg region | 149182 | March 15, 2022 |
| MTS PJSC | Sakha Republic (Yakutia) | 149183 | March 15, 2022 |
| MTS PJSC | Stavropol territory | 149154 | March 15, 2022 |
| MTS PJSC | Tyva Republic | 149172 | March 15, 2022 |
| MTS PJSC | Chechen Republic | 149157 | March 15, 2022 |
| MTS PJSC | Zabaykalsky Territory | 149185 | March 15, 2022 |
| MTS PJSC | Kirov region | 149152 | March 15, 2022 |
| MTS PJSC | Khakassiya Republic | 149184 | March 15, 2022 |
| MTS PJSC | KabardinoBalkar Republic | 149163 | March 15, 2022 |
| MTS PJSC | Ulyanovsk region | 149168 | March 15, 2022 |
| MTS PJSC | Adygeya Republic | 149164 | March 15, 2022 |
| MTS PJSC | Ingushetia Republic | 149160 | March 15, 2022 |
| MTS PJSC | Kaliningrad region | 149146 | March 15, 2022 |
| MTS PJSC | Karelia Republic | 149167 | March 15, 2022 |
| MTS PJSC | Penza region | 149155 | March 15, 2022 |
| MTS PJSC | Severnaya Osetia Alania Republic | 149149 | March 15, 2022 |
| MTS PJSC | Khabarovsk Territory | 149170 | March 15, 2022 |
| MTS PJSC | Chuvashia Republic | 149186 | March 15, 2022 |
| MTS PJSC | Khanty Mansiysk Autonomous region, Sverdlovsk region | 159595 | March 25, 2023 |
| MTS PJSC | Nenetsk Autonomous region | 159593 | March 25, 2023 |
| MTS PJSC | Tatarstan Republic | 159598 | March 25, 2023 |
| MTS PJSC | Ryazan region, Vladimir region | 159594 | March 25, 2023 |
| MTS PJSC | Chukotsk Autonomous region, Jewish Autonomous region | 159596 | March 25, 2023 |
| MGTS PJSC | Moscow | 135506 | February 16, 2021 |
| MTS PJSC | Magadan region | 149188 | March 15, 2022 |
| MTS PJSC | Chelyabinsk region | 149166 | March 15, 2022 |

| Licensee | License Region(s) | License number | Expiry Date |
|---|---|---|---|
| MTS PJSC | Kurgan region | 149169 | March 15, 2022 |
| MTS PJSC | Moscow | 150061 | March 30, 2022 |
| MTS PJSC | Kaluga region | 134512 | October 26, 2020 |
| MTS PJSC | Moscow region | 134508 | October 26, 2020 |
| MTS PJSC | Ivanovo region | 134510 | October 31, 2020 |
| MTS PJSC | Rostov region | 137565 | February 16, 2021 |
| MTS PJSC | Irkutsk region, Primorsky Territory, Sakhalin region | 135029 | December 12, 2020 |
| MTS PJSC | Belgorod region, Bryansk region, Kursk region, Lipetsk region, Orel region, Voronezh region | 130985 | July 28, 2020 |
| MGTS PJSC | Moscow region | 146656 | January 26, 2022 |
| MTS PJSC | Astrakhan region | 122731 | December 18, 2019 |
| MTS PJSC | Krasnodar territory | 153738 | August 31, 2022 |
| MTS PJSC | Perm region | 158898 | February 27, 2023 |
| MTS PJSC | Russian Federation | 101245 | July 25, 2022 |
| MTS PJSC | Tambov region | 122730 | December 18, 2019 |
| MTS PJSC | Tyumen region, YamaloNenetsk Autonomous region | 135966 | December 1, 2020 |
| MTS PJSC | St. Petersburg | 124994 | January 28, 2020 |
| MTS PJSC | Udmurt Republic | 158897 | February 27, 2023 |
| MTS PJSC | Samara region | 123560 | December 31, 2019 |
| MTS PJSC | Tver region | 122267 | November 24, 2019 |
| | **Mobile Radio Services** | | |
| MTS PJSC | Orenburg region | 145058 | October 2, 2021 |
| MTS PJSC | YamaloNenetsk Autonomous region | 135964 | December 15, 2020 |
| MTS PJSC | Khanty Mansiysk Autonomous region | 138956 | December 15, 2020 |
| MGTS PJSC | Moscow, Moscow Region | 154857 | May 16, 2022 |
| | **Telecommunications Services for Cablecasting** | | |
| MTS PJSC | Russian Federation | 122268 | November 24, 2019 |
| MGTS PJSC | Moscow | 137356 | January 27, 2021 |
| MGTS PJSC | Moscow region | 161531 | June 18, 2023 |
| OJSC Teleservice | Voronezh region | 138177 | March 15, 2021 |

| Licensee | License Region(s) | License number | Expiry Date |
|---|---|---|---|
| **Telecommunications Services for Broadcasting** | | | |
| Sputnikovoe TV | the Adygeya Republic, the Altai Republic, the Bashkortostan Republic, the Buryatiya Republic, the Dagestan Republic, the Ingushetia Republic, the KabardinoBalkar Republic, the Kalmykia Republic, the KarachaevoCherkesia Republic, the Karelia Republic, the Komi Republic, the Mari El Republic, the Mordovia Republic, the Sakha Republic (Yakutia), the Severnaya Osetia Alania Republic, the Tatarstan Republic, the Tuva Republic, the Udmurt Republic, the Khakassia Republic, the Chechen Republic, the Chuvashia Republic, the Altai region, the Zabaykalsky Territory, the Krasnodar region, the Krasnoyarsk region, the Perm region, the Primorsky Territory, the Stavropol Territory, the Khabarovsk Territory, the Amur region, the Arkhangelsk region, the Astrakhan region, the Belgorod region, the Bryansk region, the Vladimir region, the Volgograd region, the Vologda region, the Voronezh region, the Ivanovo region, the Irkutsk region, the Kaliningrad region, the Kaluga region, the Kemerovo region, the Kirov region, the Kostroma region, the Kurgan region, the Kursk region, the Leningrad region, the Lipetsk region, the Moscow region, the Nizhny Novgorod region, the Novgorod region, the Novosibirsk region, the Omsk region, the Orenburg region, the Orel region, the Penza region, the Pskov region, the Rostov region, the Ryazan region, the Samara region, the Saratov region, the Sakhalin region, the Sverdlovsk region, the Smolensk region, the Tambov region, the Tver region, the Tomsk region, the Tula region, the Tyumen region, the Ulyanovsk region, the Chelyabinsk region, the Yaroslavl region, Moscow, St Petersburg, Sevastopol, the Jewish Autonomous region, the Khanty Mansiysk Autonomous region, the YamaloNenetsk Autonomous region | 123687 | October 1, 2019 |
| **Cable Radio (communication services for the purpose of wire broadcasting)** | | | |
| MTS PJSC | Chelyabinsk region | 137711 | November 20, 2020 |
| MTS PJSC | Kirov region | 149715 | November 16, 2021 |
| MTS PJSC | Krasnodar region | 169190 | October 4, 2023 |
| MTS PJSC | Nizhny Novgorod region | 153995 | October 1, 2019 |

| Licensee | License Region(s) | License number | Expiry Date |
|---|---|---|---|
| MTS PJSC | Novosibirsk region | 171678 | January 29, 2024 |
| MTS PJSC | Penza region | 159702 | October 31, 2022 |
| MTS PJSC | Perm region | 129415 | April 22, 2020 |
| MTS PJSC | Rostov region | 152165 | February 8, 2022 |
| MTS PJSC | Ryazan region | 162597 | February 19, 2023 |
| MTS PJSC | Saratov region | 168309 | September 3, 2023 |
| MTS PJSC | Sverdlovsk region | 138953 | May 23, 2019 |
| MTS PJSC | Volgograd region | 156543 | July 5, 2022 |
| MTS PJSC | Vologda region | 172369 | February 26, 2024 |

All licenses with expiry date before the date of 20F issuance were renewed

## 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, 2018.

| Subsidiary | Accounting Method | Ownership Interest | Place of Incorporation/ Organization |
|---|---|---|---|
| RTC | Consolidated | 100.0% | Russia |
| Vodafone Ukraine | Consolidated | 100.0% | Ukraine |
| MTS Turkmenistan | Consolidated | 100.0% | Turkmenistan |
| Sibintertelecom | Consolidated | 100.0% | Russia |
| NVision Group | Consolidated | 100.0% | Russia |
| Sitronics Telecom Solutions | Consolidated | 100.0% | Russia |
| NVision Czech Republic | Consolidated | 100.0% | Czech Republic |
| Sputnikovoe TV | Consolidated | 100.0% | Russia |
| Stream LLC | Consolidated | 100.0% | Russia |
| Dega Retail Holding Limited | Consolidated | 100.0% | British Virgin Islands |
| Stream Digital LLC[1] | Consolidated | 100.0% | Russia |
| MTS Energo | Consolidated | 100.0% | Russia |
| Praliss Enterprises Limited | Consolidated | 100.0% | Cyprus |
| LLC "MTDZK" (Ticketland) | Consolidated | 100.0% | Russia |
| Kulturnaya Sluzhba LLC (Ponominalu) | Consolidated | 100.0% | Russia |
| IT Grad LLC | Consolidated | 100.0% | Russia |
| Metro-Telecom | Consolidated | 95.0% | Russia |
| MGTS Group | Consolidated | 94.7% | Russia |
| MTS Armenia | Consolidated | 80.0% | Armenia |
| Kulturnaya Sluzhba LLC (Ponominalu) | Consolidated | 78.2% | Russia |
| Navigation Information Systems Group | Consolidated | 77.7% | Russia |
| MTS Bank | Consolidated | 55.4% | Russia |
| Oblachny Retail LLC | Consolidated | 50.8% | Russia |
| MTS International Funding DAC[2] ("MTS International") | Consolidated | SE | Ireland |
| MTS Belarus | Equity | 49.0% | Belarus |
| Sistema Capital | Equity | 30.0% | Russia |
| Zifrovoe TV | Equity | 20.0% | Russia |
| OZON Holdings Limited | Equity | 18.7% | Cyprus |
| YOUDO Web Technologies | Equity | 13.7% | Cyprus |

(1) A wholly-owned subsidiary, through which the Group currently repurchases its own shares.

(2) 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 at 4 Marksistskaya Street Bldgs. 1-4, 34 Marksistskaya Street Bldg. 10, 1/3 Vorontsovskaya Street Bldgs. 2 and 2a, 5 Vorontsovskaya Street Bldgs. 1 and 2, 13/ 14 Vorontsovskaya Street Bldg. 4, 8 Vorontsovskaya Street Bldg. 4À, 12/12 Pankratievsky Pereulok, 2/10 Perviy Golutvinskiy Pereulok Bldg. 1 and 2, 4 Perviy Golutvinskiy Pereulok Bldg. 1, 9 Magnitogorskaya Street, 6 Vtoroy Vyazovskiy Proezd Building 1-3, 2A Konstantina Simonova Street, 19 Dmitrovskoye shosse Bldg. 2, 103 Prospect Mira, 42 Profsoyuznaya Street Bldg. 1, Panfilovskiy prospect Zelenograd Bldg 1101À, 24/2 Malaya Dmitrovka Street, 5/9 Malaya Dmitrovka Street, 58/1 Ryazanskiy prospect, 60 Varshavskoe shosse, 27 Smolenskaya-Sennaya square Bldg 2, 27 Smolenskaya-Sennaya square Bldg 3, 6 Ostrovitjanova Street, 2 Mozhayskoe shosse, 51 Second Line of Khoroshevsky Serebryany Bor Bldg.1-3, 24 Central prospect of Khoroshevsky Serebryany Bor, 24 Central prospect, 18 Andropov prospect Bldg. 8-9, premises in Moscow region in village Valishevo,2 Bldg 2, 2G, 2B which we use for administration, sales and other service centers as well as the operations of mobile switching centers.

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 approximately 133 buildings located throughout Moscow, which serve as sales and customer service offices, house MGTS' telecommunication equipment and are leased to third parties. We also own office buildings in some of our regional license areas and in Ukraine, 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 from one supplier can be combined with that 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" for information regarding governmental, economic, fiscal, monetary or political policies or factors that could materially adversely affect our operations or your investment in our shares and ADSs. 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 a leading telecommunications provider in Russia and the CIS, providing a wide range of mobile and fixed line voice, data telecommunications and digital services, including transmission, broadband, pay-TV, various value-added services as well as financial and integratrion services and selling equipment and accessories. According to AC&M-Consulting, we are the largest mobile operator in Russia in terms of mobile subscribers. We are also the largest operator in Armenia and the second largest in Ukraine in terms of mobile subscribers, according to our estimates. As of December 31, 2018, we had a mobile subscriber base of approximately 99.8 million.

Our revenues for the year ended December 31, 2018 grew by 8.4% compared to 2017 and totaled to RUB 480,293 million. In 2018 we increased our ownership share in MTS Bank to 55.4% and obtained control over the entity. The effect of MTS Bank consolidation on the Group revenue for the financial year 2018 amounted to RUB 9,336 million. Without the effect of MTS Bank, the Group's revenue increased by 6.3% to RUB 470,956 million mainly due to strong performance in core Russian market as well as continued positive trends in data consumption and digital service adoption across all the regions of operations. Our operating income for the year ended December 31, 2018 totaled to RUB 116,185 million, an increase of 20.8% in comparison with prior year was mainly due to effects from implementation of IFRS 15 and IFRS 16 as well as MTS Bank consolidation. On a like-for-like basis and without the effect of MTS Bank, the Group's operating profit increased by 11.5% compared to 2017 and totaled to RUB 107,153 million. Main positive effects relate to strong service revenue in Russia, higher income from sale of our fixed assets as well as lower impairment of our non-current assets. Our profit for the year ended December 31, 2018 declined to RUB 7,832 million mainly due to provision for fines and penalties relating to previously disclosed investigation of the Group's former subsidiary in Uzbekistan.

Our revenues for the year ended December 31, 2017 totaled to RUB 442,911 million, an increase of 1.7% year-over-year. Overall, the Group's performance in 2017 was largely driven by Russia where the increase in revenues was attributable to the natural growth in data consumption and better monetization through the cancellation of unlimited data plans. Our operating income for the year ended December 31, 2017 increased by 9.6% to RUB 96,100 million due to strong service revenue in Russia as well as roaming cost optimisation. Our profit for the year ended December 31, 2017 increased by 16.8% to RUB 56,590 million generally repeating our operating income dynamics.

Our revenues for the year ended December 31, 2016 increased by 2.1% to RUB 435,692 million due to sustained growth in data usage throughout key markets and increased handset sales in Russia. Our operating income for the year ended December 31, 2016 decreased by 6.7% to RUB 87,669 million due to additional expenses in retail as well as generally increased costs in Russia due to macroeconomic pressure. Our profit for the year ended December 31, 2016 increased slightly by 2.1% to RUB 48,450 million generally repeating our operating income dynamics. Our profit was also affected by an increase in finance costs related to repurchase of our Eurobonds due in 2020 and decreased finance income. Those effects were partially offset by the strengthening of the ruble coupled with improved performance of our non-operating affiliates (mainly MTS Bank).

Significant funds are required to support the growth of our subscriber base, primarily for increasing network capacity, maintaining and modernizing our mobile and fixed line networks, developing our network in the regions and continuing the build-out of our LTE, 3G and broadband Internet networks.

Our cash outlays for capital expenditures for the years ended December 31, 2018, 2017 and 2016 were RUB 99,568 million, RUB 76,431 million and RUB 86,149 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, 2018, 2017 and 2016 was RUB 154,390 million, RUB 144,640 million and RUB 130,565 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, 2018 and December 31, 2017 U.S. dollar denominated notes totaled to RUB 52.0 billion and RUB 43.8 billion, and ruble denominated notes amounted to RUB 65.4 billion and RUB 65.0 billion, respectively. Our bank loans consist of U.S. dollar and ruble-denominated borrowings totaling approximately RUB 250.8 billion as of December 31, 2018 and RUB 182.9 billion as of December 31, 2017.

We repaid approximately RUB 48.1 and RUB 44.3 billion of indebtedness in 2018 and 2017, respectively. As of December 31, 2018, the total amount available to us under our credit facilities amounted to RUB 21.0 billion. We had total indebtedness of approximately RUB 368.1 billion as of December 31, 2018, excluding lease obligations, compared to approximately RUB 291.7 billion as of December 31, 2017.

Our total finance costs for the years ended December 31, 2018, 2017 and 2016 were RUB 38,165 million, RUB 26,064 million and RUB 27,136 million, net of amounts of interest capitalized, respectively. See Note 24 to our audited consolidated financial statements for a description of our indebtedness.

Our reporting currency is Russian rubles. Our and our subsidiaries' functional currencies are the ruble in Russia, the hryvnia in Ukraine, the manat in Turkmenistan, the dram in Armenia and the som in Uzbekistan (before UMS (as difined below) was deconsolidated). 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."

**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.

The Group identified the following reportable segments:

***Russia convergent:*** 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.

***Moscow fixed line:*** represents the results of fixed line operations carried out in Moscow by the Group's subsidiary MGTS. MGTS is the only licensed public switched telephone network ("PSTN") operator in Moscow and is considered a natural monopoly under Russian antimonopoly regulations. Consequently, substantial part of services provided by MGTS are subject to governmental regulation.

***Ukraine:*** represents the results of mobile and fixed line operations carried out across multiple regions of Ukraine.

***MTS Bank:*** represents the results of banking services rendered to customers across multiple regions of Russia.

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 Turkmenistan, Armenia, System Integrator, Satellite TV, Navigation Information Systems, Metro-

Telecom, Stream LLC, NVision Czech Republic, Litebox, eSports, MTS Energo, IT Grad,Belarus and headquarters.

In 2017, management started to internally assess Russia convergent and NVision Czech Republic, Stream LLC, Navigation Information Systems and Metro-Telecom separately in order to monitor the results and make funding decisions on this basis, and thus has presented them separately. Related financial information was, retrospectively, restated.

Total revenues of our segments for the years ended December 31, 2018, 2017 and 2016 were as follows:

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2018 | 2017 | 2016 |
| | (in millions of Russian rubles) | | |
| **Total revenues** | | | |
| Russia convergent | 393,096 | 370,982 | 359,905 |
| Moscow fixed line | 38,846 | 39,033 | 39,667 |
| Ukraine | 29,717 | 26,103 | 29,187 |
| MTS Bank | 11,851 | — | — |
| Other | 31,748 | 30,508 | 33,237 |
| Eliminations[1] | (24,965) | (23,715) | (26,304) |
| Total revenues as reported | 480,293 | 442,911 | 435,692 |

(1) Represents the elimination of inter-company transaction results, primarily interconnect, roaming, rent of channels and telecommunications infrastructure and integration.

**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 and Ukraine, 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, | | |
|---|---|---|---|
| | 2018 | 2017 | 2016 |
| | (in millions) | | |
| **Subscribers[1]** | | | |
| Russia | 78.0 | 78.3 | 80.0 |
| Ukraine | 19.7 | 20.8 | 20.9 |
| Turkmenistan | — | — | 1.7 |
| Armenia | 2.1 | 2.1 | 2.1 |
| Total consolidated | 99.8 | 101.2 | 104.7 |
| MTS Belarus (unconsolidated) | 5.5 | 5.2 | 5.2 |

(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 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.

We had approximately 78.0 million subscribers in Russia as of December 31, 2018, 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 179%. We had approximately 19.7 million subscribers in Ukraine as of December 31, 2018and, according to our estimates, a 37% market share of total mobile cellular subscribers in Ukraine. In addition, as of December 31, 2018, we had approximately 2.1 million subscribers in Armenia, representing 57% market share, according to our estimates. From September 29, 2017 MTS stopped providing communication services in Turkmenistan due to the actions of the state-owned telecommunication company Turkmentelekom, which resulted in disconnection of international and long-distance zonal communication services and internet access.

For a description of our fixed line subscriber base, see "Item 4. Information on Our Company—B. Business Overview—Fixed Line Services."

**Revenues**

Our principal sources of revenue are:

- mobile service revenues, which include usage and interconnect fees, value-added services fees, monthly subscription fees, roaming fees and connection fees;
- fixed service revenues from individual and corporate subscribers, which include monthly subscription fees, traffic charges, connection fees, revenues from broadband Internet connection and data transmission services, revenues from pay-TV and from sales of end-user telecommunications equipment. Fixed service revenues also include revenues received from operators, which comprise revenues from the renting out of channels and traffic charges and revenues from the renting out of telecommunications infrastructure;
- revenues from sales of handsets, accessories and other goods;
- integration services, including the resale of software products; and
- banking services.

Our mobile tariffs in Russia and Ukraine 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, but are regulated in Ukraine. See also "Item 3. Key Information—D. Risk Factors—Risks Relating to Our Business—Changes in the governmental regulation of SMP operators in Ukraine could adversely affect our results of operations," "—If we are found to have a dominant position in the markets where we operate and are determined to have abused this position, the FAS may be entitled to 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***

*Subscription, voice and data revenues* primarily include monthly fees paid by our users of tariff plans which contain fixed volume of services such as minutes of usage, sms, internet traffic and other services. The over-the-limit consumption of services are charged to our subscribers depending on a tariff plan. Subscription, voice and data revenues as a percentage of our total revenues were 53.1% in

2018, 56.3% in 2017 and 56.2% in 2016. We expect subscription, voice and data revenues as a percentage of our total operating revenue to remain stable in 2019.

*Interconnect fees*, which are fees for connecting users of other operators' fixed line and wireless networks to our network, remained stable and comprised 10.9% in 2018, 11.0% and 11.4% of our total revenues in 2017 and 2016, respectively. We expect it to remain stable in 2019.

*Roaming fees for our own subscribers* include amounts charged to our subscribers while traveling out of our service area. Roaming fees for own subscribers as a percentage of our total revenues represented 4.5% in 2018, 5.3% in 2017 and 5.6% in 2016. We expect that our roaming fees will decrease slightly as a percentage of our total operating revenue, due to individually insignificant changes in the types of revenue.

*Fixed service revenues* which consist primarily of fixed line telephony services, broadband internet and pay-TV services, comprised 11.7%, 12.7% and 13.0% of our total revenues in 2018, 2017 and 2016, respectively. In absolute terms, we expect an increase in the number of internet and TV users to stimulate further growth of fixed service revenues due to consequent improvement in quality and uptake of services provided.

*Banking service revenues* 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 2.5% of our total revenues in 2018. We expect banking service revenues to increase as a percentage of our total operating revenue due to strengthening of MTS Bank's position in the retail segment, as a result of designing of and offering suitable and attractive financial services to our customers.

Other sources of revenue comprised less than 5% of our service revenues.

***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 comprised 13.3% in 2018, 11.8% in 2017 and 11.3% in 2016. The increase in 2018 as compared to 2017 is attributable to increase in sales of goods as a percentage of operating revenue. We expect that sales of goods will remain stable as a percentage of total revenue, as smartphones and devices sales support the usage of our voice and data tariff plans. We do not subsidize handset sales in Russia. In Ukraine, we subsidize handsets for some of our contract subscribers as well as modems for GSM and CDMA users. See "—Cost of goods" below.

***Cost of Services***

*Interconnect and line rental.* Interconnect and line rental charges include 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. Interconnect charges as a percentage of our total revenues represented 10.1% in 2018, 10.6% in 2017 and 11.1% in 2016. Line rental charges as a percentage of our total revenues represented 0.3% in 2018, 1.6% in 2017 and 1.7% in 2016. The decrease is attributable to implementation of IFRS 16 which allowed us to capitalize line rental expenses.

We expect that interconnect expenses payable by us to other operators for termination of traffic generated by our subscribers will slightly increase. Primarily, this increase will likely be attributable to the growth in the volume of traffic resulting from our efforts to encourage greater usage through the introduction of new services, which may be supported by marketing campaigns.

We expect line rental costs to increase due to termination of a number of line rental contracts in 2019 the terms of which satisfied the provisions of IFRS 16 to be classified as a "lease."

*Roaming expenses.* Roaming expenses consist of amounts charged by other cellular operators under agreements for roaming services provided to our subscribers while outside our service area. Roaming expenses as a percentage of our total revenues represented 2.2% in 2018, 2.5% in 2017 and 3.6% in 2016. The decrease of roaming expenses as a percentage of our total revenues was largely due to the impact of cost optimisation.

*Cost of banking services.* Cost of banking services consists primarily of interests on loans received from banks and other financial institutions and commission fees. Cost of banking services as a percentage of our total revenues represented 1.2% in 2018.

*Other direct costs.*

Our other direct costs primary consist of:

- production staff's salary, bonuses and social contributions;
- network repair and maintenance;
- electricity charges; and
- payments for radio frequencies usage.

Our other direct costs remained relatively stable as a percentage of our total revenues and represented 3.9% in 2018, 3.8% in 2017 and 3.7% in 2016. Other direct costs as a percentage of revenue are expected to increase over time as a result of inflation.

***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 sold and SIM cards provided to customers as a percentage of our total revenues represented 11.5% in 2018, 9.3% in 2017 and 9.4% in 2016. The increase in 2018 is attributable to a strategy to win over additional market share in selling handsets and accessories.The increase in 2017 was not significant.

***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 2018, 2017 and 2016, selling expenses comprised 9.4%, 12.0% and 12.3% of our total revenue, respectively. The decrease of 2.6% in 2018 in comparison with the prior year related to capitalization of dealer commissions and rent expenses for our retail stores as a result of IFRS 15 and IFRS 16 implementation. The slight decrease of selling expense in 2017 compared to 2016 was mainly due to advertising and marketing cost optimization.

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 in Russia and Ukraine 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;
- billing and data processing expenses;
- taxes other than income taxes, *e.g*. property taxes;
- office maintenance expenses and rental of administrative premises;
- consulting expenses; and
- other expenses of administrative nature.

General and administrative expenses as a percentage of our total revenues represented 9.0% in 2018, 9.4% in 2017 and 9.3% in 2016. A 0.1% decrease in general and administrative expenses in the financial year 2018 compared to 2017 related to capitalization of rental expenses as a result of IFRS 16 implementation. In 2017 the increase of general and administrative expenses compared to 2016 was mainly attributable to the growth of bank commissions paid to support our sales on credit. 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 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 (0.2%), 0.5% and (0.8)% as of December 31, 2018, 2017 and 2016, respectively. In the financial year 2018 the Group recorded other operating income in amount of RUB 897 million, which was mainly attributable to gain from sale or other disposal of our fixed assets. In 2017 sundry operating expense amounted to RUB 2,311 million against operating income of RUB 3,337 in 2016. In 2017 operating expenses included impairment of non-current assets in Turkmenistan and Czech Republic in the amount of 3,204 million and RUB 571 million, respectively.

***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 increased to 21.8% for the year ended December 31, 2018 as compared to 18.0% of our total revenues for the year ended December 31, 2017. The increase was attributable mostly to the effect of new IFRS standards. On the like-for-like basis depreciation comprised 17% of revenue for the year ended December 31, 2018. The decrease was mostly attributable to significant revenue growth. Our expense for depreciation of property, network equipment and amortization of intangible assets comprised 18.7% of our total revenues for the year ended December 31, 2016.

We expect our expense for depreciation of property, network equipment and amortization of intangible assets to remain relatively stable in 2019.

***Finance costs***

Our finance costs for 2018 increased by RUB 12,101 million or 46.43% compared to 2017 and amounted to RUB 38,165 million. The increase was primarily attributable to the implementation of new standards: IFRS 16 "Leases," IFRS9 "Financial Instruments" starting from January 1, 2018. Net of this effect, our finance costs for the financial year ended December 31, 2018 increased by RUB 2,021 million as a result of increased indebtedness. Our finance costs for 2017 decreased by RUB 1,072 million or 3.95% compared to 2016 and amounted to RUB 26,064 million. In 2016 we incurred additional interest expense in the amount of RUB 3,044 million related to early redemption of Eurobonds due 2020. Net of this effect, our finance costs for the financial year ended December 31, 2017 increased by RUB 1,972 million as a result of increased indebtedness.

We expect our finance costs to increase in 2019.

***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 statutory income tax rate in Ukraine is 18%. The effective tax rate applicable to our consolidated group in the year ended December 31, 2018, 2017 and 2016 was 20.2%, 25.1% and 22.4%, respectively. The effective tax rate differs from the statutory rate mainly as a result of items not liable for tax purposes, earnings distribution from subsidiaries, prior period tax effects and effect of the change in fair value of derivative financial instruments.

**Certain Factors Affecting our Financial Position and Results 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 within the Russian Federation, Ukraine, Turkmenistan and Armenia, 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 net income.

***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.

The Russian economy has been characterized by the following rates of inflation:

| Year | Inflation rate |
|---|---|
| 2011 | 6.1% |
| 2012 | 6.6% |
| 2013 | 6.5% |
| 2014 | 11.4% |
| 2015 | 12.9% |
| 2016 | 5.4% |
| 2017 | 2.5% |
| 2018 | 4.3% |

Source: Federal State Statistics Service.

The Ukrainian economy has been characterized by high rates of inflation:

| Year | Inflation/(deflation) rate |
|---|---|
| 2011 | 8.0% |
| 2012 | (0.2)% |
| 2013 | (0.3)% |
| 2014 | 12.1% |
| 2015 | 48.7% |
| 2016 | 13.9% |
| 2017 | 14.4% |
| 2018 | 10.9% |

Source: State Statistics Committee of Ukraine.

Inflation rate in Armenia in 2018 was estimated at 2.5%.

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."

***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. See "Item 3. Key Information—A. Selected Financial Data."

Below is a list of our major acquisitions during 2018-2016.

| Company | Type | Date of acquisition | Stake acquired | Purchase price |
|---|---|---|---|---|
| **2018** | | | | |
| Kulturnaya Sluzhba ("Ponominalu.ru") | Ticket distribution | January 2018 | 78.2% | 321 |
| Moskovskaia Direktciia Teatralno-Kontcertnyh i Sportivno-Zrelishchnyh Kass ("Ticketland.ru") | Ticket distribution | February 2018 | 100% | 3,190 |
| MTS Bank | Banking services | July 2018 | 28.6%* | 8,273 |
| Progressivniye Technologii | Fixed-line services | August 2018 | 100% | 395 |
| Dekart | Administrative properties | October 2018 | 100% | 5,242** |
| Serebryaniy Bor | Administrative properties | December 2018 | 100% | 1,711 |
| IT-Grad | Cloud services | December 2018 | 100% | 2,422 |
| | | | | **21,554** |
| **2017** | | | | |
| Bashkortostan Cellular Communication | Regional mobile operator | July 2017 | 100% | 292 |
| Oblachny Retail | Retail software developer | October 2017 | 50.82% | 590 |
| Praliss Enterprises | eSport | December 2017 | 100% | 313 |
| | | | | **1,195** |
| **2016** | | | | |
| Smarts-Yoshkar-Ola | Regional mobile operator | September 2016 | 100% | 13 |
| | | | | **13** |

* Acquisition of 28.6% in MTS Bank in addition to the previously held stake of 26.6% allowed us to obtain control over the entity.

** This amount includes VAT

**Results of Operations**

Our management identified the following reportable segments: Russia convergent, Moscow fixed line, Ukraine and MTS Bank. 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, | | |
|---|---|---|---|
| | 2018 | 2017 | 2016 |
| **Total revenues** | | | |
| Russia convergent | 393,096 | 370,982 | 359,905 |
| Moscow fixed line | 38,846 | 39,033 | 39,667 |
| Ukraine | 29,717 | 26,103 | 29,187 |
| MTS Bank | 11,851 | | |
| Other | 31,748 | 30,508 | 33,237 |
| Eliminations[1] | (24,965) | (23,715) | (26,304) |
| Total revenues as reported | 480,293 | 442,911 | 435,692 |
| **Costs of services, excluding depreciation and amortization shown separately below, and cost of goods** | | | |
| Russia convergent | 143,512 | 144,230 | 149,687 |
| Moscow fixed line | 11,754 | 13,799 | 12,985 |
| Ukraine | 9,182 | 9,654 | 13,297 |
| MTS Bank | 5,973 | | |
| Other | 25,081 | 22,565 | 23,238 |
| Eliminations[1] | (19,232) | (20,846) | (23,475) |
| Cost of services and cost of goods as reported | 176,270 | 169,402 | 175,732 |
| **Sundry operating expenses[2]** | | | |
| Russia convergent | 1,422 | 3,300 | 1,602 |
| Moscow fixed line | (2,961) | (1,772) | (2,106) |
| Ukraine | (147) | 53 | (33) |
| MTS Bank | 397 | | |
| Other | (3,497) | 594 | (2,972) |
| Eliminations[1] | 90 | 136 | 172 |
| Sundry operating expenses as reported | (4,696) | 2,311 | (3,337) |
| **Selling, general and administrative expenses** | | | |
| Russia convergent | 59,409 | 69,690 | 67,046 |
| Moscow fixed line | 6,491 | 7,563 | 7,038 |
| Ukraine | 4,678 | 5,031 | 6,019 |
| MTS Bank | 3,643 | | |
| Other | 16,638 | 14,742 | 15,776 |
| Eliminations[1] | (2,913) | (1,840) | (1,833) |
| Selling, general and administrative expenses as reported | 87,946 | 95,186 | 94,046 |
| **Depreciation and amortization expenses** | | | |
| Russia convergent | 82,457 | 59,942 | 60,087 |
| Moscow fixed line | 10,867 | 10,642 | 10,900 |
| Ukraine | 9,346 | 6,106 | 6,304 |
| MTS Bank | 547 | | |
| Other | 3,662 | 3,530 | 4,420 |
| Eliminations[1] | (2,291) | (308) | (129) |
| Depreciation and amortization expenses as reported | 104,588 | 79,912 | 81,582 |
| **Operating profit** | | | |
| Russia convergent | 106,296 | 93,821 | 81,484 |
| Moscow fixed line | 12,695 | 8,801 | 10,850 |
| Ukraine | 6,658 | 5,258 | 3,599 |
| MTS Bank | 1,291 | | |
| Other | (10,136) | (10,923) | (7,225) |
| Eliminations[1] | (619) | (857) | (1,039) |
| Operating profit as reported | 116,185 | 96,100 | 87,669 |

(1) Represents the elimination of inter-company transaction results, primarily interconnect, roaming, rent of channels and telecommunications infrastructure and integration.

(2) For the purposes of this analysis "Sundry operating expenses" consist of allowance for doubtful accounts, impairment of non-current assets and goodwill, other operating expenses/(income), operating share of profit of associates and provision for investments in distressed banks.

**Year Ended December 31, 2018 compared to Year Ended December 31, 2017**

***Revenues and cost of services and cost of goods***

*Consolidated revenues* for the year ended December 31, 2018, increased by RUB 37,382 million, or 8.4%, to RUB 480,293 million from RUB 442,911 million for the year ended December 31, 2017. The principal reason for the growth was the acquisition of MTS Bank which added RUB 11,534 million to our consolidated revenues, the large increase in the usage of voice and data tariffs by our subscribers (by RUB 4,788 million), which 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 an increase in interconnect revenue by RUB 3,671 million due to increase in the volume of traffic. The increase of our consolidated revenues for the year ended December 31, 2018 was also supported by the growth in revenues from sales of handsets and accessories by RUB 13,961 million and by the increase of revenues from sales of software products by RUB 3,292 million. The increase in sales of handsets and accessories by RUB 13,961 million resulted from active marketing initiatives and smartphones' penetration. The increase in sales of software products by RUB 3,292 million was attributable to the agreements with newly acquired customers.

The decrease of our revenues from roaming fees of own subscribers by RUB 1,997 million in the year ended December 31, 2018 due to the cancellation of the fees for incoming calls within the MTS network.

*Consolidated cost of services and cost of goods* for the year ended December 31, 2018 increased by RUB 6,868 million and amounted to RUB 176,270 million as compared to RUB 169,402 million for the year ended December 31, 2017 and comprised 36.7% and 38.2% as a percentage of consolidated revenues for the year ended December 31, 2018 and 2017, respectively. The increase in consolidated cost of services and cost of goods is attributable to the growth of cost of goods by RUB 18,246 million caused by the increase in sales of handsets and accessories and software products. The acquisition of MTS Bank added RUB 4,642 million to our consolidated cost of services and cost of goods for the year ended December 31, 2018. The increase in the consolidated cost of services and cost of goods for the year ended December 31, 2018 was also supported by the growth in interconnect expenses by RUB 1,691 million due to increase in the volume of traffic. The increase was partly offset by the decrease in cost of services attributable to the implementation of IFRS 16 which allowed us to capitalize RUB 17,045 million rent expenses.

*Russia convergent revenues* for the year ended December 31, 2018, increased by 6.0% to RUB 393,036 million from RUB 370,982 million for the year ended December 31, 2017. The increase in Russia convergent revenues in the year ended December 31, 2018, was primarily due to the growth of revenues from sales of handsets and accessories by RUB 13,419 million, revenues from voice and data tariffs by RUB 4,468 million, revenues from handsets customization and commissions by RUB 3,110 million and interconnect revenues by RUB 2,350 million. Revenue from voice and data tariffs increased due to active promotion of such tariffs, significant volume of Internet traffic included and the constant quality improvement of services provided. Revenues from sales of handsets and accessories increased to RUB 59,668 million in the year ended December 31, 2018 from RUB 46,249 million in the year ended December 31, 2017 as a result of active marketing initiatives and continued expansion of our retail operations. The increase in revenues from handsets customization and commissions by RUB 3,110 million was supported by the growth in handsets sales. Increase in interconnect revenues by RUB 2,350 million was driven by the growth in volume of incoming traffic.

*Russia convergent cost of services and cost of goods* for the year ended December 31, 2018, decreased slightly by 0.5% to RUB 143,512 million from RUB 144,230 million for the year ended December 31, 2017. The decline in Russia convergent cost of services and cost of goods is attributable to the decrease in rent expenses by RUB 10,918 million and line rental expenses by RUB 4,679 million. This was caused by the implementation of IFRS 16. The decline was offset by the increase of cost of goods by RUB 14,010 million caused by the growth in sales of handsets and accessories and software products. The decrease in the Russia convergent cost of services and cost of goods for the year ended December 31, 2018 was also offset by the growth in interconnect expenses by RUB 1,873 million due to increase in the volume of traffic.

*Moscow fixed line revenues* for the year ended December 31, 2018, slightly decreased and amounted to RUB 38,846 million as compared to RUB 39,033 million for the year ended December 31, 2017. The principal reason for the decline was a decrease in number of users of fixed line voice services.

*Moscow fixed line cost of services and cost of goods* for the year ended December 31, 2018, decreased by 14.8% to RUB 11,754 million from RUB 13,799 million for the year ended December 31, 2017. The decline in Moscow fixed line cost of services and cost of goods is attributable to the implementation of IFRS 16.

*Ukraine revenues* increased by 13.8% to RUB 29,717 million in the year ended December 31, 2018, from RUB 26,103 million in the year ended December 31, 2017, primarily due to the increase in tariffs and consumption of services.

*Ukraine cost of services and cost of goods* decreased by 4.9% to RUB 9,182 million in the year ended December 31, 2018, from RUB 9,654 million in the year ended December 31, 2017. The decline in Ukraine cost of services and cost of goods is attribulable to the implementation of IFRS 16.

*MTS Bank revenues* amounted to RUB 11,851 million for the period from the date of MTS Bank's consolidation to December 31, 2018. Banking service revenues as a percentage of our total revenues represented 2.5% in 2018.

*MTS Bank cost of services* amounted to RUB 5,973 million for the period from the date of MTS Bank consolidation to December 31, 2018. Cost of banking services as a percentage of our total revenues represented 3.4% in 2018.

*Other countries and business activities revenues* for the year ended December 31, 2018, increased by RUB 1,240 million to RUB 31,748 million from RUB 30,508 million for the year ended December 31, 2017 due to the depreciation of national currencies against Russian ruble.

*Other countries and business activities cost of goods* for the year ended December 31, 2018, increased to RUB 25,081 million from RUB 22,565 million for the year ended December 31, 2017 due to the depreciation of national currencies against Russian ruble.

**Sundry operating expenses**

*Consolidated sundry operating expenses* for the year ended December 31, 2018, decreased by RUB 7,007 million. We generated income of RUB 4,696 million and expense of RUB 2,311 million for the year ended December 31, 2018 and 2017, respectively. These amounts comprised (1.0)% and 0.5% as a percentage of consolidated revenue for the year ended December 31, 2018 and 2017, respectively. The primary reason for the change year-over-year was due to the long-lived assets impairment in Turkmenistan and NVision Czech Republic in the amount of RUB 3,775 million for the year ended December 31, 2017.

*Russia convergent sundry operating expenses* for the year ended December 31, 2018, decreased by 56.9% or RUB 1,878 million to RUB 1,422 million from RUB 3,300 million for the year ended December 31, 2017 and comprised 0.4% and 0.9% of Russia convergent revenues for the year ended

December 31, 2018 and 2017, respectively. The decline is attributable to the growth of income in the amount of RUB 636 million in connection with acquisition of the companies "Praliss," "Ticketland," "Ponominalu" and MTS Bank.

*Moscow fixed line sundry operating income* for the year ended December 31, 2018, increased by RUB 1,189 million to RUB 2,961 million from RUB 1,772 million for the year ended December 31, 2017. Moscow fixed line sundry operating income as a percentage of Moscow fixed line revenues increased to 7.6% for the year ended December 31, 2018, from 4.5% for the year ended December 31, 2017. The principal reason for the increase was growth of income in connection with the sale of fixed assets.

*Ukraine sundry operating income* for the year ended December 31, 2018, increased by RUB 200 million to income of RUB 147 million from expense of RUB 53 million for the year ended December 31, 2017. Ukraine sundry operating income as a percentage of Ukraine revenues comprised 0.5% for the year ended December 31, 2018 and (0.2)% for the year ended December 31, 2017. The increase is mainly attributable to provision for fines and penalties concerning affairs with the Antimonopoly Committee of Ukraine for the year ended December 31, 2017.

*MTS Bank sundry operating expenses* amounted to RUB 397 million for the period from the date of MTS Bank consolidation to December 31, 2018. Sundry operating expenses as a percentage of banking service revenues represented 3.3% in 2018.

*Other countries and business activities sundry operating income* for the year ended December 31, 2018, increased by RUB 4,091 million. We recognized income of RUB 3,497 million for the year ended December 31, 2018 as compared to the loss of RUB 594 million for the year ended December 31, 2017. The income recognized is attributable to impairment of long-lived assets in Turkmenistan and NVision Czech Republic in the amount of RUB 3,775 million for the year ended December 31, 2017.

***Selling, general and administrative expenses***

*Consolidated selling, general and administrative expenses* for the year ended December 31, 2018, decreased by RUB 7,240 million and amounted to RUB 87,946 million as compared to RUB 95,186 million for the year ended December 31, 2017 and comprised 18.3% and 21.5% as a percentage of consolidated revenues for the year ended December 31, 2018 and 2017, respectively.

*Russia convergent selling, general and administrative expenses* for the year ended December 31, 2018 decreased by RUB 10,279 million to RUB 59,411 million, or 14.7% of Russia convergent revenue, from RUB 69,690 million, or 18.8% of Russia convergent revenue, for the year ended December 31, 2017. Sales and marketing expenses decreased by RUB 7,968 million mainly due to decrease in dealer commissions by RUB 2,548 million as a result of the adoption of IFRS 15 "Revenue from contracts with customers" from January 1, 2018 and decrease in utilities and maintenance expenses by RUB 6,424 million due to adoption of IFRS 16 "Leases" from January 1, 2018. General and administrative expenses decreased by RUB 1,371 million mainly due to decrease in rental expenses due to adoption of IFRS 16 "Leases" from January 1, 2018.

*Moscow fixed line selling, general and administrative expenses* for the year ended December 31, 2018, decreased by RUB 1,072 million, to RUB 6,491 million, or 16.7% of Moscow fixed line revenue, from RUB 7,563 million, or 19.4% of Moscow fixed line revenue, for the year ended December 31, 2017. Taxes other than income tax as a percentage of Moscow fixed line revenues decreased to 1.3% for the year ended December 31, 2018 compared to 2.3% for the year ended December 31, 2017. Taxes decreased due to decrease of property tax as a result reconciliation with tax authorities. Salary expenses—general and administrative decreased by RUB 413 million and amounted to 5.5% of Moscow fixed line revenues for the year ended December 31, 2018 compared to 6.5% of Moscow fixed line revenues for the year ended December 31, 2017 mainly due to cessation of retirement program and

additional remuneration schemes. Dealer commissions as a percentage of Moscow fixed line revenues decreased to 0.3% for the year ended December 31, 2018 compared to 0.7% for the year ended December 31, 2017 as a result of the adoption of IFRS 15 "Revenue from contracts with customers" from January 1, 2018.

*Ukraine selling, general and administrative expenses* for the year ended December 31, 2018, decreased by RUB 354 million and amounted to RUB 4,678 million as compared to RUB 5,032 million for the year ended December 31, 2017 and comprised 15.7% and 19.3% as a percentage of Ukraine revenues for the year ended December 31, 2018 and 2017, respectively. Dealer commissions as a percentage of Ukraine revenues decreased to 2.1% for the year ended December 31, 2018 compared to 3.5% for the year ended December 31, 2017 mainly as a result of the adoption of IFRS "Revenue from contracts with customers."

*MTS Bank selling, general and administrative expenses* amounted to RUB 3,643 million for the period from the date of MTS Bank's consolidation to December 31, 2018. Selling, general and administrative expenses as a percentage of banking service revenues represented 30.7% in 2018.

*Other countries and business activities selling, general and administrative expenses* for the year ended December 31, 2018, increased by 12.9% to RUB 16,637 million from RUB 14,742 million for the year ended December 31, 2017. Other countries and business activities selling, general and administrative expenses mainly increased by 8.1% due to expenses of newly acquired companies and by 2.8% due to promotional expenses on Satellite TV.

***Depreciation and amortization expenses***

*Consolidated depreciation and amortization* of property, network equipment, customer base, license costs and other intangible assets for the year ended December 31, 2018, increased by 30.9% to RUB 104,588 million from RUB 79,912 million for the year ended December 31, 2017 mainly due to adoption of IFRS 16 and IFRS 15. Excluding the effect of adoption of new standards on a like-for-like basis depreciation and amortization expense slightly increased by 2.6% mostly due to acquisitions of new assets during 2018.

*Russia convergent depreciation and amortization* for the year ended December 31, 2018, increased by 37.6% to RUB 82,457 million from RUB 59,942 million for the year ended December 31, 2017 mainly due to adoption of IFRS 16 and IFRS 15. On a like-for-like basis depreciation and amortization expense increased by 2.5% mainly due to additions of intangible assets.

*Moscow fixed line depreciation and amortization* for the year ended December 31, 2018 increased by 2.1% and amounted to RUB 10,867 million as compared to RUB 10,642 million for the year ended December 31, 2017 Adoption of IFRS 16 and IFRS 15 increased depreciation expense for 10.5%, but overall reduction of property and equipment during 2018 driven to decrease of 7.6%.

*Ukraine depreciation and amortization* for the year ended December 31, 2018, increased by 53.1% to RUB 9,346 million from RUB 6,106 million for the year ended December 31, 2017. The increase is mainly attributable to adoption of IFRS 16 and IFRS 15 and additions of property, equipment and intangible assets.

*MTS Bank depreciation and amortization* amounted to RUB 547 million for the period from the date of MTS Bank's consolidation to December 31, 2018.

*Other countries and business activities depreciation and amortization* for the year ended December 31, 2018, increased by 3.7% to RUB 3,662 million from RUB 3,530 million for the year ended December 31, 2017. The increase of 13.5% is attributable to adoption of IFRS 16 and IFRS 15, increase of 4.4% occurred due to large modernization of network base stations in Armenia, whereas the most part of the growth (16.8%) was levelled due to termination of operations in Turkmenistan.

***Operating profit***

*Consolidated operating profit* grew by RUB 20,085 million to RUB 116,185 million in the year December 31, 2018 from RUB 96,100 million in the year ended December 31, 2017. The effect of new IFRS standards implementation on operating profit for the financial year 2018 amounted to RUB 7,428 million. Acquisition of controlling stake and following consolidation of MTS Bank increased the operating profit by another RUB 1,291 million. The remaining increase was mainly attributable to strong performance of our Russia convergent segment, higher income from sale of our fixed assets as well as lower impairment of our non-current assets.

*Russia convergent operating profit* for the year ended December 31, 2018 increased by 12,475 and totaled to RUB 106,296 million against RUB 93,821 million for the year ended 2017. Russia convergent operating profit grew as a percentage of Russia convergent revenues to 27.0% for the year ended December 31, 2018, from 25.3% for the year ended December 31, 2017. The increase was mainly attrutable to the effect from the implementation of new IFRS standard, which totaled to RUB 6,821 million (1.7% as a percentage of Russia convergent revenue for the financial year 2018).

*Moscow fixed line operating profit* for the year ended December 31, 2018, increased by 44.2% to RUB 12,695 million from RUB 8,801 million for the year ended December 31, 2017. Moscow fixed line operating profit increased as a percentage of Moscow fixed line revenue to 32.7% for the year ended December 31, 2018 from 22.5% for the year ended December 31, 2017. The increase related to implementation of new IFRS standard totaled to RUB 799 million (2.1% as a percentage of Moscow fixed line revenues for the financial year 2018). The remaining growth was mainly attributable to increase of the gain realized from sale and other disposal of our fixed assets as well as reduction of personnel expenses due to headcount optimization.

*Ukraine operating profit* for the year ended December 31, 2018, increased by 26.6% to RUB 6,658 million compared to RUB 5,258 million for the year ended December 31, 2017. Ukraine operating profit increased as a percentage of Ukraine revenues to 22.4% for the year ended December 31, 2018, from 20.1% for the year ended December 31, 2017. The increase was mainly attributable to the effect of new IFRS standards implementation, which totaled to RUB 703 million (2.4% as a percentage of Ukraine operating revenue).

*MTS Bank operating profit consolidated from July 5, 2018* amounted to RUB 1,291 million and totaled to 10.9% as a percentage of banking service revenues for the respective period.

*Other countries and business activities operating loss* for the year ended December 31, 2018, decreased by 7.2% to RUB 10,136 million from RUB 10,923 million for the year ended December 31, 2017. The decrease in operating loss was mainly attributable to impairment of non-current assets of MTS Turkmenistan in the amount of RUB 3,204 million recognized in the financial year 2017.

***Currency exchange and transaction gains/losses***

*Consolidated currency exchange and transaction loss* for the year ended December 31, 2018, was RUB 3,594 million, compared to the gain of 1,301 million for the year ended December 31, 2017. The loss recognized in the year ended December, 31 2018 was mainly attributable to the appreciation of the Russian ruble against U.S. dollar and euro during the year ended December 31, 2018.

***Finance costs***

*Consolidated finance costs* for the year ended December 31, 2018, increased by RUB 12,101 million, or 46.43%, to RUB 38,165 million from RUB 26,064 million for the year ended December 31, 2017. The increase was primarily attributable to the implementation of new standards IFRS16 "Leases," IFRS9 "Financial Instruments" starting from January 1, 2018. Net of this effect, our

finance costs for the financial year ended December 31, 2018 increased by RUB 2,021 million as a result of increased indebtedness.

***Equity in net income of associates***

*Non-operating share of the profit or loss of associates* for the year ended December 31, 2018 increased by RUB 473 million to a loss of RUB 909 million compared to a loss of RUB 436 million for the year ended December 31, 2017. The increase is primarily attributable to the increase in loss of other individually insignificant associates in the year ended December 31, 2018.

***Other expenses (income), net***

*Consolidated other expenses* for the year ended December 31, 2018 decreased to RUB 1,031 million, as compared to the expense of RUB 992 million for the year ended December 31, 2017 due to decrease of the gain from sale of foreign currencies and decrease in charity expenses in the year ended December, 31 2018.

***Provision for income taxes***

*Consolidated provision for income taxes* for the year ended December 31, 2018 decreased by 10.6% to RUB 16,969 million from RUB 18,977 million for the year ended December 31, 2017 mainly due to decrease in the effective tax rate. The effective tax rate decreased to 20.2% in the year ended December 31, 2018, from 25.1% in the year ended December 31, 2017 mainly as a result of decrease of prior period tax effects and decrease in earnings distributions from subsidiaries, and as a result of decrease in expenses not deductible for tax purposes.

***Net income attributable to the non-controlling interest***

*Net income attributable to the non-controlling interest* for the year ended December 31, 2018 increased by 81.2% and amounted to RUB 993 million compared to net income attributable to the non-controlling interest of RUB 548 million for the year ended December 31, 2017 as a result of increase in ownership share in our associate MTS Bank from 26.6% to 55.4% and obtaining control over the entity.

***Net income attributable to the Group***

*Net income attributable to the Group* for the year ended December 31, 2018, dropped by RUB 49,194 million, or 87.8%, to RUB 6,848 million, compared to RUB 56,042 million for the year ended December 31, 2017. Net income as a percentage of revenues was 1.4% in the year ended December 31, 2018, and 12.7% in the year ended December 31, 2017. The decrease in the amount of RUB 59,050 relates to provision for fines and penalties with respect to the previously disclosed investigation into our former operations in Uzbekistan, see also "Item 3. Key Information—D. Risk Factors—Legal Risks and Uncertainties—The 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" regarding recent suspension of our services in Uzbekistan and "Item 8. Financial Information—A. Consolidated Statements and Other Financial Information—7. Litigation—Uzbekistan." Net of the provision effect net income attributable to the Group increased by RUB 9,856 million or 17.6% and totaled to RUB 65,898 million. The positive effect of new IFRS standards implementation amounted to RUB 2,334 million.

**Year Ended December 31, 2017 compared to Year Ended December 31, 2016**

***Revenues and cost of services and cost of goods***

*Consolidated revenues* for the year ended December 31, 2017, increased by RUB 7,219 million, or 1.7%, to RUB 442,911 million from RUB 435,692 million for the year ended December 31, 2016. The principal reason for the growth was the large increase in the usage of voice and data tariffs by our subscribers (by RUB 5,387 million), which 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 increase of our consolidated revenues for the year ended December 31, 2017 was also supported by the growth in revenues from sales of handsets and accessories by RUB 1,496 million and by the increase of revenues from sales of software products by RUB 1,475 million. The increase in sales of handsets and accessories by RUB 1,469 million resulted from active marketing initiatives and smartphones' penetration. The increase in sales of software products by RUB 1,475 million was attributable to the agreements with newly acquired customers.

The decrease of our revenues from roaming fees of own subscribers by RUB 800 million in the year ended December 31, 2017 is attributable to depreciation of Ukrainian hryvnia against Russian ruble and promotion of tariff plans with reduced prices, which include fixed amount of minutes in roaming.

*Consolidated cost of services and cost of goods* for the year ended December 31, 2017 decreased by RUB 6,330 million and amounted to RUB 169,402 million as compared to RUB 175,732 million for the year ended December 31, 2016 and comprised 38.2% and 40.3% as a percentage of consolidated revenues for the year ended December 31, 2017 and 2016, respectively. The decrease was mainly attributable to the optimization of roaming and interconnect expenses which declined by RUB 6,157 million and depreciation of Ukrainian hryvnia against Russian ruble.

*Russia convergent revenues* for the year ended December 31, 2017, increased by 3.1% to RUB 370,982 million from RUB 359,905 million for the year ended December 31, 2016. The increase in Russia convergent revenues in the year ended December 31, 2017, was primarily due to the growth of revenues from voice and data tariffs by RUB 7,102 million, revenues from sales of handsets and accessories by RUB 1,598 million, revenues from handsets customization and commissions by RUB 1,168 million and interconnect revenues by RUB 992 million. Revenue from voice and data tariffs increased due to active promotion of such tariffs, significant volume of Internet traffic included and the constant quality improvement of services provided. Revenues from sales of handsets and accessories increased to RUB 46,249 million in the year ended December 31, 2017 from RUB 44,651 million in the year ended December 31, 2016 as a result of active marketing initiatives and continued expansion of our retail operations. The increase in revenues from handsets customization and commissions by RUB 1,168 million was supported by the growth in handsets sales. Increase in interconnect revenues by RUB 992 million was driven by the growth in volume of traffic.

*Russia convergent cost of services and cost of goods* for the year ended December 31, 2017, decreased by 3.6% to RUB 144,230 million from RUB 149,687 million for the year ended December 31, 2016. The decrease of Russia convergent cost of services and cost of goods was mainly attributable to the decline of roaming expenses by RUB 3,461 million, interconnect expenses by RUB 865 million and line rental by RUB 255 million. The decrease was also supported by the decline in cost of handsets and accessories by RUB 1,595 million due to the shift in the structure of hansets sales in favour of higher margin products.

*Moscow fixed line revenues* for the year ended December 31, 2017, slightly decreased and amounted to RUB 39,033 million as compared to RUB 39,667 million. The principal reason for the decline was a decrease in number of users of fixed line voice services.

*Moscow fixed line cost of services and cost of goods* for the year ended December 31, 2017, increased by 6.3% to RUB 13,799 million from RUB 12,985 million for the year ended December 31, 2016. The increase was primarily attributable to the growth of salaries and social contributions, production by RUB 727 million.

*Ukraine revenues* decreased by 10.6% to RUB 26,103 million in the year ended December 31, 2017, from RUB 29,187 million in the year ended December 31, 2016, primarily due to the depreciation of Ukrainian hryvnia against Russian ruble.

*Ukraine cost of services and cost of goods* decreased by 27.4% to RUB 9,654 million in the year ended December 31, 2017, from RUB 13,297 million in the year ended December 31, 2016. The decrease was mainly attributable to the decline of interconnect and roaming expenses by RUB 2,813 million due to the depreciation of Ukrainian hryvnia against Russian ruble.

*Other countries and business activities revenues* for the year ended December 31, 2017, decreased by RUB 2,729 million to RUB 30,508 million from RUB 33,237 million for the year ended December 31, 2016 due to the depreciation of national currencies against Russian ruble and termination of operations in Turkmenistan.

*Other countries and business activities cost of goods* for the year ended December 31, 2017, decreased to RUB 22,565 million from RUB 23,238 million for the year ended December 31, 2016 due to the depreciation of national currencies against Russian ruble and termination of operations in Turkmenistan.

**Sundry operating expenses**

*Consolidated sundry operating expenses* for the year ended December 31, 2017, increased by RUB 5,648 million. We generated expense of RUB 2,311 million and income of RUB 3,337 million for the year ended December 31, 2017 and 2016, respectively. These amounts comprised 0.5% and (0.8)% as a percentage of consolidated revenue for the year ended December 31, 2017 and 2016. Expenses recognized for the year ended December 31, 2017 primarily consist of long-lived assets impairment in Turkmenistan and NVision Czech Republic in the amount of RUB 3,775 million.

*Russia convergent sundry operating expenses* for the year ended December 31, 2017, increased by 106% or RUB 1,698 million to RUB 3,300 million from RUB 1,602 million for the year ended December 31, 2016 and comprised 0.9% and 0.4% of Russia convergent revenues for the year ended December 31, 2017 and 2016, respectively. The growth is attributable to the results of regular count of fixed assets which we recognized during the year ended December 31, 2017 as compared to the income of RUB 848 million from compensation for the transfer of radiofrequencies to other operators for the year ended December 31, 2016.

*Moscow fixed line sundry operating income* for the year ended December 31, 2017, decreased by RUB 334 million to RUB 1,772 million from RUB 2,106 million for the year ended December 31, 2016. Moscow fixed line sundry operating income as a percentage of Moscow fixed line revenues decreased to 4.5% for the year ended December 31, 2017, from 5.3% for the year ended December 31, 2016. The principal reason for the decrease was a decline in income from sales of fixed assets.

*Ukraine sundry operating expenses* for the year ended December 31, 2017, decreased by RUB 86 million to expense of RUB 53 million from income of RUB 33 million for the year ended December 31, 2016. Ukraine sundry operating expenses as a percentage of Ukraine revenues comprised 0.2% for the year ended December 31, 2017 and (0.1)% for the year ended December 31, 2016.

*Other countries and business activities sundry operating income* for the year ended December 31, 2017, decreased by RUB 3,566 million. We recognized the loss of RUB 594 million for the year ended December 31, 2017 as compared to income of RUB 2,972 million for the year ended December 31,

2016. The expenses recognized are attributable to impairment of long-lived assets in Turkmenistan and NVision Czech Republic in the amount of RUB 3,775 million.

***Selling, general and administrative expenses***

*Consolidated selling, general and administrative expenses* for the year ended December 31, 2017, slightly increased by RUB 1,140 million and amounted to RUB 95,186 million as compared to RUB 94,046 million for the year ended December 31, 2016 and comprised 21.5% and 21.6% as a percentage of consolidated revenues for the year ended December 31, 2017 and 2016, respectively.

*Russia convergent selling, general and administrative expenses* for the year ended December 31, 2017, increased to RUB 69,690 million, or 18.8% of Russia convergent revenue, from RUB 67,046 million, or 18.6% of Russia convergent revenue, for the year ended December 31, 2016. Sales and marketing expenses remained relatively stable. The principal reason was that the increase in salary expenses due to the growth in sales of handsets and cash collection expenses attributable to the indexation of commission rates were compensated by decrease of our advertising expenses. General and administrative expenses increased by RUB 2,479 million due to increase of bank commissions by RUB 1,300 million as a result of growth in credit sales of handsets and indexation of commission rates as well as increase in administrative personnel expenses by RUB 482 million and consulting expenses by RUB 351 million.

*Moscow fixed line selling, general and administrative expenses* for the year ended December 31, 2017, increased by RUB 526 million, to RUB 7,563 million, or 19.4% of Moscow fixed line revenue, from RUB 7,038 million, or 17.7% of Moscow fixed line revenue, for the year ended December 31, 2016. Taxes other than income tax as a percentage of Moscow fixed line revenues increased to 2.3% for the year ended December 31, 2017 compared to 1.7% for the year ended December 31, 2016. Taxes increased due to increase of property tax as a result of growth in taxable value of property, plant and equipment. Salary expenses increased by RUB 146 million and amounted to 4.4% of Moscow fixed line revenues for the year ended December 31, 2017 compared to 4% of Moscow fixed line revenues for the year ended December 31, 2016.

*Ukraine selling, general and administrative expenses* for the year ended December 31, 2017, decreased by RUB 987 million and amounted to RUB 5,032 million as compared to RUB 6,019 million for the year ended December 31, 2016 and comprised 19.3% and 20.6% as a percentage of Ukraine revenues for the year ended December 31, 2017 and 2016, respectively. The principal reason for the decrease was the depreciation of Ukrainian hryvnia against Russian ruble by 19%.

*Other countries and business activities selling, general and administrative expenses* for the year ended December 31, 2017, decreased by 6.5% to RUB 14,743 million from RUB 15,776 million for the year ended December 31, 2016. Other countries and business activities selling, general and administrative expenses declined due to cost optimization in salaries of RUB 580 million in our headquarters. Appreciation of Russian ruble against local currencies (Armenian dram and Turkmenian manat) caused the decrease of selling, general and administrative expenses by RUB 479 million.

***Depreciation and amortization expenses***

*Consolidated depreciation and amortization* of property, network equipment, customer base, license costs and other intangible assets for the year ended December 31, 2017, decreased by 2% to RUB 79,912 million from RUB 81,582 million for the year ended December 31, 2016 due to slight reduction of network and base stations' carryng value, changes in estimates of useful lives of several types of assets and apreciation of Russian ruble against national currencies of foreign subsidiaries.

*Russia convergent depreciation and amortization* for the year ended December 31, 2017, decreased by 0.2% to RUB 59,942 million from RUB 60,087 million for the year ended December 31, 2016 mainly due to slight changes in estimates of useful lives of several types of assets.

*Moscow fixed line depreciation and amortization* for the year ended December 31, 2017 decreased by 2.4% and amounted to RUB 10,642 million as compared to RUB 10,900 million for the year ended December 31, 2016 mainly due to reduced volume of construction.

*Ukraine depreciation and amortization* for the year ended December 31, 2017, decreased by 3.1% to RUB 6,106 million from RUB 6,304 million for the year ended December 31, 2016. The reduction is mostly attributable to the strengthening of ruble against Ukrainian hryvnia.

*Other countries and business activities depreciation and amortization* for the year ended December 31, 2017, increased by 20.1% to RUB 3,530 million from RUB 4,420 million for the year ended December 31, 2016. The decrease is mainly attributable to weakening of the Armenian dram as compared to Russian ruble.

***Operating profit***

*Consolidated operating profit* increased by RUB 8,431 million from RUB 87,669 million in the year ended December 31, 2016 to RUB 96,100 million in the year December 31, 2017 mainly due to inrease in operating profit of Russia convergent and Ukraine segments.

*Russia convergent operating profit* for the year ended December 31, 2017 increased by 12,337 and totaled to RUB 93,821 million for the year ended December 31, 2017 and RUB 81,484 million for the year ended 2016. Russia convergent operating profit increased as a percentage of Russia convergent revenues from 22.6% for the year ended December 31, 2016, to 25.3% for the year ended December 31, 2017, due to increase of Russia convergent gross margin to 61.1% for the year ended December 31, 2017 from 58.4% for the year ended December 31, 2016. The increase of gross margin was mainly attributable to the growth in data usage and usage of other higher-margin products and optimization of our roaming costs.

*Moscow fixed line operating profit* for the year ended December 31, 2017, decreased by 18.9% to RUB 8,801 million from RUB 10,850 million for the year ended December 31, 2016. Moscow fixed line operating profit declined as a percentage of Moscow fixed line revenues to 22.5% for the year ended December 31, 2017 from 27.4% for the year ended December 31, 2016 due to negative dynamic of revenues and increase of expenses.

*Ukraine operating profit* for the year ended December 31, 2017, increased by 46.1% to RUB 5,258 million for the year, ended December 31, 2017 compared to RUB 3,599 million for the year ended December 31, 2016. Ukraine operating profit increased as a percentage of Ukraine revenues to 20.1% for the year ended December 31, 2017, from 12.2% for the year ended December 31, 2016. Ukraine gross margin increased from 54.4% for the year ended December 31, 2016 to 63.0% for the year ended December 31, 2017 due to optimisation of roaming and interconnect expenses.

*Other countries and business activities operating loss* for the year ended December 31, 2017, increased by 51.2% to RUB 10,923 million from RUB 7,225 million for the year ended December 31, 2016. The increase in operating loss was mainly attributable to impairment of non-current assets of MTS Turkmenistan and NVsision Czech Republic in amount of RUB 3,204 million and RUB 571 million, respectively.

***Currency exchange and transaction gains/losses***

*Consolidated currency exchange and transaction gain* for the year ended December 31, 2017, was RUB 1,301 million, compared to the gain of 3,241 million for the year ended December 31, 2016. The gain recognized in the year ended December, 31 2017 was mainly attributable to the appreciation of the Russian ruble against U.S. dollar and euro during the year ended December 31, 2017.

***Finance costs***

*Consolidated finance costs* for 2017 decreased by RUB 1,072 million or 3.95% compared to 2016 and amounted to RUB 26,064 million. In 2016 we incurred additional interest expense in the amount of RUB 3,044 million related to early redemption of Eurobonds due 2020. Net of this effect, our finance costs for the financial year ended December 31, 2017 increased by RUB 1,972 million as a result of increased indebtedness.

***Equity in net income of associates***

Non-operating share of the profit or loss of associates for the year ended December 31, 2017 decreased by RUB 851 million to a loss of RUB 436 million compared to a loss of RUB 1,287 million for the year ended December 31, 2016. The decline is primarily attributable to the decrease in loss of MTS Bank in the year ended December 31, 2017.

***Other expenses (income), net***

*Consolidated other expenses* for the year ended December 31, 2017 increased to RUB 992 million, as compared to the expense of RUB 317 million for the year ended December 31, 2016 due to decrease of the gain from sale of foreign currencies and increase in charity expenses in the year ended December, 31 2017.

***Provision for income taxes***

Consolidated provision for income taxes for the year ended December 31, 2017 increased by 25.4% to RUB 18,977 million from RUB 15,138 million for the year ended December 31, 2016 mainly due to increase in the effective tax rate. The effective tax rate increased to 25.1% in the year ended December 31, 2017, from 22.4% in the year ended December 31, 2016 mainly as a result of derecognition of deferred tax assets relating to tax losses, increase in earnings distributions from subsidiaries and decrease of foreign subsidiaries' income, taxed at lower rate.

***Net loss/income attributable to the non-controlling interest***

Net gain attributable to the non-controlling interest for the year ended December 31, 2017 totaled to RUB 548 million compared to net loss attributable to the non-controlling interest of RUB 24 million for the year ended December 31, 2016. The loss for the year ended December 31, 2016 is mainly attributable to the non-controlling interest in the amount of RUB 654 million recognized in relation to UMS, our former subsidiary in Uzbekistan.

***Net income attributable to the Group***

Net income attributable to the Group for the year ended December 31, 2017, increased by RUB 7,569 million, or 15.6%, to RUB 56,042 million, compared to RUB 48,474 million for the year ended December 31, 2016. Net income as a percentage of revenues was 12.7% in the year ended December 31, 2017, and 11.1% in the year ended December 31, 2016. The dynamic of net income for the year ended December 31, 2017, as compared to the year ended December 31, 2016, mainly repeats our operating income trend.

## B. Liquidity and Capital Resources

Our borrowings consist of notes and bank loans. Since 2001, we have raised a total of $3.0 billion (RUB 92.8 billion at the date of transactions) through seven U.S. dollar-denominated unsecured bond offerings in the international capital markets, as well as ruble-denominated bonds totaling RUB 178.6 billion. Our bank loans consist of U.S. dollar-, and ruble-denominated borrowings totaling approximately RUB 250.8 billion as of December 31, 2018. We repaid approximately RUB 52.5 billion of indebtedness in 2018. As of December 31, 2018, the total amount available to us under our credit facilities amounted to RUB 21 billion. We had total indebtedness of approximately RUB 528.7 billion as of December 31, 2018, including capital lease obligations, compared to approximately RUB 303.6 billion as of December 31, 2017. Our total finance costs for the years ended December 31, 2018, 2017 and 2016, was RUB 38.2 billion, RUB 26.1 billion and RUB 27,1 billion, net of amounts of interest capitalized, respectively. See Note 24 to our audited consolidated financial statements for a description of our indebtedness.

***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 in 2018, 2017 and 2016 were RUB 99,568 million, RUB 76,431 million and RUB 86,149 million respectively. We expect to continue to finance most of our capital expenditure needs through our operating cash flows, and to the extent required, to incur additional indebtedness through borrowings or additional capital raising activities. Historically, a significant portion of our capital expenditures have been related to the installation and build-out of our network and expansion into new license areas. We expect that capital expenditures will remain a large portion of our cash outflows in connection with the continued installation and build-out of our network. We expect our total capital expenditures in 2019 (including investments required for the Yarovaya Law) to be up to RUB 90 billion. These investments are required to support our subscriber base (*i.e.*, to improve network capacity), to maintain and modernize our mobile and fixed line networks, to develop our network in the regions and to continue with the roll out of LTE networks throughout Russia as well as the development of our proprietary retail chain in Russia. We expect that the development of LTE networks will be among our most significant capital expenditures and require considerable management resources. See "Item 4. Information on Our Company—B. Business Overview—Mobile Operations—Services Offered—3G Technology" for additional information. Our actual capital expenditures may vary significantly from our estimates.

In February 2016, we acquired 946,347 ordinary shares of MTS Bank, placed as part of an earlier approved additional issue, for a total consideration of RUB 1,325 million. On November 22, 2016 we acquired 2,637,310 ordinary shares of MTS Bank of 10,000,000 shares, placed as a part of an earlier approved additional share issuance, for a total consideration of RUB 2,769 million. In September 2016, we acquired 100% of the shares of Smarts-Yoshkar-Ola, operating in the Republic of Mari El and holding rights to use 1800 MHz radio frequencies for RUB 13 million.

In July 2017, we acquired a 100% ownership interest in Bashkortostan Cellular Communication OJSC ("BCC") for RUB 292 million. BCC operates in the Republic of Bashkortostan and holds rights to use 450 MHz and 2,100 MHz radio frequencies. In October 2017, we acquired 50.82% of ownership interest in the Russian retail software developer Oblachny Retail LLC ("Oblachny Retail"), operating under its trademark name LiteBox, for RUB 590 million. The deal allows us to enter the cloud-based cash register market as a fully licensed fiscal data operator (FDO) and a provider of integrated digital cash management solutions for B2B clients. In December 2017, we purchased a 100% ownership interest in Praliss Enterprises ("Praliss") for RUB 313 million, thus acquiring one of the world's leading eSport clubs—Gambit Esports.

In January and February 2018, we acquired Ponominalu.ru (78.2%) and Ticketland.ru (100%), the leading players in the Russian event e-ticketing industry. The acquisitions allow us to enter the promising event ticketing market and establish ourself as a leading ticket operator in Russia, while simultaneously broadening our suite of digital services and integrating a key new product into our existing loyalty program and mobile app ecosystem. In March 2018, we invested RUB 1.15 billion in the development of Ozon Holdings Ltd (OZON) through additional share issuance, as a result of which our stake in Ozon's authorized capital increased from 11.2% to 13.7%. In May, we further increased our stake in Ozon to 16.7% through a series of transactions with minority shareholders. In July 2018, our wholly-owned subsidiary Mobile TeleSystems B.V. acquired a 28.63% stake in MTS Bank from Sistema for RUB 8.27 billion. As a result of the deal, our ownership share in MTS Bank increased from 26.61% to 55.4%. In September 2018, we acquired 100% of the share capital of Avantage LLC for RUB 8.9 billion (including net debt). Avantage LLC owns the Avantage data processing center project in Lytkarino, Moscow region, one of the largest data centers in Russia by number of racks. The data center in Lytkarino increased the number of data centers in our federal network to 10. In September 2018, we acquired a 13.7% stake in Youdo Web Technologies Limited (Cyprus), the owner of Youdo, one of the largest Russian online service providers matching freelance labor demand and supply for everyday and business tasks for USD 12 million (RUB 824 mln). Youdo Group is the leader in the labor exchange market for cleaning, repair, freight, courier delivery and other services in the C2C and B2B segments.

We 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, 2018 see Note 24 of our audited consolidated financial statements.We generally use the proceeds from our financing activities for our corporate purposes and refinancing existing indebtedness.

Sistema, which currently controls 44.57% of our total charter capital (effective ownership of 50.07%) and consolidates our results in its financial statements, has a significant amount of outstanding debt and requires funds for debt service. These funds may come, in part, from dividends paid by its subsidiaries, including us.

On March 21, 2019, our Board of Directors approved new dividend policy which sets a minimum payout of RUB 28.0 per ordinary MTS share (RUB 56.0 per ADR) per calendar year. In determining actual dividends payout, we will consider a number of factors, including cash flow from operations, capital expenditures and debt position. The policy will cover 2019 - 2021. Payments will continue to be made on a semi-annual basis.

Annual and semi-annual dividend payments, if any, must be recommended by Board of Directors and approved by the General Meeting of Shareholders (GM). We anticipate that any dividends we may pay in the future on the shares represented by the ADSs will be declared and paid to the depositary in

rubles and will be converted into U.S. dollars by the depositary and distributed to holders of ADSs, net of the depositary's fees and expenses. Accordingly, the value of dividends received by holders of ADSs will be subject to fluctuations in the exchange rate between the ruble and the dollar.

In accordance with Russian laws, earnings available for dividends are limited to profits determined under Russian statutory accounting regulations, denominated in Russian rubles, after certain deductions. Our net income for the years ended December 31, 2018, 2017 and 2016 that is distributable under Russian legislation totaled RUB 43,301 million, RUB 125,091 million and RUB 50,659 million, respectively. As of December 31, 2018, 2017 and 2016 dividends payable were RUB 146.2 million, RUB 125.4 million and RUB 87.0 million, respectively, and included in the 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 U.S. dollar-denominated and 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.

As of December 31, 2018, our outstanding indebtedness consisted of the following notes and bank loans:

*Notes*

As of December 31, 2018, our notes consisted of the following:

| | Currency | Interest rate (actual at December 31, 2018) | Amount |
|---|---|---|---|
| MTS International Notes due 2023 | USD | 5.00% | 31,090 |
| MTS International Notes due 2020 | USD | 8.625% | 20,870 |
| MTS PJSC Notes due 2022 | RUB | 7.70% | 14,958 |
| MTS PJSC Notes due 2023 | RUB | 6.85% | 9,348 |
| MTS PJSC Notes due 2031 | RUB | 7.85% | 1,080 |
| MTS PJSC Notes due 2022 | RUB | 9.00% | 9,993 |
| MTS PJSC Notes due 2021 | RUB | 8.85% | 9,990 |
| MTS PJSC Notes due 2021 | RUB | 7.10% | 9,988 |
| MTS PJSC Notes due 2025 | RUB | 7.25% | 9,986 |
| MTS PJSC Notes due 2018 | RUB | 7.70% | — |
| MTS PJSC Notes due 2020 | RUB | 7.90% | 40 |
| Other Notes due 2022 | RUB | 0.25% | 12 |
| **Total notes** | | | **117,355** |
| Less: current portion | | | (1,017) |
| **Total notes, long-term** | | | **116,338** |

We have an unconditional obligation to repurchase certain MTS Notes at par value if claimed by the noteholders subsequent to the announcement of the sequential coupon. The dates of the announcement for each particular note issue are as follows:

| | |
|---|---|
| MTS PJSC Notes due 2031 | September 2019 |
| MTS PJSC Notes due 2023 | March 2020 |

Subject to certain exceptions and qualifications, the indentures governing our U.S. dollar-denominated notes due 2020 contain covenants limiting our ability to incur debt, create liens, sell or transfer lease properties, enter into loan transactions with affiliates, merge or consolidate or convey our properties and assets to another person, as well as our ability to sell or transfer any of our GSM licenses for the Moscow, St. Petersburg, Krasnodar and Ukraine license areas. In addition, if we experience a change in control, noteholders will have the right to require us to redeem the notes at 101% of their principal amount, plus accrued interest. In respect to MTS International Notes due 2023 and MTS International Notes due 2020 we are prohibited from having any judgment, decree or order for payment of money in an amount of $75 million (RUB 5,210 million as of December 31, 2018) unsatisfied for a period of more than 60 days without being appealed, discharged or waived. If we fail to comply with these and the other covenants contained in the indentures, after certain notice and cure periods, the noteholders can accelerate the debt to be immediately due and payable.

Our ruble-denominated notes contain certain covenants limiting our ability to delist the notes from the quotation lists and delay coupon payments. We may from time to time seek to repurchase or redeem our outstanding notes through cash purchases and/or exchanges for new debt securities in open market purchases, privately negotiated transactions or otherwise. Such repurchases or exchanges, if any, will depend on market conditions, our liquidity requirements, contractual restrictions and other factors.

We were in compliance with our covenants as of December 31, 2018.

*Bank loans*

As of December 31, 2018, our loans from banks and other financial institutions consisted of the following:

| | Maturity | Interest rate (actual at December 31, 2018) | December 31, 2018 |
|---|---|---|---|
| ***USD-denominated:*** | | | |
| Citibank | 2019 - 2024 | LIBOR + 0.9% (3.776%) | 10,980 |
| | | | **10,980** |
| ***RUB-denominated:*** | | | |
| Sberbank | 2020 - 2022 | 7.50% - 8.59% | 139,515 |
| VTB | 2020 - 2021 | 7.20% - 8.65% | 100,000 |
| Other | 2024 | Various | 210 |
| | | | **239,725** |
| ***Other currencies:*** | | | |
| Various financial institutions | 2019 - 2020 | Various | 75 |
| | | | **75** |
| **Total bank and other loans** | | | **250,780** |
| Less: current portion | | | (2,046) |
| **Total bank and other loans, long-term** | | | **248,734** |

See also Note 24 to our audited consolidated financial statements.

Our loans are subject to certain restrictive covenants, including, but not limited to, negative pledges, certain financial ratios, limitations on dispositions of assets and limitations on transactions with associates, requirements to maintain ownership in certain subsidiaries, maintain certain contracts or licenses, maintain assets of certain value and to maintain a certain level of deposits in accounts at our creditor banks. In addition, there are restrictions on the granting of loans and guarantees and the incurrence of debt the purpose of which is to facilitate us paying or making any dividend or other payment or distribution of any kind on or in respect of any of our shares or to undertake any form of capital reduction. Some loans also include an event of default involving an unsatisfied judgment against us in excess of $250 million (RUB 17,368 million as of December 31, 2018) for a period of over 180 consecutive calendar days. We were in compliance with our loan covenants as of December 31, 2018.

The following table presents the aggregate scheduled maturities of debt principal outstanding as of December 31, 2018:

| | Notes | Bank loans |
|---|---|---|
| Payments due in the year ending December 31, | | |
| 2019 | 12,401 | 21,849 |
| 2020 | 38,964 | 107,600 |
| 2021 | 25,670 | 150,558 |
| 2022 | 29,061 | 22,756 |
| 2023 | 32,738 | 2,131 |
| Thereafter | 11,085 | 1,068 |
| **Contractual undiscounted cash flows** | **149,919** | **305,962** |
| Less: unamortized debt issuance costs | (179) | (408) |
| Less: interest | (32,385) | (49,289) |
| Less: debt modification | — | (5,485) |
| **Total debt** | **117,355** | **250,780** |

In addition, we had lease obligations in the amount of RUB 160,553 million and RUB 11,857 million as of December 31, 2018 and 2017, respectively. The terms of our material debt obligations are described in Note 24 to our audited consolidated financial statements.

In addition, Sistema, which currently controls 44.57% of our total charter capital (effective ownership of 50.07%) and consolidates our results in its financial statements, is subject to various covenants in certain of its credit facilities which impose restrictions on Sistema and its restricted subsidiaries, including us, with respect to, among others, incurrence of indebtedness and liens. 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 and Sistema's 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 capital expenditures and acquisitions of subsidiaries follows:

| | 2018 | 2017 | 2016 |
|---|---|---|---|
| | (amounts in million RUB) | | |
| **Cash flows from:** | | | |
| Net cash provided by operating activities | 154,390 | 144,640 | 130,565 |
| Net cash used in investing activities | (78,389) | (81,510) | (57,302) |
| Net cash used in financing activities | (25,924) | (50,445) | (83,038) |
| Effect of exchange rate changes on cash and cash equivalents | 3,412 | (569) | (5,219) |
| Net increase/(decrease) in cash and cash equivalents | 53,489 | 12,116 | (14,994) |
| **Cash outlays for:** | | | |
| Capital expenditures[1] | (99,568) | (76,431) | (86,149) |
| Acquisition of subsidiaries, net of cash acquired | (3,444) | (367) | (5) |
| Cash payments for the acquisition of subsidiaries under common control and non-controlling interests | (13,242) | — | (17) |
| Cash inflow from sale of subsidiaries under common control | 619 | — | 3,063 |

(1) Includes acquisitions of property, plant and equipment and intangible assets

For the year ended December 31, 2018, net cash provided by operating activities was RUB 154,390 million, an increase of 6.7% from the year ended December 31, 2017. The increase was mainly attributable to the effect of IFRS 15 and IFRS 16 implementation, which led to reclassification of cash flows related to capitalized contract costs and part of rental payments to investing and financiang activities, respectively. On like to like basis, net cash provided by operating activities for 2018 financial year deacreased by 7,341 million or 5.1% and totaled to RUB 137,299 million. The main negative effect resulted from acquisition of contolling stake and further consolidation of MTS Bank, the operating cash ouflow related to bank activities totaled to RUB 9,922 million or 6.9% of the decrease.

Net cash used in investing activities for the year ended December 31, 2018 decreased by RUB 3,121 million or 3.8% and totaled to RUB 78,389 million. The decrease in amount of RUB 14,963 million related to lower investing in deposits, traded debt securities and assets in trust management of Sistema-Capital. At the same time the inflows from investing in traded securities and assets in trust management increased by RUB 13,211 million, including RUB 4,490 million from MTS Bank activities. Other positive effect resulted from cash inflows from our swaps and forward contracts, which amounted to RUB 6,892 million. Our capital expenditures in the financial year 2018 increased by RUB 23,137 million including through RUB 7,559 million related to purchase of data center from Avantage, RUB 5,527 million spent for acquisition of 4G licences in Ukraine as well RUB 959 million of MTS Bank capital expendures. In 2018, we also spent RUB 6,225 more on acquisition of subsidiaries and associates (thereof RUB 3,190 million for Ticketland, RUB 2,998 million for Ozon). Cash paid for capitalized contract costs reclassified from operating activities as a result of IFRS 15 implementation totaled to RUB 3,855 million.

Net cash used in financing activities decreased by RUB 24,521 million or 48.6% from 50,445 million for the year ended December 31, 2017 to RUB 25,924 million for the year ended December 31, 2018 mainly due to increase in borrowed funds. In 2018, our proceeds from loans and notes grew by RUB 52,414 million. The positive effect was offset by cash outflows related to acquisition of subsidiaries under common control, including RUB 6,872 million, RUB 4,658 million and RUB 1,711 million spent for purchase of MTS Bank, Dekart and Serebryaniy Bor, respectively. Rental

payments reclassified from operating activities as a result of IFRS 16 implementation totaled to RUB 13,234 million.

For the year, ended December 31, 2017, net cash provided by operating activities was RUB 144,640 million, a increase of 10.8% from the year ended December 31, 2016. The increase was mainly driven by our improved operating performance through out the year.

Net cash used in investing activities for the year ended December 31, 2017 totaled to RUB 81,510 million, an increase of 42.2% in comparison with 2016. The increase in the amount of RUB 23,978 million was attributable to higher cash outflow relating to bank deposits, investments in Sistema-Capital trust management as well as investing in publicly traded debt securities. At the same time the cash inflows from investing in deposits reduced by RUB 13,636 million in 2017 compared to 2016, as in 2016 we got significant cash inflow related to deposits opened in previous years. Positive effect on net cash used in investing activity was attributable to lower capital expenditires and reduced investments in associates, the effects amounted to RUB 9,718 million and RUB 3,371 million, respectively

Net cash used in financing activities for the year ended December 31, 2017 decreased by RUB 32,593 million or 39.2%, and totaled to RUB 50,445 million. The decrease was mainly due to decline in repayments and growth of proceeds from notes and loans by RUB 45,175 million and RUB 9,440 million, respectively. The positive effect from movements in our debt was partially offset by increase in cash outflows related to our share repurchase program, they grew by RUB 21,148 million in comparison to prior period.

***Liquidity***

As of December 31, 2018, we had total cash and cash equivalents of RUB 84,075 million (RUB 69,776 million in rubles, RUB 4,873 million in U.S. dollars, RUB 4,763 million in Ukrainian hryvnias, RUB 2,988 million in euros, RUB 721 million in Turkmenistan manat and RUB 954 million in other currencies). In addition, as of December 31, 2018, we had short-term investments of RUB 47,863 million, mostly in form of deposits in various banks as well as debt securities (assets in Sistema-Capital trust management) and loans. We also had RUB 21,000 million available under existing credit facilities as of December 31, 2018. For a description of our outstanding external financing, see Note 24 to our audited consolidated financial statements.

As of December 31, 2018, we had a working capital deficit of RUB 26,537 million compared to a deficit of RUB 10,639 million as of December 31, 2017. The increase primarily related to the provision for penalty of USD 850 million (RUR 59.1 billion as of December 31, 2018) with respect to our discontinued operations in Uzbekistan (fully paid in March 2019), as well as acquisition of controlling stake and further consolidation of MTS Bank, which had a working capital deficit of RUB 37,307 million as of the reporting date. These negative effects were partially offset by a decrease of RUB 60,610 million of our short-term borrowings. We expect to repay all long-term debts as they become due from our operating cash flows or through re-financings. We believe that our working capital, 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 net income under Russian accounting standards for the years ended December 31, 2018 and 2017 that was distributable under Russian legislation amounted to RUB 99,408 million and RUB 128,465 million respectively.

**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. See "Item 3. Key Information—D. Risk Factors—Risks Relating to Our Business—The controlling shareholder has a possibility to determine certain decisions of our governing bodies."

**Critical Accounting Policies**

Please refer to notes in our audited consolidated financial statements included elsewhere in this document.

***Recent Accounting Pronouncements***

Please refer to note 2 in our audited consolidated financial statements included elsewhere in this document.

## C. Research and Development, Patents and Licenses, etc.

Not applicable.

## D. Trend Information

***Sales***

In 2018, our revenues in Russia increased by 5.8% and in Ukraine increased by 1.4%. Our mobile subscriber base decreased to 99.8 million subscribers as of December 31, 2018 from 101.2 million subscribers as of December 31, 2017. We expect our consolidated subscriber base to remain stable in 2019 as a result of continued marketing and advertising activity. We expect growth in the long term due to increased use of IoT (M2M) devices. We anticipate our consolidated revenues will increase in 2019 mainly based on growth in development of our broadband business and convergent services and growth in sales of handsets and accessories.

Average monthly minutes per subscriber in Russia slightly increased and amounted to 390 minutes in 2018 as compared to 383 minutes in 2017. We expect an increase in megabytes per subscriber due to our efforts aimed at stimulating data usage.

In Ukraine, our subscriber base decreased to approximately 19.7 million subscribers as of December 31, 2018, from 20.8 million subscribers as of December 31, 2017. During 2016 - 2018 VF Ukraine actively expanded its network in order to meet the growing demand for high-speed mobile internet and digital services.

In January 2018, VF Ukraine secured the first 4G license in the 2600 MHz band. By the end 2018 4G network is available in all regions of Ukraine and covers more than 45% of the country's population. 3G network is available for more than 85% of Ukrainians. We believe that success in the digital services market will strengthen the market position of VF Ukraine. In 2019, we expect revenues to remain stable under the impact of the weaker macroeconomic environment.

Our subscriber base in Armenia remained stable and amounted to 2.1 million subscribers in 2018. We expect 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 and Ukraine are the two largest markets for us, both in terms of subscribers and revenue. In 2018, the underlying developments within these markets remained generally positive and included high mobile penetration, strong demand for mobile services, generally positive usage trends and increased consumption of data services and value-added services. We expect growth of business activity in Russia to continue throughout 2019. We also expect that the stabilizing of the political situation in Ukraine will allow us to retain our operating indicators.

We expect a challenging operating environment in 2019 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."

However, considering current macroeconomic conditions, our management believes that we will experience medium- and long-term growth. Due to the fact that the Russian and the Ukrainian markets are 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 2018 total revenue of MGTS decreased by 0.5%. The decline consists of two different trends. We see the continuing decline of fixed line voice services market and related revenue. In 2018 MGTS' fixed line voice services revenue decreased by 8.5%. In 2018, the subscriber base of B2C and B2B segments decreased by 4.8% and 5.5%, respectively. We expect further reduction of MGTS' revenue from fixed line voice services due to the decrease in subscriber base in 2019.

However, we observe a growth in revenues from other services provided by MGTS to customers. MGTS' revenue from broadband Internet services increased by 12.3%. The increase was driven by high quality of services, profitable tariffs and operation optimization that led the transition of subscribers from competitors. MGTS' revenue from digital TV services increased by 23.8% in 2018. The growth mainly falls to B2C market, where MGTS is the leader in terms of the growth and the number of TV subscribers. In 2019, we expect further growth of revenue from broadband Internet and digital TV services mainly due to increase in the subscriber base.

In 2018, MGTS' revenue from data services in B2G segment decreased by 23.5% due to the termination of some contracts with government customers. In 2019, we expect further reduction of MGTS' revenue from data services in B2G segment.

***Churn***

We define churn as the total number of subscribers who cease to be a subscriber during the 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 around 34% for the year ended December 31, 2018. We continued to offer our popular tariff plans "Super MTS" (free calls to all subscribers of MTS Russia) and "Smart" (integrated voice and data bundles), updated options for unlimited mobile Internet, further improved network quality and enhanced data rate through the expansion of our 3G and LTE capabilities. We expect that the extension of our loyalty programs, new digital services and further development of our mono-brand retail network will allow us to keep churn rate under control in 2019, stimulate data usage and promote subscriber loyalty through superior customer service.

The churn rate in Ukraine slightly increased to 28.8% for the year ended December 31, 2018, from 26.6% for the year ended December 31, 2017. In 2019, we expect subscriber loyalty to grow due to the launch of 3G/4G-enabled data services with the support of Vodafone partnership.

***Moscow Fixed Line Operations Churn***

Churn reduction and customer loyalty increase are among the most important areas of focus of MGTS. The churn rate differs for different services. Fixed line voice services is the fundamental service of MGTS. The churn rate for fixed line services of MGTS increased by 1% to 5.9% during the year ended December 31, 2018, as compared to 4.9% for the year ended December 31, 2017. MGTS intends to prevent increase of the churn rate for fixed line services in 2019 through fixed and mobile package offers.

The churn rate for broadband Internet services of MGTS slightly increased to 8.2% during the year ended December 31, 2018, as compared to 7.9% for the year ended December 31, 2017. The churn rate for Digital TV services of MGTS remained at 8.5% during the year ended December 31, 2018. The maintenance of churn rate for Digital TV services was achieved due to technological optimization of user equipment, new services and competitive tariffs for quality services. MGTS plans to increase subscriber loyalty in 2019 in order to consolidate its leading position on the market.

## E. 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 regularly enter into fixed to variable interest rate swaps to eliminate the exposure of changes in value of debt obligations. Interest rate swap contracts outstanding December 31, 2018 mature in 2020.

In addition to the above, we have also entered into several cross currency interest rate swap agreements. Most of these contracts hedged the risk of both interest rate and currency fluctuations and assumed periodic exchanges of interest payments or both principal and interest payments from RUB denominated amounts to USD denominated amounts to be exchanged at a specified rate. The rate was determined by the market spot rate upon issuance. Each qualifying for cash flow hedge accounting cross-currency interest rate swap matches the exact maturity dates of the underlying debt allowing for highly effective hedges. Cross currency interest rate swap contracts mature in 2019 - 2024.

## F. Tabular Disclosure of Contractual Obligations

We have various contractual obligations and commercial commitments to make future payments, including debt agreements, capital 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, 2018:

| | Payments due by period | | | | |
|---|---|---|---|---|---|
| | Less than 1 year | 1 - 3 years | 3 - 5 years | More than 5 years | Total |
| | (amounts in millions of RUB) | | | | |
| **Contractual Obligations:**[1] | | | | | |
| Long-Term Principal Debt Obligations[2] | 3,256 | 279,527 | 80,361 | 11,064 | 374,208 |
| Interest Payments[3] | 30,994 | 43,265 | 6,325 | 1,089 | 81,673 |
| MTS Bank deposits and liabilities | 110,668 | 2,157 | 399 | 858 | 114,082 |
| Lease Obligations | 30,220 | 53,702 | 53,701 | 116,420 | 254,043 |
| Purchase Obligations[4] | 26,850 | 13,859 | 950 | 1,876 | 43,535 |
| Provision for decommissioning and restoration | — | — | — | 3,109 | 3,109 |
| Retirement and post-retirement obligation | — | 229 | 13 | 40 | 282 |
| Payments related to business acquisitions | 2,375 | 249 | — | — | 2,624 |
| Uncertain Income Tax Position | 850 | — | — | — | 850 |
| **Total** | 205,213 | 392,988 | 141,749 | 134,456 | 874,406 |

(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, 2018, scheduled maturities for the debt and interest rates effective as of December 31, 2018. We calculate interest payments on ruble-denominated notes until the dates of their respective put options, as described in Note 24 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) 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 the date of this document were as follows:

| Name | Year of Birth | Position |
|---|---|---|
| Ron Sommer[(3)(4)(5)] | 1949 | Chairman of the Board of Directors, Non-Executive Director |
| Artem I. Zassoursky[(3)(4)(5)] | 1979 | Non-Executive Director |
| Alexey B. Katkov[(4)] | 1977 | Non-Executive Director |
| Stanley P. Miller[(1)(2)(4)(5)(7)] | 1958 | Non-Executive Independent Director |
| Regina von Flemming[(1)(2)(3)(5)(7)] | 1965 | Non-Executive Independent Director |
| Vsevolod V. Rozanov[(3)(4)(5)] | 1971 | Non-Executive Director |
| Thomas Holtrop[(1)(2)(3)(7)] | 1954 | Non-Executive Independent Director |
| Dr. Wolfgang Schüssel[(1)(2)(4)] | 1945 | Non-Executive Independent Director |
| Alexey V. Kornya[(5)(6)] | 1975 | Executive Director, President and Chief Executive Officer ("CEO") |
| Alexander E. Gorbunov[(4)(6)] | 1967 | Vice President—Member of Management Board—Strategy and Development |
| Maria N. Golyandrina[(6)] | 1986 | Vice President—Member of Management Board—Human Resources |
| Inessa V. Galaktionova[(6)] | 1974 | Vice President—Member of Management Board—Sales and Customer Service |
| Kirill A. Dmitriev[(6)] | 1978 | Vice President—Member of Management Board—Digital Solutions for Home |
| Igor A. Yegorov[(6)] | 1968 | Member of Management Board—Head of Moscow region |
| Ruslan S. Ibragimov[(5)(6)] | 1963 | Vice President—Member of Management Board—Corporate and Legal Affairs |
| Andrey M. Kamenskiy[(3)(6)] | 1972 | Vice President—Member of Management Board—Chief Financial Officer ("CFO") (Finance, Investments, Mergers & Acquisitions) |
| Vyacheslav K. Nikolaev[(4)(6)] | 1972 | Vice President—Member of Management Board—Marketing |
| Andrey G. Smelkov[(6)] | 1976 | Vice President—Member of Management Board—Director of "MTS Foreign Subsidiaries" Business Unit |
| Andrey E. Ushatskiy[(6)] | 1974 | Vice President—Member of Management Board—Chief Technology and Information Officer |
| Valery V. Shorzhin[(6)] | 1963 | Vice-President—Member of Management Board—Digital Business Solutions |

(1) Member of the Remuneration and Nomination Committee.

(2) Member of Audit Committee.

(3) Member of Budget Committee.

(4) Member of Strategy Committee.

(5) Member of Corporate Governance Committee.

(6) Member of Management Board.

(7) Member of Special Committee.

***Ron Sommer*** serves as Chairman of our Board of Directors since June 2009. He is the Chairman of our Strategy Committee. He also is a Member of our Budget Committee and Corporate Governance Committee. Mr. Sommer serves as the Chairman of the Supervisory Board of Vodafone Ukraine. He is also a Member of the Board of Directors of Tata Consultancy Services and Sistema. Mr. Sommer served as First Vice President—Head of Telecommunications Assets Operating Unit of Sistema from May 2009 until 2011. He was a member of the Board of Directors of Sistema from 2005 until 2012 and he served as Chairman of the Board of Directors of various Sistema - affiliated companies. Mr. Sommer was the Chairman of the Board of Directors of SSTL until 2015. He was also a member of the International Advisory Board of The Blackstone Group until 2012. In 2009, he served as Chairman of the Board of Directors of Comstar. Between May 1995 and July 2002, he was CEO of Deutsche Telekom AG. From 1980 to 1995, he held a number of positions with Sony Corporation, including as CEO of Sony Deutschland, COO of Sony Corporation of America and COO of Sony Europe.

***Artem I. Zassoursky*** serves as one of our Directors since June 2017. He also is a Member of our Strategy Committee, Budget Committee and Corporate Governance Committee. Mr. Zassoursky is also a Vice President for Strategy and a Member of Management Board of Sistema. He was a Member of the Board of Directors of Business-Real Estate, Agroholding Steppe, Stream LLC, Sitroniks, Detskiy Mir, Insitel Services Private Limited, and now he is a Member of the Board of Directors of Sistema Finance S.A. and Chairman of the Board of Directors of Medsi. Prior to joining Sistema, he held the position of General Director of Stream LLC, in 2013 he served as a Vice President of SMM OJSC. He held various senior positions at major media companies prior to 2013.

***Alexey B. Katkov*** serves as one of our Directors since June 2018. He is also Member of our Strategy Committee, Member of Management Board of Sistema, Member of the Board of Directors of SVK Fund, Ozon Holdings Ltd., Detsky Mir, Sistema Venture Capital LLC and other companies. He is a President of SVK Fund LLC and a CEO and President of Sistema Venture Capital LLC. Mr. Katkov is also the Chairman of Sitroniks and Sistema Consult Board of Directors In 2015, he was First Vice President and COO at SMM JSC. Previously, from 2000 to 2015, he worked at Mail.ru LLC, where he served as Vice President, Commercial Director and Director for International and Regional Development.

***Stanley P. Miller*** serves as one of our Directors since June 2010. He also is a Member of our Remuneration and Nomination Committee, Strategy Committee, Audit Committee and Corporate Governance Committee. Previously, from 2010 to 2018, he was the Chairman of our Remuneration and Nomination Committee. He owns real-estate businesses in Belgium and South Africa, serving as CEO at ULS BVBA Belgium, Milvest BVBA Belgium, Leaderman -NV Belgium, Athena Investment Holdings SA Luxembourg, Director of Arrow Creak Investments 75 (PTY) Ltd South Africa and Main Branch Investments 45 (PRY) Ltd South Africa. From 1998 to 2010, Mr. Miller served as CEO at KPN, Netherlands (since 2005, KPN Mobile International). From 2006 to 2010, he served as CEO and Chairman of the Supervisory Board at E-Plus, a subsidiary of KPN and the third largest provider of mobile telephony services in Germany. From 2001 to 2010, Mr. Miller was CEO and Chairman of the Board at BASE, Belgium, a subsidiary of KPN and the third largest provider of mobile telephony services in Belgium operating under the Simyo and Ortel Mobile brands. From 1998 to 2010, he served as a member of the Board of Directors of IP Global Net NV. He also is a Member of a Special Committee of the MTS' Board of Directors. This was established to assist the Board of Directors to execute the project on increasing MTS's stock in the share capital of MTS Bank

***Regina von Flemming*** serves as one of our Directors since June 2015. She is also the Chairman of our Remuneration and Nomination Committee and a Member of our Audit Committee, Budget Committee and Corporate Governance Committee. Ms. Von Fleming also serves on the Board of Directors of the Russian Standard Charitable Foundation. She also is a Member of a Special Committee of the MTS' Board of Directors. Previously, from 2016 to 2018, she was a Member of our

Remuneration and Nomination Committee. Ms. von Flemming served as the CEO and Publisher of Axel Springer Russia from 2005 to 2015. Prior to that, she was the founder and owner of Flemming & Partner GmbH Berlin—Moscow, a consultancy providing services in the areas of crisis management, start up, interim management and restructuring, interim CEO in Russia mainly for German and Russian entities. From 2000 to 2003, she worked as Vice President of the "US Russia Investment Fund" at Delta Capital, one of the first private equity funds in Russia. Prior to joining Delta Capital, she held various management roles in German companies.

***Vsevolod V. Rozanov*** serves as one of our Directors since June 2012, and in 2015 he was elected as the Deputy Chairman of the Board of Directors. He is also the Chairman of our Budget Committee and our Corporate Governance Committee. He also is a Member of our Strategy Committee. Mr. Rozanov is also the Chairman of the Board of Directors of MTS Bank. Since 2013 he served as the Vice President—Head of Finance and Investments Complex in Sistema and now he serves as Managing partner in Sistema. Currently he is also the Chairman of the MTS Bank's Board of Directors, Deputy Chairman of the Board of Directors in SSTL, member of the Boards of Directors in EAST-WEST UNITED BANK S.A., "Landshaft" CJSC, "Lider Invest" OJSC, "UK Segezha Group" LLC, Sistema Finance S.A., Sistema-Capital trust management, "Mikron" PJSC, Insitel, member of Management Board in Charity Fund Sistema. Since 2014 until 2015 he was a member of "SG-Trans" CJSC and "Landshaft" CJSC' Boards of Directors and the Chairman of the Board of Directors in "DIK" LLC. Since 2014 until 2015 Mr. Rozanov was also a member of and since 2015 is the Chairman of the Board of Directors of MTS Bank. From 2008 until 2013 he served as the president of SSTL and since 2015 serves as the Deputy Chairman of the SSTL's Board of Directors. From 2006 until 2008 served as Vice President and Chief Financial Officer of MTS. In 2004 he was appointed Deputy General Director for Economics and Finance of Comstar UTS, coordinating the preparation of the company's IPO on the London Stock Exchange. From 2002 until 2004 served as Deputy General Director and Chief Financial Officer of MTU-Inform. From 1993 until 2001 held various consulting positions at the Moscow, London and Stockholm offices of Bain & Company.

***Thomas Holtrop*** serves as one of our Directors since February 2013. He is also the Chairman of our Audit Committee, a Member of Remuneration and Nomination Committee and Budget Committee. He also is the Chairman of a Special Committee of the MTS' Board of Directors. From 2005 to 2011, Mr. Holtrop served as a member of the Supervisory Board at Gruner & Jahr (Hamburg). Prior to that, from 2001 to 2004, he served as the President of T-Online International AG. Mr. Holtrop also served as a member of the Board of Directors at Deutsche Telecom AG from 2002 to 2004. Prior to that, he served as Vice President at American Express International Inc. and was a member of the Board of Directors at Bank 24 AG and Deutsche Bank 24 AG.

***Dr. Wolfgang Schüssel*** serves as one of our Directors since June 2018. He is also a Member of our Remuneration and Nomination Committee, Audit Committee and Strategy Committee. He is the President of the Foreign Policy, United Nations Association of Austria (UNA-Austria) and United Europe. He is also a Member of the Supervisory Board of RWE AG and Chairman of the Supervisory Board of Zoo Vienna. Dr. Wolfgang Schüssel is also Member of the Advisory Board of Deutsche Vermögensberatung (DVAG) and Investcoprp (UAE), Member of the Board of trustees of Allensbach Institute and Konrad Adenauer Foundation.

***Alexey V. Kornya*** serves as our President and CEO since March 2018. He is also a Member of our Corporate Governance Committee. He is the Chairman of the Board of Directors of Mobile TeleSystems LLC and Member of the Board of Directors of MTS Bank and Sistema Capital. Mr. Kornya is also a Member of the Board of Directors of RTC. He is also serves as a Member of the Supervisory Board of Vodafone Ukraine. Prior to that, he served as our Vice President for Finance, Investments, Mergers and Acquisitions-CFO from 2016. From July 2008, he served as our Acting Vice President for Finance and Investments. From March 2007 to December 2008, Mr. Kornya served as our Chief Financial Controler. He served as our Financial Planing and Analysis Director from November

2004 to March 2007 and as CFO of our Urals Macro-region branch from July 2004 to November 2004.Mr. Kornya joined MTS in July 2004 as MTS Financial Director in the Ural Federal District. Prior to joining MTS, Mr Kornya worked for such companies as North West Telecom and PwC Audit.

***Alexander E. Gorbunov*** serves as our Vice President for Strategy and Development since April 2018. He is also a member of our Strategy Committee. Before that, he was a Member of our Board of Directors, Deputy Chairman of our Board of Directors and a Member of our Budget Committee. In addition, Mr. Gorbunov serves on the Board of Directors of various other companies such as SSTL and YOUDO. From 2011 until 2018 he served as Vice-President managing telecom assets of Sistema. From 2010 until 2011, Mr. Gorbunov served as Executive Vice President for development of telecommunication assets at Core Assets Business Unit of Sistema and from 2011 until 2015—as Executive Vice-President. From 2006 until 2010, he served as Vice President for Strategy and Development at Comstar. Prior to that, from 2005 to 2006, Mr. Gorbunov headed Corporate Development Department at Sistema.

***Maria N. Golyandrina*** serves as our Vice President for Human Resources since December 2017. She also is a Member of Board of Directors of MGTS. From 2014 to 2018, she run the Compensation, Benefits and HR administration Department. Ms. Golyandrina started her career at MTS as HR manager in 2006.

***Inessa V. Galaktionova*** serves as our Vice President for Sales and Customer Service since February 2019. She is also Adviser of the Federal State Unitary Enterprise "Russian Post." Prior to joining MTS, Inessa served as Deputy Chief Executive Officer at the Federal State Unitary Enterprise "Russian Post." From 2009 to 2013, she held the position of Chief Commercial Officer of Tele2 Russia. From 1996 to 2008, Inessa worked at Philips Russia and Central Asia, where she held various positions from marketing communications manager to CMO.

***Kirill A. Dmitriev*** serves as our Vice President—Digital Solutions for Home since February 2019. He is also a Member of the Board of Directors of NVision Group, MTS Armenia, RTC and MGTS. Mr. Dmitriev is also a Member of Supervisory Board of Vodafone Ukraine and Vodafone Retail. Prior to that, he was our Vice President- Sales and Customer Service since 2016. He also was a Member of Management Board—Head of Moscow Macro-region since April 2014. Since 2011 he held a position of Director of North-West Macro-region. Mr. Dmitriev joined MTS in 2009 as Director of Western branch of MTS Ukraine. Prior to joining MTS he served at various management positions at Baltic Beverages Holding Ukraine.

***Igor A. Yegorov*** serves as our Head of Moscow region, Member of the Management Board since May 2016. He is also a Member of the Board of Directors of Avantage. Prior to that, he headed the MTS business in the regions of Central Russia since May 2014. He joined us in 2003 and held senior positions in the MTS operations in the Irkutsk Region and the Trans-Baikal Territory, served as Marketing Director and Commercial Director for retail markets at the MTS operation in the Far East and Eastern Siberia and was appointed Director of the Far East macroregion in October 2011.

***Ruslan S. Ibragimov*** serves as our Vice President—Corporate and Legal Affairs since January 2008. Since 2015 he is also a Member of our Corporate Governance Committee. He is also a Member of the Management Board, Vice President of the Russian Corporate Counsel Association (RCCA) and Senior Director of the Association of Independent Directors. Mr. Ibragimov also serves as a Member of the Board of Directors of Vysshaya Shkola Publishers OJSC, Prosveshcheniye Publishers JSC and Doctor Ryadom LLC. From February 2007 to January 2008, Mr. Ibragimov served as our Director—Chief Legal Counsel. He joined us in June 2006 and initially served as the Director for legal matters, as well as headed our Legal Department. Prior to joining us, Mr. Ibragimov was a member of the law firm Ibragimov, Kagan and Partners from July 2002 to June 2006. From 1996 to 2002, he served as Deputy General Director and Senior Partner at RSM Top-Audit, a tax and legal consulting firm. From 1992 to 1996, Mr. Ibragimov headed legal departments at various commercial banks.

***Andrey M. Kamenskiy*** serves as our Vice President—Chief Financial Officer since April 2018. He is also a Member of our Budget Committee. He is a Member of the Board of Directors of Mobile TeleSystems LLC, MTS Bank, MGTS, RTC and Sistema Capital. Prior to that, he served as Executive Vice President, Finance and Economics for Sistema since 2011. From 1997 to 2011, he held senior positions in finance in such companies as Trade House Perekrestok, San InBev and ING Bank (Eurasia).

***Vyacheslav K. Nikolaev*** serves as our Vice President for Marketing since July 2017. He is also a Member of our Strategy Committee. He is a Member of the Board of Directors of MTS Armenia, MTS Bank, MGTS, RTC, KS and MTDZK. Mr. Nikolaev has been working for MTS since October 2004 and held various positions within the Group. Prior to joining MTS, he held various key positions in OOO Renaissance Capital—Financial Consultant and TRUST Investment Bank, OJSC.

***Andrey G. Smelkov*** serves as our Vice President—Director of "MTS Foreign Subsidiaries" Business Unit since October 2013. He is a Member of the Board of Directors of Mobile TeleSystems LLC and Vodafone Ukraine, Chairman of the Board of Directors of MTS Turkmenistan and MTS Armenia and also Member of Supervisory Board of NVision Czech Republic. Prior to that, from 2010 to 2013, he served as the Chairman of the Board in TOO "Mobile Telekom Service," Kazakhstan. Since 2008 Mr. Smelkov worked as a Head of OOO "Sky Mobile," Kyrgyztan. Prior to that, he worked as a Head of branch in VEON Ltd. (VimpelCom).

***Andrey E. Ushatsky*** serves as our Vice President—Chief Technology and Information Officer since April 2013. He is a Member of the Board of Directors of MTS Turkmenistan, MGTS, NVision Group and other companies. Prior to that Mr. Ushatsky served as our Vice President—Chief Technology Officer since April 2009. Mr. Ushatsky joined us in 1996 and served in various technology-related positions, most recently as the Deputy Head of MTS Russia for Technology.

***Valery V. Shorzhin*** serves as our Vice President for Digital Business Solutions, Member of the Management Board since September 2018. Prior to that, he was our Vice President—Procurement Management and Administrative Matters, Member of the Management Board since March 2014. He is a Member of the Board of Directors of MGTS, NVision Group and NIS. Prior to that he served at MTS as Director-Procurement Management since 2011. He also was a Member of the MTS Management Board between 2009 and 2011. From 2008 to 2011, he served as Director of Information Technology. Prior to joining MTS, Mr. Shorzhin held the positions of Technical Director and Director for IT and Information Management of Farlep-Invest in Ukraine from December 2006. From 1996 to 2006, he held various information technology management positions at Sovintel.

All members of our Board of Directors were elected at the annual shareholders' meeting on June 28, 2018 and will serve until their terms expire at the next annual shareholders' meeting, which will take place on June 28, 2019. The business address of each of our directors is 4 Marksistkaya Street, Moscow 109147, Russian Federation.

## B. Compensation of Directors and Senior Management

Our officers and directors were paid during 2018 an aggregate amount of approximately RUB 816 million for services in all capacities provided to us; this amount comprised RUB 504 million in base salaries and RUB 312 million in bonuses paid pursuant to a bonus plan and in other monetary compensations for the 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 2018 amounted to RUB 554 million. For additional information, see Note 31 to our audited consolidated financial statements.

Members of the Board of Directors who are independent non-executive directors receive annual base compensation of $300,000 (RUB 18.8 million) or $400,000 (RUB 25 million) in the case of an independent non-executive director who serves as Chairman of the Board of Directors.

Independent non-executive directors who also serve on Board committees receive additional compensation as follows. Members of the Strategy Committee, Remuneration and Nomination Committee, Audit Committee and Committee for Corporate Conduct and Ethics receive additional annual compensation of $30,000 (RUB 1.9 million), and a director serving as Chairman of the foregoing committees receives additional annual compensation of $50,000 (RUB 3.1 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 in relation to certain assigned matters, receive additional annual compensation of $30,000 (RUB 1.9 million), and a director serving as Chairman of a special committee receives additional annual compensation of $50,000 (RUB 3.1 million). Members of all other Board committees receive additional annual compensation of $25,000 (RUB 1.6 million) and a director serving as Chairman of any other Board committee receives additional annual compensation of $30,000 (RUB 1.9 million).

Independent non-executive 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 vorporate year shall be determined as the quotient obtained by:

- the ruble equivalent of $100,000 (RUB 6.2 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 compensation received by an independent non-executive director (including annual base compensation and remuneration for performance of additional duties for serving as a Board committee member should not exceed $400,000 (RUB 25 million) and for serving as Chairman of the Board of Directors should not exceed $500,000 (RUB 31.3 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.

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.

## C. Board Practices

### Board of Directors

Members of our Board of Directors are elected by a majority vote of shareholders at the annual shareholders' meeting using a cumulative voting system. Directors are typically elected by the annual meeting of shareholders for one year until the next annual 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 currently consists of nine members. The Board of Directors has the authority to make overall management decisions for us, except 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 a quarter. See "—B. Compensation of Directors and Senior Management" for a description of the compensations for the members of our Board of Directors.

**Audit Committee**

Our Audit Committee consists of four members appointed by the Board of Directors. The current members are Thomas Holtrop, Stanley Miller, Regina von Flemming and Wolfgang Schussel, all of whom are independent members of the Board of Directors. Mr. Thomas Holtrop serves as the Chairman of the Audit Committee. The Audit Committee is primarily responsible for the integrity of our financial statements; overseeing our internal control system; overseeing our accounting and financial reporting processes and the internal and external audits of our financial statements; 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 exercises functions related to ethics matters.

According to the bylaws, the Audit Committee shall convene with our external auditors at least four times a 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 four members appointed by the Board of Directors. The current members are Stanley Miller, Thomas Holtrop, Wolfgang Schussel and Regina von Flemming, who serves as the Chairman of the Remuneration and Nomination Committee. The Remuneration and Nomination Committee is primarily responsible for developing a remuneration structure and compensation levels for management executives.

According to the bylaws, the Remuneration and Nomination Committee shall be convened by the Chairman of the Remuneration and Nomination Committee, at his sole discretion, or at the suggestion of any member of this committee, a member of the Board of Directors or our President.

**President**

Our President is elected by the Board of Directors for a term of three years and can be reelected for an unlimited number of terms. 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 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 shareholders' meeting 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. On March 13, 2018, Alexey Kornya was elected as our President and CEO, starting from March 13, 2018, by the Board of Directors for a term of three years.

**Management Board**

In October 2006, we revised our charter to establish a new governing body called the Management Board. The Management Board is an executive body which 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 upon nomination by the President. Each Board member is elected for a three year period and can be reelected an unlimited number of times.

The President is the Chairman of the Management Board. Currently our Management Board consists of 11 members.

**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. Andrey M. Kamensky, our CFO is the Chairman of the Disclosure Committee. Currently, our Disclosure Committee consists of eight members, two of whom are officers of the company.

**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 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:

- Irina R. Borisenkova, who holds the position of Chief Accountant—Managing Director, Finance and Investment Complex, Sistema;
- Maxim A. Mamonov, who holds the position of Director for internal control and audit of MTS; and
- Anatoly G. Panarin, who holds the position of head of planning of Sistema.

The members of our Auditing Commission serve until their terms expire at the next annual shareholders' meeting, which will take place in June, 2019.

**Corporate Governance**

We are required under the New York Stock Exchange listing rules to disclose any significant differences between the corporate governance practices that we follow under Russian law and applicable listing standards and those followed by U.S. domestic companies under New York Stock Exchange listing standards. This disclosure is posted on our website (http://ir.mts.ru/about-mts/corporate-governance/default.aspx). See also "Item 16G. Corporate Governance."

## D. Employees

At December 31, 2018, we had 65,374 employees. Of our 60,071 employees in Russia, we estimate that 591 were executives; 14,827 were technical and maintenance employees; 31,103 were sales, marketing and customer service staff; and 13,581 were administration and finance staff. In addition, of the 60,071 employees in Russia, we estimate that 18,814 were employed in our retail unit.

As of December 31, 2018, 3,537 of our employees worked in Ukraine. Of these employees, we estimate that 20 were executives; 880 were technical and maintenance employees; 1,757 were sales, marketing and customer service staff; and 880 were administration and finance staff.

As of December 31, 2018, 125 of our employees worked in Turkmenistan. Of these employees, we estimate that 9 were executives; 39 were technical and maintenance employees; 5 were sales, marketing and customer service staff; and 72 were administration and finance staff.

As of December 31, 2018, 1,140 of our employees worked in Armenia. Of these employees, we estimate that 9 were executives; 105 were technical and maintenance employees; 698 were sales, marketing and customer service staff; and 328 were administration and finance staff.

As of December 31, 2018, 501 of our employees worked in other countries, such as Czech Republic and Belarus (employees of NVision Group subsidiaries). Of these employees, we estimate that

15 were executives; 424 were technical and maintenance employees; 9 were sales, marketing and customer service staff; and 53 were administration and finance staff.

The following chart sets forth the number of our employees at December 31, 2018 and 2017:

| | Years ended December 31 | |
|---|---|---|
| | 2018 | 2017 |
| Russia | 60,071 | 60,442 |
| Ukraine | 3,537 | 2,969 |
| Turkmenistan | 125 | 305 |
| Armenia | 1,140 | 1,157 |
| Other | 501 | 472 |
| Total | 65,374 | 65,345 |

Our employees are not unionized, except for 2,300 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.

## E. Share Ownership

As of April 1, 2019, our directors, senior management and employees owned less than 1% of our outstanding common stock.

The following table sets forth information with respect to the beneficial ownership of our common stock as of April 1, 2019, by our current directors and executive officers. All shares of common stock have the same voting rights.

| | Beneficial ownership as of April 1, 2019 | |
|---|---|---|
| Directors and Executive officers | Number | %[1] |
| Alexey V. Kornya, Executive Director, President and CEO | 243,780 | 0,01361% |
| Ron Sommer, Chairman of the Board, Non-Executive Director | 209,363 | 0,01169% |
| Ralph S. Yirikian, General Director of MTS Armenia | 208,184 | 0,01163% |
| Andrey E. Ushatsky, Vice President—Chief Technology and Information Officer | 186,693 | 0,01043% |
| Ruslan S. Ibragimov, Vice President—Corporate and Legal Matters | 175,675 | 0,00981% |
| Valery V. Shorzhin, Vice-President—Digital Business Solutions | 150,139 | 0,00838% |
| Kirill A. Dmitriev, Vice President—Digital Solutions for Home | 100,429 | 0,00561% |
| Andrey V. Ershov, President of NVision Group | 97,173 | 0,00543% |
| Andrey G. Smelkov, Vice-President, Head of business unit MTS Foreign subsidiaries | 87,333 | 0,00488% |
| Vsevolod V Rozanov, Non-Executive Director | 72,792 | 0,00407% |
| Igor A. Yegorov, Member of Management Board, Head of Moscow Macro-region | 63,623 | 0,00355% |
| Total | 1,595,184 | 0,08908% |

(1) Percentage of beneficial ownership of each named director and executive officer is based on 1,790,672,992 ordinary shares outstanding as of April 1, 2019.

Our management are 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 3 years. The transfer of such shares is probable and is subject to certain employment conditions. In 2018, options related compensation accrued in the amount of RUB 554 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 1, 2019. All shares of common stock have the same voting rights.

| Directors and Executive officers | Number of ordinary shares as of April 1, 2019 | |
|---|---|---|
| | Number | %[1] |
| Alexey V. Kornya, Executive Director, President and CEO | 432,116 | 0.02413% |
| Andrey E. Ushatsky, Vice President—Chief Technology and Information Officer | 261,609 | 0,01461% |
| Ralph S. Yirikian, General Director of MTS Armenia | 230,347 | 0,01286% |
| Kirill A. Dmitriev, Vice President—Digital Solutions for Home | 219,030 | 0,01223% |
| Ruslan S. Ibragimov, Vice President—Corporate and Legal Matters | 212,220 | 0,01185% |
| Valery V. Shorzhin, Vice President—Digital Business Solutions | 211,335 | 0,01180% |
| Andrey G. Smelkov, Vice President—Director of "MTS Foreign Subsidiaries" Business Unit | 179,855 | 0,01004% |
| Andrey V. Ershov, President of NVision Group | 172,337 | 0,00962% |
| Igor A. Yegorov, Member of Management Board, Head of Moscow Macro-region | 168,766 | 0,00942% |
| Vyatcheslav K. Nikolaev, Vice President—Marketing | 155,684 | 0,00869% |
| Alexander A. Mosyakin, General Director of RTK | 145,771 | 0,00814% |
| Alexander E. Gorbunov, Vice President—Strategy and Development | 129,155 | 0,00721% |
| Andrey M. Kamenskiy, Acting Vice-President—Chief Financial Officer | 124,371 | 0,00695% |
| Olga V. Ustinova, General Director of Vodafone Ukraine | 114,671 | 0,00640% |
| Inessa V. Galaktionova, Vice President—Sales and Customer Service | 93,768 | 0,00524% |
| Maria N. Golyandrina, Vice President—HR | 87,856 | 0,00491% |
| Pavel V. Kuznetsov, General Director of MGTS | 72,173 | 0,00403% |
| Alexey V. Ivanov, General Director of STV | 14,612 | 0,00082% |
| Total | 3,025,676 | 0.16897% |

(1) Percentage of ordinary shares in the form of share options granted to each named director and executive officer is based on 1,790,672,992 ordinary shares outstanding as of April 1, 2019.

## Item 7. *Major Shareholders and Related Party Transactions*

### A. Major Shareholders

The following table sets forth, as of April 1, 2019, 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 1, 2019 | |
|---|---|---|
| | Number | Percentage |
| Sistema[1] | 634,674,257 | 35,44% |
| Sistema Finance S.A. | 44,516,061 | 2,49% |
| STA[2] | 220,467,234 | 12,31% |
| ADS holders[3] | 699,237,647 | 39,05% |
| Other Public Float (including our directors and executive officers)[4] | 191,777,793 | 10,71% |
| Total[5] | 1,790,672,992 | 100,0% |

(1) Vladimir P. Evtushenkov has a controlling interest in Sistema, and is considered under U.S. securities laws as the beneficial owner of our shares held by Sistema, Sistema Finance SA, and Sistema Telecom Activy ("STA"). Mr. Evtushenkov is also the chairman of the board of directors of Sistema.

(2) STA is a limited liability company formed under the laws of Russia. Sistema owns 100% of STA, which became a holder of our 12.31% beneficial ownership after VAST LLC and Invest-Svyaz CJSC, the previous beneficial owners of this ownership interest, were merged into STA in 2010 and 2011, respectively.

(3) As of April 1, 2019, the total number of ADSs outstanding was 349,618,824, representing underlying ownership of 699,237,647 shares, or approximately 39.05% of our outstanding common stock. The shares underlying the ADSs are deposited with JPMorgan Chase Bank, formerly known as Morgan Guaranty Trust Company of New York and the local custodian is Sberbank of Russia.

(4) We believe that our directors and executive officers as a group own less than 1% of our shares.

(5) Excludes treasury shares, as described below.

Our subsidiaries, MGTS and Bastion, owned 7,569,230 and 95,955,692 of our ordinary shares, respectively, as of April 1, 2019.

As a result of series of buy-backs during 2018, 2017 and 2016 Stream Digital LLC owned 104,165,997 of our shares as of 1 April, 2019.

As of April 1, 2019, we held a total of 207,708,583 shares, 67,335,837 of which were held in the form of ADSs. These shares are excluded from the total number of shares presented in the table above.

Sistema's current effective ownership in us is 50.07%.

## B. Related Party Transactions

### Transactions with Sistema and its Affiliates

***Sistema***

In November 2009, the Group accepted a promissory note, issued by Sistema, as repayment of the loan principal and interest accrued to date under an agreement with Sistema-Hals. The note was interest free and was repayed in fourth quarter of 2018.

***Maxima Advertising Agency***

We have contracts for advertising services with Maxima, a subsidiary of Sistema, pursuant to which we incurred expenses of RUB 1,018 million, RUB 143 million and 19 million and for services provided in the years ended December 31, 2016, 2017 and 2018, respectively. In 2017 Maxima ceased to be our principal supplier of advertising services.

***NVision Group***

During the years ended December 31, 2014 and 2015, we acquired from NVision Group, a subsidiary of Sistema, telecommunications equipment, software and billing systems (FORIS) for approximately RUB 9,819 million and RUB 5,469 million, respectively, and incurred expenses of RUB 846 million, and RUB 710 million, respectively, under an IT consulting agreement.

As of December 31, 2014, the advances given to NVision Group, a subsidiary of Sistema, amounted to RUB 274 million. The advances were included into property, plant and equipment and intangible assets in the accompanying consolidated statements of financial position.

As of the end of December 2015, we acquired 100% stake in NVision Group, accordingly as of December 31, 2015, NVision Group was our subsidiary. As we and the acquired NVision Group subsidiaries were under common control with Sistema, the assets and liabilities acquired were recognized at the carrying amounts recorded previously in the counterparty's financial statements with the resulting gain or loss recognized directly in equity. The comparative information was not restated.

***Smart Cards Group***

During the years ended December 31, 2016, 2017 and 2018, we purchased SIM cards and prepaid phone cards for approximately RUB 39 million, RUB 57 million and RUB nil, respectively.

***AB Safety***

During the years ended December 31, 2016, 2017 and 2018, we purchased security services from AB Safety, an affiliate of Sistema, for the amount of RUB 271 million, RUB 302 million and RUB 324 million, respectively.

***Investments in certain subsidiaries and affiliates of Sistema***

As of December 31, 2016, 2017 and 2018, we held investments in the share capital of certain subsidiaries and affiliates of Sistema amounting to RUB 149 million, RUB 149 million and RUB 149 million, respectively. Our main investments are in Sistema Venture Capital (former Sistema Mass Media (SMM)), in which we hold 2.356%, and the value of such investments as of December 31, 2016, 2017 and 2018, amounted to RUB 117 million.

**Transactions with equity investees**

***Stream LLC***

In July 2012 our share in the company Stream LLC decreased to 45% and therefore it has become the related party for the group. In the years ended December 31, 2014 and 2015, we signed contracts for content services and expenses amounting to RUB 1,395 million and RUB 2,132 million, respectively.

On of December 29, 2015, we increased our share in Stream LLC to 100%.

***MTS Bank***

On July 5, 2018 we acquired the controlling stake in MTS Bank and thus it ceased to be a related party to the Group since the acquisition date (See Note 5 to our audited consolidated financial statements for details).

We maintain certain bank accounts with MTS Bank, an associate of the Group. As of December 31, 2016 and December 31, 2017, the Group's cash position at MTS Bank amounted to RUB 4,902 million and RUB 13,746 million, respectively, including short-term deposits in the amount of RUB 532 million and RUB 633 million, respectively. The interest accrued on the deposits and cash on current accounts for the years ended December 31, 2016, 2017 and the period from January 1, 2018 till July 5, 2018, amounted to RUB 285 million, RUB 345 million and RUB 448 million, respectively, and was included as a component of the line item "interest income" in our audited consolidated financial statements. In January 2017 MTS Bank fully repaid its 10-year subordinated loan, received from the Group in September 2012 in amount of RUB 2,100 million.

During the years ended December 31, 2016, 2017 and the period from January 1, 2018 till July 5, 2018, we received revenues from mobile and call center services with MTS Bank amounting to RUB 900 million, RUB 1,507 million and RUB 1,271 million, respectively. In addition, during the year ended December 31, 2016, 2017 and the period from January 1, 2018 till July 5, 2018 we received revenues from processing documents for bank cards issue and granting of consumer credits amounting to RUB 372 million, RUB 378 million and RUB 228 million, respectively (agency fees after deduction of cross-fines). Moreover, during the years ended December 31, 2016, 2017 and the period from January 1, 2018 till July 5, 2018 we incurred commission expenses (bank commission and commission

for cash collection from subscribers) amounting to RUB 347 million, RUB 2,259 million and RUB 1,217 million, respectively.

***East-West United Bank***

We maintain certain bank accounts with East-West United Bank, a subsidiary of Sistema. As of December 31, 2016, December 31, 2017, and December 31, 2018 the Group's cash position at East-West United Bank amounted to RUB 736 million, RUB 5,969 million and RUB 938 million, respectively, including short-term deposits in the amount of RUB nil, RUB 5,810 million and RUB nil, respectively.

***MTS Belarus***

During the years ended December 31, 2016, 2017 and 2018, we accrued revenues from roaming agreements with MTS Belarus, our associate company, amounting to RUB 276 million, RUB 248 million and RUB 296 million, respectively. At the same time, during the years ended December 31, 2016, 2017 and 2018 we incurred roaming expenses with MTS Belarus amounting to RUB 161 million, RUB 121 million and RUB 104 million, respectively.

***Zifrovoe TV***

In June 2017, we made a cash contribution to Zifrovoe TV in the amount of RUB 171 million.

**Accounts receivable and accounts payable**

We had total accounts receivable of RUB 8,094 million, RUB 11,360 million and RUB 8,930 million, from, and total accounts payable of RUB 1,014 million, RUB 1,102 million and RUB 1,301 million to, related parties as of December 31, 2016, 2017 and 2018, respectively. We had total Bank deposits and liabilities of RUB 43,686 million from related parties as of December 31, 2018. 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 31 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**

**Uzbekistan**

In June 2012, the authorities of the Republic of Uzbekistan commenced audits of the financial and operating activities of MTS' wholly-owned subsidiary Uzdunrobita. Further various claims for violation of tax, antimonopoly and industry legislation were made against Uzdunrobita, which resulted in significant amounts of fines and penalties, revocation of all licenses and suspension of services. Fines and penalties amounted to approximately RUB 18,375 million payable in equal installments over eight months.

Uzdunrobita paid two scheduled installments in November and December 2012 totaling approximately RUB 4,583.4 million. On January 14, 2013, further to its partial payment of the third installment due in January 2013 totaling approximately RUB 481 million and constituting the remaining amount of cash held in its bank accounts, Uzdunrobita filed a petition for voluntary bankruptcy to the Tashkent Economic Court on the grounds of its inability to meet further obligations.

Considering the adverse impact of such circumstances on the Group's ability to conduct operations in Uzbekistan, the Group tested goodwill and other long-lived assets attributable to Uzbekistan for impairment upon first receiving notification of the investigations. As a result, an impairment loss on the long-lived assets in the amount of RUB 20,037 million was recorded in the consolidated statements of profit or loss for the year ended December 31, 2012. In 2013 these losses were assigned to discontinued operations.

In 2012, the Group filed a claim against the Republic of Uzbekistan in the ICSID, part of the World Bank Group, in Washington, D.C.

On April 22, 2013, the Tashkent Economic Court declared Uzdunrobita bankrupt and initiated a liquidation process. Uzdunrobita was later liquidated. As a result the Group lost control over the subsidiary and deconsolidated Uzdunrobita.

In July 2014 the dispute between MTS and the Republic of Uzbekistan was resolved. The parties signed the Settlement Agreement and according to its terms all mutual claims were eliminated. The Settlement Agreement is governed by English law and provides for resolution of any disputes arising out of the Settlement Agreement in the ICSID. ICSID has discontinued international arbitration proceedings between us and the Republic of Uzbekistan following the submission of a joint application by both parties.

The Republic of Uzbekistan established a legal entity, UMS, with such entity having no legal connection to the previously liquidated entity, Uzdunrobita. UMS was granted 2G, 3G and LTE licenses valid until 2029, and received frequencies, numbering capacity and other permits required for the launch of operations. On September 24, 2014, a 50.01% ownership interest in UMS was transferred to MTS by the State Unitary Enterprise Center of Radio Communications, Radio Broadcasting and Television on behalf of the Republic of Uzbekistan. We have also received certain guaranties in relation to the protection of any future investment in the Republic of Uzbekistan.

In March 2014, we received requests for the provision of information from the SEC and the DOJ relating to a currently conducted investigation of the our former subsidiary in Uzbekistan.

In July 2015, activities related to our operations in Uzbekistan have been referenced in a civil forfeiture complaints ("The Complaints"), filed by DOJ in the U.S. District Court, Southern District of New York (Manhattan), directed at certain assets of an unnamed Uzbek government official. The Complaints allege among other things that we and certain other parties made corrupt payments to the unnamed Uzbek official to assist their entering and operating in the Uzbekistan telecommunications market. The Complaints are solely directed towards assets held by the unnamed Uzbek

In March 2019, we reached a resolution with the SEC and the DOJ relating with these investigations.We consented to the entry of the Order by the SEC. The United States District Court for the Southern District of New York approved the DPA entered by us and a plea agreement entered into our former 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 our audited consolidated statement of profit or loss for the year ended December 31, 2018.

Under the DPA and the Order, we agreed to appoint an independent compliance monitor. Pursuant to the DPA and the Order, the monitorship will continue for a period of three years, and the term of the monitorship may be terminated early or extended depending on certain circumstances, as ultimately determined and approved by the DOJ and SEC.

In March 2019, a proposed class action complaint on behalf of Shayan Salim and all other persons similarly situated has been filed in the United States District Court for the Eastern District of New York against MTS PJSC and certain of its managers. The complaint is alleging certain securities law violations relating to the resolution of US government investigations related to our former operations in Uzbekistan. We are reviewing the allegations and intend to defend our interests. It is currently impossible to predict possible implications and amount of the claim reliably. It is possible that additional similar complaints will be filed.

For additional information please refer to Note 10 and 34 to our audited consolidated financial statements, "Item 3. Key Information—D. Risk Factors—Legal Risks and Uncertainties—The 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" regarding recent suspension of our services in Uzbekistan and "—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" and "—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."

**Turkmenistan**

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. The case is pending resolution.

**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 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 29 to our audited consolidated financial statements.

In December 2017, the Russian tax authorities completed a tax audit of MTS for the years ended December 31, 2014 and 2015. In August 2018 based on the results of this audit, the Russian tax authorities determined that RUB 596.24 million of additional taxes, fines and penalties were payable by us. We are not considering to appeal this resolution.

In October 2018, the Russian tax authorities completed a tax audit of RTK JSC for the years ended December 31, 2014, 2015 and 2016. Based on the results of this audit, the Russian tax

authorities determined that RUB 46.97 million in additional taxes, fines and penalties were payable by us. We are not considering to appeal this resolution.

In July 2018, the Russian tax authorities completed a tax audit of NVision Group JSC for the years ended December 31, 2015 and 2016. Based on the results of this audit, the Russian tax authorities determined that RUB 32.7 million in additional taxes, fines and penalties were payable by us. We are not considering to appeal this resolution.

In January 2018, the Russian tax authorities completed a tax audit of Stream LLC for the years ended December 31, 2014 and 2015. Based on the results of this audit, the Russian tax authorities determined that RUB 20.8 million in additional taxes and fines were payable by us. We appealed this resolution. In August 2018 the Russian tax authorities partially satisfied our petition. The amount to be paid is RUB 2.03 million in additional taxes. We are not considering to appeal this resolution.

In September 2018, the Russian tax authorities initiated a tax audit of STV LLC for the years ended December 31, 2015, 2016 and 2017 which is on-going.

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 possibility of utilization by MGTS of tax asset in the amount of RUB 1,065.79 million. We are considering to appeal this resolution.

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, 2018, 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 December 2015, the FAS charged MTS, MegaFon, VEON Ltd. (VimpelCom) and Tele2 with violation of antimonopoly laws in respect to pricing of SMS dispatching. In April 2017, the FAS found us, MegaFon and VEON Ltd. (VimpelCom) responsible for the aforementioned violation. VEON Ltd. (VimpelCom) and Tele2 appealed the FAS decision in the Arbitrazh Court. As a result Moscow Arbitrazh Court, the Ninth Arbitrazh Court of Appeal, the Court of Cassation and Federal Arbitration Court of the Moscow District declared the FAS decision unlawful.

In July 2017, the FAS issued a warning to MTS, MegaFon, Tele2 and VEON Ltd. (VimpelCom) on termination of actions containing signs of violation of the antimonopoly laws in respect of establishing unreasonable differences in tariffication of communication services for subscribers in home region and outside. Following non-compliance with the warning, the FAS started antimonopoly proceeding against us. The FAS also started antimonopoly proceeding against us for establishing high prices for communication services in national roaming. In 2018, we changed the principles and terms of tariffication when travelling about the country. The FAS held us administratively liable and imposed administrative fines in amount of RUB 1 million in respect of each proceeding.

In August 2018, the FAS charged us and other federal operators with violation of antimonopoly laws in respect to establishing distinguished terms and conditions for SMS pricing for the entities with state-owned equity interest as compared to the terms and conditions for the other entities and establishing unreasonably high SMS prices. Investigation is currently in process. Following the case examination a fine may be imposed on us or illegally obtained income may be recovered.

The FAS determines the amount of illegally obtained income as the difference between the amount of revenue received from applying monopolistically high prices and the amount of revenue that

could have been received if "reasonable" prices were applied. There is no information regarding the level of prices that the FAS considers economically justified. It is not possible to make a reliable estimation of amount of fine that could be imposed.

**8.A.8. Dividend Distribution Policy**

On April 8, 2016, our Board of Directors approved dividend policy which sets a target payout of RUB 25.0 - 26.0 per ordinary MTS share (RUB 50.0 - 52.0 per ADR) per calendar year. The policy guarantees a minimum payout of RUB 20.0 per ordinary MTS share (or RUB 40.0 per ADR). The policy covered 2016 - 2018. Payments continued to be made on a semi-annual basis.

Annual and semi-annual dividend payments, if any, must be recommended by Board of Directors and approved by the General Meeting of Shareholders (GM). We anticipate that any dividends we may pay in the future on the shares represented by the ADSs will be declared and paid to the depositary in rubles and will be converted into U.S. dollars by the depositary and distributed to holders of ADSs, net of the depositary's fees and expenses. Accordingly, the value of dividends received by holders of ADSs will be subject to fluctuations in the exchange rate between the ruble and the dollar.

On March 21, 2019, our Board of Directors approved new dividend policy which sets a minimum payout of RUB 28.0 per ordinary MTS share (RUB 56.0 per ADR) per calendar year. In determining actual dividends payout, we will consider a number of factors, including cash flow from operations, capital expenditures and debt position. The policy will cover 2019 - 2021. Payments will continue to be made on a semi-annual basis.

**B. Significant Changes**

***Ruble bonds placement***—In January 2019, MTS issued exchange-traded bonds totaling RUB 10 billion with a coupon rate of 8.70% and a maturity of 5 years.

***Purchase of additional stake in MTS Bank***—In February 2019 we purchased additional 39.48% stake in MTS Bank from Sistema for RUB 11.4 billion. Consequently, our share in MTS Bank increased to 94.97%. This acquisition allows us to fully integrate our FinTech business.

***Sale of investment in Ozon Holdings Limited***—In March 2019 we sold 18.69% stake in Ozon Holdings Limited, our associate, to Sistema for RUB 7.9 billion.

***Acquisition of shares under Share Repurchase Plan***—Since the end of the reporting period we acquired 51,791,867 MTS shares of Common Stock representing 2.6% of share capital issued by MTS. We purchased MTS shares of Common Stock under the Share Repurchase Plan announced in 2018.

***Class action complaint***—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 MTS and certain of its managers. The complaint filed by an individual securities holder on behalf of himself and all similarly situated securities holders alleged violations of Sections 10(b) and 20(a) of the Exchange Act and Rule 10b-5 with respect to certain public disclosure statements made by us regarding our former business in Uzbekistan and investigations carried out by the SEC and DOJ related thereto. See "Item 8. Financial Information—A. Consolidated Statements and Other Financial Information—7. Litigation—Uzbekistan."

***New dividend policy***—In March 2019, the Board of Directors approved a dividend policy for the calendar years 2019 - 2021, committing to a minimum cumulative dividend payout of RUB 28 per ordinary share (RUB 56 per ADS) per calendar year through two semi-annual payments.

***Ruble bonds placement***—In April 2019, MTS completed the placement of Series 001P-08 exchange-traded bonds in the amount of RUB 5 billion with a coupon rate of 8.40% and a maturity of 3.5 years and of Series 001P-09 exchange-traded bonds in the amount of RUB 7.5 billion with a coupon rate of 8.60% and a maturity of 5.5 years.

***Annual General Meeting of Shareholders announcement***—In April 2019, our Board of Directors set the date for our AGM for June 27, 2019 and recommended that the AGM approve annual dividends of RUB 19.98 per ordinary MTS share (RUB 39.96 per ADR), or a total of RUB 39.9 billion, based on the full-year 2018 financial results.

## Item 9. *Offer and Listing Details*

(Only Items 9.A.4 and 9.C are applicable.)

### A.4. Market Price Information

Our ADS, each representing two ordinary shares, have been listed on the NYSE since July 6, 2000 under the symbol "MBT." Our ordinary shares have been listed on MICEX (currently Moscow Exchnage) since December 2003. In addition, we issued additional ordinary shares in connection with our merger with Comstar, which have been listed on MICEX (currently Moscow Exchange) since May 2011. The shares of the additional issuance became fully fungible with our previously issued ordinary shares in July 2011. Set forth below, for the periods indicated, are the high and low closing prices per ADS as reported by the NYSE and the high and low closing prices per ordinary share as reported by the Moscow Exchange.

| | ADS High | ADS Low | Ordinary Share High | Ordinary Share Low |
|---|---|---|---|---|
| **Monthly High and Low** | | | | |
| March 2019 | $ 8.49 | $ 7.39 | 272.10 RUB | 250.50 RUB |
| February 2019 | $ 8.62 | $ 7.44 | 267.00 RUB | 245.85 RUB |
| January 2019 | $ 8.62 | $ 6.92 | 266.30 RUB | 237.00 RUB |
| December 2018 | $ 7.72 | $ 6.64 | 249.80 RUB | 222.40 RUB |
| November 2018 | $ 8.75 | $ 7.31 | 274.55 RUB | 245.05 RUB |
| October 2018 | $ 8.75 | $ 7.31 | 275.70 RUB | 255.10 RUB |
| **Quarterly High and Low** | | | | |
| First Quarter 2019 | $ 8.62 | $ 6.92 | 272.10 RUB | 237.00 RUB |
| Fourth Quarter 2018 | $ 8.75 | $ 6.64 | 279.50 RUB | 222.40 RUB |
| Third Quarter 2018 | $ 8.82 | $ 7.25 | 288.00 RUB | 245.25 RUB |
| Second Quarter 2018 | $ 10.67 | $ 8.32 | 302.25 RUB | 252.00 RUB |
| First Quarter 2018 | $ 12.80 | $ 10.22 | 321.00 RUB | 271.30 RUB |
| Fourth Quarter 2017 | $ 11.45 | $ 8.71 | 296.95 RUB | 245.10 RUB |
| Third Quarter 2017 | $ 11.10 | $ 7.77 | 294.45 RUB | 223.05 RUB |
| Second Quarter 2017 | $ 11.58 | $ 8.20 | 285.90 RUB | 226.70 RUB |
| First Quarter 2017 | $ 11.51 | $ 9.28 | 290.00 RUB | 255.20 RUB |
| **Annual High and Low**[(1)] | | | | |
| 2018 | $ 12.80 | $ 6.64 | 321.00 RUB | 222.40 RUB |
| 2017 | $ 11.58 | $ 7.77 | 296.95 RUB | 223.05 RUB |
| 2016 | $ 9.64 | $ 5.22 | 268.30 RUB | 200.55 RUB |
| 2015 | $ 12.77 | $ 6.11 | 271.00 RUB | 174.70 RUB |
| 2014 | $ 21.38 | $ 6.17 | 324.0 RUB | 158.5 RUB |

(1) Effective May 3, 2010, the ratio of our ADSs changed from 1 ADS per 5 common shares to 1 ADS per 2 common shares. The ADS prices set forth in the table above reflect the new share: ADS ratio for all periods.

### C. Markets

Our common stock has been listed on the Moscow Interbank Currency Exchange (currently Moscow Exchange) since December 2003. ADSs, each representing two shares of our common stock, have been listed on the New York Stock Exchange under the symbol "MBT" since July 6, 2000. Our U.S. dollar-denominated notes due in 2020 and 2023 are listed on the Irish Stock Exchange. Our ruble-denominated notes are listed on the Moscow Exchange.

## Item 10. *Additional Information*

### A. Share Capital

Not applicable.

### B. 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.

The Joint Stock Companies Law requires us to dispose of any of our shares that we acquire within one year of their acquisition or, failing that, reduce our charter capital. We refer to such shares as treasury shares for the purposes hereof. Russian legislation does not allow for the voting of such treasury shares. Any of our shares that are owned by our subsidiaries are not considered treasury shares under Russian law (*i.e.*, they are considered outstanding shares), and our subsidiaries holding such shares are able to vote and dispose of such shares without any further corporate actions by our shareholders or Board of Directors.

In March 2016, in the course of liquidation of our wholly owned subsidiary, MTS Bermuda, we obtained 67,995,335 shares. As of June 1, 2016, we had 36,652 treasury shares repurchased pursuant to our shareholders' right to demand buy-out following the merger of our subsidiaries into MTS during 2015 and 2016 in accordance with applicable laws. In June 2016, our shareholders decided to decrease our charter capital by cancellation of all outstanding 68,031,987 treasury shares (approximately 3.29% of our share capital at that time). In August 2016, we cancelled these shares, and as such our capital

stock decreased from 2,066,413,562 to 1,998,381,575 shares. As of April 1, 2017, we did not have any treasury shares.

In August, 2017, we repurchased 497 treasury shares pursuant to our shareholders' right to demand buy-out following the merger of our subsidiaries into MTS in accordance with applicable laws. As of December 31, 2017, we had 497 treasury shares.

In September 2018, we repurchased 17,167 treasury shares in the course of buy-back procedure under article 75 of the Federal law "On Joint-Stock Companies." As of December 31, 2018, MTS held 17,664 treasury shares.

As of April 1, 2016, our subsidiaries held 9,496,163 of our shares. In April 2016, our wholly owned subsidiary Bastion LLC sold 954,386 shares to our management pursuant to our management long-term motivation program. In December 2016, our wholly owned subsidiary Stream Digital LLC purchased 3,060,409 shares (including shares represented by ADSs) as a result of a tender offer announced in October 2016.

A second tender offer was announced in January 2017, as a result of which Stream Digital LLC purchased additional 32,061,256 shares. Thus, as of April 1, 2017, our subsidiaries held a total of 43,543,303 of our shares.

To increase the shareholder return, we continued repurchase of the shares in the open market in 2017 and 2018. Thus, as of December 31, 2017, our subsidiaries held a total of 86,339,156 of our shares. As of December 31, 2018 our subsidiaries held a total of 167,621,235 of MTS shares.

See "Item 7. Major Shareholders and Related Party Transactions—A. Major Shareholders." In our consolidated financial statements prepared in accordance with IFRS, these shares are considered treasury shares (*i.e.*, they are considered not outstanding).

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;
- receive 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 voting 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;

- if holding, alone or with other holders, at least 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;

- 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 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; and

  - delisting of our shares from a stock exchange;

  - 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 depositary within seven business days of receipt of funds by the depositary.

**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.

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) which now maintains our register of shareholders by way of universal succession.

The Federal Law No. 414-FZ "On the Central Depositary" dated December 7, 2011 (the "**Central Depositary Law**"), which came into force on January 1, 2012, set out a legal framework for establishment and operation of the central depositary. On November 6, 2012, the Russian Federal Financial Markets Service granted the JSC National Settlement Depositary the status of central depositary 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 depositary became the only person having a nominee holder account in our share register. Also, the Central Depositary 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 depositary.

Ownership of our registered shares is evidenced by entries made in the register of shareholders, on the books of the central depositary or a Russian licensed depositary. Any of our shareholders may obtain an extract from the register of our shareholders maintained by the registrar or from their respective depositary, 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 depositaries registered with the central depository because underlying shareholders have no obligation to reveal and such depositaries 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 shareholders and ADS 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 depositary if shares are

held by a depositary. The registrar or depositary 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.

**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**

Russian securities regulations require us to make the following periodic public disclosures and filings:

- posting on our website quarterly reports, containing information about us, our shareholders and depositary, the structure of our management bodies, the members of the Board of Directors, our branches and representative offices, our shares, bank accounts and auditors, important developments during the reporting quarter, and other information about our financial and business activity;
- 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 on a quarterly basis;
- posting on our website a list of inside information; and
- other information as required by applicable Russian securities legislation.

**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 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 Comission;
- consent or subsequent approval of certain interested party transactions and major transactions;
- 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, for public joint stock companies Russian law 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;
- 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.

***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, 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 five-member board of directors for all 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 seven

members, which number may be increased pursuant to a decision of the general meeting of shareholders. Currently, our Board of Directors consists of nine 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;
- 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.

Our internal regulation "On the Board of Directors of Mobile TeleSystems Public Joint Stock Company" (the "Regulation") was approved by the annual shareholders' meeting on June 28, 2018. 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 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 shares) 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 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 voting shares or preference shares, in an amount exceeding 2% of the company's issued voting 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 independent directors is less than two, unless the charter of a company provides for a higher quorum for a board of directors meeting on this issue.

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' 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 mandatory 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, until January 5, 2016, the FAS had to approve in advance acquisitions of voting shares in a company involving (1) companies with a combined value of assets or combined annual revenues calculated under RAS exceeding a certain threshold, or (2) companies included in a register of business entities having more than a 35% share of a certain commodity market 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.

According to the amendments made by the Federal law No. 275-FZ dated October 5, 2015 starting from January 5, 2016 the regulations in relation to the abovementioned register were repealed and only the combined value of assets or combined annual revenues of the companies involved in the transaction is taken in account. 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, the FAS may be entitled to regulate our subscriber tariffs and impose certain restrictions on our operations."

**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 common 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 outstanding common shares by such person.

A holder of more than 5% of our common 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 common 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. According to the official clarifications of the Ministry of Finance, this requirement only concerns foreign persons registered as individual entrepreneurs in Russia, whereas legal entities incorporated outside Russia do not have this obligation.

## C. Material Contracts

The following is a description of contracts that we and/or our subsidiaries are a party to and that are or may be material to our business.

**Eurobonds**

On May 28, 2013, we issued U.S. dollar-denominated Loan Participation Notes in the amount of $500 million (RUB 16.4 billion as of December 31, 2013) with an annual interest rate of 5.00% and a maturity in June 2023. The proceeds will be used for general corporate purposes. The notes were issued by MTS International Funding DAC, a private company organized and existing as a private limited company under the laws of Ireland, and are listed on the Irish Stock Exchange. Proceeds were on-lent to us pursuant to a loan agreement between us and MTS International Funding DAC.

The loan agreements relating to our notes due 2023 sets forth various occurrences, each of which would constitute an event of default. If an event of default, other than an event of default arising from events of bankruptcy, insolvency or bankruptcy-related reorganization, occurs and is continuing, either the lender, the trustee or the holders of at least 25% in principal amount of the outstanding notes may accelerate the maturity of all of the notes. If an event of default arising from events of our bankruptcy, insolvency or bankruptcy-related reorganization occurs and is continuing, then the principal of, and accrued interest on, all of the notes will automatically become immediately due and payable without any declaration or other act on the part of the lender, holders of notes or the trustee.

Covenants in the loan agreement relating to our notes 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. In addition, if we experience certain types of mergers, consolidations or other changes in control, noteholders will have the right to require us to redeem the notes at 101% of their principal amount, plus accrued interest. If we fail to meet these covenants, after certain notice and cure periods, the noteholders can accelerate the debt to be immediately due and payable.

**Ruble bonds**

On April 3, 2013, we issued exchange-traded Series 1 ruble bond on Moscow Exchange. The bond is worth RUB 10 billion and has a maturity of ten years. Coupons are to be paid semiannually at the rate of 8.25%. Bond holders will have the right under a five-year put option to sell the bonds to us. Following the announcement of new coupon rate of 6.85% in April 2018, the Group repurchased the bonds at the request of eligible bondholders in total amount of RUB 7.4 billion of notes. In April 2018, we placed the bonds through secondary offering in the total amount of RUB 6.8 billion. The proceeds from the bond placement were used for general corporate needs.

On September 2, 2016, we issued RUB 10 billion exchange-traded Series 2 bonds with a maturity of 15 years and a two year put option on Moscow Exchange. Coupons are to be paid semiannually at the rate of 9.4% per annum. The proceeds from bonds were used for general corporate needs. Following the announcement of new coupon rate of 7.85% in September 2018, the Group repurchased the bonds at the request of eligible bondholders in the total amount of RUB 8.9 billion of notes.

On February 10, 2017 we issued RUB 10 billion exchange-traded bonds with a maturity of 5 years. Coupons are to be paid semiannually at the rate of 9.0% per annum. The proceeds from the bond placement were used for general corporate needs.

On March 30, 2017, we placed RUB 10 billion exchange-traded bonds with a maturity of 4 years and 8.85% coupon per annum to be paid semiannually. The proceeds from bonds were used for general corporate needs.

On November 9, 2017 we issued a RUB 15 billion exchange-traded bonds with a maturity of 5 years and 7.70% coupon per annum. The coupon period is 182 days. The proceeds from the bond placement were used for general corporate needs.

On December 5, 2017 we placed RUB 10 billion exchange-traded bonds with a maturity of one year and 7.70% coupon per annum. Coupons are to be paid semiannually The proceeds from bonds were used for general corporate needs. The bonds were redeemed in full amount in December 2018.

On March 7, 2018 we completed the placement of Series 001P-05 and Series 001P-06 exchange-traded bonds totaling RUB 20 billion on the Moscow Exchange (MOEX). The Series 001P-05 bond issue in the amount of RUB 10 billion was placed with a semi-annual coupon rate of 7.10% and a maturity of 3.5 years. The Series 001P-06 bond issue in the amount of RUB 10 billion was placed with a semi-annual coupon rate of 7.25% and a maturity of 7 years.

**Agreement with Apple**

In April 2017, the Group entered into an unconditional purchase agreement with Apple Rus LLC to buy 615 thousand iPhone handsets at list prices at the dates of respective purchases over a period ending June 30, 2019. Pursuant to the agreement the Group is also required to incur certain iPhone advertising and promotion costs. As of December 31, 2018 the Group fully completed total purchase installment contemplated by the agreement.

## 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).

**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.

## 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 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 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. We urge you to consult your own tax adviser regarding the specific Russian tax consequences of the ownership and disposition 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 depo account with the shares underlying the ADSs acting 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 program 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 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 often 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. Reduced tax rates may apply in case 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 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. 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 trustee, unless the information on the ADS holder, the respective amount of ADS held and its 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 the relevant decision of the general shareholders meeting. The same amendments 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 depositary 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 depositary. Similarly to the order applicable to legal entities, reduced tax rates may apply in case 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 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 the 15% tax withheld from payment of dividends to the depositary and, therefore, it is possible that individuals who are U.S. holders may be subject to up to a 30% effective tax rate (general tax rate for Russian tax non-residents) on their share of dividends.

The amendments to the Russian Tax Code, which came into effect from January 1, 2015, exclude dividends from the scope of payments subject to 30% withholding tax rate.

***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 by non-residents.

Where the 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 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 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 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.

In order to apply the provisions of relevant double tax treaties, 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 holder to the ADS 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 holder, 3) a document with information about the custodian that transferred the dividend amounts to the depositary, and 4) documents confirming the ADS 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, 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 depositary nor us has or will have any obligation to assist an ADS 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 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 U.S. 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"), 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 U.S. 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 that any such contrary position would not be sustained by a court. If an entity treated as a partnership for United States federal income tax purposes is an owner 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, partnerships that hold ADSs and partners in such partnerships are urged to consult their tax advisors regarding the specific U.S. 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;
- an S corporation;
- a partnership, a pass-through entity, a person holding ADSs through a partnership or other pass-through entity;
- 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 person subject to special tax accounting rules as a result of any item of gross income with respect to the shares or ADSs being taken into account in an applicable financial statement;
- a regulated investment company;
- a real estate investment trust;
- an owner of, directly, indirectly or by attribution, 10% or more of the outstanding shares of our stock (by vote or value); or
- an owner holding ADSs as part of a hedge, straddle, synthetic security or conversion transaction.

In addition, this summary is limited to U.S. Holders holding 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 tax on "net investment income" or of any United States state or local tax law or foreign tax law. This discussion also does not address any tax consequences relating to the direct ownership of ordinary shares.

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***

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 Russian withholding taxes, paid by us with respect to ADSs will be treated as a taxable foreign source dividend on the date of actual or constructive receipt by the depositary 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 continue to be listed on the New York Stock Exchange (or other national securities exchange that is registered under section 6 of the Securities Exchange Act of 1934, as amended, or the Nasdaq Stock Market) 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" with respect to your ADSs (as discussed below). Distributions with respect to ADSs in excess of our current and accumulated earnings and profits will be applied against and will reduce your tax basis in such ADSs and, to the extent in excess of such tax basis, will be treated as gain from a sale or exchange of such ADSs. You should be aware that we do not intend to calculate our earnings and profits for United States federal income tax purposes and, unless we make such calculations, you should assume that any distributions with respect to 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, 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 U.S. federal income tax treatment of any distribution received with respect to 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 depositary, 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 depositary 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 United States dollar value of the refund differs from the dollar equivalent of that amount on the date of receipt of the underlying distribution.

Russian withholding tax at the rate applicable to you 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 U.S. 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 under the United States—Russia income tax treaty, you may not be entitled to credits for the excess amount, even though the procedures for claiming refunds and the practical likelihood that refunds will be made available in a timely fashion are uncertain. 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***

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. 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 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 will generally be treated as U.S. source income or loss for 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 withheld on the sale 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 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, 2018. However, our possible status as a PFIC must be determined annually and may be dependent in part on the market price of our ADSs, which may be volatile. 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, at tax rates that may be higher than those otherwise applicable. You should consult your tax advisors regarding the application of the PFIC rules to your investment in the ADSs.

***Information Reporting and Backup Withholding***

Dividend payments with respect to ADSs and proceeds from the sale or exchange 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 any other required certification 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 U.S. 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.

***Additional Reporting Requirements***

Certain U.S. Holders who are individuals and certain specified non-individual holders may be required to report information relating to an interest in the ADSs, subject to certain exceptions

(including an exception for ADSs held in accounts maintained by certain financial institutions). U.S. Holders should consult their tax advisors regarding the effect, if any, of this requirement on their ownership and disposition of the ADSs.

***FATCA***

Provisions under Sections 1471 through 1474 of the Code and applicable U.S. Treasury Regulations commonly referred to as "FATCA" generally impose 30% withholding on certain "withholdable payments" and, in the future, may impose such withholding on "foreign passthru payments" made by a "foreign financial institution" (each as defined in the Code). Prospective investors should consult their tax advisors regarding the potential impact of FATCA and any non-U.S. legislation implementing FATCA on the investment in ADSs.

## 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 read at the U.S. Securities and Exchange Commission's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330 or, from outside the United States, at 1-202-942-8090. Copies may also be obtained from the SEC website at www.sec.gov. Our electronic filings are available at the SEC website www.sec.gov. Information about Mobile TeleSystems 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, 2018, RUB 10,980 million, or 2.98% of our total indebtedness, excluding capital leases, was variable interest rate debt, while RUB 357,155 million, or 97.02% of our total indebtedness, excluding capital leases, 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, 2018.

**Contractual Maturity Date as of December 31, 2018:**

| Indebtedness | Currency | 2019 | 2020 | 2021 | 2022 | 2023 | Thereafter | Total | Annual interest rate (Actual interest rate at December 31, 2018) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | (amounts in millions of RUB) | | | | |
| **Variable debt** | | | | | | | | | |
| Citibank | USD | 2,071 | 2,071 | 2,071 | 2,071 | 2,071 | 1,035 | 11,390 | 3.78% |
| **Total variable debt** | | **2,071** | **2,071** | **2,071** | **2,071** | **2,071** | **1,035** | **11,390** | |
| **Weighted average interest rate** | | **3.78%** | **3.78%** | **3.78%** | **3.78%** | **3.78%** | **3.78%** | **3.78%** | |
| **Fixed-rate notes** | | | | | | | | | |
| MTS International Notes due 2020 | USD | — | 20,903 | — | — | — | — | 20,903 | 8.63% |
| MTS PJSC Notes due 2020 | RUB | — | 40 | — | — | — | — | 40 | 7.90% |
| MTS International Notes due 2023 | USD | — | — | — | — | 31,147 | — | 31,147 | 5.00% |
| MTS PJSC Notes due 2022 (V series) | RUB | — | — | 12 | — | — | — | 12 | 0.25% |
| MTS PJSC Notes due 2023 | RUB | — | 9,352 | — | — | — | — | 9,352 | 6.85% |
| MTS PJSC Notes due 2031 | RUB | 1,080 | — | — | — | — | — | 1,080 | 7.85% |
| MTS PJSC Notes due 2022 | RUB | — | — | — | 10,000 | — | — | 10,000 | 9.00% |
| MTS PJSC Notes due 2021 | RUB | — | — | 10,000 | — | — | — | 10,000 | 8.85% |
| MTS PJSC Notes due 2022 | RUB | — | — | — | 15,000 | — | — | 15,000 | 7.70% |
| MTS PJSC Notes due 2021 | RUB | — | — | 10,000 | — | — | — | 10,000 | 7.10% |
| MTS PJSC Notes due 2025 | RUB | — | — | — | — | — | 10,000 | 10,000 | 7.25% |
| **Fixed-rate bank loans** | | | | | | | | | |
| Sberbank | RUB | — | 35,000 | — | — | — | — | 35,000 | 7.50% |
| Sberbank | RUB | — | 10,000 | 40,000 | 20,000 | — | — | 70,000 | 8.59% |
| Sberbank | RUB | — | 40,000 | — | — | — | — | 40,000 | 7.88% |
| Ekvant | RUB | 36 | 36 | 36 | 36 | 36 | 28 | 208 | 0.00% |
| ZTE Ukraine | UAH | 16 | 6 | — | — | — | — | 22 | 28.00% |
| ZTE Corporation | USD | 53 | — | — | — | — | — | 53 | 15.00% |
| VTB | RUB | — | 3,500 | 1,500 | — | — | — | 5,000 | 7.99% |
| VTB | RUB | — | — | 20,000 | — | — | — | 20,000 | 7.20% |
| VTB | RUB | — | — | 25,000 | — | — | — | 25,000 | 7.65% |
| VTB | RUB | — | — | 50,000 | — | — | — | 50,000 | 8.65% |
| **Total fixed debt** | | **1,185** | **118,837** | **156,548** | **45,036** | **31,183** | **10,028** | **362,817** | |
| **Weighted average interest rate** | | **7.81%** | **7.81%** | **7.78%** | **7.02%** | **5.54%** | **7.23%** | **7.20%** | |

We would have experienced an additional interest expense of approximately RUB 201 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, 2018. The rates of EUR and USD as of December 31, 2018 were used in calculations.

The fair value of our publicly traded fixed-rate notes as of December 31, 2018, ranged from 91.88% to 105.28% of the notional amount. As of December 31, 2018, the difference between the carrying value and the fair value of other fixed rate debt, including capital lease obligations, was immaterial. For details of our fixed-rate debt, refer to Note 24 of our audited consolidated financial statements. The fair value of variable rate debt approximates its carrying value.

We use derivative financial instruments to eliminate the exposure of changes in value of debt obligations. We primarily focus on reducing risk caused by the fluctuations in value for our fixed-rate long-term debt. According to our policy, we have entered into various fixed-to-variable interest rate

swap agreements. The table below presents a summary of our fixed-to-variable interest rate swap agreements.

| Type of derivative | Maturity | Notional amount (at inception) | Mark to Market Value as of December 31, 2018 |
|---|---|---|---|
| | | (amounts in millions of Rubles) | |
| **Fixed-to-variable Interest Rate Swap Agreements** | | | |
| Swap agreement with Sberbank to pay a variable interest rate of 3m LIBOR and receive a fixed interest rate of 8.45 | March 2020 | 7,000 | (33.1) |
| Swap agreement with Merill Lynch to pay a variable interest rate of 3m LIBOR and receive a fixed interest rate of 8.45% | March 2020 | 3,000 | (9.5) |

As of December 31, 2018, approximaely 5.8% of our fixed interest rate debt was hedged against risks of changes in value of the debt. We continue to consider other financial instruments available to us to mitigate exposure to debts' value fluctuations.

We also 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, which hedge the risk of both interest rate and currency fluctuations, 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 2019, 2020, 2023 and 2024.

The table below presents a summary of our cross-currency interest rate swap agreements:

| Type of derivative | Maturity | Notional amount (at inception) | Mark to Market Value as of December 31, 2018 |
|---|---|---|---|
| | | (amounts in millions of Rubles) | |
| **Cross-currency Interest Rate Swap Agreements** | | | |
| Swap agreements with Sberbank to pay a fixed rates of 7.095% and receive a variable interest rate of 6m LIBOR | September 2020 | 2,331 | 787 |
| Swap agreements with HSBC bank Plc to pay a fixed rates of 8.13% and receive a variable interest rate of 6m LIBOR | June 2019 | 732 | 73 |
| Swap agreement with VTB bank to pay a fixed rate of 8.2% and receive a variable interest rate of 6m LIBOR | June 2019 | 2,191 | 217 |
| Swap agreements with Sberbank to pay a fixed rates of 8.29% to 8.3125% and receive a variable interest rate of 6m LIBOR | June 2024 | 4,410 | 637 |
| Swap agreements with Rosbank to pay a fixed rates of 7.924% to 8.2965% and receive a variable interest rate of 6m LIBOR | June 2024 | 8,499 | 1,510 |
| Swap agreements with VTB bank to pay a variable Central Bank key rate (not less than 7%) + (–0.02%)–0.575% and receive a fixed interest rate of 5% | May 2023 | 20,841 | 649 |

As of December 31, 2018, approximately 100% of our variable interest rate debt was hedged against interest rate risks.

***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.

| | Rubles per U.S. dollar | | | |
|---|---|---|---|---|
| **Years ended December 31,** | **High** | **Low** | **Average[1]** | **Period End** |
| 2014 | 67.79 | 32.66 | 39.34 | 56.26 |
| 2015 | 72.88 | 49.18 | 62.01 | 72.88 |
| 2016 | 83.59 | 60.27 | 66.35 | 60.66 |
| 2017 | 60.75 | 55.85 | 58.10 | 57.60 |
| 2018 | 69.97 | 55.67 | 62.71 | 69.47 |

(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 2018 | 63.49 | 62.10 |
| August 2018 | 68.53 | 62.35 |
| September 2018 | 69.97 | 65.59 |
| October 2018 | 66.97 | 65.22 |
| November 2018 | 68.00 | 65.58 |
| December 2018 | 69.52 | 66.24 |
| January 2019 | 69.47 | 65.92 |
| February 2019 | 66.70 | 65.26 |
| March 2019 | 66.08 | 63.74 |

Source: CBR.

The exchange rate between the ruble and the U.S. dollar quoted by the CBR for April 18, 2019 was 63.95 rubles per U.S. dollar.

The following tables show, for the periods indicated, certain information regarding the exchange rate between the hryvnia and the U.S. dollar, based on data published by the National Bank of

Ukraine. These rates may differ from the actual rates used in preparation of our financial statements and other financial information provided herein.

| | Hryvnias per U.S. dollar | | | |
|---|---|---|---|---|
| **Years ended December 31,** | **High** | **Low** | **Average[1]** | **Period End** |
| 2013 | 7.99 | 7.99 | 7.99 | 7.99 |
| 2014 | 15.85 | 7.99 | 12.19 | 15.77 |
| 2015 | 30.01 | 15.75 | 21.81 | 24.00 |
| 2016 | 27.25 | 23.27 | 25.69 | 27.19 |
| 2017 | 28.07 | 25.44 | 26.67 | 28.07 |
| 2018 | 28.88 | 25.92 | 27.20 | 27.69 |

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

| | Hryvnias per U.S. dollar | |
|---|---|---|
| | **High** | **Low** |
| July 2018 | 26.76 | 26.19 |
| August 2018 | 28.28 | 26.87 |
| September 2018 | 28.49 | 28.03 |
| October 2018 | 28.34 | 27.92 |
| November 2018 | 28.39 | 27.75 |
| December 2018 | 28.39 | 27.27 |
| January 2019 | 28.27 | 27.51 |
| February 2019 | 27.74 | 26.90 |
| March 2019 | 27.26 | 26.31 |

Source: National Bank of Ukraine.

The exchange rate between the hryvnia and the U.S. dollar quoted by the National Bank of Ukraine for April 18, 2019 was 26.69 hryvnias per U.S. dollar.

We have exposure to fluctuations in the value of the U.S. dollar relative to the Russian ruble, Ukrainian hryvnia, Turkmen manat 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, hryvnia, manat, dram or sum 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, hryvnia, manat 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, hryvnia, manat, dram or sum against the euro because settlements denominated in euros are not significant.

We would experience a currency exchange loss of RUB 176 million on our U.S. dollar-denominated net monetary liabilities as a result of a hypothetical 1.0% increase in the ruble/hryvnia/manat/dram/sum to U.S. dollar exchange rate at December 31, 2018. We would experience a currency exchange gain of RUB 152 million in the fair value of our euro-denominated net monetary liabilities as a result of a hypothetical 1.0% increase in the ruble/hryvnia/manat/dram to euro exchange rate at December 31, 2018. We are unable to estimate future loss of earnings as a result of such changes.

**Item 12.** ***Description of Securities Other Than Equity Securities***

(Only Items 12.D.3-4 are applicable.)

**D. American Depositary Shares**

**3. Fees and charges that a holder of American Depositary Receipts may have to pay, either directly or indirectly.**

| Category | Depositary Actions | Associated Fee |
|---|---|---|
| (a) Depositing or substituting the underlying shares | Each person to whom ADSs are issued, including, without limitation, issuances against deposits of shares, issuances in respect of share distributions, rights and other distributions, issuances pursuant to a stock split declared by the Company, or issuances pursuant to a merger, exchange of securities or any other transaction or event affecting the ADSs or the deposited securities | $5.00 for each 100 ADSs (or portion thereof) |
| (b) Receiving or distributing dividends | Distribution of stock dividends | $5.00 for each 100 ADSs (or portion thereof) |
| | Distribution of cash | $0.02 or less per ADS (or portion thereof) |
| (c) Selling or exercising rights | Distribution or sale of securities, the fee being in an amount equal to the fee for the execution and delivery of ADSs which would have been charged as a result of the deposit of such securities | $5.00 for each 100 ADSs (or portion thereof) |
| (d) Withdrawing an underlying security | Acceptance of ADRs surrendered for withdrawal of deposited securities or cancellation or reduction of ADSs for any other reason | $5.00 for each 100 ADSs (or portion thereof) |
| (e) Transferring, splitting or grouping receipts | Transfers, combining or grouping of depositary receipts | $1.50 per ADS |

| Category | Depositary Actions | Associated Fee |
|---|---|---|
| (f) General depositary services, particularly those charged on an annual basis | Other services performed by the depositary in administering the ADRs | $0.02 per ADS (or portion thereof) per calendar year which may be charged on a periodic basis during each calendar year and shall be assessed against holders of ADSs as of the record date or record dates set by the depositary during each calendar year and shall be payable at the sole discretion of the depositary by billing such holders or by deducting such charge from one or more cash dividends or other cash distributions |
| | Custodian and share register related issues, including, without limitation, any inspections of the share register maintained by the Russian share registrar or other confirmation of holdings of deposited securities | $0.01 or less per ADS (or portion thereof) per year which fee shall be assessed against holders of record as of the date set by the depositary not more often than once each calendar year |
| (g) Expenses of the depositary | Certain fees and expenses incurred by the depositary bank and certain taxes and governmental charges in connection with:<br>• compliance with foreign exchange control regulations or any law or regulation relating to foreign investment;<br>• depositary or its custodian's compliance with applicable law, rule or regulation;<br>• stock transfer or other taxes and other governmental charges;<br>• cable, telex, facsimile transmission or delivery charges; | Charges to be assessed against holders as of the record date or dates set by the depositary and payable at the sole discretion of the depositary by billing such holders or by deducting such charge from one or more cash dividends or other cash distributions |

| Category | Depositary Actions | Associated Fee |
|---|---|---|
| | • if applicable, transfer or registration fees for the registration or transfer of deposited securities on any applicable register in connection with the deposit or withdrawal of deposited securities (which are payable by persons depositing shares or holders withdrawing deposited securities);<br>• expenses of the depositary in connection with the conversion of foreign currency into U.S. dollars (which are paid out of such foreign currency);<br>• any other charge payable by depositary or its agents including, without limitation, the custodian, or the agents of the depositary's agents in connection with the servicing of the shares or other deposited securities | |

**4. All fees and other direct and indirect payments made by the depositary to the foreign issuer of the deposited securities.**

The Depositary has agreed to reimburse to us or pay on our behalf certain reasonable expenses related to our ADS program and incurred by us in connection with the program (such as NYSE listing fees, legal and accounting fees incurred with preparation of Form 20-F and ongoing SEC compliance and listing requirements, investor relations expenses, among others). The amounts the Depositary reimbursed or paid are not perforce related to the fees collected by the depositary from ADS holders.

As part of its service to us, the Depositary has agreed to waive fees for the standard costs associated with the administration of our ADS program, associated operating expenses and investor relations advice estimated to total $0.2 million.

## 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, 2018, 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, 2018 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, 2018 was effective.

Management excluded from its assessment the internal control over financial reporting at PJSC "MTS Bank," which was acquired on July 5, 2018 and whose financial statements constitute 17% of total assets and 2% of revenues of the consolidated financial statement amounts as of and for the year ended December 31, 2018. Accordingly, our assessment did not include the internal control over financial reporting at PJSC "MTS Bank."

The effectiveness of our internal control over financial reporting as of December 31, 2018 has been audited and assessed as effective by independent registered public accounting firm AO Deloitte & Touche CIS, 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, 2018 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 subsidiaries (the "Group") as of December 31, 2018, 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, 2018, based on the 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, 2018, of the Group and our report dated March 19, 2019 expressed an unqualified opinion on those consolidated financial statements and included an explanatory paragraph regarding the Group's adoption of a new accounting standard.

As described in the Management's Annual Report on Internal Control over Financial Reporting, management excluded from its assessment the internal control over financial reporting at MTS Bank PJSC, which was acquired on July 5, 2018 and whose financial statements constitute 17% of total assets and 2% of revenues of the consolidated financial statement amounts as of and for the year ended December 31, 2018. Accordingly, our audit did not include the internal control over financial reporting at MTS Bank PJSC.

**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.

/s/ AO Deloitte & Touche CIS
Moscow, Russia
March 19, 2019

(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 is an "audit committee financial expert" 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 experience, please see "Item 6. Directors, Senior Management and Employees—A. Directors and Senior Management—Key Biographies."

**Item 16B.** ***Code of Ethics***

The current version of our Code of Ethics was adopted on October 19, 2018. Our Code of Ethics applies to all of our officers, directors and employees. The new Code of Ethics did not substantively alter any of its requirements as compared with the code of ethics that was in effect prior to the approval of the new Code of Ethics.

A copy of our Code of Ethics is available on our website at http://ir.mts.ru/.

**Item 16C.** ***Principal Accountant Fees and Services***

AO Deloitte & Touche CIS has served as our Independent Registered Public Accounting Firm for each of the fiscal years in the two-year period ended December 31, 2018 and 2017 for which audited financial statements appear in this Annual Report on Form 20-F. The following table presents the aggregate fees billed for professional services and other services by AO Deloitte & Touche CIS and its affiliates in 2018 and 2017, respectively.

| | Year ended December 31, | |
|---|---|---|
| | 2018 | 2017 |
| | (in thousands of Russian rubles) | |
| Audit Fees | 165,011 | 125,070 |
| Audit-Related Fees | 4,093 | 9,700 |
| Tax Fees | 308 | 950 |
| All Other Fees | 1,690 | 8,290 |
| **Total** | **171,102** | **144,010** |

**Audit Fees**

The Audit Fees for the years ended December 31, 2018 and 2017 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, 2018 and 2017 mainly included fees for agreed-upon procedures related to audited financial statements and procedures to support ongoing investigations related to our former subsidiary in Uzbekistan.

**Tax Fees**

The Tax Fees for the years ended December 31, 2018 and 2017 include the fees principally related to tax compliance services.

**All Other Fees**

All Other Fees for the year ended December 31, 2018 primarily relate to an agreed-upon procedures engagement on non-financial information; for the year ended December 31, 2017 - to non-recurring internal audit function assessment and other quality assessment 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 Deloitte & Touche CIS 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 Deloitte & Touche CIS and its affiliates for all services performed for the fiscal year ended December 31, 2018. 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***

We did not repurchase any ADSs in the years ended December 31, 2014 and December 31, 2015.

A total of 9,935 MTS ordinary shares representing 0.0005% of our issued share capital were repurchased for RUB 2.1 million in August 2014 pursuant to our shareholders' right to demand buy-out following our decision on merger of our subsidiaries into MTS in accordance with applicable laws. These shares were sold pursuant to the requirements of applicable legislation in August 2015.

A total of 29,666 MTS shares representing 0.001% of our issued share capital were repurchased for RUB 5.9 million in October 2015 pursuant to our shareholders' right to demand buy-out following our decision on merger of our subsidiaries into MTS in accordance with applicable laws. These shares were used for reduction of our issued share capital in August 2016.

A total of 6,986 MTS shares representing 0.0003% of our issued share capital were repurchased for RUB 1.1 million in February 2016 pursuant to our shareholders' right to demand buy-out following our decision on merger of our subsidiaries into MTS in accordance with applicable laws. These shares were used for reduction of our issued share capital in August 2016.

In October 2016, we announced a tender offer (the "**First Tender Offer**") for repurchase of MTS ordinary shares (including ordinary shares represented by ADSs) for the amount of up to RUB 4,934 million. Also, our subsidiary Stream Digital LLC and Sistema entered into a purchase agreement (the "**Sistema Purchase Agreement**") pursuant to which Sistema agreed not to tender and sell any shares in the First Tender Offer and instead agreed to sell to us, following completion of the First Tender Offer, a pro rata number of shares of ordinary shares based on the number of shares tendered in the First Tender Offer. As a result of the First Tender Offer in December 2016 our subsidiary, Stream Digital LLC, repurchased 1,509,914 MTS ordinary shares (including ordinary shares represented by ADSs) representing approximately 0.08% of our issued share capital for RUB 346 million. Simultaneously, Stream Digital LLC repurchased 1,550,495 MTS ordinary shares from Sistema under the Sistema Purchase Agreement representing approximately 0.08% of our issued share capital for RUB 355 million.

In January 2017, we announced another tender offer (the "**Second Tender Offer**") for repurchase of MTS ordinary shares (including ordinary shares represented by ADSs) for the amount of up to

RUB 4,647 million. Also, our subsidiary Stream Digital LLC and Sistema Finance S.A., a subsidiary of Sistema, entered into a purchase agreement (the "**Second Sistema Purchase Agreement**") pursuant to which Sistema Finance S.A. together with Sistema and Sistema's affiliated entities agreed not to tender and sell any shares in the Second Tender Offer and instead agreed to sell to us, following completion of the Second Tender Offer, a pro rata number of shares of ordinary shares based on the number of shares purchased in the Second Tender Offer.

As a result of the Second Tender Offer in March 2017 Stream Digital LLC, repurchased 16,022,364 MTS ordinary shares (including ordinary shares represented by ADSs) representing approximately 0.8% of our issued share capital for RUB 4,646 million.

Simultaneously, Stream Digital LLC repurchased 16,038,892 MTS ordinary shares from Sistema Finance S.A. under the Second Sistema Purchase Agreement representing approximately 0.8% of our issued share capital for RUB 4,651 million.

In September 2017, we launched a share repurchase plan for repurchase of MTS ordinary shares (including ordinary shares represented by ADSs) for an amount up to RUB 20 billion under Rule 10b5-1 and Rule 10b-18 of the Exchange Act (the "**Repurchase Plan**"). Also, we entered into a sale and repurchase agreement with Sistema Finance S.A., a subsidiary of Sistema, to acquire any number of shares proportional to any shares acquired from the market under the Repurchase Plan. The Repurchase Plan is carried out by our subsidiary Stream Digital LLC.

As a result of the Repurchase Plan by the end of 2017 Stream Digital LLC repurchased 43,647,128 MTS ordinary shares (including ordinary shares represented by ADSs) representing approximately 2.2% of our issued share capital for RUB 12,475 million.

During the first quarter of 2018 Stream Digital LLC repurchased 25,397,204 MTS ordinary shares (including ordinary shares represented by ADSs) representing approximately 1.3% of our issued share capital for RUB 7,354 million.

In March 2018, our wholly owned subsidiary Bastion LLC repurchased 1,400,000 MTS ordinary shares representing approximately 0.07% of our issued share capital in order to accomplish MTS management long-term motivation program.

In July 2018, we launched a share repurchase plan for repurchase of MTS ordinary shares (including ordinary shares represented by ADSs) for an amount up to RUB 30 billion under Rule 10b5 1 and Rule 10b 18 of the Exchange Act (the "Repurchase Plan"). Also, we entered into a sale and repurchase agreement with Sistema Finance S.A., a subsidiary of Sistema, to acquire any number of shares proportional to any shares acquired from the market under the Repurchase Plan. The Repurchase Plan is carried out by our subsidiary Bastion LLC.

As a result of Repurchase Plans by the end of 2018 Stream Digital LLC and Bastion LLC repurchased 81,251,382 MTS ordinary shares (including ordinary shares represented by ADSs) representing approximately 4.1% of our issued share capital for RUB 22,148 million.

In 2019, Bastion LLC repurchased 51,791,867 MTS ordinary shares (including ordinary shares represented by ADSs) representing approximately 2.6% of our issued share capital.

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***

We are a company organized under the laws of the Russian Federation and qualify as a foreign private issuer as such term is defined in Rule 3b-4 of the Exchange Act. In accordance with the NYSE corporate governance rules, listed companies that are foreign private issuers are permitted in some circumstances to follow home country practice in lieu of the provisions of the corporate governance rules contained in Section 303A of the NYSE Listed Company Manual that are applicable to U.S. companies. In addition, foreign private issuers listed on the NYSE must disclose any significant ways in which their corporate governance practices differ from those followed by U.S. companies listed on the NYSE. With regard to our corporate governance practices, these differences can be summarized as follows:

- For U.S. companies, the NYSE standards require that a majority of directors be independent, as determined by the board. Russian law does not require that a majority of our directors be independent. Of our nine directors, four have been determined by the board to be independent in accordance with the independence standards set forth in SEC Rule 10A-3 and Section 303A.02 of the NYSE Listed Company Manual.

- For U.S. companies, the NYSE standards require that the audit committee have a minimum of three members. Russian law does not contain such a requirement. Our audit committee comprises of four members.

- For U.S. companies, the NYSE standards require that non-management directors meet at regularly scheduled executive sessions without management. Russian law does not contain such a requirement. However, our audit committee and remuneration and nomination committee comprises of independent directors, who meet on a regular basis in connection with their work on these committees.

- For U.S. companies, the NYSE standards require that listed companies have a nominating/corporate governance committee and a compensation committee, each composed entirely of independent directors and having a written charter specifying the committee's purpose and responsibilities, as well as annual performance evaluations of the committee.

We have a corporate governance committee comprising of directors and members of management that is responsible for developing and implementing standards for corporate governance and making recommendations to the Board of Directors on developing our strategy in the area of corporate governance.

We have a remuneration and nomination committee comprising of four independent directors. This committee functions pursuant to bylaws approved by the Board of Directors specifying the committee's purpose, duties and responsibilities. The committee is primarily responsible for recommending appointments to key managerial posts, developing a set of requirements and criteria for directors and management executives and developing a remuneration structure and compensation levels for the Board of Directors, the audit committee and management executives (including the CEO). This committee is also responsible for conducting annual performance evaluations of the Board of Directors.

- For U.S. companies, the NYSE standards require that shareholders be given the opportunity to vote on all equity compensation plans and material revisions. Under Russian law, such approval from shareholders is not required, and our equity compensation plans and material revisions thereto are currently approved by the Board of Directors.

- For U.S. companies, the NYSE standards require the adoption and disclosure of corporate governance guidelines addressing certain subjects. Our corporate governance guidelines are consistent with what is required under Russian law and are set forth in our Charter, in the bylaw on our Board of Directors and in the bylaws of our various committees.

We are required under the New York Stock Exchange listing rules to disclose any significant differences between the corporate governance practices that we follow under Russian law and applicable listing standards and those followed by U.S. domestic companies under New York Stock Exchange listing standards. This disclosure is posted on our website (http://ir.mts.ru/about-mts/corporate-governance/default.aspx).

## PART III

**Item 17.** ***Financial Statements***

See instead Item 18.

**Item 18.** ***Financial Statements***

The following financial statements, together with the report of AO Deloitte & Touche CIS, are filed as part of this annual report on Form 20-F.


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**Item 19.** ***Exhibits***

| Exhibits No. | Description |
|---|---|
| 1.1 | Charter of Mobile TeleSystems PJSC, restated version No. 14, as approved by the General Meeting of Shareholders of Mobile TeleSystems PJSC held on June 28, 2018 (English translation).* |
| 1.2 | Amendments and Additions to the Charter of Mobile TeleSystems PJSC (Version No. 14), as approved by General Meeting of Shareholders of Mobile TeleSystems PJSC held on June 28, 2018 (English translation). |
| 1.3 | Amendments to the Charter of Mobile TeleSystems PJSC (Version No. 14), as approved by General Meeting of Shareholders of Mobile TeleSystems PJSC held on June 28, 2018 (English translation). |
| 1.4 | Code of Corporate Conduct and Business Ethics of Mobile TeleSystems PJSC approved by the Board of Directors of Mobile TeleSystems PJSC on September 21, 2018 (English translation). |
| 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 | Amendment No. 1 to Deposit Agreement is incorporated herein by reference to Exhibit (a)(2) to Form F-6 (Registration No 333-12008). |
| 2.3 | Amendment No. 2 to Deposit Agreement is incorporated herein by reference to Exhibit (a)(3) to Form F-6 (Registration No 333-121240). |
| 2.4 | Amendment No. 3 to Deposit Agreement is incorporated herein by reference to Exhibit (a)(4) to Form F-6 (333-145190). |
| 2.5 | Amendment No. 4 to Deposit Agreement is incorporated herein by reference to Exhibit (a)(5) to Form F-6 (Registration No. 333-166178). |
| 2.6 | Listing Prospectus of Mobile TeleSystems PJSC relating to exchange-traded interest-bearing non-convertible documentary bonds dated March 5, 2013 (English translations) 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. |
| 4.1 | Indenture dated as of January 28, 2005 between Mobile TeleSystems Finance S.A., Mobile TeleSystems OJSC and JPMorgan Chase Bank is incorporated herein by reference to Exhibit 4.3 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, 2004, on Form 20-F. |
| 4.2 | Indenture dated as of October 14, 2003 between Mobile TeleSystems Finance S.A., Mobile TeleSystems OJSC and JPMorgan Chase Bank 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, 2003, on Form 20-F. |

| Exhibits No. | Description |
|---|---|
| 4.3 | MTS License No. 765 for provision of mobile radiotelephone communication services in the 900/1800 MHz band in the territory of the Armenia Republic (English translation) is incorporated herein by reference to Exhibit 4.50 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, 2007, on Form 20-F. |
| 4.4 | Vodafone Ukraine License No. 813 for provision of provision of services of mobile telephone communications with the right of maintenance and operation of telecommunication networks and provision for use of telecommunication channels in the territory of the Ukraine (English translation) is incorporated herein by reference to Exhibit 4.252 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, 2017, on Form 20-F. |
| 4.5 | Vodafone Ukraine License No. 815 for provision of provision of services of mobile telephone communications with the right of maintenance and operation of telecommunication networks and provision for use of telecommunication channels in the entire territory of Ukraine in accordance with the License Terms in the territory of the Ukraine (English translation) is incorporated herein by reference to Exhibit 4.253 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, 2017, on Form 20-F. |
| 4.6 | MTS License No. 86435 for provision of mobile radiotelephone communication services in the 900 MHz band in the territory of the Ulyanovsk Region (English translation) is incorporated herein by reference to Exhibit 4.30 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, 2010, on Form 20-F. |
| 4.7 | MTS License No. 86436 for provision of mobile radiotelephone communication services in the 900 MHz band in the territory of the Penza Region (English translation) is incorporated herein by reference to Exhibit 4.29 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, 2010, on Form 20-F. |
| 4.8 | MTS License No. 101245 for provision of data communication services for the purposes of voice data communication in the territory of the Russian Federation (English translation) is incorporated herein by reference to Exhibit 4.254 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, 2017, on Form 20-F. |
| 4.9 | MTS License No. 101246 for provision of telematic communication services in the territory of the Russian Federation (English translation) is incorporated herein by reference to Exhibit 4.255 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, 2017, on Form 20-F. |
| 4.10 | MTS License No. 101247 for provision of mobile radio telephone communication services in the territory of the Asian Russia (English translation) is incorporated herein by reference to Exhibit 4.256 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, 2017, on Form 20-F. |

| Exhibits No. | Description |
|---|---|
| 4.11 | MTS License No. 101248 for provision of data communication services excluding data communication services for the purposes of voice data communication in the territory of the Russian Federation (English translation) is incorporated herein by reference to Exhibit 4.257 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, 2017, on Form 20-F. |
| 4.12 | MTS License No. 104893 for provision of local, international and intercity phone communication service in the territory of the Russian Federation (English translation) is incorporated herein by reference to Exhibit 4.258 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, 2017, on Form 20-F. |
| 4.13 | MTS License No. 118158 for provision of data transmission services, except for data transmission services for the purpose of voice transmission in the territory of the Zabaykalsky Territory (English translation) is incorporated herein by reference to Exhibit 4.183 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, 2014, on Form 20-F. |
| 4.14 | MTS License No. 118159 for provision of telematic communication services in the territory of the Zabaykalsky Territory (English translation) is incorporated herein by reference to Exhibit 4.187 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, 2014, on Form 20-F. |
| 4.15 | Sibintertelecom CJSC License No. 119279 for provision of communication services for the provision of communication channels in the territory of the Zabaykalsky Territory (English translation) is incorporated herein by reference to Exhibit 4.182 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, 2014, on Form 20-F. |
| 4.16 | MTS License No. 119295 for provision of communication services for the provision of communication channels in the territory of the Belgorod region, the Bryansk region, the Voronezh region, the Kursk region, the Lipetsk region, the Orel region (English translation) is incorporated herein by reference to Exhibit 4.174 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, 2014, on Form 20-F. |
| 4.17 | MTS License No. 119985 for provision of communication services for the purpose of broadcasting in the territory of the Chukotsk Autonomous region (English translation) is incorporated herein by reference to Exhibit 4.172 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, 2014, on Form 20-F. |
| 4.18 | MTS License No. 120894 for provision of mobile radio telephone communication services in the territory of the KabardinoBalkar Republic (English translation) is incorporated herein by reference to Exhibit 4.259 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, 2017, on Form 20-F. |
| 4.19 | MTS License No. 120895 for provision of mobile radio telephone communication services in the territory of the Chechen Republic (English translation) is incorporated herein by reference to Exhibit 4.260 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, 2017, on Form 20-F. |

| Exhibits No. | Description |
|---|---|
| 4.20 | MTS License No. 122267 for provision of data transmission services for the purpose of voice transmission in the territory of the Tver region (English translation) is incorporated herein by reference to Exhibit 4.126 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, 2014, on Form 20-F. |
| 4.21 | MTS License No. 122268 for provision of communication services for the purpose of cable broadcasting in the territory of the Russian Federation (English translation) is incorporated herein by reference to Exhibit 4.173 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, 2014, on Form 20-F. |
| 4.22 | City Telecom CJSC License No. 122706 for provision of data communication services for voice transmission in the territory of Moscow (English translation) is incorporated herein by reference to Exhibit 4.220 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. |
| 4.23 | MTS License No. 122730 for provision of data transmission services for the purpose of voice transmission in the territory of the Tambov region (English translation) is incorporated herein by reference to Exhibit 4.131 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, 2014, on Form 20-F. |
| 4.24 | MTS License No. 122731 for provision of data transmission services for the purpose of voice transmission in the territory of the Arkhangelsk region (English translation) is incorporated herein by reference to Exhibit 4.143 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, 2014, on Form 20-F. |
| 4.25 | MTS License No. 123559 for provision of intrazonal telephone communication services in the territory of the Samara region (English translation) is incorporated herein by reference to Exhibit 4.130 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, 2014, on Form 20-F. |
| 4.26 | MTS License No. 123560 for provision of data transmission services for the purpose of voice transmission in the territory of the Samara region (English translation) is incorporated herein by reference to Exhibit 4.125 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, 2014, on Form 20-F. |
| 4.27 | MTS License No. 123658 for provision of intrazonal telephone communication services (GSM-900/1800 network) in the territory of the Nizny Novgorod region (English translation) is incorporated herein by reference to Exhibit 4.147 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, 2014, on Form 20-F. |

| Exhibits No. | Description |
|---|---|
| 4.28 | Sputnikovoe TV License No. 123687 for provision of communication services for the purpose of broadcasting in the territory of the Adygea Republic, the Altai Republic, the Bashkortostan Republic, the Buryatiya Republic, the Dagestan Republic, the Ingushetia Republic, the KabardinoBalkar Republic, the Kalmykia Republic, the KarachaevoCherkesia Republic, the Karelia Republic, the Komi Republic, the Mari-El Republic, the Mordovia Republic, the Sakha Republic (Yakutia), the Severnaya Osetia Alania Republic, the Tatarstan Republic, the Tuva Republic, the Udmurt Republic, the Khakassia Republic, the Chechen Republic, the Chuvashia Republic, the Altai region, the Zabaykalsky Territory, the Krasnodar region, the Krasnoyarsk region, the Perm region, the Primorsky Territory, the Stavropol Territory, the Khabarovsk Territory, the Amur region, the Arkhangelsk region, the Astrakhan region, the Belgorod region, the Bryansk region, the Vladimir region, the Volgograd region, the Vologda region, the Voronezh region, the Ivanovo region, the Irkutsk region, the Kaliningrad region, the Kaluga region, the Kemerovo region, the Kirov region, the Kostroma region, the Kurgan region, the Kursk region, the Leningrad region, the Lipetsk region, the Moscow region, the Nizhny Novgorod region, the Novgorod region, the Novosibirsk region, the Omsk region, the Orenburg region, the Orel region, the Penza region, the Pskov region, the Rostov region, the Ryazan region, the Samara region, the Saratov region, the Sakhalin region, the Sverdlovsk region, the Smolensk region, the Tambov region, the Tver region, the Tomsk region, the Tula region, the Tyumen region, the Ulyanovsk region, the Chelyabinsk region, the Yaroslavl region, Moscow, St Petersburg, Sevastopol, the Jewish Autonomous region, the Khanty Mansiysk Autonomous region, the YamaloNenetsk Autonomous region (English translation) is incorporated herein by reference to Exhibit 4.152 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, 2014, on Form 20-F. |
| 4.29 | MTS License No. 124558 for provision of communications services for the provision of communication channels in the territory of the Jewish Autonomous region (English translation) is incorporated herein by reference to Exhibit 4.153 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, 2014, on Form 20-F. |
| 4.30 | MTS License No. 124994 for provision of data transmission services for the purpose of voice transmission in the territory of St. Petersburg (English translation) is incorporated herein by reference to Exhibit 4.128 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, 2014, on Form 20-F. |
| 4.31 | MTS License No. 125651 for provision of telematic communication services in the territory of the Penza region (English translation) is incorporated herein by reference to Exhibit 4.139 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, 2014, on Form 20-F. |
| 4.32 | MGTS License No. 125652 for provision of data transmission services, except for data transmission services for the purpose of voice transmission in the territory of the Penza region (English translation) is incorporated herein by reference to Exhibit 4.136 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, 2014, on Form 20-F. |

| Exhibits No. | Description |
|---|---|
| 4.33 | MGTS License No. 125848 for provision of local telephone communication services, excluding local telephone communication services using payphones and shared-access facilities in the territory of the Moscow region (English translation) is incorporated herein by reference to Exhibit 4.138 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, 2014, on Form 20-F. |
| 4.34 | MGTS License No. 125854 for provision of data transmission services, except for data transmission services for the purpose of voice transmission in the territory of the Moscow region (English translation) is incorporated herein by reference to Exhibit 4.142 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, 2014, on Form 20-F. |
| 4.35 | MTS License No. 127169 for provision of telematic communication services in the territory of the Khabarovsk Territory (English translation)is incorporated herein by reference to Exhibit 4.288 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, 2015, on Form 20-F. |
| 4.36 | MTS License No. 127170 for provision of local telephone communication services, excluding local telephone communication services using coin-box telephones and public access services in the territory of the Zabaikalye Territory (English translation) is incorporated herein by reference to Exhibit 4.289 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, 2015, on Form 20-F. |
| 4.37 | MTS License No. 127171 for provision of communications services for the provision of communication channels in the territory of the Primorye Territory (English translation) is incorporated herein by reference to Exhibit 4.180 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, 2015, on Form 20-F. |
| 4.38 | MTS License No. 127172 for provision of data transmission services, except for data transmission services for the purpose of voice transmission in the territory of the Khabarovsk Territory (English translation) is incorporated herein by reference to Exhibit 4.283 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, 2015, on Form 20-F. |
| 4.39 | MTS License No. 127678 for provision of telematic communication services in the territory of the Stavropol Territory (English translation) is incorporated herein by reference to Exhibit 4.291 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, 2015, on Form 20-F. |
| 4.40 | MTS License No. 127679 for provision of data transmission services, except for data transmission services for the purpose of voice transmission in the territory of the Ulyanovsk Region (English translation) is incorporated herein by reference to Exhibit 4.286 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, 2015, on Form 20-F. |
| 4.41 | MTS License No. 127680 for provision of telematic communication services in the territory of the Samara region (English translation) is incorporated herein by reference to Exhibit 4.290 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, 2015, on Form 20-F. |

| Exhibits No. | Description |
|---|---|
| 4.42 | MTS License No. 127681 for provision of telematic communication services in the territory of the Ulyanovsk region (English translation) is incorporated herein by reference to Exhibit 4.287 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, 2015, on Form 20-F. |
| 4.43 | MTS License No. 127682 for provision of data transmission services, except for data transmission services for the purpose of voice transmission in the territory of the Volgograd Region (English translation) is incorporated herein by reference to Exhibit 4.284 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, 2015, on Form 20-F. |
| 4.44 | MTS License No. 127683 for provision of communications services for the provision of communication channels in the territory of the Stavropol Territory, the Astrakhan region (English translation) is incorporated herein by reference to Exhibit 4.282 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, 2015, on Form 20-F. |
| 4.45 | MTS License No. 127684 for provision of telematic communication services in the territory of the Vologda region (English translation) is incorporated herein by reference to Exhibit 4.292 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, 2015, on Form 20-F. |
| 4.46 | MTS License No. 127685 for provision of data transmission services, except for data transmission services for the purpose of voice transmission in the territory of the Stavropol Territory (English translation) is incorporated herein by reference to Exhibit 4.285 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, 2015, on Form 20-F. |
| 4.47 | MTS License No. 127686 for provision of communications services for the provision of communication channels in the territory of the Samara region, the Saratov region, the Ulyanovsk Region (English translation) is incorporated herein by reference to Exhibit 4.281 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, 2015, on Form 20-F. |
| 4.48 | MTS License No. 127687 for provision of data transmission services, except for data transmission services for the purpose of voice transmission in the territory of the Saratov region (English translation) is incorporated herein by reference to Exhibit 4.270 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, 2015, on Form 20-F. |
| 4.49 | MTS License No. 127688 for provision of telematic communication services in the territory of the Saratov region (English translation) is incorporated herein by reference to Exhibit 4.278 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, 2015, on Form 20-F. |
| 4.50 | MTS License No. 127689 for provision of data transmission services, except for data transmission services for the purpose of voice transmission in the territory of the Samara region (English translation) is incorporated herein by reference to Exhibit 4.271 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, 2015, on Form 20-F. |

| Exhibits No. | Description |
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| 4.51 | MTS License No. 127698 for provision of intrazonal telephone communication services in the territory of the Moscow region, Moscow (English translation) is incorporated herein by reference to Exhibit 4.302 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, 2015, on Form 20-F. |
| 4.52 | MTS License No. 128517 for provision of data transmission services, except for data transmission services for the purpose of voice transmission in the territory of the Republic of Tuva (English translation) is incorporated herein by reference to Exhibit 4.273 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, 2015, on Form 20-F. |
| 4.53 | MTS License No. 128518 for provision of telematic communication services in the territory of the Sakha Republic (Yakutia) (English translation) is incorporated herein by reference to Exhibit 4.274 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, 2015, on Form 20-F. |
| 4.54 | MTS License No. 128519 for provision of telematic communication services in the territory of the Tomsk region (English translation) is incorporated herein by reference to Exhibit 4.248 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, 2015, on Form 20-F. |
| 4.55 | MTS License No. 128520 for provision of data transmission services, except for data transmission services for the purpose of voice transmission in the territory of the Buryatiya Republic, the Magadan region, the Sakhalin region, the Kamchatka region (excluding the Koryak Autonomous Area) (English translation) is incorporated herein by reference to Exhibit 4.269 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, 2015, on Form 20-F. |
| 4.56 | MTS License No. 128521 for provision of telematic communication services in the territory of the Republic of Tuva (English translation) is incorporated herein by reference to Exhibit 4.279 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, 2015, on Form 20-F. |
| 4.57 | MTS License No. 128522 for provision of data transmission services, except for data transmission services for the purpose of voice transmission in the territory of the Republic of Khakassia (English translation) is incorporated herein by reference to Exhibit 4.275 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, 2015, on Form 20-F. |
| 4.58 | MTS License No. 128523 for provision of data transmission services, except for data transmission services for the purpose of voice transmission in the territory of the Kemerovo region (English translation) is incorporated herein by reference to Exhibit 4.276 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, 2015, on Form 20-F. |
| 4.59 | MTS License No. 128525 for provision of telematic communication services in the territory of the Republic of Khakassia (English translation) is incorporated herein by reference to Exhibit 4.277 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, 2015, on Form 20-F. |

| Exhibits No. | Description |
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| 4.60 | MTS License No. 128526 for provision of data transmission services, except for data transmission services for the purpose of voice transmission in the territory of the Novosibirsk region (English translation) is incorporated herein by reference to Exhibit 4.272 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, 2015, on Form 20-F. |
| 4.61 | MTS License No. 128527 for provision of data transmission services, except for data transmission services for the purpose of voice transmission in the territory of the Novosibirsk region (English translation) is incorporated herein by reference to Exhibit 4.262 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, 2015, on Form 20-F. |
| 4.62 | MTS License No. 128528 for provision of communications services for the provision of communication channels in the territory of the Republic of Altai, the Altai Territory, the Novosibirsk Region (English translation) is incorporated herein by reference to Exhibit 4.259 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, 2015, on Form 20-F. |
| 4.63 | MTS License No. 128529 for provision of communications services for the provision of communication channels in the territory of the Republic of Tuva (English translation) is incorporated herein by reference to Exhibit 4.258 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, 2015, on Form 20-F. |
| 4.64 | MTS License No. 128530 for provision of telematic communication services in the territory of the Republic of Khakassia (English translation) is incorporated herein by reference to Exhibit 4.264 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, 2015, on Form 20-F. |
| 4.65 | MTS License No. 128533 for provision of communications services for the provision of communication channels in the territory of the Republic of Khakassia (English translation) is incorporated herein by reference to Exhibit 4.260 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, 2015, on Form 20-F. |
| 4.66 | MTS License No. 128534 for provision of data transmission services, except for data transmission services for the purpose of voice transmission Republic of Altai (English translation) is incorporated herein by reference to Exhibit 4.268 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, 2015, on Form 20-F. |
| 4.67 | MTS License No. 128535 for provision of data transmission services, except for data transmission services for the purpose of voice transmission in the territory of the Tomsk region (English translation) is incorporated herein by reference to Exhibit 4.263 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, 2015, on Form 20-F. |
| 4.68 | MTS License No. 128536 for provision of telematic communication services in the territory of the Kamchatka region (excluding the excluding the Koryak Autonomous Area) (English translation) is incorporated herein by reference to Exhibit 4.265 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, 2015, on Form 20-F. |

| Exhibits No. | Description |
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| 4.69 | MTS License No. 129415 for provision of communication services for the purpose of wire broadcasting in the territory of the Perm Territory (English translation) is incorporated herein by reference to Exhibit 4.266 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, 2015, on Form 20-F. |
| 4.70 | MTS License No. 129942 for provision of data transmission services, except for data transmission services for the purpose of voice transmission in the territory of the Republic of Kalmykia (English translation) is incorporated herein by reference to Exhibit 4.255 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, 2015, on Form 20-F. |
| 4.71 | MTS License No. 129943 for provision of communications services for the provision of communication channels in the territory of the Chuvash Republic—Chuvashia (English translation) is incorporated herein by reference to Exhibit 4.249 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, 2015, on Form 20-F. |
| 4.72 | MTS License No. 129944 for provision of telematic communication services in the territory of the Tatarstan Republic (English translation) is incorporated herein by reference to Exhibit 4.257 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, 2015, on Form 20-F. |
| 4.73 | MTS License No. 129945 for provision of data transmission services, except for data transmission services for the purpose of voice transmission in the territory of the Republic of Adygeya (English translation) is incorporated herein by reference to Exhibit 4.253 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, 2015, on Form 20-F. |
| 4.74 | MTS License No. 129946 for provision of local telephone communication services, excluding local telephone communication services using coin-box telephones and public access services in the territory of the Kaluga region (English translation) is incorporated herein by reference to Exhibit 4.306 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, 2015, on Form 20-F. |
| 4.75 | MTS License No. 129947 for provision of data telematic communication services in the territory of the Republic of Adygeya (English translation) is incorporated herein by reference to Exhibit 4.250 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, 2015, on Form 20-F. |
| 4.76 | MTS License No. 129948 for provision of communications services for the provision of communication channels in the territory of the Republic of Adygeya, the Krasnodar Krai (English translation) is incorporated herein by reference to Exhibit 4.252 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, 2015, on Form 20-F. |
| 4.77 | MTS License No. 129949 for provision of telematic communication services in the territory of the Astrakhan region (English translation) is incorporated herein by reference to Exhibit 4.254 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, 2015, on Form 20-F. |

| Exhibits No. | Description |
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| 4.78 | MTS License No. 129950 for provision of local telephone communication services, excluding local telephone communication services using coin-box telephones and public access services in the territory of the Ryazan region: Ryazan (English translation) is incorporated herein by reference to Exhibit 4.256 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, 2015, on Form 20-F. |
| 4.79 | MTS License No. 129951 for provision of telematic communication services in the territory of the Krasnodar region (English translation) is incorporated herein by reference to Exhibit 4.251 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, 2015, on Form 20-F. |
| 4.80 | MTS License No. 129952 for provision of data transmission services, except for data transmission services for the purpose of voice transmission in the territory of the Krasnodar Territory (English translation) is incorporated herein by reference to Exhibit 4.239 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, 2015, on Form 20-F. |
| 4.81 | MTS License No. 129953 for provision of data transmission services, except for data transmission services for the purpose of voice transmission in the territory of the Republic of Tatarstan (English translation) is incorporated herein by reference to Exhibit 4.304 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, 2015, on Form 20-F. |
| 4.82 | MTS License No. 129954 for provision of mobile radio telephone services in the territory of the Rostov region (English translation) is incorporated herein by reference to Exhibit 4.294 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, 2015, on Form 20-F. |
| 4.83 | MTS License No. 129955 for provision of data transmission services, except for data transmission services for the purpose of voice transmission in the territory of the Republic of Bashkortostan (English translation) is incorporated herein by reference to Exhibit 4.243 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, 2015, on Form 20-F. |
| 4.84 | MTS License No. 129956 for provision of data transmission services, except for data transmission services for the purpose of voice transmission in the territory of the Astrakhan region (English translation) is incorporated herein by reference to Exhibit 4.242 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, 2015, on Form 20-F. |
| 4.85 | MTS License No. 129957 for provision of telematic communication services in the territory of the Republic of Kalmykia (English translation) is incorporated herein by reference to Exhibit 4.245 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, 2015, on Form 20-F. |
| 4.86 | MTS License No. 130982 for provision of data transmission services, except for data transmission services for the purpose of voice transmission in the territory of the Irkutsk region, the Jewish Autonomous region, the Chukotsk Autonomous region, and Koryak Autonomous Area of the Kamchatka region (English translation) is incorporated herein by reference to Exhibit 4.246 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, 2015, on Form 20-F. |

| Exhibits No. | Description |
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| 4.87 | MTS License No. 130983 for provision of communications services for the provision of communication channels in the territory of the Buryatiya Republic (English translation) is incorporated herein by reference to Exhibit 4.241 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, 2015, on Form 20-F. |
| 4.88 | MTS License No. 130984 for provision of telematic communication services in the territory of the Irkutsk region, the Jewish Autonomous Region, the Chukotsk Autonomous region, and the Koryak District of the Kamchatka Territory (English translation) is incorporated herein by reference to Exhibit 4.247 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, 2015, on Form 20-F. |
| 4.89 | MTS License No. 130985 for provision of data transmission services for the purpose of voice transmission in the territory of the Belgorod region, the Bryansk region, the Voronezh region, the Kursk region, the Lipetsk region, the Orel region (English translation) is incorporated herein by reference to Exhibit 4.238 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, 2015, on Form 20-F. |
| 4.90 | MTS License No. 130986 for provision of communications services for the provision of communication channels in the territory of the Sakhalin region (English translation) is incorporated herein by reference to Exhibit 4.240 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, 2015, on Form 20-F. |
| 4.91 | MTS License No. 131138 for provision of data transmission services for the purpose of voice transmission in the territory of the Yaroslavl Region (English translation) is incorporated herein by reference to Exhibit 4.235 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, 2015, on Form 20-F. |
| 4.92 | MTS License No. 131715 for provision of local telephone communication services, excluding local telephone communication services using coin-box telephones and public access services in the territory of Ufa, the Republic of Bashkortostan (English translation) is incorporated herein by reference to Exhibit 4.230 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, 2015, on Form 20-F. |
| 4.93 | MTS License No. 131716 for provision of telematic communication services in the territory of the Republic of Mari El (English translation) is incorporated herein by reference to Exhibit 4.232 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, 2015, on Form 20-F. |
| 4.94 | MTS License No. 131717 for provision of telematic communication services in the territory of the Chuvashia Republic, Mordovia Republic (English translation) is incorporated herein by reference to Exhibit 4.263 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, 2017, on Form 20-F. |

| Exhibits No. | Description |
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| 4.95 | MTS License No. 131718 for provision of data transmission services, except for data transmission services for the purpose of voice transmission in the territory of the Mordovia Republic, the Chuvash Republic—Chuvashia (English translation) is incorporated herein by reference to Exhibit 4.231 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, 2015, on Form 20-F. |
| 4.96 | MTS License No. 131719 for provision of data transmission services, except for data transmission services for the purpose of voice transmission in the territory of the Republic of Daghestan, the Republic of Ingushetia, the KabardinoBalkar Republic, the KarachayevoCherkesia Republic, the Republic of North Ossetia-Alania (English translation) is incorporated herein by reference to Exhibit 4.237 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, 2015, on Form 20-F. |
| 4.97 | MTS License No. 131720 for provision of data transmission services, except for data transmission services for the purpose of voice transmission in the territory of the Mari El Republic (English translation) is incorporated herein by reference to Exhibit 4.233 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, 2015, on Form 20-F. |
| 4.98 | MTS License No. 131721 for provision of telematic communication services in the territory of the Republic of Daghestan, the Republic of Ingushetia, the KabardinoBalkar Republic, the KarachayevoCherkesia Republic, Republic of North Ossetia-Alania (English translation) is incorporated herein by reference to Exhibit 4.234 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, 2015, on Form 20-F. |
| 4.99 | Sibintertelecom CJSC License No. 132674 for provision of telematic communication services in the territory of the Zabaykalsky Territory (English translation) is incorporated herein by reference to Exhibit 4.264 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, 2017, on Form 20-F. |
| 4.100 | Sibintertelecom CJSC License No. 132676 for provision of data communication services, except for data communication services for voice transmission in the territory of the Zabaykalsky Territory (English translation) is incorporated herein by reference to Exhibit 4.265 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, 2017, on Form 20-F. |
| 4.101 | MTS License No. 134506 for provision of communications services for the provision of communication channels in the territory of the Vladimir region, the Kaluga region, the Pskov region, the Ryazan region, the Smolensk region, the Tula region (English translation) is incorporated herein by reference to Exhibit 4.224 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, 2015, on Form 20-F. |
| 4.102 | MTS License No. 134507 for provision of telematic communication services in the territory of the Rostov region (English translation) is incorporated herein by reference to Exhibit 4.221 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, 2015, on Form 20-F. |

| Exhibits No. | Description |
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| 4.103 | MTS License No. 134508 for provision of data transmission services for the purpose of voice transmission in the territory of the Moscow region (English translation) is incorporated herein by reference to Exhibit 4.219 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, 2015, on Form 20-F. |
| 4.104 | MTS License No. 134509 for provision of communications services for the provision of communication channels in the territory of the Ivanov region, the Kirov region, the Nizhny Novgorod region, the Yaroslavl region (English translation) is incorporated herein by reference to Exhibit 4.228 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, 2015, on Form 20-F. |
| 4.105 | MTS License No. 134510 for provision of data transmission services for the purpose of voice transmission in the territory of the Ivanovo region (English translation) is incorporated herein by reference to Exhibit 4.220 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, 2015, on Form 20-F. |
| 4.106 | MTS License No. 134511 for provision of communications services for the provision of communication channels in the territory of the Mari El Republic (English translation) is incorporated herein by reference to Exhibit 4.223 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, 2015, on Form 20-F. |
| 4.107 | MTS License No. 134512 for provision of data transmission services for the purpose of voice transmission in the territory of the Kaluga Region (English translation) is incorporated herein by reference to Exhibit 4.225 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, 2015, on Form 20-F. |
| 4.108 | MTS License No. 135026 for provision of communications services for the provision of communication channels in the territory of the Sakha Republic (Yakutia), the Khabarovsk Territory, the Zabaikalye Territory (excluding the Aginski Buryatski Autonomous District) (English translation) is incorporated herein by reference to Exhibit 4.218 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, 2015, on Form 20-F. |
| 4.109 | MTS License No. 135027 for provision of intrazonal telephone communication services in the territory of the Moscow region (English translation) is incorporated herein by reference to Exhibit 4.226 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, 2015, on Form 20-F. |
| 4.110 | MTS License No. 135028 for provision of intrazonal telephone communication services in the territory of the Republic of Bashkortostan (English translation) is incorporated herein by reference to Exhibit 4.227 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, 2015, on Form 20-F. |

| Exhibits No. | Description |
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| 4.111 | MTS License No. 135029 for provision of data transmission services for the purpose of voice transmission in the territory of the Primorye Territory, the Sakhalin region, Irkutsk region (excluding the Ust-Ordyn Buryat District) (English translation) is incorporated herein by reference to Exhibit 4.222 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, 2015, on Form 20-F. |
| 4.112 | MTS License No. 135506 for provision of data transmission services for the purpose of voice transmission in the territory of Moscow (English translation) is incorporated herein by reference to Exhibit 4.227 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 is incorporated herein by reference to Exhibit 4.227 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. |
| 4.113 | Teleservice OJSC License No. 135893 for provision of data communication services, except for data communication services for voice transmission in the territory of the Voronezh region (English translation) is incorporated herein by reference to Exhibit 4.266 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, 2017, on Form 20-F. |
| 4.114 | Teleservice OJSC License No. 135894 for provision of telematic communication services in the territory of the Voronezh region (English translation) is incorporated herein by reference to Exhibit 4.267 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, 2017, on Form 20-F. |
| 4.115 | MTS License No. 135956 for provision of intrazonal telephone communication services in the territory of the Perm Territory (English translation) is incorporated herein by reference to Exhibit 4.305 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, 2015, on Form 20-F. |
| 4.116 | MTS License No. 135957 for provision of data transmission services, except for data transmission services for the purpose of voice transmission in the territory of the Primorsky Territory (English translation) is incorporated herein by reference to Exhibit 4.228 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. |
| 4.117 | MTS License No. 135958 for provision of mobile radio telephone services in the territory of Republic of Kalmykia (English translation) is incorporated herein by reference to Exhibit 4.211 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, 2015, on Form 20-F. |
| 4.118 | MTS License No. 135959 for provision of communications services for the provision of communication channels in the territory of Aginski Buryatski Autonomous District of the Zabaikalye Territory (English translation) is incorporated herein by reference to Exhibit 4.216 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, 2015, on Form 20-F. |

| Exhibits No. | Description |
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| 4.119 | MTS License No. 135960 for provision of intrazonal telephone communication services in the territory of the Ulyanovsk region (English translation) is incorporated herein by reference to Exhibit 4.215 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, 2015, on Form 20-F. |
| 4.120 | MTS License No. 135961 for provision of telematic communication services in the territory of the Primorsky Territory (English translation) is incorporated herein by reference to Exhibit 4.210 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, 2015, on Form 20-F. |
| 4.121 | MTS License No. 135962 for provision of intrazonal telephone communication services in the territory of the Tyumen region, YamaloNenetsk Autonomous region (English translation) is incorporated herein by reference to Exhibit 4.214 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, 2015, on Form 20-F. |
| 4.122 | MTS License No. 135963 for provision of communications services for the provision of communication channels in the territory of the Aginski Buryatski Autonomous District of the Penza region (English translation) is incorporated herein by reference to Exhibit 4.213 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, 2015, on Form 20-F. |
| 4.123 | MTS License No. 135964 for provision of mobile radio telephone services in fixed communication network in the territory of the YamaloNenetsk Autonomous region (English translation) is incorporated herein by reference to Exhibit 4.299 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, 2015, on Form 20-F. |
| 4.124 | MTS License No. 135965 for provision of communications services for the provision of communication channels in the territory of the Mordovia Republic (English translation) is incorporated herein by reference to Exhibit 4.212 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, 2015, on Form 20-F. |
| 4.125 | MTS License No. 135966 for provision of data transmission services for the purpose of voice transmission in the territory of the Tyumen Region, the YamaloNenetsk Autonomous region (English translation) is incorporated herein by reference to Exhibit 4.300 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, 2015, on Form 20-F. |
| 4.126 | MTS License No. 135967 for provision of intrazonal telephone communication services in the territory of the Chelyabinsk Region (English translation) is incorporated herein by reference to Exhibit 4.206 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, 2015, on Form 20-F. |
| 4.127 | MTS License No. 136447 for provision of mobile radio telephone services in the territory of the Amur region (English translation) is incorporated herein by reference to Exhibit 4.199 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, 2015, on Form 20-F. |

| Exhibits No. | Description |
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| 4.128 | MTS License No. 136448 for provision of mobile radio telephone services in the territory of the Orenburg Region (English translation) is incorporated herein by reference to Exhibit 4.205 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, 2015, on Form 20-F. |
| 4.129 | MTS License No. 136449 for provision of mobile radio telephone services in the territory of the Republic of North Ossetia-Alania (English translation) is incorporated herein by reference to Exhibit 4.206 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, 2015, on Form 20-F. |
| 4.130 | MTS License No. 136450 for provision of mobile radio telephone services in the territory of the Perm Territory, excluding the Komi-Permyak area (English translation) is incorporated herein by reference to Exhibit 4.207 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, 2015, on Form 20-F. |
| 4.131 | MTS License No. 136451 for provision of mobile radio telephone services in the territory of the Perm Territory—the Komi-Permyak area (English translation) is incorporated herein by reference to Exhibit 4.200 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, 2015, on Form 20-F. |
| 4.132 | MGTS License No. 137356 for provision of data transmission services for cabe broadcasting in the territory of the Moscow (English translation) is incorporated herein by reference to Exhibit 4.231 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. |
| 4.133 | MTS License No. 137565 for provision of data transmission services for the purpose of voice transmission in the territory of the Rostov region (English translation) is incorporated herein by reference to Exhibit 4.202 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, 2015, on Form 20-F. |
| 4.134 | MTS License No. 137566 for provision of intrazonal telephone communication services in the territory of Moscow (English translation) is incorporated herein by reference to Exhibit 4.208 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, 2015, on Form 20-F. |
| 4.135 | MTS License No. 137567 for provision of telematic communication services in the territory of the Komi Republic, the Udmurt Republic, the Perm Territory, the Amur region, the Belgorod region, the Bryansk region, the Vladimir region, the Voronezh region, the Ivanovo region, the Kaluga region, the Kirov region, the Kostroma region, the Kurgan region, the Kursk region, the Lipetsk region, the Moscow region, the Nizhniy Novgorod region, the Omsk region, the Orenburg region, the Orel region, the Pskov region, the Ryazan region, the Sverdlovsk region, the Smolensk region, the Tambov region, the Tver region, the Tula Region, the Tyumen region, the Chelyabinsk region, the Yaroslavl region, Moscow, the Khanty Mansiysk Autonomous region, the YamaloNenetsk Autonomous region (English translation) is incorporated herein by reference to Exhibit 4.203 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, 2015, on Form 20-F. |

| Exhibits No. | Description |
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| 4.136 | MTS License No. 137711 for provision of communication services for the purpose of wire broadcasting in the territory of the Chelyabinsk region (English translation) is incorporated herein by reference to Exhibit 4.201 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, 2015, on Form 20-F. |
| 4.137 | Teleservice JSC License No. 138177 for provision of telecommunication services for cabe broadcasting in the territory of the Voronezh Region (English translation) is incorporated herein by reference to Exhibit 4.232 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. |
| 4.138 | MTS License No. 138258 for provision of for provision of telematic communication services in the territory of the Novosibirsk region (English translation) is incorporated herein by reference to Exhibit 4.195 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, 2015, on Form 20-F. |
| 4.139 | MTS License No. 138260 for provision of data transmission services for the purpose of voice transmission in the territory of the Republic of Bashkortostan (English translation) is incorporated herein by reference to Exhibit 4.233 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. |
| 4.140 | MTS License No. 138261 for provision of data transmission services, except for data transmission services for the purpose of voice transmission in the territory of the Rostov Region (English translation) is incorporated herein by reference to Exhibit 4.232 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. |
| 4.141 | MTS License No. 138262 for provision of communications services for the provision of communication channels in the territory of the Udmurt Republic, Perm Territory, Amur region, the Kurgan region, the Orenburg region, the Sverdlovsk region, the Tambov region, the Tumen region, the Chelyabinsk region, the Khanty Mansiysk Autonomous region, the YamaloNenetsk Autonomous region (English translation) is incorporated herein by reference to Exhibit 4.197 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, 2015, on Form 20-F. |
| 4.142 | MTS License No. 138952 for provision of intra-area telephone communication services in the territory of the Ryazan Region (English translation) is incorporated herein by reference to Exhibit 4.236 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. |
| 4.143 | MTS License No. 138952 for provision of telecommunication services for wired radio broadcasting in the territory of the Sverdlovsk Region (English translation) is incorporated herein by reference to Exhibit 4.237 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. |

| Exhibits No. | Description |
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| 4.144 | MTS License No. 138956 for provision of mobile radio communication services in the allocated telecommunications network in the territory of the Khanty-Mansiysk Autonomous District-Yugra (English translation) is incorporated herein by reference to Exhibit 4.238 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. |
| 4.145 | MTS License No. 140009 for provision of local telecommunication services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Sverdlovsk Region (English translation) is incorporated herein by reference to Exhibit 4.239 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. |
| 4.146 | MTS License No. 140458 for provision of local telecommunication services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Republic of Khakassia (English translation) is incorporated herein by reference to Exhibit 4.240 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. |
| 4.147 | MTS License No. 140459 for provision of telematic communication services in the territory of Bashkortostan (English translation) is incorporated herein by reference to Exhibit 4.241 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. |
| 4.148 | MTS License No. 141521 for provision of mobile radio telephone communication services in the territory of the Republic Altai (English translation) is incorporated herein by reference to Exhibit 4.244 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. |
| 4.149 | MTS License No. 141543 for provision of mobile radio telephone communication services in the territory of the Russian Federation, except for Moscow, the Moscow Region, the Republic of Crimea and Sevastopol (English translation) is incorporated herein by reference to Exhibit 4.245 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. |
| 4.150 | MTS License No. 141344 for provision of data communication services, except for data communication services for voice transmissions in the territory of the Russian Federation, except for Moscow, the Moscow Region, the Republic of Crimea and Sevastopol (English translation) is incorporated herein by reference to Exhibit 4.246 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. |
| 4.151 | MTS License No. 142345 for provision of data communication services for voice transmissions in the territory of the Russian Federation, except for Moscow, the Moscow Region, the Republic of Crimea and Sevastopol (English translation) is incorporated herein by reference to Exhibit 4.247 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. |

| Exhibits No. | Description |
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| 4.152 | MTS License No. 142346 for provision of telematic communication services in the territory of the Russian Federation, except for Moscow, the Moscow Region, the Republic of Crimea and Sevastopol (English translation) is incorporated herein by reference to Exhibit 4.248 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. |
| 4.153 | MTS License No. 144269 for provision of mobile radio telephone communication services in the territory of the Republic of Khakassia (English translation) is incorporated herein by reference to Exhibit 4.250 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. |
| 4.154 | MTS License No. 144270 for provision of mobile radio telephone communication services in the territory of the Republic of North Ossetia-Alania (English translation) is incorporated herein by reference to Exhibit 4.251 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. |
| 4.155 | MTS License No. 145056 for provision of telematic communication services in the territory of the Republic of Karelia, Arkhangelsk Region, Vologda Region, Kaliningrad Region, Leningrad Region, Murmansk Region, Novgorod Region, Saint Perterburg, Nenets Autonomus District (English translation) is incorporated herein by reference to Exhibit 4.255 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. |
| 4.156 | MTS License No. 145058 for provision of mobile radio telephone communication services in the allocared lelecommunications network in the territory of the Orenburg Region (English translation) is incorporated herein by reference to Exhibit 4.254 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. |
| 4.157 | MTS License No. 145059 for provision of mobile radio telephone communication services in the territory of the Volgograd Region (English translation) is incorporated herein by reference to Exhibit 4.255 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. |
| 4.158 | MTS License No. 145060 for provision of intra-area telephone communication services in the territory of the Omsk Region (English translation) is incorporated herein by reference to Exhibit 4.256 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. |
| 4.159 | MTS License No. 145447 for provision of intra-area telephone communication services in the territory of the Omsk Region (English translation) is incorporated herein by reference to Exhibit 4.257 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. |
| 4.160 | MTS License No. 145493 for provision of telematic communication services in the territory of the Russion Federation (English translation) is incorporated herein by reference to Exhibit 4.258 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. |

| Exhibits No. | Description |
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| 4.161 | MTS License No. 146066 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Khabarovsk Territory (English translation) is incorporated herein by reference to Exhibit 4.259 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. |
| 4.162 | MTS License No. 146066 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Krasnodar Territory (English translation) is incorporated herein by reference to Exhibit 4.260 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. |
| 4.163 | MTS License No. 146068 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Ivanovo Region (English translation) is incorporated herein by reference to Exhibit 4.261 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. |
| 4.164 | MTS License No. 146069 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Irkutsk Region, except for the Ust-Ordyn Buryat Autonomus District (English translation) is incorporated herein by reference to Exhibit 4.262 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. |
| 4.165 | MTS License No. 146070 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Primorsky Territory (English translation) is incorporated herein by reference to Exhibit 4.263 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. |
| 4.166 | MTS License No. 146071 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Novosibirsk Region (English translation) is incorporated herein by reference to Exhibit 4.264 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. |
| 4.167 | MTS License No. 146072 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Orenburg Region (English translation) is incorporated herein by reference to Exhibit 4.265 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. |

| Exhibits No. | Description |
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| 4.168 | MTS License No. 146073 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Altai Territory (English translation) is incorporated herein by reference to Exhibit 4.266 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. |
| 4.169 | MTS License No. 146074 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Chelyabinsk Region (English translation) is incorporated herein by reference to Exhibit 4.267 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. |
| 4.170 | MTS License No. 146075 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Nizhny Novgorod Region (English translation) is incorporated herein by reference to Exhibit 4.268 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. |
| 4.171 | MTS License No. 146076 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Republic of Sakha (Yakutia) (English translation) is incorporated herein by reference to Exhibit 4.269 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. |
| 4.172 | MTS License No. 146077 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Yaroslavl Region (English translation) is incorporated herein by reference to Exhibit 4.270 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. |
| 4.173 | MTS License No. 146078 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Perm Territory (English translation) is incorporated herein by reference to Exhibit 4.271 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. |
| 4.174 | MTS License No. 146079 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Republic of Komi (English translation) is incorporated herein by reference to Exhibit 4.272 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. |

| Exhibits No. | Description |
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| 4.175 | MTS License No. 146080 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Astrakhan Region (English translation) is incorporated herein by reference to Exhibit 4.273 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. |
| 4.176 | MTS License No. 146081 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Sakhalin Region (English translation) is incorporated herein by reference to Exhibit 4.274 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. |
| 4.177 | MTS License No. 146082 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Republic of Tatarstan (English translation) is incorporated herein by reference to Exhibit 4.275 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. |
| 4.178 | MTS License No. 146084 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Rostov Region (English translation) is incorporated herein by reference to Exhibit 4.277 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. |
| 4.179 | MTS License No. 146085 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Volgograd Region (English translation) is incorporated herein by reference to Exhibit 4.278 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. |
| 4.180 | MTS License No. 146086 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Kurgan Region (English translation) is incorporated herein by reference to Exhibit 4.279 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. |
| 4.181 | MTS License No. 146087 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Krasnoyarsk Territory, except for the Evenk Autonomous District (English translation) is incorporated herein by reference to Exhibit 4.280 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. |

| Exhibits No. | Description |
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| 4.182 | MTS License No. 146088 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Omsk Region (English translation) is incorporated herein by reference to Exhibit 4.281 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. |
| 4.183 | MTS License No. 146089 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Kirov Region (English translation) is incorporated herein by reference to Exhibit 4.282 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. |
| 4.184 | MTS License No. 146090 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Samara Region (English translation) is incorporated herein by reference to Exhibit 4.283 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. |
| 4.185 | MTS License No. 146091 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Udmurt Republic (English translation) is incorporated herein by reference to Exhibit 4.284 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. |
| 4.186 | MTS License No. 146092 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Amur Region (English translation) is incorporated herein by reference to Exhibit 4.285 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. |
| 4.187 | MTS License No. 146094 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Tomsk Region (English translation) is incorporated herein by reference to Exhibit 4.287 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. |
| 4.188 | MGTS License No. 146656 for provision of data communication services for voice transmission in the territory of the Moscow region (English translation) is incorporated herein by reference to Exhibit 4.268 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, 2017, on Form 20-F. |
| 4.189 | MTS License No. 147352 for provision of telematic communications services in the territory of the Altai Territory (English translation) is incorporated herein by reference to Exhibit 4.288 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. |

| Exhibits No. | Description |
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| 4.190 | MTS License No. 147353 for provision of mobile radio telephone communications services in the territory of the Moscow Region and Moscow (English translation) is incorporated herein by reference to Exhibit 4.289 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. |
| 4.191 | MTS License No. 147354 for provision of intra-area telephone communications services in the territory of the Leningrad Region (English translation) is incorporated herein by reference to Exhibit 4.290 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. |
| 4.192 | MTS License No. 147357 for provision of communications channel provision services in the territory of the Omsk Region (English translation) is incorporated herein by reference to Exhibit 4.293 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. |
| 4.193 | MTS License No. 148176 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Altai Republic (English translation) is incorporated herein by reference to Exhibit 4.270 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, 2017, on Form 20-F. |
| 4.194 | MTS License No. 148177 for provision of mobile radio telephone communication services in the territory of the Mari El Republic (English translation) is incorporated herein by reference to Exhibit 4.271 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, 2017, on Form 20-F. |
| 4.195 | MTS License No. 149146 for provision of data communication services for voice transmission in the territory of the Kaliningrad region (English translation) is incorporated herein by reference to Exhibit 4.273 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, 2017, on Form 20-F. |
| 4.196 | MTS License No. 149147 for provision of communication channel provision services in the territory of the Kaliningrad region (English translation) is incorporated herein by reference to Exhibit 4.274 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, 2017, on Form 20-F. |
| 4.197 | MTS License No. 149148 for provision of data communication services for voice transmission in the territory of the Mari El Republic (English translation) is incorporated herein by reference to Exhibit 4.275 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, 2017, on Form 20-F. |
| 4.198 | MTS License No. 149149 for provision of data communication services for voice transmission in the territory of the Severnaya Osetia Alania Republic (English translation) is incorporated herein by reference to Exhibit 4.276 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, 2017, on Form 20-F. |

| Exhibits No. | Description |
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| 4.199 | MTS License No. 149150 for provision of data communication services for voice transmission in the territory of the Tomsk region (English translation) is incorporated herein by reference to Exhibit 4.277 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, 2017, on Form 20-F. |
| 4.200 | MTS License No. 149151 for provision of data communication services for voice transmission in the territory of the Komi Republic (English translation) is incorporated herein by reference to Exhibit 4.278 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, 2017, on Form 20-F. |
| 4.201 | MTS License No. 149152 for provision of data communication services for voice transmission in the territory of the Kirov region (English translation) is incorporated herein by reference to Exhibit 4.279 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, 2017, on Form 20-F. |
| 4.202 | MTS License No. 149153 for provision of data communication services for voice transmission in the territory of the Murmansk region (English translation) is incorporated herein by reference to Exhibit 4.280 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, 2017, on Form 20-F. |
| 4.203 | MTS License No. 149154 for provision of data communication services for voice transmission in the territory of the Stavropol territory (English translation) is incorporated herein by reference to Exhibit 4.281 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, 2017, on Form 20-F. |
| 4.204 | MTS License No. 149155 for provision of data communication services for voice transmission in the territory of the Penza region (English translation) is incorporated herein by reference to Exhibit 4.282 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, 2017, on Form 20-F. |
| 4.205 | MTS License No. 149156 for provision of data communication services for voice transmission in the territory of the Buryatiya Republic (English translation) is incorporated herein by reference to Exhibit 4.283 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, 2017, on Form 20-F. |
| 4.206 | MTS License No. 149157 for provision of data communication services for voice transmission in the territory of the Chechen Republic (English translation) is incorporated herein by reference to Exhibit 4.284 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, 2017, on Form 20-F. |
| 4.207 | MTS License No. 149158 for provision of data communication services for voice transmission in the territory of the Mordovia Republic (English translation) is incorporated herein by reference to Exhibit 4.285 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, 2017, on Form 20-F. |

| Exhibits No. | Description |
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| 4.208 | MTS License No. 149159 for provision of data communication services for voice transmission in the territory of the KarachaevoCherkesia Republic (English translation) is incorporated herein by reference to Exhibit 4.286 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, 2017, on Form 20-F. |
| 4.209 | MTS License No. 149160 for provision of data communication services for voice transmission in the territory of the Ingushetia Republic (English translation) is incorporated herein by reference to Exhibit 4.287 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, 2017, on Form 20-F. |
| 4.210 | MTS License No. 149161 for provision of data communication services for voice transmission in the territory of the Altai territory (English translation) is incorporated herein by reference to Exhibit 4.288 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, 2017, on Form 20-F. |
| 4.211 | MTS License No. 149162 for provision of data communication services for voice transmission in the territory of the Kalmykia Republic (English translation) is incorporated herein by reference to Exhibit 4.289 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, 2017, on Form 20-F. |
| 4.212 | MTS License No. 149163 for provision of data communication services for voice transmission in the territory of the KabardinoBalkar Republic (English translation) is incorporated herein by reference to Exhibit 4.290 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, 2017, on Form 20-F. |
| 4.213 | MTS License No. 149164 for provision of data communication services for voice transmission in the territory of the Adygeya Republic (English translation) is incorporated herein by reference to Exhibit 4.291 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, 2017, on Form 20-F. |
| 4.214 | MTS License No. 149165 for provision of data communication services for voice transmission in the territory of the Saratov region (English translation) is incorporated herein by reference to Exhibit 4.292 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, 2017, on Form 20-F. |
| 4.215 | MTS License No. 149166 for provision of data communication services for voice transmission in the territory of the Chelyabinsk region (English translation) is incorporated herein by reference to Exhibit 4.293 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, 2017, on Form 20-F. |
| 4.216 | MTS License No. 149167 for provision of data communication services for voice transmission in the territory of the Karelia Republic (English translation) is incorporated herein by reference to Exhibit 4.294 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, 2017, on Form 20-F. |

| Exhibits No. | Description |
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| 4.217 | MTS License No. 149168 for provision of data communication services for voice transmission in the territory of the Ulyanovsk region (English translation) is incorporated herein by reference to Exhibit 4.295 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, 2017, on Form 20-F. |
| 4.218 | MTS License No. 149169 for provision of data communication services for voice transmission in the territory of the Kurgan region (English translation) is incorporated herein by reference to Exhibit 4.296 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, 2017, on Form 20-F. |
| 4.219 | MTS License No. 149170 for provision of data communication services for voice transmission in the territory of the Khabarovsk Territory (English translation) is incorporated herein by reference to Exhibit 4.297 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, 2017, on Form 20-F. |
| 4.220 | MTS License No. 149171 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Ulyanovsk region (English translation) is incorporated herein by reference to Exhibit 4.298 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, 2017, on Form 20-F. |
| 4.221 | MTS License No. 149172 for provision of data communication services for voice transmission in the territory of the Tyva Republic (English translation) is incorporated herein by reference to Exhibit 4.299 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, 2017, on Form 20-F. |
| 4.222 | MTS License No. 149173 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Bashkortostan Republic (English translation) is incorporated herein by reference to Exhibit 4.300 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, 2017, on Form 20-F. |
| 4.223 | MTS License No. 149174 for provision of communication channel provision services in the territory of the St. Petersburg, Leningrad region, Arkhangelsk region, Karelia Republic, Murmansk region, Nenetsk Autonomous region, Novgorod region, Vologda region (English translation) is incorporated herein by reference to Exhibit 4.301 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, 2017, on Form 20-F. |
| 4.224 | MTS License No. 149175 for provision of data communication services for voice transmission in the territory of the Kostroma region (English translation) is incorporated herein by reference to Exhibit 4.302 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, 2017, on Form 20-F. |

| Exhibits No. | Description |
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| 4.225 | MTS License No. 149176 for provision of data communication services for voice transmission in the territory of the Altai Republic (English translation) is incorporated herein by reference to Exhibit 4.303 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, 2017, on Form 20-F. |
| 4.226 | MTS License No. 149177 for provision of data communication services for voice transmission in the territory of the Pskov region (English translation) is incorporated herein by reference to Exhibit 4.304 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, 2017, on Form 20-F. |
| 4.227 | MTS License No. 149178 for provision of data communication services for voice transmission in the territory of the Amur region (English translation) is incorporated herein by reference to Exhibit 4.305 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, 2017, on Form 20-F. |
| 4.228 | MTS License No. 149179 for provision of data communication services for voice transmission in the territory of the Dagestan Republi (English translation) is incorporated herein by reference to Exhibit 4.306 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, 2017, on Form 20-F. |
| 4.229 | MTS License No. 149180 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Tambov region (English translation) is incorporated herein by reference to Exhibit 4.307 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, 2017, on Form 20-F. |
| 4.230 | MTS License No. 149181 for provision of data communication services for voice transmission in the territory of the Kamchatka region (English translation) is incorporated herein by reference to Exhibit 4.308 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, 2017, on Form 20-F. |
| 4.231 | MTS License No. 149182 for provision of data communication services for voice transmission in the territory of the Orenburg region (English translation) is incorporated herein by reference to Exhibit 4.309 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, 2017, on Form 20-F. |
| 4.232 | MTS License No. 149183 for provision of data communication services for voice transmission in the territory of the Sakha Republic (Yakutia) (English translation) is incorporated herein by reference to Exhibit 4.310 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, 2017, on Form 20-F. |
| 4.233 | MTS License No. 149184 for provision of data communication services for voice transmission in the territory of the Khakassiya Republic (English translation) is incorporated herein by reference to Exhibit 4.311 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, 2017, on Form 20-F. |

| Exhibits No. | Description |
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| 4.234 | MTS License No. 149185 for provision of data communication services for voice transmission in the territory of the Zabaykalsky Territory (English translation) is incorporated herein by reference to Exhibit 4.312 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, 2017, on Form 20-F. |
| 4.235 | MTS License No. 149186 for provision of data communication services for voice transmission in the territory of the Chuvashia Republic (English translation) is incorporated herein by reference to Exhibit 4.313 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, 2017, on Form 20-F. |
| 4.236 | MTS License No. 149187 for provision of data communication services for voice transmission in the territory of the Vologda region (English translation) is incorporated herein by reference to Exhibit 4.314 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, 2017, on Form 20-F. |
| 4.237 | MTS License No. 149188 for provision of data communication services for voice transmission in the territory of the Magadan region (English translation) is incorporated herein by reference to Exhibit 4.315 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, 2017, on Form 20-F. |
| 4.238 | MTS License No. 149644 for provision of intra-area telephone communications services in the territory of the Orenburg region (English translation) is incorporated herein by reference to Exhibit 4.316 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, 2017, on Form 20-F. |
| 4.239 | MTS License No. 149645 for provision of intra-area telephone communications services in the territory of the Sverdlovsk region (English translation) is incorporated herein by reference to Exhibit 4.317 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, 2017, on Form 20-F. |
| 4.240 | MTS License No. 149647 for provision of intra-area telephone communications services in the territory of the Khabarovsk Territory (English translation) is incorporated herein by reference to Exhibit 4.318 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, 2017, on Form 20-F. |
| 4.241 | MTS License No. 149648 for provision of intra-area telephone communications services in the territory of the Primorsky Territory (English translation) is incorporated herein by reference to Exhibit 4.319 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, 2017, on Form 20-F. |
| 4.242 | MTS License No. 149649 for provision of intra-area telephone communications services in the territory of the Penza region (English translation) is incorporated herein by reference to Exhibit 4.320 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, 2017, on Form 20-F. |

| Exhibits No. | Description |
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| 4.243 | MTS License No. 149650 for provision of intra-area telephone communications services in the territory of the Udmurt Republic (English translation) is incorporated herein by reference to Exhibit 4.321 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, 2017, on Form 20-F. |
| 4.244 | MTS License No. 149653 for provision of intra-area telephone communications services in the territory of the Kirov region (English translation) is incorporated herein by reference to Exhibit 4.322 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, 2017, on Form 20-F. |
| 4.245 | MTS License No. 149654 for provision of intra-area telephone communications services in the territory of the Saratov region (English translation) is incorporated herein by reference to Exhibit 4.323 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, 2017, on Form 20-F. |
| 4.246 | MTS License No. 149715 for provision of telecommunications services for wired radio broadcasting in the territory of the Kirov Region (English translation) is incorporated herein by reference to Exhibit 4.295 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. |
| 4.247 | MTS License No. 149829 for provision of mobile radio telephone communication services in the territory of the Chechen Republic (English translation) is incorporated herein by reference to Exhibit 4.297 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. |
| 4.248 | MTS License No. 150052 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the St. Petersburg, Leningrad region, Arkhangelsk region, Karelia Republic, Murmansk region, Novgorod region, Vologda region (English translation) is incorporated herein by reference to Exhibit 4.325 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, 2017, on Form 20-F. |
| 4.249 | MTS License No. 150053 for provision of data communication services, except for data communication services for voice transmission in the territory of the Amur region (English translation) is incorporated herein by reference to Exhibit 4.326 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, 2017, on Form 20-F. |
| 4.250 | MTS License No. 150054 for provision of data communication services, except for data communication services for voice transmission in the territory of the St. Petersburg, Leningrad region, Arkhangelsk region, Kaliningrad region, Karelia Republic, Komi Republic, Murmansk region, Nenetsk Autonomous region, Novgorod region, Pskov region, Vologda region (English translation) is incorporated herein by reference to Exhibit 4.327 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, 2017, on Form 20-F. |

| Exhibits No. | Description |
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| 4.251 | MTS License No. 150055 for provision of data communication services, except for data communication services for voice transmission in the territory of the Orenburg region (English translation) is incorporated herein by reference to Exhibit 4.328 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, 2017, on Form 20-F. |
| 4.252 | MTS License No. 150056 for provision of data communication services, except for data communication services for voice transmission in the territory of the Moscow, Moscow region (English translation) is incorporated herein by reference to Exhibit 4.329 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, 2017, on Form 20-F. |
| 4.253 | MTS License No. 150057 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Penza region (English translation) is incorporated herein by reference to Exhibit 4.330 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, 2017, on Form 20-F. |
| 4.254 | MTS License No. 150058 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Moscow region (English translation) is incorporated herein by reference to Exhibit 4.331 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, 2017, on Form 20-F. |
| 4.255 | MTS License No. 150059 for provision of data communication services, except for data communication services for voice transmission in the territory of the Ivanovo region, Kaluga region, Kostroma region, Ryazan region, Smolensk region, Tambov region, Tula region, Tver region, Vladimir region, Yaroslavl region (English translation) is incorporated herein by reference to Exhibit 4.332 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, 2017, on Form 20-F. |
| 4.256 | MTS License No. 150060 for provision of data communication services, except for data communication services for voice transmission in the territory of the Perm region, Chelyabinsk region, Khanty Mansiysk Autonomous region, Kurgan region, Omsk region, Sverdlovsk region, Tyumen region, YamaloNenetsk Autonomous region (English translation) is incorporated herein by reference to Exhibit 4.333 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, 2017, on Form 20-F. |
| 4.257 | MTS License No. 150061 for provision of data communication services for voice transmission in the territory of the Moscow (English translation) is incorporated herein by reference to Exhibit 4.334 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, 2017, on Form 20-F. |

| Exhibits No. | Description |
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| 4.258 | MTS License No. 150062 for provision of data communication services, except for data communication services for voice transmission in the territory of the Belgorod region, Bryansk region, Kursk region, Lipetsk region, Orel region, Voronezh region (English translation) is incorporated herein by reference to Exhibit 4.335 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, 2017, on Form 20-F. |
| 4.259 | MTS License No. 150063 for provision of data communication services, except for data communication services for voice transmission in the territory of the Kirov region, Nizhny Novgorod region, Udmurt Republic (English translation) is incorporated herein by reference to Exhibit 4.336 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, 2017, on Form 20-F. |
| 4.260 | MTS License No. 150064 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Moscow (English translation) is incorporated herein by reference to Exhibit 4.337 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, 2017, on Form 20-F. |
| 4.261 | MTS License No. 152080 for provision of communication channel provision services in the territory of the Magadan region (English translation) is incorporated herein by reference to Exhibit 4.340 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, 2017, on Form 20-F. |
| 4.262 | MTS License No. 152081 for provision of telematic communication services in the territory of the Altai Republic (English translation) is incorporated herein by reference to Exhibit 4.341 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, 2017, on Form 20-F. |
| 4.263 | MTS License No. 152082 for provision of communication channel provision services in the territory of the Irkutsk region (English translation) is incorporated herein by reference to Exhibit 4.342 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, 2017, on Form 20-F. |
| 4.264 | MTS License No. 152083 for provision of communication channel provision services in the territory of the Dagestan Republi (English translation) is incorporated herein by reference to Exhibit 4.343 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, 2017, on Form 20-F. |
| 4.265 | MTS License No. 152084 for provision of communication channel provision services in the territory of the Kamchatka region (English translation) is incorporated herein by reference to Exhibit 4.344 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, 2017, on Form 20-F. |
| 4.266 | MTS License No. 152085 for provision of mobile radio telephone communication services in the territory of the Krasnodar territory (English translation) is incorporated herein by reference to Exhibit 4.345 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, 2017, on Form 20-F. |

| Exhibits No. | Description |
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| 4.267 | MTS License No. 152165 for provision of telecommunication services for the purpose of wired radio brodcasting services in the territory of the Rostov Region (English translation) is incorporated herein by reference to Exhibit 4.308 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. |
| 4.268 | MTS License No. 152516 for provision of mobile radio telephone communication services in the territory of the Tatarstan Republic (English translation) is incorporated herein by reference to Exhibit 4.346 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, 2017, on Form 20-F. |
| 4.269 | MTS License No. 152517 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Dagestan Republi (English translation) is incorporated herein by reference to Exhibit 4.347 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, 2017, on Form 20-F. |
| 4.270 | MTS License No. 152518 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Severnaya Osetia Alania Republic (English translation) is incorporated herein by reference to Exhibit 4.348 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, 2017, on Form 20-F. |
| 4.271 | MTS License No. 153738 for provision of data communication services for voice transmission in the territory of the Krasnodar territory (English translation) is incorporated herein by reference to Exhibit 4.350 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, 2017, on Form 20-F. |
| 4.272 | MTS License No. 153739 for provision of mobile radio telephone communication services in the territory of the Saratov region (English translation) is incorporated herein by reference to Exhibit 4.351 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, 2017, on Form 20-F. |
| 4.273 | MTS License No. 153995 for provision of telecommunications services for wired radio broadcasting in the territory of the Nizhny Novgorod region (English translation) is incorporated herein by reference to Exhibit 4.352 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, 2017, on Form 20-F. |
| 4.274 | MTS License No. 154793 for provision of mobile radio telephone communication services in the territory of the Komi Republic (English translation) is incorporated herein by reference to Exhibit 4.356 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, 2017, on Form 20-F. |

| Exhibits No. | Description |
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| 4.275 | MTS License No. 154794 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Tyumen region, YamaloNenetsk Autonomous region (English translation) is incorporated herein by reference to Exhibit 4.357 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, 2017, on Form 20-F. |
| 4.276 | MGTS License No. 154857 for provision of telecommunications services for wired radio broadcasting in the territory of the Moscow region, Moscow (English translation) is incorporated herein by reference to Exhibit 4.358 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, 2017, on Form 20-F. |
| 4.277 | City Telecom CJSC License No. 155379 for provision of communication channel provision services in the territory of the Moscow (English translation) is incorporated herein by reference to Exhibit 4.361 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, 2017, on Form 20-F. |
| 4.278 | City Telecom CJSC License No. 155380 for provision of data communication services, except for data communication services for voice in the territory of the Moscow (English translation) is incorporated herein by reference to Exhibit 4.362 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, 2017, on Form 20-F. |
| 4.279 | City Telecom CJSC License No. 155381 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Moscow (English translation) is incorporated herein by reference to Exhibit 4.363 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, 2017, on Form 20-F. |
| 4.280 | City Telecom CJSC License No. 155382 for provision of telematic communication services in the territory of the Moscow (English translation) is incorporated herein by reference to Exhibit 4.364 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, 2017, on Form 20-F. |
| 4.281 | MTS License No. 155415 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Orel region, Voronezh region (English translation) is incorporated herein by reference to Exhibit 4.365 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, 2017, on Form 20-F. |
| 4.282 | MTS License No. 155416 for provision of intra-area telephone communications services in the territory of the Orel region (English translation) is incorporated herein by reference to Exhibit 4.366 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, 2017, on Form 20-F. |
| 4.283 | MTS License No. 156543 for provision of telecommunications services for wired radio broadcasting in the territory of the Volgograd region (English translation) is incorporated herein by reference to Exhibit 4.367 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, 2017, on Form 20-F. |

| Exhibits No. | Description |
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| 4.284 | MTS License No. 156887 for provision of data communication services, except for data communication services for voice transmission in the territory of the Chechen Republic (English translation) is incorporated herein by reference to Exhibit 4.368 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, 2017, on Form 20-F. |
| 4.285 | MTS License No. 156888 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Kaliningrad region (English translation) is incorporated herein by reference to Exhibit 4.369 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, 2017, on Form 20-F. |
| 4.286 | MTS License No. 156889 for provision of telematic communication services in the territory of the Chechen Republic (English translation) is incorporated herein by reference to Exhibit 4.370 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, 2017, on Form 20-F. |
| 4.287 | MTS License No. 156890 for provision of mobile radio telephone communication services in the territory of the Samara region (English translation) is incorporated herein by reference to Exhibit 4.371 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, 2017, on Form 20-F. |
| 4.288 | MTS License No. 157431 for provision of intra-area telephone communications services in the territory of the Tver region (English translation) is incorporated herein by reference to Exhibit 4.372 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, 2017, on Form 20-F. |
| 4.289 | MTS License No. 158896 for provision of intra-area telephone communications services in the territory of the Novosibirsk region (English translation) is incorporated herein by reference to Exhibit 4.375 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, 2017, on Form 20-F. |
| 4.290 | MTS License No. 158897 for provision of data transfer communication services for purposes of voice messages transmission in the territory of the Udmurt Republic (English translation) is incorporated herein by reference to Exhibit 4.376 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, 2017, on Form 20-F. |
| 4.291 | MTS License No. 158898 for provision of data transfer communication services for purposes of voice messages transmission in the territory of the Perm region (English translation) is incorporated herein by reference to Exhibit 4.377 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, 2017, on Form 20-F. |
| 4.292 | MTS License No. 158899 for provision of intra-area telephone communications services in the territory of the Altai territory (English translation) is incorporated herein by reference to Exhibit 4.378 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, 2017, on Form 20-F. |

| Exhibits No. | Description |
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| 4.293 | MTS License No. 158900 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Smolensk region (English translation) is incorporated herein by reference to Exhibit 4.379 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, 2017, on Form 20-F. |
| 4.294 | MTS License No. 158901 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Belgorod region, Bryansk region, Kursk region, Lipetsk region (English translation) is incorporated herein by reference to Exhibit 4.380 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, 2017, on Form 20-F. |
| 4.295 | MTS License No. 158902 for provision of intra-area telephone communications services in the territory of the Krasnoyarsk Territory (English translation) is incorporated herein by reference to Exhibit 4.381 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, 2017, on Form 20-F. |
| 4.296 | MTS License No. 158903 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of the Tver region (English translation) is incorporated herein by reference to Exhibit 4.382 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, 2017, on Form 20-F. |
| 4.297 | MTS License No. 158904 for provision of intra-area telephone communications services in the territory of the Tomsk region (English translation) is incorporated herein by reference to Exhibit 4.383 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, 2017, on Form 20-F. |
| 4.298 | MTS License No. 159593 for provision of data transfer communication services for purposes of voice messages transmission in the territory of the Nenetsk Autonomous region (English translation) is incorporated herein by reference to Exhibit 4.385 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, 2017, on Form 20-F. |
| 4.299 | MTS License No. 159594 for provision of data transfer communication services for purposes of voice messages transmission in the territory of the Ryazan region, Vladimir region (English translation) is incorporated herein by reference to Exhibit 4.386 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, 2017, on Form 20-F. |
| 4.300 | MTS License No. 159595 for provision of data transfer communication services for purposes of voice messages transmission in the territory of the Khanty Mansiysk Autonomous region, Sverdlovsk region (English translation) is incorporated herein by reference to Exhibit 4.387 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, 2017, on Form 20-F. |

| Exhibits No. | Description |
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| 4.301 | MTS License No. 159596 for provision of data transfer communication services for purposes of voice messages transmission in the territory of the Chukotsk Autonomous region, Jewish Autonomous region (English translation) is incorporated herein by reference to Exhibit 4.388 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, 2017, on Form 20-F. |
| 4.302 | MTS License No. 159597 for provision of local telephone communication services, excluding local telephone communication services using payphones and shared-access facilities in the territory of the Saratov Region (English translation) is incorporated herein by reference to Exhibit 4.403 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, 2017, on Form 20-F. |
| 4.303 | MTS License No. 159598 for provision of data transfer communication services for purposes of voice messages transmission in the territory of the Tatarstan Republic (English translation) is incorporated herein by reference to Exhibit 4.389 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, 2017, on Form 20-F. |
| 4.304 | MTS License No. 159599 for provision of local telephone communication services, excluding local telephone communication services using payphones and shared-access fasilities in the territory of the Chuvashia Republic (English translation) is incorporated herein by reference to Exhibit 4.390 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, 2017, on Form 20-F. |
| 4.305 | MTS License No. 159600 for provision of local telephone communication services, excluding local telephone communication services using payphones and shared-access fasilities in the territory of the Mari El Republic (English translation) is incorporated herein by reference to Exhibit 4.391 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, 2017, on Form 20-F. |
| 4.306 | MTS License No. 159601 for provision of communication channels in the territory of the Republic of Ingushetia, Kabardino-Balkar Republic, KarachaevoCherkesia Republic, Volgograd Region (English translation) is incorporated herein by reference to Exhibit 4.255 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, 2017, on Form 20-F. |
| 4.307 | MTS License No. 159602 for provision of local telephone communication services, excluding local telephone communication services using payphones and shared-access facilities in the territory of the the Republic of Buryatia (English translation) is incorporated herein by reference to Exhibit 4.274 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, 2017, on Form 20-F. |
| 4.308 | MTS License No. 159702 for provision of telecommunications services for wired radio broadcasting in the territory of the Penza region (English translation) is incorporated herein by reference to Exhibit 4.392 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, 2017, on Form 20-F. |

| Exhibits No. | Description |
|---|---|
| 4.309 | MTS License No. 160629 for provision of intra-area telephone communications services in the territory of the Khanty Mansiysk Autonomous region (English translation) is incorporated herein by reference to Exhibit 4.393 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, 2017, on Form 20-F. |
| 4.310 | MTS License No. 162597 for provision of telecommunications services for wired radio broadcasting in the territory of the Ryazan region (English translation) is incorporated herein by reference to Exhibit 4.396 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, 2017, on Form 20-F. |
| 4.311 | MTS License No. 162943 for provision of mobile radio telephone communication services in the territory of the Astrakhan region (English translation) is incorporated herein by reference to Exhibit 4.397 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, 2017, on Form 20-F. |
| 4.312 | MTS License No. 162944 for provision of mobile radio telephone communication services in the territory of the Penza region (English translation) is incorporated herein by reference to Exhibit 4.398 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, 2017, on Form 20-F. |
| 4.313 | Sibintertelecom CJSC License No. 132675 for provision of mobile radio telephone services in the territory of Zabaykalsky Territory (English translation). |
| 4.314 | MTS License No. 160409 for provision of mobile radio telephone services in the territory of Adygeya Republic (English translation). |
| 4.315 | MTS License No. 160410 for provision of mobile radio telephone services in the territory of Moscow, Moscow region (English translation). |
| 4.316 | MTS License No. 161213 for provision of mobile radio telephone services in the territory of St. Petersburg, Leningrad region, Arkhangelsk region, Kaliningrad region, Karelia Republic, Murmansk region, Nenetsk Autonomous region, Novgorod region, Pskov region, Vologda region (English translation). |
| 4.317 | MTS License No. 161214 for provision of telecommunication services for provision of communication channels in the territory of Kemerovo region, Tomsk region (English translation). |
| 4.318 | MTS License No. 161215 for provision of mobile radio telephone services in the territory of Belgorod region, Bryansk region, Ivanovo region, Kaluga region, Kostroma region, Kursk region, Lipetsk region, Nizhny Novgorod region, Orel region, Ryazan region, Smolensk region, Tambov region, Tula region, Tver region, Vladimir region, Voronezh region, Yaroslavl region (English translation). |
| 4.319 | MTS License No. 161216 for provision of mobile radio telephone services in the territory of Amur region, Buryatiya Republic, Chukotsk Autonomous region, Jewish Autonomous region, Irkutsk region, Kamchatka region, Khabarovsk Territory, Magadan region, Primorsky Territory, Sakha Republic (Yakutia), Sakhalin region, Zabaykalsky Territory (English translation). |

| Exhibits No. | Description |
|---|---|
| 4.320 | MTS License No. 161217 for provision of data communication services excluding data communication services for the purposes of voice data communication in the territory of Krasnoyarsk Territory (English translation). |
| 4.321 | MTS License No. 161218 for provision of telecommunication services for provision of communication channels in the territory of Tatarstan Republic (English translation). |
| 4.322 | MTS License No. 161219 for provision of telecommunication services for provision of communication channels in the territory of Kalmykia Republic, Severnaya Osetia Alania Republic (English translation). |
| 4.323 | MTS License No. 161220 for provision of telecommunication services for provision of communication channels in the territory of Krasnoyarsk Territory (English translation). |
| 4.324 | MTS License No. 161221 for provision of telematic services in the territory of Krasnoyarsk Territory (English translation). |
| 4.325 | MTS License No. 161222 for provision of mobile radio telephone services in the territory of Krasnoyarsk Territory (English translation). |
| 4.326 | MTS License No. 161223 for provision of telecommunication services for provision of communication channels in the territory of Bashkortostan Republic (English translation). |
| 4.327 | MGTS License No. 161531 for provision of cable television in the territory of Moscow region (English translation). |
| 4.328 | MTS License No. 161954 for provision of intra zonal communications services in the territory of Tatarstan Republic (English translation). |
| 4.329 | MGTS License No. 161957 for provision of local telephone communication services using payphones in the territory of Moscow (English translation). |
| 4.330 | MGTS License No. 162566 for provision of mobile radio telephone services in the territory of Moscow, Moscow region (English translation). |
| 4.331 | MTS License No. 163838 for provision of intra zonal communications services in the territory of Rostov region (English translation). |
| 4.332 | MTS License No. 163839 for provision of intra zonal communications services in the territory of Severnaya Osetia Alania Republic (English translation). |
| 4.333 | MTS License No. 163840 for provision of intra zonal communications services in the territory of Krasnodar territory (English translation). |
| 4.334 | MTS License No. 164187 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of Khanty Mansiysk Autonomous region (English translation). |
| 4.335 | Sputnikovoe TV LLC License No. 165243 for provision of communication channel provision services in the territory of Russian Federation (English translation). |
| 4.336 | MTS License No. 165418 for provision of radio telephone services in the territory of Khanty Mansiysk Autonomous region (English translation). |
| 4.337 | MTS License No. 166424 for provision of telecommunication services for provision of communication channels in the territory of Rostov region (English translation). |

| Exhibits No. | Description |
|---|---|
| 4.338 | MTS License No. 166425 for provision of data communication services excluding data communication services for the purposes of voice data communication in the territory of Altai territory (English translation). |
| 4.339 | MGTS License No. 166443 for provision of leased communications circuits in the territory of Moscow, Moscow region (English translation). |
| 4.340 | MGTS License No. 166444 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of Moscow (English translation). |
| 4.341 | MGTS License No. 166445 for provision of data transmission services in the territory of Moscow (English translation). |
| 4.342 | MTS License No. 166704 for provision of mobile radio telephone services in the territory of Tyva Republic (English translation). |
| 4.343 | MTS License No. 166958 for provision of telecommunication services for provision of communication channels in the territory of Moscow, Moscow region, Komi Republic, Kostroma region, Tver region (English translation). |
| 4.344 | MTS License No. 167215 for provision of mobile radio telephone services in the territory of Russian Federation, except the Republic of Crimea, Sevastopol (English translation). |
| 4.345 | MTS License No. 167216 for provision of mobile radio telephone services in the territory of Novosibirsk region (English translation). |
| 4.346 | MTS License No. 167990 for provision of mobile radio telephone services in the territory of Altai territory (English translation). |
| 4.347 | MTS License No. 167991 for provision of mobile radio telephone services in the territory of Tomsk region (English translation). |
| 4.348 | MTS License No. 167992 for provision of telecommunication services for provision of communication channels in the territory of Russian Federation, except the Republic of Crimea, Sevastopol (English translation). |
| 4.349 | MTS License No. 168186 for provision of mobile radio telephone services in the territory of Astrakhan region (English translation). |
| 4.350 | MTS License No. 168309 for provision of cable radio in the territory of Saratov region (English translation). |
| 4.351 | MTS License No. 168612 for provision of mobile radio telephone services in the territory of Dagestan Republi (English translation). |
| 4.352 | MTS License No. 168613 for provision of mobile radio telephone services in the territory of KarachaevoCherkesia Republic (English translation). |
| 4.353 | MTS License No. 168614 for provision of mobile radio telephone services in the territory of Ulyanovsk region (English translation). |
| 4.354 | MTS License No. 168615 for provision of mobile radio telephone services in the territory of Stavropol territory (English translation). |
| 4.355 | MTS License No. 168616 for provision of mobile radio telephone services in the territory of Kemerovo region (English translation). |

| Exhibits No. | Description |
|---|---|
| 4.356 | MTS License No. 168617 for provision of mobile radio telephone services in the territory of Kabardino-Balkar Republic (English translation). |
| 4.357 | MTS License No. 168618 for provision of mobile radio telephone services in the territory of Mordovia Republic (English translation). |
| 4.358 | MTS License No. 168619 for provision of local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities in the territory of Kemerovo region (English translation). |
| 4.359 | MTS License No. 168620 for provision of mobile radio telephone services in the territory of Kalmykia Republic (English translation). |
| 4.360 | MTS License No. 168621 for provision of mobile radio telephone services in the territory of Altai Republic (English translation). |
| 4.361 | MTS License No. 168622 for provision of mobile radio telephone services in the territory of Tyva Republic (English translation). |
| 4.362 | MTS License No. 168623 for provision of mobile radio telephone services in the territory of Ingushetia Republic (English translation). |
| 4.363 | MTS License No. 168624 for provision of mobile radio telephone services in the territory of Chuvashia Republic (English translation). |
| 4.364 | MTS License No. 169190 for provision of cable radio in the territory of Krasnodar territory (English translation). |
| 4.365 | MTS License No. 169448 for provision of intra zonal communications services in the territory of Karelia Republic (English translation). |
| 4.366 | MTS License No. 169449 for provision of intra zonal communications services in the territory of Komi Republic (English translation). |
| 4.367 | MTS License No. 169450 for provision of intra zonal communications services in the territory of St. Petersburg (English translation). |
| 4.368 | MTS License No. 169451 for provision of international, national, intra zonal and local communications services in the territory of Kemerovo region (English translation). |
| 4.369 | MTS License No. 169452 for provision of intra zonal communications services in the territory of Vologda region (English translation). |
| 4.370 | MTS License No. 169453 for provision of intra zonal communications services in the territory of Novgorod region (English translation). |
| 4.371 | MTS License No. 169454 for provision of intra zonal communications services in the territory of Astrakhan region (English translation). |
| 4.372 | MTS License No. 169455 for provision of intra zonal communications services in the territory of Murmansk region (English translation). |
| 4.373 | MTS License No. 169456 for provision of intra zonal communications services in the territory of Arkhangelsk region (English translation). |
| 4.374 | MTS License No. 169457 for provision of intra zonal communications services in the territory of Kaliningrad region (English translation). |

| Exhibits No. | Description |
|---|---|
| 4.375 | MTS License No. 170007 for provision of mobile radio telephone services in the territory of Omsk region (English translation). |
| 4.376 | MTS License No. 170425 for provision of data transmission services for voice in the territory of Kemerovo region (English translation). |
| 4.377 | MTS License No. 170426 for provision of data transmission services for voice in the territory of Nizhny Novgorod region (English translation). |
| 4.378 | MTS License No. 170427 for provision of data transmission services for voice in the territory of Arkhangelsk region (English translation). |
| 4.379 | MTS License No. 170428 for provision of data transmission services for voice in the territory of Krasnoyarsk Territory (English translation). |
| 4.380 | MTS License No. 170429 for provision of data transmission services for voice in the territory of Novgorod region (English translation). |
| 4.381 | MTS License No. 170430 for provision of data transmission services for voice in the territory of Omsk region (English translation). |
| 4.382 | MTS License No. 170431 for provision of data transmission services for voice in the territory of Novosibirsk region (English translation). |
| 4.383 | MTS License No. 170432 for provision of data transmission services for voice in the territory of Tula region (English translation). |
| 4.384 | MTS License No. 170433 for provision of intra zonal communications services in the territory of Kurgan region (English translation). |
| 4.385 | MTS License No. 170434 for provision of data transmission services for voice in the territory of Smolensk region (English translation). |
| 4.386 | MTS License No. 170435 for provision of data transmission services for voice in the territory of Leningrad region (English translation). |
| 4.387 | MTS License No. 170436 for provision of data transmission services for voice in the territory of Volgograd region (English translation). |
| 4.388 | MTS License No. 170616 for provision of mobile radio telephone services in the territory of Bashkortostan Republic (English translation). |
| 4.389 | MTS License No. 170831 for provision of intra zonal communications services in the territory of Volgograd region (English translation). |
| 4.390 | MTS License No. 171610 for provision of mobile radio telephone services in the territory of Kirov region, Orenburg region, Perm region, Udmurt Republic, Chelyabinsk region, Khanty Mansiysk Autonomous region, Kurgan region, Sverdlovsk region, Tyumen region, YamaloNenetsk Autonomous region (English translation). |
| 4.391 | MTS License No. 171678 for provision of cable radio in the territory of Novosibirsk region (English translation). |
| 4.392 | Sibintertelecom CJSC License No. 171974 for provision of mobile radio telephone services in the territory of Zabaykalsky Territory (English translation). |
| 4.393 | MTS License No. 172049 for provision of mobile radio telephone services in the territory of Bashkortostan Republic (English translation). |

| Exhibits No. | Description |
|---|---|
| 4.394 | MTS License No. 172367 for provision of mobile radio telephone services in the territory of Zabaykalsky Territory (English translation). |
| 4.395 | MTS License No. 172368 for provision of mobile radio telephone services in the territory of Volgograd region (English translation). |
| 4.396 | MTS License No. 172369 for provision of cable radio in the territory of Vologda region (English translation). |
| 4.397 | MGTS License No. 169794 for provision of data transmission services, except for data transmission services for the purpose of voice transmission in the territory of the Moscow region (English translation). |
| 4.398 | MGTS License No. 169795 for provision of local telephone communication services, excluding local telephone communication services using payphones and shared-access facilities in the territory of the Moscow region (English translation). |
| 8.1 | List of Subsidiaries of Mobile TeleSystems Public Joint Stock Company. |
| 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, 2018 and 2017, (ii) Consolidated statements of profit or loss for the years ended December 31, 2018, 2017 and 2016, (iii) Consolidated statements of comprehensive income for the years ended December 31, 2018, 2017 and 2016, (iv) Consolidated statements of changes in shareholders' equity for the years ended December 31, 2018, 2017 and 2016, (v) Consolidated statements of cash flows for the years ended December 31, 2018, 2017 and 2016, and (vi) Notes to the consolidated financial statements. |

* Approved by General Meetingof Shareholders of Mobile TeleSystems Public Joint Stock Company held Orty 28, 2018 and became effective upon registration with the Federal Tax Service on July 11, 2018.

**SIGNATURES**

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

Date: April 19, 2019

MOBILE TELESYSTEMS PUBLIC JOINT STOCK COMPANY

By: /s/ Alexey V. Kornya

Name: Alexey V. Kornya
Title: President and Chief Executive Officer

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# PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES

## Consolidated Financial Statements

As of December 31, 2018, 2017 and for the Years Ended
December 31, 2018, 2017 and 2016.

**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, 2018 and 2017, 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, 2018, 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, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018, 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, 2018, 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 19, 2019 expressed an unqualified opinion on the Group's internal control over financial reporting.

**Change in Accounting Principle**

As discussed in Note 2 to the consolidated financial statements, the Group has changed its method of accounting for lease agreements in the year ended December 31, 2018 due to the early adoption of International Financial Reporting Standard 16, *Leases.*

**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.

/s/ AO Deloitte & Touche CIS

Moscow, Russia
March 19, 2019

We have served as the Group's auditor since 2002.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**CONSOLIDATED STATEMENTS OF FINANCIAL POSITION**

**AS OF DECEMBER 31, 2018 AND 2017**

**(Amounts in millions of Russian Rubles)**

| | Notes | December 31, 2018 | December 31, 2017 |
|---|---|---|---|
| **ASSETS** | | | |
| NON-CURRENT ASSETS: | | | |
| Property, plant and equipment | 20 | 276,443 | 263,063 |
| Investment property | | 2,177 | 407 |
| Right-of-use assets | 25 | 149,007 | — |
| Goodwill | 21 | 39,107 | 34,281 |
| Other intangible assets | 23 | 95,962 | 79,397 |
| Investments in associates | 16 | 10,735 | 9,452 |
| Other investments | 17 | 16,873 | 1,953 |
| Deferred tax assets | 12 | 11,190 | 5,545 |
| Accounts receivable, related parties | 31 | 2,545 | 2 |
| Trade accounts receivable | 18 | 2,600 | — |
| Bank deposits and loans to customers | 29 | 30,653 | — |
| Other financial assets | 28 | 4,729 | 8,890 |
| Other non-financial assets | | 5,038 | 2,048 |
| **Total non-current assets** | | **647,059** | **405,038** |
| CURRENT ASSETS: | | | |
| Inventories | 19 | 18,654 | 9,995 |
| Trade and other receivables | 18 | 34,543 | 28,017 |
| Accounts receivable, related parties | 31 | 6,385 | 11,358 |
| Bank deposits and loans to customers | 29 | 32,385 | — |
| Short-term investments | 15 | 47,863 | 50,757 |
| Advances paid and prepaid expenses | | 4,208 | 3,894 |
| VAT receivable | | 7,415 | 7,165 |
| Income tax assets | | 3,887 | 2,838 |
| Assets held for sale | | 2,694 | 1,276 |
| Cash and cash equivalents | 14 | 84,075 | 30,586 |
| Other financial assets | 28 | 25,487 | 146 |
| Other non financial assets | | 1,338 | — |
| **Total current assets** | | **268,934** | **146,032** |
| **TOTAL ASSETS** | | **915,993** | **551,070** |

The accompanying notes are an integral part of these consolidated financial statements.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**CONSOLIDATED STATEMENTS OF FINANCIAL POSITION (Continued)**

**AS OF DECEMBER 31, 2018 AND 2017**

**(Amounts in millions of Russian Rubles)**

| | Notes | December 31, 2018 | December 31, 2017 |
|---|---|---|---|
| **EQUITY AND LIABILITIES** | | | |
| EQUITY: | | | |
| Common stock | 32 | 200 | 200 |
| Treasury stock | 32 | (44,808) | (22,644) |
| Additional paid-in capital | | — | 381 |
| Retained earnings | | 110,946 | 151,043 |
| Accumulated other comprehensive loss | 32 | (1,064) | (8,854) |
| Equity attributable to owners of the Company | | 65,274 | 120,126 |
| Non-controlling interests | | 12,291 | 4,079 |
| **Total equity** | | **77,565** | **124,205** |
| NON-CURRENT LIABILITIES: | | | |
| Borrowings | 24 | 365,072 | 228,040 |
| Lease obligations | 25 | 144,740 | 11,056 |
| Bank deposits and liabilities | 29 | 2,633 | — |
| Deferred tax liabilities | 12 | 24,439 | 23,773 |
| Provisions | 27 | 3,391 | 2,309 |
| Contract liabilities | 7 | 558 | 765 |
| Other non-financial liabilities | | 1,643 | 3,203 |
| Other financial liabilities | 28 | 481 | 1,048 |
| **Total non-current liabilities** | | **542,957** | **270,194** |
| CURRENT LIABILITIES: | | | |
| Trade and other payables | | 53,623 | 47,314 |
| Accounts payable, related parties | 31 | 1,301 | 1,102 |
| Contract liabilities | 7 | 21,597 | 17,696 |
| Borrowings | 24 | 3,063 | 63,673 |
| Lease obligations | 25 | 15,812 | 801 |
| Bank deposits and liabilities | 29 | 108,821 | — |
| Income tax liabilities | | 1,792 | 1,150 |
| Provisions | 27 | 70,911 | 9,852 |
| Other non-financial liabilities | | 13,903 | 12,047 |
| Other financial liabilities | 28 | 4,648 | 3,036 |
| **Total current liabilities** | | **295,471** | **156,671** |
| **TOTAL EQUITY AND LIABILITIES** | | **915,993** | **551,070** |

The accompanying notes are an integral part of these consolidated financial statements.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**CONSOLIDATED STATEMENTS OF PROFIT OR LOSS**

**FOR THE YEARS ENDED DECEMBER 31, 2018, 2017 AND 2016**

**(Amounts in millions of Russian Rubles, except per share amounts)**

| | Notes | 2018 | 2017 | 2016 |
|---|---|---|---|---|
| Service revenue | | 410,890 | 390,761 | 386,486 |
| Sales of goods | | 69,403 | 52,150 | 49,206 |
| **Revenue** | 6, 7 | **480,293** | **442,911** | **435,692** |
| Cost of services | | 112,401 | 123,779 | 130,158 |
| Cost of goods | 19 | 63,869 | 45,623 | 45,574 |
| Selling, general and administrative expenses | 8 | 87,946 | 95,186 | 94,046 |
| Depreciation and amortization | 6 | 104,588 | 79,912 | 81,582 |
| Operating share of the profit of associates | 16 | (3,799) | (3,210) | (3,115) |
| Impairment of non-current assets | 22 | 149 | 3,775 | — |
| Impairment of financial assets | | 3,694 | 2,923 | 2,698 |
| Other income | | (4,740) | (1,177) | (2,920) |
| **Operating profit** | 6 | **116,185** | **96,100** | **87,669** |
| Finance income | 9 | (5,981) | (5,548) | (5,273) |
| Finance costs | 9 | 38,165 | 26,064 | 27,136 |
| Currency exchange loss / (gain) | | 3,594 | (1,301) | (3,241) |
| Non-operating share of the loss of associates | 16 | 909 | 436 | 1,287 |
| Change in fair value of financial instruments | | (5,384) | (110) | (166) |
| Other expenses | | 1,031 | 992 | 317 |
| **Profit before tax** | | **83,851** | **75,567** | **67,609** |
| Income tax expense | 12 | 16,969 | 18,977 | 15,138 |
| **Profit for the year from continuing operations** | | **66,882** | **56,590** | **52,471** |
| Loss / (gain) from discontinued operations | 10, 34 | 59,050 | — | (4,021) |
| **Profit for the year** | | **7,832** | **56,590** | **48,450** |
| Profit / (loss) for the year attributable to: | | | | |
| Owners of the Company | | 6,848 | 56,042 | 48,474 |
| Non-controlling interests | | 984 | 548 | (24) |
| Earnings per share from continuing operations (basic and diluted), Russian Rubles: | 13 | 35.17 and 35.13 | 28.68 and 28.66 | 26.06 and 26.04 |
| Earnings per share from discontinued operations (basic and diluted), Russian Rubles: | 13 | (31.52) and (31.48) | — | (1.69) and (1.69) |

The accompanying notes are an integral part of these consolidated financial statements.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME**

**FOR THE YEARS ENDED DECEMBER 31, 2018, 2017 AND 2016**

**(Amounts in millions of Russian Rubles)**

| | 2018 | 2017 | 2016 |
|---|---|---|---|
| **Profit for the year** | **7,832** | **56,590** | **48,450** |
| **Other comprehensive income** | | | |
| *Items that will not be reclassified subsequently to profit or loss:* | | | |
| Unrecognized actuarial gain / (loss) | 167 | (40) | 50 |
| *Items that may be reclassified subsequently to profit or loss:* | | | |
| Exchange differences on translating foreign operations | 7,416 | (2,469) | (15,104) |
| Net fair value (loss) / gain on financial instruments | (103) | 495 | (1,200) |
| **Share of other comprehensive income / (loss) of associates** | | | |
| *Items that may be reclassified subsequently to profit or loss:* | | | |
| Exchange differences on translating foreign operations in associates | 319 | (810) | (1,553) |
| **Other comprehensive income / (loss) for the year, net of income tax** | **7,799** | **(2,824)** | **(17,807)** |
| **Total comprehensive income for the year** | **15,631** | **53,766** | **30,643** |
| Total comprehensive income / (loss) for the year attributable to: | | | |
| Owners of the Company | 14,638 | 53,218 | 31,268 |
| Non-controlling interests | 993 | 548 | (625) |

The accompanying notes are an integral part of these consolidated financial statements.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**
**CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY**
**FOR THE YEARS ENDED DECEMBER 31, 2018, 2017 AND 2016**
**(Amounts in millions of Russian Rubles, except share amounts)**

| | Common stock | | Treasury stock | | | Accumulated other comprehensive income / (loss) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Shares | Amount | Shares | Amount | Additional paid-in capital | Cash flow hedging reserve | Foreign currency translation reserve | Remeasurements of the net defined benefit liability | Retained earnings | Equity attributable to equity holders | Non-controlling interests | Total equity |
| **Balances at January 1, 2016** | **2,066,413,562** | **207** | **(77,521,163)** | **(24,468)** | **—** | **1,045** | **9,638** | **493** | **173,200** | **160,115** | **8,256** | **168,371** |
| Profit / (loss) for the year | — | — | — | — | — | — | — | — | 48,474 | 48,474 | (24) | 48,450 |
| Other comprehensive (loss) / income for the year, net of income tax | — | — | — | — | — | (1,200) | (13,970) | 50 | — | (15,120) | (601) | (15,721) |
| **Total comprehensive (loss) / income for the year** | **—** | **—** | **—** | **—** | **—** | **(1,200)** | **(13,970)** | **50** | **48,474** | **33,354** | **(625)** | **32,729** |
| Issuance of stock options | — | — | — | — | 131 | — | — | — | — | 131 | 11 | 142 |
| Dividends declared by MTS | — | — | — | — | — | — | — | — | (51,738) | (51,738) | — | (51,738) |
| Dividends to non-controlling interests | — | — | — | — | — | — | — | — | — | — | (1,120) | (1,120) |
| Unclaimed dividends | — | — | — | — | — | — | — | — | 3 | 3 | — | 3 |
| Sale of own stock | — | — | 1,074,525 | 213 | — | — | — | — | — | 213 | — | 213 |
| Purchase of own stock (Note 32) | — | — | (3,067,396) | (748) | — | — | — | — | — | (748) | — | (748) |
| Purchase of non-controlling interests | — | — | — | — | 5 | — | — | — | — | 5 | (22) | (17) |
| Changes in ownership interest with no gain / loss of control—MTS Bank additional share issuance | — | — | — | — | (14) | — | — | — | — | (14) | — | (14) |
| Redemption of treasury shares (Note 32) | (68,031,987) | (7) | 68,031,987 | 24,255 | — | — | — | — | (24,248) | — | — | — |
| Disposal of UMS, the Group's subsidiary in Uzbekistan (Note 10) | — | — | — | — | — | — | (2,086) | — | — | (2,086) | (1,787) | (3,873) |
| Reclassification to retained earnings | — | — | — | — | 69 | — | — | — | (69) | — | — | — |
| **Balances at December 31, 2016** | **1,998,381,575** | **200** | **(11,482,047)** | **(748)** | **191** | **(155)** | **(6,418)** | **543** | **145,622** | **139,235** | **4,713** | **143,948** |
| Profit / (loss) for the year | — | — | — | — | — | — | — | — | 56,042 | 56,042 | 548 | 56,590 |
| Other comprehensive (loss) / income for the year, net of income tax | — | — | — | — | — | 495 | (2,620) | (40) | — | (2,165) | — | (2,165) |
| Disposal of East-West United Bank by MTS Bank, the Group's associate (Note 16) | — | — | — | — | — | — | (659) | — | — | (659) | — | (659) |
| **Total comprehensive (loss) / income for the year** | **—** | **—** | **—** | **—** | **—** | **495** | **(3,279)** | **(40)** | **56,042** | **53,218** | **548** | **53,766** |
| Exercise of stock options | — | — | 851,275 | — | 240 | — | — | — | — | 240 | — | 240 |
| Dividends declared by MTS | — | — | — | — | — | — | — | — | (50,621) | (50,621) | — | (50,621) |
| Dividends to non-controlling interests | — | — | — | — | — | — | — | — | — | — | (1,175) | (1,175) |
| Purchase of own stock (Note 32) | — | — | (75,708,384) | (21,896) | — | — | — | — | — | (21,896) | — | (21,896) |
| Purchase of non-controlling interests | — | — | — | — | (2) | — | — | — | — | (2) | (7) | (9) |
| Changes in ownership interest with no gain / loss of control | — | — | — | — | (48) | — | — | — | — | (48) | — | (48) |
| **Balances at December 31, 2017** | **1,998,381,575** | **200** | **(86,339,156)** | **(22,644)** | **381** | **340** | **(9,697)** | **503** | **151,043** | **120,126** | **4,079** | **124,205** |

The accompanying notes are an integral part of these consolidated financial statements.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY**

**FOR THE YEARS ENDED DECEMBER 31, 2018, 2017 AND 2016 (Continued)**

**(Amounts in millions of Russian Rubles, except share amounts)**

| | Common stock | | Treasury stock | | Additional paid-in capital | Accumulated other comprehensive income / (loss) | | | Retained earnings | Equity attributable to equity holders | Non-controlling interests | Total equity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Shares | Amount | Shares | Amount | | Cash flow hedging reserve | Foreign currency translation reserve | Remeasurements of the net defined benefit liability | | | | |
| **Balances at December 31, 2017** | **1,998,381,575** | **200** | **(86,339,156)** | **(22,644)** | **381** | **340** | **(9,697)** | **503** | **151,043** | **120,126** | **4,079** | **124,205** |
| Adjustment on initial application of IFRS 15 (net of tax) (Note 2) | — | — | — | — | — | — | — | — | 2,528 | 2,528 | 17 | 2,545 |
| Adjustment on initial application of IFRS 9 (net of tax) (Note 2) | — | — | — | — | — | — | — | — | 1,367 | 1,367 | — | 1,367 |
| **Adjusted balance at January 1, 2018** | **—** | **—** | **—** | **—** | **—** | **—** | **—** | **—** | **154,938** | **124,021** | **4,096** | **128,117** |
| Profit for the year | — | — | — | — | — | — | — | — | 6,848 | 6,848 | 984 | 7,832 |
| Unrecognized actuarial gain | — | — | — | — | — | — | — | 167 | — | 167 | — | 167 |
| Currency translation adjustment | | | | | | | 7,726 | | | 7,726 | 9 | 7,735 |
| Change in fair value of derivatives, net of income tax | — | — | — | — | — | (103) | | — | — | (103) | — | (103) |
| **Total comprehensive (loss) / income for the year** | **—** | **—** | **—** | **—** | **—** | **(103)** | **7,726** | **167** | **6,848** | **14,638** | **993** | **15,631** |
| Issuance of stock options | — | — | — | — | 675 | — | — | — | — | 675 | — | 675 |
| Exercise of stock options | — | — | 1,369,303 | 403 | (403) | — | — | — | — | — | — | — |
| Dividends declared by MTS | — | — | — | — | — | — | — | — | (48,921) | (48,921) | — | (48,921) |
| Dividends to non-controlling interests | — | — | — | — | — | — | — | — | — | | (1,165) | (1,165) |
| Purchase of own stock (Note 32) | — | — | (82,669,046) | (22,567) | (4) | — | — | — | — | (22,571) | — | (22,571) |
| Purchase of non-controlling interests | — | — | — | — | (97) | — | — | — | — | (97) | 47 | (50) |
| Acquisitions under common control | — | — | — | — | (2,471) | — | — | — | — | (2,471) | 8,320 | 5,849 |
| Reclass to retained earnings | — | — | — | — | 1,919 | — | — | — | (1,919) | — | — | — |
| **Balances at December 31, 2018** | **1,998,381,575** | **200** | **(167,638,899)** | **(44,808)** | **—** | **237** | **(1,971)** | **670** | **110,946** | **65,274** | **12,291** | **77,565** |

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, 2018, 2017 AND 2016**

**(Amounts in millions of Russian Rubles)**

| | 2018 | 2017 | 2016 |
|---|---|---|---|
| **CASH FLOWS FROM OPERATING ACTIVITIES:** | | | |
| Profit for the year | 7,832 | 56,590 | 48,450 |
| **Adjustments for:** | | | |
| Depreciation and amortization | 104,588 | 79,912 | 83,259 |
| Impairment of non-current assets | 149 | 3,775 | — |
| Impairment of financial assets | 3,694 | 2,923 | 2,857 |
| Non-cash loss from sale of subsidiary in Uzbekistan | — | — | 2,726 |
| Provision related to SEC investigation (Note 34) | 55,752 | — | — |
| Finance income | (5,981) | (5,548) | (5,273) |
| Finance costs | 38,165 | 26,064 | 27,427 |
| Income tax expense | 16,969 | 18,977 | 14,954 |
| Currency exchange loss/(gain) | 6,892 | (1,301) | (3,232) |
| Amortization of deferred connection fees | (3,904) | (2,876) | (2,287) |
| Share of profit of associates | (2,890) | (2,774) | (1,828) |
| Change in fair value of financial instruments | (5,384) | (110) | (166) |
| Inventory obsolescence expense | 3,326 | 2,179 | 1,548 |
| Change in provisions | 13,534 | 14,347 | 13,161 |
| Other non-cash items | (3,479) | (657) | (3,656) |
| **Movements in operating assets and liabilities:** | | | |
| Decrease / (Increase) in trade and other receivables | 438 | (3,514) | (3,525) |
| Increase in bank loans to customers and interbank loans | (15,367) | — | — |
| (Increase) / Decrease in inventory | (11,292) | 2,200 | (1,816) |
| Decrease / (Increase) in advances paid and prepaid expenses | 1,429 | 1,197 | (812) |
| Decrease / (Increase) in VAT receivable | 72 | (1,145) | 227 |
| Decrease in trade and other payables and other current liabilities | (11,162) | (6,715) | (9,086) |
| Increase in bank deposits and liabilities | 4,100 | — | — |
| Dividends received | 3,726 | 3,590 | 2,801 |
| Income tax paid | (19,777) | (22,427) | (11,687) |
| Interest received | 10,016 | 3,319 | 3,344 |
| Interest paid, net of interest capitalized | (37,056) | (23,366) | (26,821) |
| **NET CASH PROVIDED BY OPERATING ACTIVITIES** | **154,390** | **144,640** | **130,565** |

The accompanying notes are an integral part of these consolidated financial statements.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**CONSOLIDATED STATEMENTS OF CASH FLOWS (Continued)**

**FOR THE YEARS ENDED DECEMBER 31, 2018, 2017 AND 2016**

**(Amounts in millions of Russian Rubles)**

| | 2018 | 2017 | 2016 |
|---|---|---|---|
| **CASH FLOWS FROM INVESTING ACTIVITIES:** | | | |
| Purchase of subsidiaries, net of cash acquired (Note 5) | (3,444) | (367) | (5) |
| Purchases of property, plant and equipment (including capitalized interest in the amount of RUB 460 million, RUB 307 million and RUB 388 million, respectively) | (64,731) | (53,366) | (55,538) |
| Purchases of other intangible assets | (21,751) | (23,065) | (28,013) |
| Purchase of Avantage | (7,559) | — | — |
| Purchase of 3G and 4G licenses in Ukraine and Russia | (5,527) | — | (2,598) |
| Cost to obtain and fulfill contracts, paid | (4,764) | — | — |
| Proceeds from sale of property, plant and equipment and assets held for sale | 5,905 | 4,343 | 4,042 |
| Purchases of short-term and other investments | (18,754) | (33,717) | (9,739) |
| Proceeds from sale of short-term and other investments | 38,596 | 25,385 | 39,021 |
| Investments in associates (Note 16) | (3,871) | (723) | (4,094) |
| Cash proceeds related to swap contracts | 6,892 | — | — |
| Proceeds from sale of subsidiary | 619 | — | — |
| Disposal of discontinued operation, net of cash disposed | — | — | (378) |
| **NET CASH USED IN INVESTING ACTIVITIES** | **(78,389)** | **(81,510)** | **(57,302)** |
| **CASH FLOWS FROM FINANCING ACTIVITIES:** | | | |
| Repayment of notes | (27,983) | (12,042) | (20,364) |
| Proceeds from issuance of notes | 27,550 | 45,000 | 10,000 |
| Notes and debt issuance cost paid | (39) | (98) | (16) |
| Lease obligation principal paid | (13,577) | (774) | (334) |
| Dividends paid | (50,054) | (51,759) | (52,805) |
| Acquisition of entities under common control, net of cash acquired | (13,242) | — | 3,063 |
| Proceeds from loans | 95,000 | 25,136 | 50,696 |
| Repayment of loans | (20,076) | (32,239) | (69,532) |
| Payments under credit guarantee agreement related to foreign-currency hedge (Note 30) | (981) | (1,766) | (2,984) |
| Repurchase of common stock | (22,655) | (21,896) | (748) |
| Other financing activities | 133 | (7) | (14) |
| **NET CASH USED IN FINANCING ACTIVITIES** | **(25,924)** | **(50,445)** | **(83,038)** |
| Effect of exchange rate changes on cash and cash equivalents | 3,412 | (569) | (5,219) |
| **NET INCREASE / (DECREASE) IN CASH AND CASH EQUIVALENTS** | **53,489** | **12,116** | **(14,994)** |
| **CASH AND CASH EQUIVALENTS, beginning of the year** | **30,586** | **18,470** | **33,464** |
| **CASH AND CASH EQUIVALENTS, end of the year** | **84,075** | **30,586** | **18,470** |

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, 2018 and 2017, and for the years ended 31 December 2018, 2017 and 2016 were authorized for issue by the President of MTS on March 19, 2019.

***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. MTS PJSC's majority shareholder is Sistema Public Joint-Stock Financial Corporation or Sistema, whose controlling shareholder is Vladimir P. Yevtushenkov.

The Group provides a wide range of telecommunications services including voice and data transmission, internet access, pay TV, various value added services ("VAS") through wireless and fixed lines, financial services, banking services, integration services as well as the sale of equipment, accessories and software. The Group primarily operates in Russia, Ukraine and Armenia.

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 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").

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND NEW ACCOUNTING PRONOUNCEMENTS

***Basis of preparation***—These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB").

These 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.

These 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.

***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

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

**2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND NEW ACCOUNTING PRONOUNCEMENTS (Continued)**

applied by the Group. All intra-group balances, income, expenses and cash flows are eliminated on consolidation.

Effective ownership interests in the Group's significant subsidiaries were the following:

| | Accounting method | December 31, 2018 | December 31, 2017 |
|---|---|---|---|
| RTC | Consolidated | 100.0% | 100.0% |
| Vodafone Ukraine (VF Ukraine) | Consolidated | 100.0% | 100.0% |
| MTS Turkmenistan (Note 11) | Consolidated | 100.0% | 100.0% |
| Sibintertelecom | Consolidated | 100.0% | 100.0% |
| NVision Group | Consolidated | 100.0% | 100.0% |
| Sitronics Telecom Solutions | Consolidated | 100.0% | 100.0% |
| NVision Czech Republic | Consolidated | 100.0% | 100.0% |
| Sputnikovoe TV | Consolidated | 100.0% | 100.0% |
| Stream | Consolidated | 100.0% | 100.0% |
| Dega | Consolidated | 100.0% | 100.0% |
| Stream Digital | Consolidated | 100.0% | 100.0% |
| MTS Energo | Consolidated | 100.0% | 100.0% |
| Bashkortostan Cellular Communications (BCC)[1] | Consolidated | — | 100.0% |
| Praliss Enterprises Limited | Consolidated | 100.0% | 100.0% |
| MDTZK LLC (Ticketland) | Consolidated | 100.0% | — |
| IT Grad | Consolidated | 100.0% | — |
| Metro-Telecom | Consolidated | 95.0% | 95.0% |
| MGTS Group | Consolidated | 94.7% | 94.7% |
| MTS Armenia | Consolidated | 80.0% | 80.0% |
| Kulturnaya Sluzhba (Ponominalu) | Consolidated | 78.2% | — |
| Navigation Information Systems Group | Consolidated | 77.7% | 77.7% |
| MTS Bank (Note 5) | Consolidated | 55.4% | 26.6% |
| Oblachny Retail LLC | Consolidated | 50.8% | 50.8% |
| MTS International Funding Limited[2] ("MTS International") | Consolidated | SE | SE |
| MTS Belarus (Note 16) | Equity | 49.0% | 49.0% |
| Sistema Capital | Equity | 30.0% | 30.0% |
| Zifrovoe TV | Equity | 20.0% | 20.0% |
| OZON Holdings Limited (Note 16) | Equity | 18.7% | 11.2% |
| YOUDO Web Technologies (Note 16) | Equity | 13.7% | — |

(1) A wholly-owned subsidiary, through which the Group repurchases its own shares.

(2) Merged with MTS PJSC on November 15, 2018

(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 USD 750 million 8.625% notes due in 2020 and USD 500 million 5.0% notes due in 2023, respectively (Note 15). The notes are guaranteed by MTS PJSC in the event of default. MTS International does not

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND NEW ACCOUNTING PRONOUNCEMENTS (Continued)

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.

***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.

***Functional currency translation methodology***—As of December 31, 2018, the functional currencies of Group entities were as follows:

- For entities incorporated in the Russian Federation, Dega and MTS International—the Russian Ruble ("RUB");
- For VF Ukraine—the Ukrainian Hryvna;
- 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.

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.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND NEW ACCOUNTING PRONOUNCEMENTS (Continued)

### Standards, interpretations and amendments adopted on January 1, 2018

Starting from January 1, 2018 the Group has applied IFRS 9, "***Financial Instruments***", IFRS 15, "*Revenue from Contracts with Customers*", and IFRS 16, "*Leases*".

**IFRS 9, "Financial Instruments"**—IFRS 9 replaces the existing standard IAS 39 in regulating the classification and measurement of financial assets and liabilities and requires certain additional disclosures. The primary changes relate to the assessment of hedging arrangements and provisioning for potential future credit losses on financial assets as well as recognition of modification gain or loss for all revisions of estimated payments or receipts, including changes in cash flows arising from a modification or exchange of a financial liability, that does not result in its derecognition.

Resulting from the adoption of the IFRS 9 standard, the Group recognized RUB 3.0 billion (RUB 2.4 billion net of tax) gain relating to modification of its financial liabilities, which did not result in extinguishment of the original liabilities, and RUB 1.2 billion (1.0 billion net of tax) loss related to expected losses on financial assets.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND NEW ACCOUNTING PRONOUNCEMENTS (Continued)

The new guidance on the classification of financial assets did not results in any changes in the measurement and presentation of the Group's financial assets. The following table compares the classification of financial assets in accordance with IFRS 9 and IAS 39:

| | Classification | | December 31, 2017 | January 1, 2018 |
|---|---|---|---|---|
| | IAS 39 | IFRS 9 | | |
| Trade and other receivables | Loans and receivables | At amortized cost | 28,017 | 28,017 |
| Accounts receivable, related parties | Loans and receivables | At amortized cost | 11,358 | 11,358 |
| Cash and Cash equivalents | At amortized cost | At amortized cost | 30,586 | 30,586 |
| Assets in Sistema Capital trust management | At fair value through profit or loss | At fair value through profit or loss | 9,600 | 9,600 |
| Notes | Available-for-sale | At fair value through OCI | 57 | 57 |
| Cross-currency swap designated as cash flow hedge | At fair value through OCI | At fair value through OCI | 8,403 | 8,403 |
| Bank deposits | Loans and receivables | At amortized cost | 27,836 | 27,836 |
| Loans | Loans and receivables | At amortized cost | 5,415 | 4,935 |
| Notes | Loans and receivables | At amortized cost | 8,480 | 8,480 |
| Other | Loans and receivables | At amortized cost | 1,810 | 1,810 |
| **Total** | | | **131,562** | **131,082** |

The Group recognized the cumulative effect arising from the transition to IFRS 9 as an adjustment to the opening balance of equity. Prior period comparatives have not been restated.

**IFRS 15, *"Revenue from Contracts with Customers"***—The standard establishes a single comprehensive framework for the determination and recognition of revenue to be applied to all contracts with customers. IFRS 15 replaces the existing standards IAS 18, "*Revenue"*, and IAS 11, "*Construction Contracts"*. The core principle of IFRS 15 is that an entity should recognize revenue to accurately reflect the transfer of promised goods or services to customers in an amount that is equal to the consideration to which the entity expects to be entitled in exchange for those goods or services.

The most significant impact of the adoption of IFRS 15 on the Group's consolidated financial statements related to the deferral of certain incremental costs, which were incurred in acquiring or fullfilling a contracts with a customers.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

**2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND NEW ACCOUNTING PRONOUNCEMENTS (Continued)**

The Group utilized the option for simplified initial application, meaning that those contracts that were not completed by January 1, 2018 were recognized as if they had been accounted for under IFRS 15 from the very beginning. The cumulative effect arising from the transition amounted to RUB 3.1 billion gain (2.5 billion net of tax) and was recognized as an adjustment to the opening balance of equity. The prior period comparatives were not restated.

The effects of implementation of IFRS 15 on the Group financial statements as of December 31, 2018 are summarized in Note 3.

***IFRS 16, "Leases"***—The standard requires lessees to recognize assets and liabilities for all leases and to present the rights and obligations associated with these leases in the statement of financial position. The standard also includes a new definition of a lease and requirements for its presentation, new disclosures requirements and changes in the accounting for sale and leaseback transactions.

The Group elected for an early adoption of the IFRS 16 standard effective as of January 1, 2018 concurrent with the adoption of the new IFRS 15 standard on revenue recognition.

In applying IFRS 16 for the first time, the Group used the following practical expedients permitted by the standard:

- Relief from the requirement to reassess whether a contract is, or contains the lease for contracts existing as of january 1, 2018;
- The use of a single discount rate to a portfolio of leases with reasonably similar characteristics;

  reliance on previous assessments on whether leases are onerous;
- Exclusion of initial direct costs for the measurement of the right-of-use asset at the date of initial application, and
- Use of hindsight in determining the lease term if the contract contains options to extend or terminate the lease.

As a result of the application of the IFRS 16 standard the Group has recognised an additional lease liability and right-of-use assets in the amount of RUB 141 billion. On initial application the balance relating to leased equipment previously included in property, plant and equipment was reclassified to right-of-use assets. The lease liability previously presented within borrowings has been presented separately.

As of January 1, 2018 the weighted average borrowing rate applied by the Group to discount its lease liabilities amounted to 8.83%.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND NEW ACCOUNTING PRONOUNCEMENTS (Continued)

The reconciliation between the operating lease commitments disclosed under IAS 17 as of December 31, 2017 discounted at the weighted average rate and lease liability recognized under IFRS 16 at January 1, 2018 is presented below:

| | January 1, 2018 |
|---|---|
| Operating lease commitments | 15,135 |
| Operating lease commitments discounted at 8.83% | 10,530 |
| Lease liability under IFRS 16 | 148,897 |
| **Difference** | **138,367** |
| Thereof: | |
| Finance lease liability recognized at December 31, 2017 | 11,056 |
| Lease liability related to exclusive right to use trademark | 1,808 |
| Extention options reasonably certain to be exercised | 125,503 |

The most significant difference between the discounted value of the operating lease commitments as of December 31, 2017 and the value of lease liability under IFRS 16 recognised at January 1, 2018, pertains to the requirements of the previously applied standard IAS 17 that in determining its lease operating commitments, the Group only considers future payments under the non-cancellable period of leases. Under the new lease standard, when determining a lease liability, the Group is required to consider existing extension options which are reasonably certain to be exercised.

Prior period comparatives were not restated. Lease liabilities as of December 31, 2017 include financial lease obligations recognized in accordance with IAS 17 Leases.

Other standards, interpretations and amendments adopted by the Group on January 1, 2018 had no 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:

| | |
|---|---|
| Amendments to IAS 28 | Long-term Interests in Associates and Joint Ventures[(1)] |
| IFRIC 23 | Uncertainty over Income Tax Treatments[(1)] |
| Amendments to IFRS 9 | Prepayment Features With Negative Compensation[(1)] |
| Amendments IFRSs | Annual Improvements to IFRSs 2015-2017 Cycle[(1)] |
| Amendments to Conceptual Framework | Conceptual Framework in IFRS standards[(2)] |
| IFRS 17 | Insurance Contracts[(3)] |
| Amendments to IFRS 10 and IAS 28 | Sale or Contribution of Assets between an Investor and its Associate or Joint Venture[(4)] |

(1) Effective for annual periods beginning on or after January 1, 2019, with earlier application permitted.

(2) Effective for annual periods beginning on or after January 1, 2020, with earlier application permitted.

(3) Effective for annual periods beginning on or after January 1, 2021, with earlier application permitted.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND NEW ACCOUNTING PRONOUNCEMENTS (Continued)

(4) The effective date for these amendments was deferred indefinitely. Early adoption continues to be permitted.

These IFRS pronouncements are not expected to have a material impact on the Group's consolidated financial statements.

## 3. EFFECT FROM IFRS 15 IMPLEMENTATION

The effects of IFRS 15 adoption on the Group's consolidated statement of financial position as of December 31, 2018 are presented below:

| | As if IFRS 15 was not applied | IFRS 15 adjustments | As reported |
|---|---|---|---|
| **ASSETS** | | | |
| NON-CURRENT ASSETS: | | | |
| Property, plant and equipment | 278,002 | (1,559) | 276,443 |
| Other intangible assets | 88,945 | 7,017 | 95,962 |
| Investments in associates | 10,772 | (37) | 10,735 |
| Other non financial assets | 3,424 | 1,614 | 5,038 |
| **Total non-current assets** | **640,024** | **7,035** | **647,059** |
| CURRENT ASSETS: | | | |
| Other non financial assets | 1,238 | 100 | 1,338 |
| **Total current assets** | **268,834** | **100** | **268,934** |
| **TOTAL ASSETS** | **908,858** | **7,135** | **915,993** |
| **EQUITY AND LIABILITIES** | | | |
| EQUITY: | | | |
| Retained earnings | 108,243 | 2,703 | 110,946 |
| Accumulated other comprehensive loss | (1,158) | 94 | (1,064) |
| Equity attributable to owners of the Company | 62,477 | 2,797 | 65,274 |
| Non-controlling interests | 12,269 | 22 | 12,291 |
| **Total equity** | **74,746** | **2,819** | **77,565** |
| NON-CURRENT LIABILITIES: | | | |
| Deferred tax liabilities | 23,740 | 699 | 24,439 |
| **Total non-current liabilities** | **542,258** | **699** | **542,957** |
| CURRENT LIABILITIES: | | | |
| Contract liabilities | 17,980 | 3,617 | 21,597 |
| **Total current liabilities** | **291,854** | **3,617** | **295,471** |
| **TOTAL EQUITY AND LIABILITIES** | **908,858** | **7,135** | **915,993** |

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 3. EFFECT FROM IFRS 15 IMPLEMENTATION (Continued)

The effects of IFRS 15 adoption on the Group's consolidated statements of profit or loss for the twelve months ended December 31, 2018 are presented below:

| | As if IFRS 15 was not applied | IFRS 15 adjustments | As reported |
|---|---|---|---|
| Service revenue | 413,067 | (2,177) | 410,890 |
| **Revenue** | **482,470** | **(2,177)** | **480,293** |
| Cost of services | 114,458 | (2,057) | 112,401 |
| Cost of goods | 64,169 | (300) | 63,869 |
| Selling, general and administrative expenses | 91,887 | (3,941) | 87,946 |
| Depreciation and amortization | 100,687 | 3,901 | 104,588 |
| **Operating profit** | **115,965** | **220** | **116,185** |
| **Profit before tax** | **83,631** | **220** | **83,851** |
| Income tax expense | 16,925 | 44 | 16,969 |
| **Profit for the year** | **66,706** | **176** | **66,882** |
| Profit for the period attributable to: | | | |
| Owners of the Company | 6,672 | 176 | 6,848 |

The effects of IFRS 15 adoption on the Group's consolidated statements of cash flows for the twelve months ended December 31, 2018 are presented below:

| | As if IFRS 15 was not applied | IFRS 15 adjustments | As reported |
|---|---|---|---|
| **CASH FLOWS FROM OPERATING ACTIVITIES:** | | | |
| Profit for the year | 7,656 | 176 | 7,832 |
| **Adjustments for:** | | | |
| Depreciation and amortization | 100,687 | 3,901 | 104,588 |
| Income tax expense | 16,925 | 44 | 16,969 |
| **Movements in operating assets and liabilities:** | | | |
| Decrease in trade and other payables and other current liabilities | (10,896) | (266) | (11,162) |
| **NET CASH PROVIDED BY OPERATING ACTIVITIES** | **150,535** | **3,855** | **154,390** |
| **CASH FLOWS FROM INVESTING ACTIVITIES:** | | | |
| Cost to obtain and fulfill contracts, paid | — | (4,764) | (4,764) |
| Other investing activities | (909) | 909 | — |
| **NET CASH USED IN INVESTING ACTIVITIES** | **(74,534)** | **(3,855)** | **(78,389)** |

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 4. SIGNIFICANT ACCOUNTING JUDGMENTS, ESTIMATES AND ASSUMPTIONS

### 1. Critical accounting estimates

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.

### 2. 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 license 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 20 and 23 for further information.

### 3. Impairment of non-current assets

The Group has made significant investments including in property, plant and equipment, intangible assets, goodwill, right-of-use assets, acquiring and fulfilling of contracts and other.

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

**4. SIGNIFICANT ACCOUNTING JUDGMENTS, ESTIMATES AND ASSUMPTIONS (Continued)**

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.

All of the Group's operations are in countries with emerging markets. The political and economic situation in these countries may change rapidly which could potentially have a significant impact on these operations. The changing state of the world economy, and increased macroeconomic risks also impact the assessment of cash flow forecasts and the discount rates applied.

There are significant variations between different markets with respect to growth, mobile penetration, Average revenue per user, the Company's market share and similar parameters, which result in differences in operating margins. The future developments of operating margins are important in the Group's impairment assessments, and the long-term estimates of these margins are highly uncertain.

See Note 22 for further information.

**4. 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 28 for further information.

**5. Provisions and contingencies**

The Group is subject to various legal proceedings, disputes and claims, including regulatory discussions related to the Group's business, licenses, 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 Note 27 and Note 34 for further information.

**6. 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

**6. Right-of-use assets and lease liabilities (Continued)**

considers all facts and circumstances that create the economic incentive for the Group to excise 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 our 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.

**7. 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 of 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 Note 18 and Note 30 for further information.

**5. BUSINESS ACQUISITIONS AND DISPOSALS**

**1. Acquisitions in 2018**

***Acquisition of Kulturnaya Sluzhba***—In January 2018, the Group acquired a 78.2% ownership interest in Kulturnaya Sluzhba LLC ("KS"), operating under the trademark Ponominalu.ru. The purchase price comprised a cash payment, deferred payment due within 12 months from the acquisition date, and a contingent consideration to be paid to the sellers if agreed upon financial targets are met by KS. As of December 31, 2018, the Group paid the full amount of a RUB 54 million contingent consideration to the seller.

***Acquisition of Moskovskaia Direktciia Teatralno-Kontcertnyh i Sportivno-Zrelishchnyh Kass***—In February 2018, the Group acquired a 100% ownership interest in Moskovskaia Direktciia Teatralno-Kontcertnyh i Sportivno-Zrelishchnyh Kass LLC ("MDTZK"), operating under the trademark Ticketland.ru. The purchase price comprised of both cash payment and deferred payment payable within 12 months from the acquisition date.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

**5. BUSINESS ACQUISITIONS AND DISPOSALS (Continued)**

These acquisitions allow the Group to enter the event ticketing market, whilst also broadening the Group's suite of digital services.

***Acquisition of Progressivniye Technologii (ProgTech)***—In August 2018, the Group acquired a 99% ownership interest in science and production association Progressivniye Technologii CJSC, a provider of fixed-line services in the cities of Zhukovskiy and Anapa. The acquisition of ProgTech allows the Group to strengthen its position in these local markets and benefit from the expected synergies. The purchase price comprised of cash payment and deferred payment. The Group will make a deferred payment of RUB 11 million in 12 months after the acquisition date, and of RUB 21 million in 24 months after the acquisition date.

***Acquisition of IT-Grad***—In December 2018, the Group acquired a 100% ownership interest in IT-Grad 1 Cloud LLC (IT-Grad), one of the largest cloud services providers on the Russian IaaS market. The acquisition allows the Group to strengthen its presence in the Russian cloud services market. The purchase price comprised of cash payment of RUB 1,515 million and a contingent consideration. The Group will pay the contingent consideration of RUB 691 million in 8 months after the acquisition date and of RUB 249 million in 18 months after the acquisition date following certain conditions, including the transfer of rights on tangible and intangible assets. The contingent consideration could also be reduced by the amount of any losses incurred by the Group in respect to any tax or other claims relating to the pre-acquisition period. In case the amount of losses incurred exceeds the amount of contingent consideration, the sellers have indemnified the Group for the amounts in excess. As of the acquisition date, the Group recognized the contingent consideration in the amount of RUB 907 million.

The business combinations were accounted for by applying the acquisition method.

The fair values of the identifiable assets and liabilities of acquired companies as at the dates of acquisitions were the following (including the preliminary purchase price allocation for IT-Grad):

| | KS | MDTZK | ProgTech | IT-Grad |
|---|---|---|---|---|
| Goodwill | 479 | 2,033 | 213 | 1,877 |
| Customer base | 37 | 727 | 123 | 643 |
| Trademark | 129 | 779 | — | — |
| Other non-current assets | 43 | 145 | 172 | 32 |
| Current assets | 117 | 202 | 15 | 44 |
| Cash and cash equivalents | 39 | 542 | 28 | 13 |
| Current liabilities | (383) | (868) | (80) | (59) |
| Liability under put option agreement over non-controlling interests | (106) | — | — | — |
| Non-current liabilities | (34) | (370) | (76) | (128) |
| **Total consideration** | **321** | **3,190** | **395** | **2,422** |
| ***Including:*** | | | | |
| Fair value of contingent consideration | 54 | — | 3 | 907 |
| Cash paid | 267 | 3,190 | 392 | 1,515 |

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

**5. BUSINESS ACQUISITIONS AND DISPOSALS (Continued)**

The excess of the total consideration over the value of net assets acquired of KS in the amount of RUB 479 million was recorded as goodwill arising from the acquisition of one of the leading players in the Russian event ticketing industry and expected synergies. This has been allocated to the "Ponominalu" operating segment.

The excess of the total consideration over the value of net assets acquired through MDTZK, in the amount of RUB 2,033 million was recorded as goodwill arising from the acquisition of one of the leading players in the Russian event ticketing industry and expected synergies. This has been allocated to the "Ticketland" operating segment.

The excess of the total consideration over the value of Progtech' net assets acquired, in the amount of RUB 213 million, was recorded as goodwill arising from expected synergies. This has been allocated to the "Moscow fixed line" operating segment.

The excess of the total consideration over the value of net assets acquired of IT-Grad in the amount of RUB 1,877 million was recorded as goodwill arising from expected synergies and market position obtained. This has been allocated to the "Russia Convergent" operating segment.

Goodwill recognized as a result of the acquisitions is not expected to be deductible for income tax purposes.

KS's trademark is amortized over 10 years, along with its customer base.

The trademark of MDTZK is amortized over 10 years, along with its customer base.

The customer base acquired upon acquisition of Progtech is amortized over 15 years.

The customer base acquired upon acquisition of IT-Grad is amortized over 7 years.

According to the terms of the purchase agreements, deferred payments payable by the Group could be reduced by the amount of any losses incurred by the Group in respect of any 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 Group recognized the following liabilities and indemnification assets in respect to deferred payments on aforementioned acquisitions on acquisition dates:

| | KS | MDTZK | ProgTech |
|---|---|---|---|
| Expected timing of deferred payment | January, 2019 | February, 2019 | August, 2019 - August, 2020 |
| Deferred payment per agreement | 78 | 60 | 32 |
| Provision for tax liabilities related to pre-acquisition period as of acquisition date | (134) | (125) | (29) |
| Liability on deferred payment | — | — | (3) |
| Indemnification asset | 56 | 65 | — |

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 5. BUSINESS ACQUISITIONS AND DISPOSALS (Continued)

The Group recognized the following liabilities and indemnification assets in respect to deferred payments on aforementioned acquisitions as of December 31, 2018:

| | KS | MDTZK | ProgTech |
|---|---|---|---|
| Deferred payment per agreement | 78 | 60 | 32 |
| Provision for tax liabilities related to the pre-acquisition period as of December 31, 2018 | (49) | (67) | (29) |
| Liability on deferred payment | (29) | — | (3) |
| Indemnification asset | — | 7 | — |

The Group also entered into an option agreement with the non-controlling shareholders of the KS. Pursuant to the agreement the Group has the right and obligation in the form of a call and put option, with the put option exercisable at the request of non-controlling shareholders, to acquire their shares at a price calculated based on the operating and financial results of KS.

***Acquisition of Dekart***—In October 2018, the Group acquired Dekart property complex from Sistema for a total consideration of RUB 5,242 million. The property complex comprises office facilities leased by the Group, subsidiaries of Sistema and other counterparties, parking premises and engineering networks and operates under management agreement with Business-Nedvizhimost, a subsidiary of Sistema. The acquisition was accounted for as a transaction under common control directly in equity. The acquisition enables the Group to optimize its rental expenses and enchance its investment property portfolio.

***Acquisition of MTS Bank***—In July 2018, the Group increased ownership share in the Group associate MTS Bank from 26.6% to 55.4% and obtained control over the entity.Consideration paid to Sistema for additional share in MTS Bank amounted to RUB 8,273 million. The acquisition was accounted for as a transaction with entities under common control directly in equity.

***Acquisition of Serebryaniy Bor***—In December 2018, the Group acquired Serebryaniy Bor property complex from Sistema for a total consideration of RUB 1,711 million. The property complex comprises land, nonresidential buildings leased by the Group and other counterparties, and engineering networks. The acquisition was accounted for as a transaction under common control directly in equity.

The following table summarizes the details of acquisitions of subsidiaries under common control finalized in 2018:

| Acquired company | Consideration paid net of cash acquired* | Cash acquired | Assets acquired other than cash | Liabilities assumed |
|---|---|---|---|---|
| Dekart | 4,658 | — | 3,406 | 125 |
| Serebryaniy Bor | 1,711 | — | 383 | — |
| MTS Bank | 6,873 | 1,401* | 126,180 | 128,165 |

* Included in consolidated statement of cash flows within cash flows from financing activities as transactions with entities under common control

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 5. BUSINESS ACQUISITIONS AND DISPOSALS (Continued)

### 2. Acquisitions in 2017

***Acquisition of Bashkortostan Cellular Communication***—In July 2017, the Group acquired a 100% ownership interest in Bashkortostan Cellular Communication OJSC ("BCC"). BCC operates in the Republic of Bashkortostan and holds rights to use 450 MHz and 2,100 MHz radio frequencies. The acquisition enhances the Group's spectrum of resources in the Republic of Bashkortostan. The purchase price comprised of cash payment and a contingent consideration, payable in 12 months from the acquisition date.

***Acquisition of Oblachny Retail***—In October 2017, the Group acquired a 50.82% of ownership interest in the Russian retail software developer Oblachny Retail LLC ("Oblachny Retail"), operating under trademark LiteBox, with a call and put option arrangement existing over another 49.18% of shares. The deal allows the Group to enter the cloud-based cash register market as a fully licensed fiscal data operator ("FDO") and a provider of integrated digital cash management solutions for B2B clients. The purchase price comprised of cash payment and a contingent consideration, payable within 12 months from the acquisition date. As a part of business combination, the Group also contributed RUB 420 million to the share capital of the acquiree to provide funds for future development. The Group has elected to measure the non-controlling interests in the acquiree at fair value.

***Acquisition of Praliss Enterprises***—In December 2017, the Group purchased a 100% ownership interest in Praliss Enterprises ("Praliss"), thus acquiring one of the world's leading eSport clubs—Gambit Esports. The acquisition is a part of the Group's digital innovation strategy. The purchase price comprised of cash payment, a contingent consideration, payable within 12 months from the acquisition date, and the earn-out amounts to be paid to the sellers in the course of two years from 2018 to 2019 on the basis that agreed upon operational targets are met by Praliss.

The fair values of the identifiable assets and liabilities of acquired companies as at the dates of acquisitions were the following:

| | BCC | Oblachny Retail | Praliss |
|---|---|---|---|
| Goodwill | 62 | 524 | 208 |
| Licenses | 260 | — | — |
| Other non-current assets | 21 | 181 | 132 |
| Current assets | 5 | 23 | — |
| Cash and cash equivalents | 13 | 420 | — |
| Current liabilities | (15) | (123) | — |
| Liability under put option agreement over non-controlling interests | — | (402) | — |
| Non-current liabilities | (54) | (33) | (27) |
| **Total consideration** | **292** | **590** | **313** |
| ***Including:*** | | | |
| Fair value of contingent consideration and earn-out payments | 72 | 10 | 93 |
| Additional contribution | — | 420 | |
| Cash paid | 220 | 160 | 220 |

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

**5. BUSINESS ACQUISITIONS AND DISPOSALS (Continued)**

The excess of the total consideration over the value of net assets acquired of BCC in the amount of RUB 62 million was allocated to goodwill arising from expected synergies. This has been attributed to the "Russia Convergent" segment.

The excess of the total consideration over the value of net assets acquired of Oblachny Retail in the amount of RUB 524 million, was allocated to goodwill arising from the company employees and expected synergies. This has been assigned to the "Oblachny Retail" operating segment (Note 22).

The excess of the total consideration over the value of net assets acquired of Praliss in the amount of RUB 208 million was allocated to goodwill arising from expected synergies. This has been attributed to the "eSports" operating segment.

None of the goodwill recognized is expected to be deductible for income tax purposes.

Licenses acquired upon acquisition of BCC are amortized over a period of their remaining useful life of 15 years on average. Software acquired through Oblachny Retail is amortized over a period of their remaining useful life of 5 years on average.

The Group also entered into an option agreement with the shareholders of the Litebox, pursuant to which the Group has the right and obligation, at the request of non-controlling shareholders, to acquire their shares at a price calculated based on the operating results of Oblachny Retail for 2019-2020.

As of December 31, 2018 the consideration payable relating to acquisitions of BCC, Oblachny Retail and Praliss were fully settled by the Group, except for earn-out payments due on acquisition of Praliss in the amount of RUB 13 million.

**3. Acquisition and disposal in 2016**

***Acquisition of Smarts-Yoshkar-Ola***—In September 2016, the Group acquired 100% of the shares of Smarts-Yoshkar-Ola CJSC ("Smarts-Yoshkar-Ola"), operating in the Republic of Mari El and holding rights to use 1800 MHz radio frequencies. The acquisition enhances the Group's spectrum resources in the Republic of Mari El. The business combination was accounted for by applying the acquisition method.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 5. BUSINESS ACQUISITIONS AND DISPOSALS (Continued)

The following table summarizes the purchase price allocation for SMARTS-Yoshkar-Ola at the date of acquisition:

| | Smarts-Yoshkar-Ola |
|---|---|
| Cash and cash equivalents | 5 |
| Current assets | 5 |
| Licenses | 323 |
| Other non-current assets | 14 |
| Current liabilities | (30) |
| Non-current liabilities | (69) |
| Gain from bargain purchase (included in other operating income in the consolidated statement of profit or loss) | (235) |
| **Total consideration** | **13** |
| ***Including:*** | |
| Contingent consideration | 3 |
| Cash paid | 10 |

The total consideration was initially determined by a contract concluded between the Group and the seller (SMARTS Group) in 2014. To determine the fair value of assets acquired, the Group used comparative prices of the first radio frequencies auction that was held in Russia in 2015, which gave rise to the recognition of a gain from bargain purchase.

As of December 31, 2018 the consideration payable was fully settled by the Group.

The details on disposal of 50.01% share in LLC "Universal Mobile Systems" ("UMS") are disclosed in Note 10.

***Pro forma results of operations***—The following pro forma financial data for the years ended December 31, 2018, 2017 and 2016 give effect to the business combinations as they had been completed at the beginning of the year.

| Pro forma: | 2018 (MTS Bank, MDTZK, Kulturnaya Sluzhba, Progtech, Dekart, IT Grad, Serebryaniy Bor) | 2017 (BCC, Oblachny Retail, Praliss) | 2016 (SMARTS-Yoshkar-Ola) |
|---|---|---|---|
| Net revenues | 491,936 | 443,178 | 435,694 |
| Net income | 8,194 | 55,881 | 48,465 |

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, 2016, 2017, or 2018, 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.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 5. BUSINESS ACQUISITIONS AND DISPOSALS (Continued)

Since their respective acquisition dates, companies acquired in 2016 contributed revenue in the amount of RUB 1 million and net loss in the amount of RUB 15 million to the consolidated statement of profit or loss for the year ended December 31, 2016. The companies acquired in 2017 contributed revenue in the amount of RUB 37 million and net loss in the amount of RUB 105 million to the consolidated statement of profit or loss for the year ended December 31, 2017. Companies acquired in 2018 contributed revenue in the amount of RUB 13,261 million and net income in the amount of RUB 615 million to the consolidated statement of profit or loss for the year ended December 31, 2018.

## 6. 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. MTS Group's management evaluates the segments' performance of each segment based on revenue and operating profit, excluding depreciation and amortization. Management does not analyze assets or liabilities by reportable segments.

The Group identified the following reportable segments:

***Russia Convergent:*** 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.

***Moscow fixed line:*** represents the results of fixed line operations carried out in Moscow by the Group's subsidiary MGTS. MGTS is the only licensed public switched telephone network ("PSTN") operator in Moscow and is considered a natural monopoly under Russian antimonopoly regulations. Consequently, a substantial part of the services provided by MGTS are subject to governmental regulation.

***Ukraine:*** represents the results of mobile and fixed line operations carried out across multiple regions of Ukraine.

***MTS Bank:*** represents the results of banking services rendered to customers across regions of Russia.

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 Turkmenistan, Armenia, System Integrator, Satellite TV and others.

In 2017, the management has started to assess Russia Convergent, NVision Czech Republic, Stream, Navigation Information Systems and Metro-Telecom separately to monitor the results and make funding decisions on this basis, and thus has presented them separately. Related financial information was, retrospectively, restated.

The intercompany eliminations presented below primarily consist of sales transactions between segments conducted under the normal course of operations.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 6. SEGMENT INFORMATION (Continued)

Financial information by reportable segments is presented below:

### Year ended December 31, 2018:

| | Russia Convergent | Moscow fixed line | Ukraine | MTS Bank | Total | Other | HQ and elimination | Consolidated |
|---|---|---|---|---|---|---|---|---|
| **Revenue** | | | | | | | | |
| External customers | 386,838 | 34,348 | 28,826 | 11,313 | 461,325 | 19,550 | (582) | 480,293 |
| Intersegment | 6,258 | 4,498 | 891 | 538 | 12,185 | 12,780 | (24,965) | — |
| **Total revenue** | **393,096** | **38,846** | **29,717** | **11,851** | **473,510** | **32,330** | **(25,547)** | **480,293** |
| Operating profit | 106,296 | 12,695 | 6,658 | 1,291 | 126,940 | 1,072 | (11,827) | 116,185 |
| Depreciation and amortization | (82,457) | (10,867) | (9,346) | (547) | (103,217) | (3,620) | 2,249 | (104,588) |
| **Other disclosure:** | | | | | | | | |
| Capital expenditures | 67,863 | 6,306 | 15,151 | 683 | 90,003 | 13,596 | — | 103,599 |

### Year ended December 31, 2017:

| | Russia Convergent | Moscow fixed line | Ukraine | Total | Other | HQ and elimination | Consolidated |
|---|---|---|---|---|---|---|---|
| **Revenue** | | | | | | | |
| External customers | 365,846 | 34,350 | 24,992 | 425,188 | 17,618 | 105 | 442,911 |
| Intersegment | 5,136 | 4,683 | 1,111 | 10,930 | 12,785 | (23,715) | — |
| **Total revenue** | **370,982** | **39,033** | **26,103** | **436,118** | **30,403** | **(23,610)** | **442,911** |
| Operating profit | 93,821 | 8,801 | 5,258 | 107,880 | (871) | (10,909) | 96,100 |
| Depreciation and amortization | 59,942 | 10,642 | 6,106 | 76,690 | 3,481 | (259) | 79,912 |
| **Other disclosure:** | | | | | | | |
| Capital expenditures | 65,790 | 7,403 | 10,573 | 83,766 | 2,392 | — | 86,158 |

### Year ended December 31, 2016:

| | Russia Convergent | Moscow fixed line | Ukraine | Total | Other | HQ and elimination | Consolidated |
|---|---|---|---|---|---|---|---|
| **Revenue** | | | | | | | |
| External customers | 355,056 | 34,796 | 27,026 | 416,878 | 18,689 | 125 | 435,692 |
| Intersegment | 4,849 | 4,871 | 2,161 | 11,881 | 14,423 | (26,304) | — |
| **Total revenue** | **359,905** | **39,667** | **29,187** | **428,759** | **33,112** | **(26,179)** | **435,692** |
| Operating profit | 81,484 | 10,850 | 3,599 | 95,933 | 3,523 | (11,787) | 87,669 |
| Depreciation and amortization | 60,087 | 10,900 | 6,304 | 77,291 | 4,395 | (104) | 81,582 |
| **Other disclosure:** | | | | | | | |
| Capital expenditures | 61,208 | 7,316 | 7,666 | 76,190 | 3,995 | — | 80,185 |

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 6. SEGMENT INFORMATION (Continued)

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:

| | For the year ended December 31, | | |
|---|---|---|---|
| **Revenue** | **2018** | **2017** | **2016** |
| Russia | 440,899 | 405,365 | 392,764 |
| Other | 39,394 | 37,546 | 42,928 |
| **Total revenue** | **480,293** | **442,911** | **435,692** |

| **Non-current assets**[1] | **As of December 31, 2018** | **As of December 31, 2017** |
|---|---|---|
| Russia | 357,361 | 339,693 |
| Other | 54,151 | 37,048 |
| **Total non-current assets:** | **411,512** | **376,741** |

(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.

### Disaggregation of revenue:

| **Year ended December 31, 2018:** | **Russia Convergent** | **Moscow fixed line** | **Ukraine** | **MTS Bank** | **Total** | **Other** | **HQ and elimination** | **Consolidated** |
|---|---|---|---|---|---|---|---|---|
| **Revenue** | | | | | | | | |
| *Mobile services* | 304,049 | 1,487 | 27,951 | — | 333,487 | 6,663 | 104 | 340,254 |
| *Fixed line services* | 22,939 | 32,739 | 241 | — | 55,919 | 377 | — | 56,296 |
| *Finance services* | — | — | — | 11,313 | 11,313 | — | 240 | 11,553 |
| *Integration services* | 444 | 5 | — | — | 449 | 1,089 | — | 1,538 |
| *Sales of goods* | 59,406 | 117 | 634 | — | 60,157 | 10,172 | (926) | 69,403 |
| *Other services* | — | — | — | — | — | 1,249 | — | 1,249 |
| External Customers | 386,838 | 34,348 | 28,826 | 11,313 | 461,325 | 19,550 | (582) | 480,293 |
| Intersegment | 6,258 | 4,498 | 891 | 538 | 12,185 | 12,780 | (24,965) | — |
| **Total revenue** | **393,096** | **38,846** | **29,717** | **11,851** | **473,510** | **32,330** | **(25,547)** | **480,293** |
| **Thereof:** | | | | | | | | |
| Recognised over time | 327,432 | 34,231 | 28,192 | 11,313 | 401,168 | 9,378 | (582) | 409,964 |
| Recognised at point of time | 59,406 | 117 | 634 | — | 60,157 | 10,172 | — | 70,329 |
| | **386,838** | **34,348** | **28,826** | **11,313** | **461,325** | **19,550** | **(582)** | **480,293** |

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 6. SEGMENT INFORMATION (Continued)

| Year ended December 31, 2017: | Russia Convergent | Moscow fixed line | Ukraine | MTS Bank | Total | Other | HQ and elimination | Consolidated |
|---|---|---|---|---|---|---|---|---|
| **Revenue** | | | | | | | | |
| *Mobile services* | 297,273 | 798 | 24,722 | — | 322,793 | 10,237 | 105 | 333,135 |
| *Fixed line services* | 22,358 | 33,453 | 208 | — | 56,019 | 353 | — | 56,372 |
| *Finance services* | — | — | — | — | — | — | — | — |
| *Integration services* | 191 | — | — | — | 191 | 1,062 | — | 1,253 |
| *Sales of goods* | 46,024 | 99 | 62 | — | 46,185 | 5,966 | — | 52,151 |
| *Other services* | — | — | — | — | — | — | — | — |
| External Customers | 365,846 | 34,350 | 24,992 | — | 425,188 | 17,618 | 105 | 442,911 |
| Intersegment | 5,136 | 4,683 | 1,111 | — | 10,930 | 12,785 | (23,715) | — |
| **Total revenue** | **370,982** | **39,033** | **26,103** | **—** | **436,118** | **30,403** | **(23,610)** | **442,911** |
| **Thereof:** | | | | | | | | |
| Recognised over time | 319,822 | 34,251 | 24,930 | — | 379,003 | 11,652 | 105 | 390,760 |
| Recognised at point of time | 46,024 | 99 | 62 | — | 46,185 | 5,966 | — | 52,151 |
| | **365,846** | **34,350** | **24,992** | **—** | **425,188** | **17,618** | **105** | **442,911** |

| Year ended December 31, 2016: | Russia Convergent | Moscow fixed line | Ukraine | MTS Bank | Total | Other | HQ and elimination | Consolidated |
|---|---|---|---|---|---|---|---|---|
| **Revenue** | | | | | | | | |
| *Mobile services* | 288,547 | 425 | 26,724 | — | 315,696 | 12,395 | 125 | 328,216 |
| *Fixed line services* | 21,685 | 34,346 | 243 | — | 56,274 | 284 | — | 56,558 |
| *Finance services* | — | — | — | — | — | — | — | — |
| *Integration services* | 185 | — | — | — | 185 | 1,527 | — | 1,712 |
| *Sales of goods* | 44,639 | 25 | 59 | — | 44,723 | 4,483 | — | 49,206 |
| *Other services* | — | — | — | — | — | — | — | — |
| External Customers | 355,056 | 34,796 | 27,026 | — | 416,878 | 18,689 | 125 | 435,692 |
| Intersegment | 4,849 | 4,871 | 2,161 | — | 11,881 | 14,423 | (26,304) | — |
| **Total revenue** | **359,905** | **39,667** | **29,187** | **—** | **428,759** | **33,112** | **(26,179)** | **435,692** |
| **Thereof:** | | | | | | | | |
| Recognised over time | 310,417 | 34,771 | 26,967 | — | 372,155 | 14,206 | 125 | 386,486 |
| Recognised at point of time | 44,639 | 25 | 59 | — | 44,723 | 4,483 | — | 49,206 |
| | **355,056** | **34,796** | **27,026** | **—** | **416,878** | **18,689** | **125** | **435,692** |

## 7. 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.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 7. REVENUE FROM CONTRACTS WITH CUSTOMERS (Continued)

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 as well as selling equipment, accessories and software. Products and services may be sold separately or in bundle packages. The most significant part of our revenue relates to prepaid contracts.

Revenue for access charges, voice and video calls, 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 sales of goods (mainly mobile handsets and other mobile devices) 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 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.

Revenue from integration 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.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 7. REVENUE FROM CONTRACTS WITH CUSTOMERS (Continued)

Disaggregation of revenue for the years ended December 31, 2018, 2017 and 2016 is dislosed in the tables below.

**Disaggregation of revenue:**

| Year ended December 31, 2018: | Russia* | Ukraine | Other | HQ and elimination | Consolidated |
|---|---|---|---|---|---|
| **Revenue** | | | | | |
| *Mobile services* | 312,649 | 28,828 | 6,687 | (3,274) | 344,889 |
| *Fixed line services* | 60,401 | 255 | 199 | (59) | 60,796 |
| *Finance services* | 11,851 | — | 0 | — | 11,851 |
| *Integration services* | 7,392 | — | 0 | (655) | 6,737 |
| *Sales of goods* | 69,174 | 634 | 643 | (1,048) | 69,403 |
| *Other services* | 1,269 | — | — | — | 1,269 |
| *Eliminations* | (14,652) | — | | — | (14,652) |
| **Total revenue** | **448,083** | **29,717** | **7,529** | **(5,037)** | **480,293** |

* Comprised of the following segments: Russia convergent, Moscow fixed line, MTS Bank and Other (excluding MTS Armenia)

| Year ended December 31, 2017: | Russia* | Ukraine | Other | HQ and elimination | Consolidated |
|---|---|---|---|---|---|
| **Revenue** | | | | | |
| *Mobile services* | 303,991 | 25,815 | 9,588 | (3,819) | 335,575 |
| *Fixed line services* | 60,782 | 226 | 160 | (68) | 61,101 |
| *Finance services* | — | — | — | — | — |
| *Integration services* | 5,571 | — | — | (916) | 4,655 |
| *Sales of goods* | 52,536 | 62 | 381 | (829) | 52,149 |
| *Other services* | — | — | — | — | — |
| *Eliminations* | (10,568) | — | — | — | (10,568) |
| **Total revenue** | **412,312** | **26,103** | **10,129** | **(5,632)** | **442 911** |

| Year ended December 31, 2016: | Russia* | Ukraine | Other | HQ and elimination | Consolidated |
|---|---|---|---|---|---|
| **Revenue** | | | | | |
| *Mobile services* | 294,988 | 28,851 | 12,695 | (5,288) | 331,246 |
| *Fixed line services* | 61,166 | 277 | 98 | (56) | 61,485 |
| *Finance services* | — | — | — | — | — |
| *Integration services* | 5,603 | — | — | (996) | 4,607 |
| *Sales of goods* | 49,648 | 59 | 319 | (821) | 49,205 |
| *Other services* | — | — | — | — | — |
| *Eliminations* | (10,851) | — | — | — | (10,851) |
| **Total revenue** | **400,554** | **29,187** | **13,111** | **(7,160)** | **435,692** |

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 7. REVENUE FROM CONTRACTS WITH CUSTOMERS (Continued)

***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 integration 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:

| | As of | |
|---|---|---|
| | **December 31, 2018** | **January 1, 2018** |
| Receivables | 28,097 | 14,271 |
| Contract assets | 105 | — |
| **Total assets** | **28,202** | **14,271** |
| Less current portion | (28,192) | (14,271) |
| **Total non-current assets** | **10** | **—** |
| Contract liabilities | (22,155) | (18,461) |
| *Thereof:* | | |
| *Mobile and fixed telecommunication services* | (20,094) | (17,156) |
| *Other services* | (1,741) | (1,084) |
| *Loyalty programme* | (320) | (221) |
| **Total liabilities** | **(22,155)** | **(18,461)** |
| Less current portion | 21,597 | 17,696 |
| **Total non-current liabilities** | **(558)** | **(765)** |

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 7. REVENUE FROM CONTRACTS WITH CUSTOMERS (Continued)

Changes in the contract assets and the contract liabilities balances during the period are as follows:

| | Contract assets | Contract liabilities |
|---|---|---|
| **Balance as of January 1, 2018** | | (18,461) |
| Revenue recognised that was included in the contract liability balance at the beginning of the period | — | 10,999 |
| Increase due to cash received, excluding amount recognised as revenue during the period | — | (14,390) |
| Transfers from contract assets to receivables | | |
| Effect of changes in estimates | 105 | — |
| Business combinations | — | (303) |
| **Balance as of December 31, 2018** | **105** | **(22,155)** |

The Group expects to recognize revenue related to performance obligations that were unsatisfied (or partially unsatisfied) as of December 31, 2018 as follows:

| | 2019 | 2020 - 2024 | 2025 - 2029 | After 2029 | Total |
|---|---|---|---|---|---|
| Mobile telecommunication services | (19,536) | (541) | (17) | — | (20,094) |
| Other services | (1,741) | | | | (1,741) |
| Loyalty programme | (320) | — | — | — | (320) |

***Cost to obtain and fulfill a contract***

The Group capitalizes certain incremental costs incurred in acquiring or fullfilling a contract with a customer if the management expects these costs to be recoverable.

Costs of acquiring a contract include commissions paid to a third-party distrubutors as well as the associated remuneration of the Group's commercial employees for obtaining a contract with a customer. These costs are amortized on a straight-line basis over the average subscriber life.

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 for the shorter of equipment useful life or average subscriber life.

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.

As of December 31, 2018 and January 1, 2018 the balances of cost to obtain and fulfill contracts capitalized by the Group amounted to:

| | December 31, 2018 | January 1, 2018 |
|---|---|---|
| Cost to obtain contracts | 7,017 | 6,829 |
| Cost to fulfull contracts | 1,614 | 966 |

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 7. REVENUE FROM CONTRACTS WITH CUSTOMERS (Continued)

As of December 31, 2018 and January 1,2018, the accumulated amortization expense related to cost to obtain and fulfill contracts amounted to 16,908 RUB million and 12,420 RUB million, respectively. Amortization expense related to cost to obtain and fulfill contracts recognized for the year ended December 31, 2018 amounted to 4,371 RUB million. There was no impairment loss relating to the costs capitalized.

## 8. SELLING, GENERAL AND ADMINISTRATIVE EXPENSES

Selling, general and administrative expenses for the years ended December 31, 2018, 2017 and 2016 comprised the following:

| | 2018 | 2017 | 2016 |
|---|---|---|---|
| Salaries and social contributions | 46,769 | 44,605 | 44,347 |
| Advertising and marketing expenses | 10,090 | 9,185 | 10,480 |
| General and administrative expenses | 8,127 | 8,321 | 7,007 |
| Taxes other than income tax | 4,010 | 3,896 | 3,806 |
| Cash collection commission | 3,724 | 3,689 | 3,311 |
| Universal service fund | 3,535 | 3,462 | 3,412 |
| Dealers commission | 3,387 | 6,718 | 6,740 |
| Utilities and maintenance | 2,852 | 9,361 | 9,092 |
| Consulting expenses | 2,067 | 1,975 | 1,618 |
| Billing and data processing | 1,243 | 1,292 | 1,485 |
| Other | 2,142 | 2,682 | 2,748 |
| **Total** | **87,946** | **95,186** | **94,046** |

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 9. FINANCE INCOME AND COSTS

Finance income and costs for the years ended December 31, 2018, 2017 and 2016 comprised the following:

| | 2018 | 2017 | 2016 |
|---|---|---|---|
| **Interest expense:** | | | |
| —Loans and notes | 25,613 | 22,131 | 22,982 |
| —Amortization of debt issuance costs | 415 | 623 | 683 |
| —Lease obligations[1] | 13,917 | 954 | 855 |
| —Provisions: unwinding of discount | 223 | 91 | 94 |
| **Total interest expense** | **40,168** | **23,799** | **24,614** |
| Loss on financial instruments | 1,008 | 2,486 | 25 |
| Other finance costs | 63 | 86 | 2,885 |
| **Total finance costs** | **41,239** | **26,371** | **27,524** |
| Less: amounts capitalized on qualifying assets[2] | (460) | (307) | (388) |
| Less: debt modification and other gain | (2,614) | — | — |
| **Finance costs** | **38,165** | **26,064** | **27,136** |
| Finance income on loans and receivables | | | |
| —Interest income on bank deposits | 5,182 | 4,818 | 4,277 |
| —Interest income on loans issued | 357 | 330 | 510 |
| —Other finance income | 442 | 400 | 486 |
| **Finance income** | **5,981** | **5,548** | **5,273** |
| **Net finance costs** | **32,184** | **20,516** | **21,863** |

(1) Starting from January 1, 2018 the Group has applied IFRS 16, "Leases"

(2) The annual weighted average capitalization rates of 8.2%, 8.2% and 8.3% were used to determine the amount of capitalized interest for the years ended December 31, 2018, 2017 and 2016, respectively.

## 10. OPERATIONS IN UZBEKISTAN

On August 5, 2016, the Group sold its 50.01% stake in UMS LLC, or UMS, a subsidiary in Uzbekistan for USD 1 to UMS's sole remaining shareholder—the State Unitary Enterprise Centre of Radio Communication, Radio Broadcasting and Television of The Ministry of Development of Information Technologies and Communications of the Republic of Uzbekistan.

The results of UMS's operations 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.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 10. OPERATIONS IN UZBEKISTAN (Continued)

**UMS's summary of financial information:**

**Results of discontinued operation**

| | Year ended December 31, 2016 |
|---|---|
| Revenue | 5,115 |
| Expenses | (6,602) |
| **Loss before tax** | **(1,487)** |
| Income tax gain (note 12) | 192 |
| **Loss for the period** | **(1,295)** |
| Loss on sale of discontinued operations | (2,726) |
| **Loss from discontinued operations** | **(4,021)** |
| Loss attributable to non-controlling interests | (654) |
| **Loss to owners of the Company** | **(3,367)** |
| Basic loss per share | (1.69) |
| Diluted loss per share | (1.69) |

**Cash flows from (used in) discontinued operation**

| | Year ended December 31, 2016 |
|---|---|
| Net cash used in operating activities | (543) |
| Net cash used in investing activities | (1,253) |
| Net cash provided by financing activities | 1,234 |

As of August 5, 2016, the carrying amounts of UMS's net assets and reconciliation of the loss on disposal were as follows:

| | |
|---|---|
| Property, plant and equipment | (6,960) |
| Other intangible assets | (2,922) |
| Other non-current assets | (2,577) |
| Cash and cash equivalents | (378) |
| Other current assets | (1,359) |
| Non-current liabilities | 5,113 |
| Current liabilities | 2,484 |
| Non-controlling interest | 1,787 |
| Accumulated other comprehensive income | 2,086 |
| **Consideration received** | — |
| **Loss on disposal of UMS** | **(2,726)** |

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 11. 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 servicing MTS clients. The license for the provision of telecommunication services on the territory of Turkmenistan was valid until the end of July 2018.

According to the IAS 36 (par.12), the Group considered facts described above as an impairment indicators and consequently determined that all long-lived assets attributable to the Turkmenistan subsidiary were impaired. The Group also assessed the recoverability of the current assets and recorded a provision for those that were considered to be impaired. No indicators of impairment were identified in respect of cash and cash equivalents attributable to MTS-TM. Total impairment charges recognized in the Group's consolidated statement of profit or loss for the year ended December 31, 2017 were as follows:

| | |
|---|---|
| Impairment of long-lived assets | 3,204 |
| Current provision for income tax | 100 |
| Provision for doubtful accounts | 74 |
| Other operating expenses | 37 |
| Taxes other than income tax | 20 |
| Deferred income tax | (69) |
| | **3,366** |

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.

In December 2018 the Group started dismantling of terminal network equipment in Turkmenistan and accrued a dismaltlment provision in the amount of RUB 228 million in the Group's consolidated statement of profit or loss.

## 12. 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 tax laws and rates applicable to the periods in which the differences are expected to affect taxable income.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 12. INCOME TAX (Continued)

Significant components of income tax expense for the years ended December 31, 2018, 2017 and 2016 were as follows:

| | 2018 | 2017 | 2016 |
|---|---|---|---|
| Current income tax charge | 19,881 | 20,712 | 15,177 |
| Prior period tax adjustments | (133) | 673 | 98 |
| **Total current income tax** | **19,748** | **21,385** | **15,275** |
| Deferred tax | (2,779) | (2,408) | (137) |
| **Income tax expense on continuing operations** | **16,969** | **18,977** | **15,138** |
| Tax effect from the discontinued operations (Note 10) | — | — | (192) |
| **Total tax expense for the period** | **16,969** | **18,977** | **14,946** |

The statutory income tax rates in jurisdictions in which the Group operates for 2018, 2017 and 2016 were as follows: Russia and Armenia—20%, Ukraine—18%, Turkmenistan—8%, Czech Republic—19%. The Russian statutory income tax rate of 20% reconciled to the Group's effective income tax rate for the years ended December 31, 2018, 2017 and 2016 as follows:

| | 2018 | 2017 | 2016 |
|---|---|---|---|
| **Statutory income tax rate for the year** | **20.0 %** | **20.0 %** | **20.0 %** |
| Adjustments: | | | |
| Expenses not deductible for tax purposes | 0.9 | 1.7 | 2.1 |
| Prior periods tax effects | (0.2) | 0.8 | 0.1 |
| Different tax rate of foreign subsidiaries | (0.3) | — | (0.5) |
| Earnings distribution from subsidiaries | 0.1 | 0.9 | 0.2 |
| Change in fair value of derivative financial instruments | — | 0.4 | 0.3 |
| Derecognition of deferred tax assets | 0.1 | 0.7 | — |
| Other | (0.4) | 0.6 | 0.2 |
| **Effective income tax rate** | **20.2 %** | **25.1 %** | **22.4 %** |

The Group reported the following deferred income tax assets and liabilities in the consolidated statement of financial position:

| | December 31, 2018 | December 31, 2017 |
|---|---|---|
| Deferred tax assets | 11,190 | 5,545 |
| Deferred tax liabilities | (24,439) | (23,773) |
| **Net deferred tax liabilities** | **(13,249)** | **(18,228)** |

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 12. INCOME TAX (Continued)

Movements in the deferred tax assets and liabilities for the year ended December 31, 2017 were as follows:

| | January 1, 2017 | Recognised in profit / loss | Recognised in other comprehensive income | Effect of acquisitions | Effect of derecognition | December 31, 2017 |
|---|---|---|---|---|---|---|
| **Assets / (liabilities) arising from tax effect of:** | | | | | | |
| Depreciation of property, plant and equipment | (19,301) | 599 | (39) | — | (180) | (18,921) |
| Other intangible assets | (7,094) | (290) | (8) | (59) | (3) | (7,454) |
| Potential distributions from/ to Group's subsidiaries/ associates | (3,987) | (175) | 119 | — | — | (4,043) |
| Licenses | (2,099) | 80 | 25 | — | — | (1,994) |
| Customer base | (660) | 124 | — | — | — | (536) |
| Accrued expenses for services | 6,382 | 761 | (9) | — | (3) | 7,131 |
| Lease obligations | 2,199 | 164 | — | — | — | 2,363 |
| Loss carryforward | 1,917 | 226 | — | — | — | 2,143 |
| Provision for investment in Delta Bank in Ukraine | 653 | — | (52) | — | — | 601 |
| Deferred connection fees | 540 | 33 | (11) | — | — | 562 |
| Hedge and other | 989 | 1,077 | (141) | — | (5) | 1,920 |
| **Net deferred tax liability** | **(20,461)** | **2,599** | **(116)** | **(59)** | **(191)** | **(18,228)** |

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 12. INCOME TAX (Continued)

Movements in the deferred tax assets and liabilities for the year ended December 31, 2018 were as follows:

| | December 31, 2017 | Adjustment on initial application of new IFRS standards | Recognised in profit / loss | Recognised in other comprehensive income | Effect of acquisitions | December 31, 2018 |
|---|---|---|---|---|---|---|
| **Assets / (liabilities) arising from tax effect of:** | | | | | | |
| Depreciation of property, plant and equipment | (18,921) | 1,632 | 513 | 143 | 395 | (16,238) |
| Other intangible assets | (7,454) | — | 1,218 | 9 | 147 | (6,080) |
| Potential distributions from/ to Group's subsidiaries/ associates | (4,043) | — | 418 | (394) | — | (4,019) |
| Licenses | (1,994) | — | 148 | (71) | — | (1,917) |
| Customer base | (536) | — | 279 | — | (449) | (706) |
| Capitalization of cost to obtain and fulfill contracts | — | (1,290) | (31) | — | — | (1,321) |
| Accrued expenses for services | 7,131 | — | (603) | 51 | 426 | 7,005 |
| Right-of-use assets and lease obligations | 2,363 | (1,632) | 1,833 | — | — | 2,564 |
| Loss carryforward | 2,143 | — | 1,362 | — | 751 | 4,256 |
| Provision for investment in Delta Bank in Ukraine | 601 | — | (319) | 85 | — | 367 |
| Contract liabilities | 562 | 717 | (340) | 15 | — | 954 |
| Debt modification | — | (597) | (478) | — | — | (1,075) |
| Hedge and other | 1,920 | 142 | (1,221) | 58 | 2,062 | 2,961 |
| **Net deferred tax liability** | **(18,228)** | **(1,028)** | **2,779** | **(104)** | **3,332** | **(13,249)** |

The Group recognizes deferred income tax on future dividend distributions from foreign subsidiaries and associates which are based on the cumulative undistributed earnings of those foreign 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.

Federal law 401-FZ dated November 30, 2016 cancelled the time limit of prior periods' tax losses carryforward, which had been previously restricted to 10 years. Furthermore, the law specified that for the years 2017-2020 prior periods' tax losses carried forward should not exeed 50% of the tax base.

Unused tax losses, for which deferred tax assets were not recognized in the consolidated statement of financial position as of December 31, 2018 and 2017 amounted to RUB 42,271 million and RUB 18,003 million, respectively.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 12. INCOME TAX (Continued)

The Group accrued RUB 850 and 906 million as of December 31, 2018 and 2017, 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.

## 13. EARNINGS PER SHARE

The following table sets forth the computation of earnings per share for the year ended December 31, 2018, 2017 and 2016:

| | 2018 | 2017 | 2016 |
|---|---|---|---|
| **Numerator:** | | | |
| Profit for the year from continuing operations, attributable to the owners of the company (before IFRS 15 application) | 65,722 | 56,042 | 51,841 |
| Profit for the year from continuing operations attributable to the owners of the company | 65,898 | 56,042 | 51,841 |
| Loss for the year from discontinued operations attributable to the owners of the company | (59,050) | — | (3,367) |
| | | | |
| **Denominator, in thousands:** | | | |
| Weighted-average ordinary shares outstanding | 1,873,563 | 1,953,779 | 1,989,282 |
| Employee stock options | 2,158 | 1,779 | 1,412 |
| **Weighted-average diluted shares outstanding** | **1,875,721** | **1,955,558** | **1,990,694** |
| **Earnings per share—basic, RUB (before the application of IFRS 15)** | **3.56** | **28.68** | **24.37** |
| Basic EPS from continuing operations | 35.08 | 28.68 | 26.06 |
| Basic EPS from discontinued operations | (31.52) | — | (1.69) |
| **Earnings per share—diluted, RUB (before the application of IFRS 15)** | **3.56** | **28.66** | **24.35** |
| Diluted EPS from continuing operations | 35.04 | 28.66 | 26.04 |
| Diluted EPS from discontinued operations | (31.48) | — | (1.69) |
| | | | |
| **Earnings per share—basic, RUB** | **3.65** | **28.68** | **24.37** |
| Basic EPS from continuing operations | 35.17 | 28.68 | 26.06 |
| Basic EPS from discontinued operations | (31.52) | — | (1.69) |
| **Earnings per share—diluted, RUB** | **3.65** | **28.66** | **24.35** |
| Diluted EPS from continuing operations | 35.13 | 28.66 | 26.04 |
| Diluted EPS from discontinued operations | (31.48) | — | (1.69) |

## 14. 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

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 14. CASH AND CASH EQUIVALENTS (Continued)

cash commitments, are readily convertible to known amounts of cash and are subject to insignificant risk of change in value.

Cash and cash equivalents comprised the following:

| | December 31, 2018 | December 31, 2017 |
|---|---|---|
| **Cash and cash equivalents at banks and on hand in:** | | |
| Russian Rubles | 17,012 | 16,879 |
| US Dollars | 4,873 | 1,119 |
| Euro | 2,073 | 983 |
| Ukraine Hryvna | 1,548 | 403 |
| Turkmenian Manat | 721 | 1,267 |
| Other | 954 | 318 |
| **Short-term deposits with an original maturity of less than 92 days:** | | |
| Russian Rubles | 52,764 | 6,595 |
| Ukraine Hryvna | 3,215 | 352 |
| Euro | 915 | — |
| US Dollars | — | 2,603 |
| Other | | 67 |
| **Total cash and cash equivalents** | **84,075** | **30,586** |

## 15. SHORT-TERM INVESTMENTS

Short-term investments represent investments in loans and time deposits, which have original maturities of longer than three months 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 are carried at fair value through profit and loss, as this portfolio of assets is neither held to collect contractial cash flows nor held both to collect contractual cash flows and to sell financial assets.

Short-term investments 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.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 15. SHORT-TERM INVESTMENTS (Continued)

The Group's short-term investments comprised the following:

| | Category | December 31, 2018 | December 31, 2017 |
|---|---|---|---|
| Notes | At amortized cost | 15,191 | 7,605 |
| Deposits | At amortized cost | 14,388 | 27,826 |
| Assets in Sistema Capital trust management (Notes 28, 31) | Financial asset at fair value through profit and loss | 11,644 | 9,600 |
| Loans | At amortized cost | 7,050 | 5,669 |
| Notes | Financial asset at fair value through other comprehensive income | 70 | 57 |
| **Short-term investments (Gross)** | | **48,343** | **50,757** |
| Allowance for ECL | | (480)[1] | — |
| **Total short-term investments** | | **47,863** | **50,757** |

(1) ECL Allowance related to loan granted to Mr. Pierre and Mr. Moussa Fattouche recognized at January 1, 2018 as a result of IFRS 9 implemetation.

The loans amount generally consists of a loan issued to Mr. Pierre Fattouche and Mr. Moussa Fattouche.

## 16. INVESTMENTS IN ASSOCIATES AND JOINT VENTURES

Associates are those entities where the Group exercises significant influence, and they are accounted for using the equity method. 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. These entities 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. The Group presents its share in profits or losses in associates within operating profit if those interests are viewed as part of Group's core operations. As of December 31, 2018, only MTS Belarus was considered as part of Group's core operating activity. Shares in profits and losses of other Group's associates were presented as non-operating items.

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. Share in profit and loss of the Group's joint venture was presented as non-operating item.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 16. INVESTMENTS IN ASSOCIATES AND JOINT VENTURES (Continued)

The Group's investments in associates and joint ventures comprised the following:

| | Country of operations | Operating activity | December 31, 2018 | December 31, 2017 |
|---|---|---|---|---|
| MTS Belarus | Belarus | telecommunications | 4,051 | 3,660 |
| MTS Bank | Russia | banking | — | 2,902 |
| OZON Holdings Ltd | Russia | e-commerce | 4,797 | 2,517 |
| Equity investments in other unquoted companies | Russia | digital TV, asset management, etc. | 1,887 | 373 |
| **Total investments in associates** | | | **10,735** | **9,452** |

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, 2018 | December 31, 2017 |
|---|---|---|
| **Assets** | | |
| Non-current assets | 17,659 | 9,819 |
| Current assets | 11,652 | 8,117 |
| **Liabilities** | | |
| Non-current liabilities | (7,089) | (703) |
| Current liabilities | (13,955) | (9,764) |
| **Total identifiable net assets** | **8,267** | **7,469** |
| The Group's share in associate | 49% | 49% |
| The Group's share of identifiable net assets | 4,051 | 3,660 |
| **Carrying amount of the Group's interest** | **4,051** | **3,660** |

The composition of the Group's share of income of MTS Belarus is as follows:

| | Year ended December 31, | | |
|---|---|---|---|
| | 2018 | 2017 | 2016 |
| Revenue | (27,695) | (23,037) | (22,256) |
| Net profit for the year | (7,752) | (6,552) | (6,356) |
| **The Group's share of the profit of the associate for the year** | **(3,799)** | **(3,210)** | **(3,115)** |
| Other comprehensive loss for the year (currency translation adjustment) | (648) | 525 | 2,292 |
| Total comprehensive income for the year | (8,400) | (6,027) | (4,064) |
| **The Group's share of total comprehensive income of the associate for the year** | **(4,116)** | **(2,953)** | **(1,991)** |
| **Dividends received** | **3,691** | **3,590** | **2,795** |

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 16. INVESTMENTS IN ASSOCIATES AND JOINT VENTURES (Continued)

The reconciliation of summarized financial information of MTS Bank to the carrying amount of the Group's interest in associate is presented below:

| | December 31, 2017 |
|---|---|
| Total assets | 142,405 |
| Total liabilities | (121,169) |
| Non-controlling interests | — |
| **Total identifiable net assets attributable to the Group** | **21,236** |
| The Group's share in associate | 26.6% |
| The Group's share of identifiable net assets | 6,127 |
| Impairment of investment in associate | (3,225) |
| **Carrying amount of the Group's interest** | **2,902** |

In February 2016, MTS Bank placed 3,588,304 additional ordinary shares. The Group acquired 946,347 shares in the placement for a total consideration of RUB 1,325 million. As the result of the transaction, the Group's share in MTS Bank decreased from 27.0% to 26.8%.

In November 2016, MTS Bank placed 10,000,000 additional ordinary shares. The Group acquired 2,637,310 shares in the placement for a total consideration of RUB 2,769 million. As the result of the transaction, the Group's share in MTS Bank decreased from 26.8% to 26.6%.

In May 2017 MTS Bank disposed of a 47% stake in East-West United Bank to Sistema, retaining less than 20% and lost control. Consequently, the accumulated foreign currency translation reserve in the amount of RUB 659 million was derecognized from the accumulated other comprehensive income of the Group.

In July 2018, the Group increased its ownership share in MTS Bank from 26.6% to 55.4% and obtained control over the entity (Note 2). The Group discontinued the use of the equity method for accounting of investment in MTS Bank and accounted for the acquisition as a transaction under common control directly in equity.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 16. INVESTMENTS IN ASSOCIATES AND JOINT VENTURES (Continued)

The Group's share in the net losses of MTS Bank was included in the non-operating share of the loss of the associates in the accompanying consolidated statement of profit or loss. The composition of the Group's share of loss of MTS Bank is the following:

| | Year ended December 31, | | |
|---|---|---|---|
| | 2018* | 2017 | 2016 |
| Total interest income | (9,289) | (14,204) | (16,555) |
| Total interest expense | 3,799 | 6,505 | 8,364 |
| Net loss for the period | 609 | 593 | 4,495 |
| **The Group's share of the loss of the associate for the period** | **162** | **109** | **1,179** |
| Other comprehensive loss for the period | 614 | 2,000 | 1,614 |
| Total comprehensive loss for the period | 1,223 | 2,593 | 6,109 |
| **The Group's share of the total comprehensive loss for the period** | **326** | **690** | **1,608** |

* Prior to discontinuing use of the equity method

### OZON Holdings Limited

The Group holds less than 20% of the equity interests in OZON Holdings Limited, nevertheless it has significant influence over the investee through the representation of the Group on the investee's Board of Directors and a number of veto rights.

In 2017 and 2018 the Group acquired additional equity interests in OZON Holdings Limited through several transactions, which resulted in increase of the Group's share in OZON Holdings Limited from 10.8% to 11.2% as of December 31, 2017 and from 11.2% to 18.69% as of December 31, 2018. The details on these transactions are summarized below:

| Date of transaction | Substance of transaction | Consideration paid, RUB mln | Number of ordinary shares acquired | Increase of the Group's share |
|---|---|---|---|---|
| September 2017 | Participation in additional share issuance | 19 | 5,193 | 0.16% |
| October 2017 | Participation in additional share issuance | 28 | 7,698 | 0.23% |
| March 2018 | Participation in additional share issuance | 1,158 | 141,498 | 2.5% |
| May 2018 | Purchase from non-controlling shareholder | 943 | 114,616 | 3.0% |
| July 2018 | Purchase from non-controlling shareholder | 85 | 11,209 | 0.32% |
| September 2018 | Exercise of the put option | 575 | 70,978 | 0.86% |
| September 2018 | Purchase from non-controlling shareholder | 289 | 31,810 | 0.81% |

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 16. INVESTMENTS IN ASSOCIATES AND JOINT VENTURES (Continued)

### Sistema Capital

In September 2017, the Group acquired a 30% ownership interest in Sistema Capital, a trust management company, through a cash contribution of RUB 356 million into its authorized share capital.

### 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. Though the Group holds less than 20% of the equity interests in YouDo, nevertheless it has significant influence over the investee based on its ownership of equity shares, representation on the investee's Board of Directors and certain additional rights related to the decision-making process on key issues.

### Sistema-Rentnaya Nedvizhimost

In December 2018, MTS Bank sold 40.26% share in a property investments mutual fund «Sistema-Rentnaya Nedvizhimost» to Business Nedvizhimost, subsidiary of Sistema, for cash consideration of RUB 450 million. The Group classified the remaining investment in the mutual fund as investment in joint venture, based on the existence of a joint decision-making process and the rights to net assets of the mutual fund. The Group applied the equity method of accounting to its remaining share in the mutual fund.

The following table is the aggregate financial information of investments in Ozon Holdings Ltd and other individually insignificant associates and joint ventures, held by the Group:

| | Year ended December 31, | | |
|---|---|---|---|
| | 2018 | 2017 | 2016 |
| Net loss for the year | 4,600 | 1,760 | 1,172 |
| **The Group's share of the loss of the associate for the year** | **747** | **327** | **108** |
| Other comprehensive income for the year | — | — | — |
| Total comprehensive loss for the year | 4,600 | 1,760 | 1,172 |
| **The Group's share of total comprehensive loss of the associate for the year** | **747** | **327** | **108** |

## 17. 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.

Investments in shares of the companies over which the Group does not have control or an ability to exercise significant influence are accounted for at amortized cost.

Other investments are presented net of allowance for ECL.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 17. OTHER INVESTMENTS (Continued)

Other investments of the Group comprised the following:

| | Category | December 31, 2018 | December 31, 2017 |
|---|---|---|---|
| Notes | At amortized cost | 15,327 | — |
| Deposits | At amortized cost | 139 | 9 |
| Loans and unquoted notes | At amortized cost | 12 | 621 |
| Other | At amortized cost | 1,397 | 1,323 |
| **Other investments (Gross)** | | **16,875** | **1,953** |
| Allowance for ECL | | (2) | — |
| **Total other investments** | | **16,873** | **1,953** |

## 18. 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 partialy 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 150 days. Receivables other than from subscribers are written-off upon the expiration of the limitation period or before based on results of internal investigations.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 18. TRADE AND OTHER RECEIVABLES (Continued)

Trade and other receivables current and non-current comprised the following:

| | December 31, 2018 | December 31, 2017 |
|---|---|---|
| Receivables from handset sales financing | 14,252 | — |
| Subscribers | 13,495 | 11,723 |
| Other trade receivables | 4,049 | 3,119 |
| Roaming | 3,763 | 7,650 |
| Interconnect | 2,193 | 2,121 |
| Other receivables | 1,641 | 1,254 |
| Integration services | 1,190 | 721 |
| Bonuses from suppliers | 492 | 569 |
| Dealers | 386 | 3,204 |
| Allowance for ECL (IFRS 9) | (4,318) | — |
| Allowance for doubtful accounts (IAS 39) | — | (2,344) |
| **Trade and other receivables total** | **37,143** | **28,017** |
| Less non-current portion | (2,600) | — |
| **Trade and other receivables current** | **34,543** | **28,017** |

The analysis of the age of trade and other accounts receivables and the respective allowance for ECL as of December 31, 2018:

| Receivables from subscribers and dealers and other trade receivables assesed for impairement based on provision matrix | Weighted-average loss rate | Gross carrying amount | Loss allowance (based on provision matrix) | Credit-impaired |
|---|---|---|---|---|
| Current | 1% | 1,300 | (5) | No |
| 1 - 30 days past due | 8% | 9,707 | (761) | No |
| 31 - 60 days past due | 14% | 1,963 | (285) | No |
| 60 - 90 days past due | 29% | 719 | (227) | No |
| More than 90 days past due | 60% | 1,282 | (817) | Yes |
| **Total** | **14%** | **14,971** | **(2,095)** | |

| Receivables other than from subscribers and dealers assesed for impairement based on individual basis | Weighted-average loss rate | Gross carrying amount | Loss allowance (individually assessed) | Credit-impaired |
|---|---|---|---|---|
| Current | 1% | 6,656 | (11) | No |
| 1 - 30 days past due | 1% | 1,147 | (3) | No |
| 31 - 60 days past due | 1% | 615 | (5) | No |
| 60 - 90 days past due | 2% | 396 | (9) | No |
| More than 90 days past due | 19% | 3,424 | (689) | Yes |
| **Total** | **5%** | **12,238** | **(717)** | |

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

**18. TRADE AND OTHER RECEIVABLES (Continued)**

| Receivables from handset sales financing | Weighted-average loss rate | Gross carrying amount | Loss allowance (collectively assessed) | Credit-impaired |
|---|---|---|---|---|
| Current | 2% | 12,352 | (205) | No |
| 1 - 30 days past due | 13% | 414 | (52) | No |
| 31 - 60 days past due | 43% | 93 | (40) | No |
| 60 - 90 days past due | 58% | 68 | (39) | No |
| More than 90 days past due | 88% | 1,325 | (1,170) | Yes |
| **Total** | **11%** | **14,252** | **(1,506)** | |

The following table summarizes changes in the allowance for expected credit losses for the year ended December 31, 2018:

| | Year ended December 31, 2018 |
|---|---|
| **Balance, beginning of the year calculated under IAS 39** | **(2,344)** |
| Additional allowance required under IFRS 9 | (233) |
| **Balance, beginning of the year, calculated under IFRS 9** | **(2,577)** |
| Allowance for ECL | (3,210) |
| Accounts receivable written off | 2,948 |
| Acquisition of subsidiaries | (1,479) |
| **Balance, end of the year** | **(4,318)** |

**Comparative information under IAS 39:**

The analysis of the age of trade and other accounts receivables past due but not impaired:

| | December 31, 2017 |
|---|---|
| Neither past due nor impaired | 22,551 |
| Past due, but not impaired: | |
| Less than 60 days | 3,265 |
| 61 - 150 days | 872 |
| More than 150 days | 1,329 |
| **Total** | **28,017** |

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

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## 18. TRADE AND OTHER RECEIVABLES (Continued)

The following table summarizes changes in the allowance for doubtful accounts receivable:

| | Year ended December 31, 2017 | Year ended December 31, 2016 |
|---|---|---|
| **Balance, beginning of the year** | **(2,160)** | **(2,928)** |
| Allowance for doubtful accounts | (2,880) | (2,863) |
| Accounts receivable written off | 2,696 | 3,459 |
| Disposal of subsidiary | — | 172 |
| **Balance, end of the year** | **(2,344)** | **(2,160)** |

## 19. 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, 2018 | December 31, 2017 |
|---|---|---|
| Handsets and accessories | 15,191 | 7,836 |
| SIM cards and prepaid phone cards | 1,167 | 784 |
| Advertising and other materials | 916 | 561 |
| TV equipment for resale | 676 | 350 |
| Software and equipment for installation and resale | 491 | 309 |
| Spare parts for telecommunication equipment | 213 | 155 |
| **Total inventories** | **18,654** | **9,995** |

Other materials mainly consist of automotive and IT components, advertising, stationery, fuel and auxiliary materials.

Spare parts for telecommunication equipment included in the inventory are expected to be utilized within twelve months of the year end.

Expenses for inventory obsolescence provision were included in cost of goods in the consolidated statement of profit or loss.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 19. INVENTORIES (Continued)

For the years ended December 31, 2018, 2017 and 2016, cost of goods comprised the following expenses:

| | Year ended December 31, 2018 | Year ended December 31, 2017 | Year ended December 31, 2016 |
|---|---|---|---|
| Amount of inventories recognized as an expense | 60,543 | 43,440 | 44,026 |
| Inventory obsolescence provision | 3,697 | 2,692 | 2,159 |
| Reversal of obsolescence provision | (371) | (509) | (611) |
| **Total cost of goods** | **63,869** | **45,623** | **45,574** |

The reversal of the inventory obsolescence provision relates to handsets and accessories sold over the course of the Group's promotion campaigns. Inventories have been sold with a positive margin.

## 20. 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 | 5 - 44 years |
| Other | 1.5 - 21 years |
| | |
| **Land and buildings:** | |
| Buildings | 20 - 150 years |
| Leasehold improvements | the term of the lease |
| | |
| **Office equipment, vehicles and other:** | |
| Office equipment | 3 - 21 years |
| Vehicles | 2 - 7 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.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 20. PROPERTY, PLANT AND EQUIPMENT (Continued)

The net book value of property, plant and equipment as of December 31, 2018, December 31, 2017, December 31, 2016 and January 1, 2016 was 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, 2016** | **542,530** | **27,321** | **49,692** | **28,966** | **648,509** |
| Additions | 1,350 | 32 | — | 47,340 | 48,722 |
| Transferred into use | 47,894 | 1,550 | 5,278 | (54,722) | — |
| Disposal of UMS (Note 10) | (4,152) | (1,309) | (452) | (2,444) | (8,357) |
| Transfer to assets held for sale | (1,557) | — | (5) | — | (1,562) |
| Disposal | (20,321) | (426) | (3,201) | (374) | (24,322) |
| Other | (118) | (200) | 269 | 55 | 6 |
| Foreign exchange differences | (17,568) | (1,525) | (2,331) | (1,455) | (22,879) |
| **December 31, 2016** | **548,058** | **25,443** | **49,250** | **17,366** | **640,117** |
| Additions | 2,094 | 15 | 302 | 57,170 | 59,581 |
| Transferred into use | 48,689 | 281 | 4,522 | (53,492) | — |
| Arising on business combinations | 10 | 2 | 5 | — | 17 |
| Transfer to assets held for sale | (1,408) | — | (22) | — | (1,430) |
| Disposal | (27,092) | (684) | (5,460) | (1,315) | (34,551) |
| Other | 327 | (69) | (452) | 7 | (187) |
| Foreign exchange differences | (4,320) | 36 | (315) | (242) | (4,841) |
| **December 31, 2017** | **566,358** | **25,024** | **47,830** | **19,494** | **658,706** |
| Additions | 2,777 | 4,887 | 777 | 63,047 | 71,488 |
| Transferred into use | 48,780 | 1,807 | 5,939 | (56,526) | — |
| Arising on business combinations | 123 | 3,912 | 1,323 | 18 | 5,376 |
| Transfer to assets held for sale | (752) | (1,656) | (36) | — | (2,444) |
| Disposal | (25,963) | (322) | (2,712) | 26 | (28,971) |
| Transfer of financial leasing | (10,124) | — | (110) | — | (10,234) |
| Other | (1,043) | (536) | (319) | — | (1,898) |
| Foreign exchange differences | 12,977 | 718 | 1,595 | 162 | 15,452 |
| **December 31, 2018** | **593,133** | **33,834** | **54,287** | **26,221** | **707,475** |
| **Accumulated amortisation and impairment** | | | | | |
| **January 1, 2016** | **(300,509)** | **(7,455)** | **(37,883)** | **—** | **(345,847)** |
| Charge for the year | (53,371) | (1,262) | (5,323) | — | (59,956) |
| Disposal of UMS (Note 10) | 1,121 | 62 | 214 | — | 1,397 |
| Transfer to assets held for sale | 846 | — | 5 | — | 851 |
| Disposal | 19,126 | 134 | 2,768 | — | 22,028 |
| Other | (222) | (182) | 227 | — | (177) |
| Foreign exchange differences | 12,061 | 551 | 1,816 | — | 14,428 |
| **December 31, 2016** | **(320,948)** | **(8,152)** | **(38,176)** | **—** | **(367,276)** |
| Charge for the year | (53,258) | (1,114) | (3,929) | — | (58,301) |
| Impairment | (2,175) | (393) | (295) | (764) | (3,627) |
| Transfer to assets held for sale | 940 | — | 22 | — | 962 |
| Disposal | 24,248 | 284 | 5,053 | — | 29,585 |
| Other | (458) | 33 | 395 | — | (30) |
| Foreign exchange differences | 2,892 | (79) | 231 | — | 3,044 |
| **December 31, 2017** | **(348,759)** | **(9,421)** | **(36,699)** | **(764)** | **(395,643)** |
| Charge for the year | (50,056) | (941) | (4,126) | — | (55,123) |
| Arising on business combinations | (13) | (368) | (922) | — | (1,303) |
| Impairment | — | 361 | 151 | — | 512 |
| Transfer to assets held for sale | 223 | 455 | 37 | — | 715 |
| Disposal | 25,116 | 175 | 2,464 | — | 27,755 |
| Transfer of financial leasing | 2,070 | — | 41 | — | 2,111 |
| Other | 553 | 22 | 309 | — | 884 |
| Foreign exchange differences | (9,148) | (500) | (1,292) | — | (10,940) |
| **December 31, 2018** | **(380,014)** | **(10,217)** | **(40,037)** | **(764)** | **(431,032)** |
| **Net book value** | | | | | |
| **January 1, 2016** | **242,021** | **19,866** | **11,809** | **28,966** | **302,662** |
| **December 31, 2016** | **227,110** | **17,291** | **11,074** | **17,366** | **272,841** |
| **December 31, 2017** | **217,599** | **15,603** | **11,131** | **18,730** | **263,063** |
| **December 31, 2018** | **213,119** | **23,617** | **14,250** | **25,457** | **276,443** |

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## 20. PROPERTY, PLANT AND EQUIPMENT (Continued)

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, 2018, 2017 and 2016 totaled RUB 1,304 million, RUB 1,231 million and RUB 1,350 million, respectively. This was included in the accompanying consolidated statements of profit or loss as component of other operating income.

## 21. 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 22).

The change in the net carrying amount of goodwill for the years ended December 31, 2018 and 2017 by reportable segments was as follows:

| | Russia Convergent | Moscow fixed line | Ukraine | Other | Total |
|---|---|---|---|---|---|
| **Balance at January 1, 2017** | | | | | |
| Gross amount of goodwill | 30,266 | 1,083 | 95 | 7,223 | 38,667 |
| Accumulated impairment loss | (1,466) | — | — | (3,516) | (4,982) |
| | **28,800** | **1,083** | **95** | **3,707** | **33,685** |
| Acquisitions (Note 5) | 62 | — | — | 732 | 794 |
| Reclassification | (81) | 81 | — | — | — |
| Currency translation adjustment | — | — | (8) | (190) | (198) |
| **Balance at December 31, 2017** | | | | | |
| Gross amount of goodwill | 30,247 | 1,164 | 87 | 7,765 | 39,263 |
| Accumulated impairment loss | (1,466) | — | — | (3,516) | (4,982) |
| | **28,781** | **1,164** | **87** | **4,249** | **34,281** |
| Acquisitions (Note 5) | 1,877 | 213 | — | 2,512 | 4,602 |
| Impairment (Note 22) | — | — | — | (524) | (524) |
| Currency translation adjustment | — | — | 19 | 729 | 748 |
| **Balance at December 31, 2018** | | | | | |
| Gross amount of goodwill | 32,124 | 1,377 | 106 | 11,006 | 44,613 |
| Accumulated impairment loss | (1,466) | — | — | (4,040) | (5,506) |
| | **30,658** | **1,377** | **106** | **6,966** | **39,107** |

## 22. IMPAIRMENT REVIEW

***Goodwill***—The management of the Group performs impairment tests for the 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.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

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## 22. IMPAIRMENT REVIEW (Continued)

***Investments in associates and joint ventures***—The carrying amount of the investment accounted for using 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.

***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 have suffered an impairment loss. If any such indication exists, the recoverable amount of the assets is estimated in order to determine the extent of the impairment loss.

When reviewing for indicators of impairment the management of the Group considers the relationship between its market capitalization and book value, changes in country risk premiums and other factors.

When the carrying amount of the CGU exceeds its recoverable amount, assets allocated to this CGU must be impaired.

The recoverable amounts of the CGUs are determined based on their value-in-use. In assessing 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.

Future cash flows calculations are based on a five-year operations plan, which is prepared and approved by the management of the Group. Estimation of future cash flows requires assumptions to be made in respect to uncertain factors, including the management's expectations of the following: OIBDA margin, timing and amount of future capital expenditure, 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.

***Oblachniy Retail***

During the year ended December 31, 2018 the Group recognized impairment charges in the amount of RUB 677 million in respect of the goodwill and non-current assets of the CGU "Oblachniy Retail".

CGU "Oblachniy Retail" operates as retail software developer, cash register distributor and provider of integrated digital cash management solutions for business to business ("B2B") clients. The impairment in the CGU "Oblachniy Retail" reflects lower operating performance and uncertainty in respect to the ability to meet its operational targets. The recoverable amount of the CGU "Oblachny Retail" was equal to RUB 765 million as of December 31, 2018, which includes inventory stock measured at net realizable value and related tax balances.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

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## 22. IMPAIRMENT REVIEW (Continued)

***NVision Czech Republic***

During the year ended December 31, 2017 the Group recognized impairment charges of RUB 571 million in respect of the non-current assets of the CGU "NVision Czech Republic", whereas during the year ended December 31, 2018 the imparment charges in the amount of RUB 507 million was reversed as a result of the improvement in its operating performance.

CGU "NVision Czech Republic" tailors in-house software solutions, provides support and managed services to telecom operators, delivers electronic and mechanical manufacturing services.

The recoverable amount of the CGU "NVision Czech Republic" was RUB 1,778 million as of December 31, 2018 compared to RUB 954 million as of December 31, 2017. However, the impairment charge was only reversed to the extent that it does not increase the carrying amount above what it would have been if the impairment charge had never been recognized.

***MTS Turkmenistan***

During the year ended December 31, 2017 the Group recognized impairment charges in the amount of RUB 3,204 million in respect of the non-current assets of the CGU "Turkmenistan".

CGU "Turkmenistan" provided mobile services across multiple regions of Turkmenistan. The impairment in the CGU "Turkmenistan" reflects uncertainty in respect of the ability to continue operations in Turkmenistan. In September, 2017, the Group's subsidiary in Turkmenistan suspended the provision of telecommucation 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 servicing clients. The recoverable amount of the CGU "Turkmenistan" was equal to nil as of December 31, 2017 and as of December 31, 2018.

Impairment loss and reversal of the impairment charges recognized during the year ended December 31, 2018 and 2017 are attributable to operating segments of the Group, reported as a part of the "Other" category, which does not constitute a reportable segment (Note 6).

The total amount of the impairment loss and reversal of impairment charges for the year ended December 31, 2018 was allocated to the carrying amounts of property, plant and equipment and other intangible assets as follows:

| | Oblachniy Retail | NVision Czech Republic |
|---|---|---|
| Goodwill | 524 | |
| Property, plant and equipment | 13 | (505) |
| Other intangible assets | 140 | (2) |
| **Total** | **677** | **(507)** |

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

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## 22. IMPAIRMENT REVIEW (Continued)

The total amount of the impairment loss for the year ended December 31, 2017 was allocated to the carrying amounts of property, plant and equipment and other intangible assets as follows:

| | Turkmenistan | NVision Czech Republic |
|---|---|---|
| Property, plant and equipment | 3,063 | 564 |
| Other intangible assets | 141 | 7 |
| **Total** | **3,204** | **571** |

**Key assumptions used for value in use calculation:**

The table below presents OIBDA margin utilized for value in use calculation of related CGUs:

| CGU | December 31, 2018 | December 31, 2017 |
|---|---|---|
| Russia Convergent | 42.4% - 42.9% | 38.0% - 39.1% |
| Armenia | 45.0% - 47.4% | 40.2% - 41.2% |
| Moscow fixed line | 56.0% - 59.2% | 41.0% - 48.5% |
| Ukraine | 50.0% - 51.6% | 31.4% - 40.6% |
| NVision Czech Republic | 4.9% - 5.5% | 4.2% |
| Oblachniy retail | negative | — |

The table below presents capital expenditure as a percentage of revenue utilized for value-in-use calculations of related CGUs:

| CGU | December 31, 2018 | December 31, 2017 |
|---|---|---|
| Russia Convergent | 19.0% | 17.2% |
| Armenia | 16.9% | 17.8% |
| Moscow fixed line | 21.6% | 20.6% |
| Ukraine | 18.4% | 22.7% |
| NVision Czech Republic | 1.3% | 2.5% |
| Oblachniy retail | 0.9% | — |

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 business.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

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## 22. IMPAIRMENT REVIEW (Continued)

The table below presents terminal growth rates utilized for value-in-use calculations of related CGUs:

| CGU | December 31, 2018 | December 31, 2017 |
|---|---|---|
| Russia Convergent | 1% | 1% |
| Armenia | nil | nil |
| Moscow fixed line | 1% | 1% |
| Ukraine | 3% | 3% |
| NVision Czech Republic | 2% | 2% |
| Oblachniy retail | 3% | — |

The table below presents pre-tax rates for the discounting of cash flows in functional currencies of related CGUs:

| CGU | December 31, 2018 | December 31, 2017 |
|---|---|---|
| Russia Convergent | 16.0% | 16.0% |
| Armenia | 15.2% | 15.2% |
| Moscow fixed line | 14.5% | 14.5% |
| Ukraine | 20.8% | 20.8% |
| NVision Czech Republic | 8.7% | 8.7% |
| Oblachniy retail | 20.1% | — |

### Sensitivity analysis

Management believes that no reasonably possible change in any of the above key assumptions would cause the carrying value of any cash-generating unit to materially exceed its recoverable amount.

After the recognition of the impairment of non-current assets in which the carrying value of the CGU "Oblachny Retail" is equal to the estimated recoverable amount, any adverse change in key assumptions would not, in isolation, cause a further impairment loss to be recognized.

## 23. 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.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

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## 23. OTHER INTANGIBLE ASSETS (Continued)

Net book value of other intangible assets as at December 31, 2018, December 31, 2017 and December 31, 2016 and January 1, 2016 was as follows:

| | Licenses | Right to use radio frequencies | Billing and other software | Client base | Numbering capacity | Cost-to-obtain contracts | Other | Total |
|---|---|---|---|---|---|---|---|---|
| *Useful life, years* | *1 to 20* | *1 to 15* | *1 to 25* | *4 to 31* | *2 to 15* | *2 to 5* | *1 to 10* | |
| **Cost** | | | | | | | | |
| **January 1, 2016** | **28,490** | **9,326** | **93,134** | **7,537** | **3,208** | **—** | **9,767** | **151,462** |
| Additions | 3,382 | 245 | 27,658 | — | 65 | — | 232 | 31,582 |
| Arising on business combinations (Note 5) | 323 | — | — | — | — | — | — | 323 |
| Disposal of UMS (Note 10) | — | — | (1,891) | — | — | — | (3,687) | (5,578) |
| Disposal | (2) | (582) | (10,509) | (164) | (160) | — | (2,842) | (14,259) |
| Other | 44 | (40) | (87) | — | (4) | — | (40) | (127) |
| Foreign exchange differences | (5,101) | — | (3,763) | — | (39) | — | (1,187) | (10,090) |
| **December 31, 2016** | **27,136** | **8,949** | **104,542** | **7,373** | **3,070** | **—** | **2,243** | **153,313** |
| Additions | 1,647 | 13 | 24,686 | — | 12 | — | 219 | 26,577 |
| Arising on business combinations (Note 5) | 260 | — | 163 | — | — | — | 150 | 573 |
| Disposal | (93) | (1,112) | (8,429) | (50) | (158) | — | (166) | (10,008) |
| Other | (2) | 1 | (6) | — | — | — | 57 | 50 |
| Foreign exchange differences | (1,207) | — | (980) | — | (9) | — | (23) | (2,219) |
| **December 31, 2017** | **27,741** | **7,851** | **119,976** | **7,323** | **2,915** | **—** | **2,480** | **168,286** |
| Additions | 7,479 | 19 | 20,884 | — | 10 | 3,961 | 401 | 32,754 |
| Arising on business combinations (Note 5) | — | — | 3,021 | 1,530 | 1 | — | 909 | 5,461 |
| Effect on adoption of IFRS 15 (Note 7) | — | — | — | — | — | 19,197 | | 19,197 |
| Impairment | — | — | (168) | — | — | — | (20) | (188) |
| Disposal | (223) | (1,223) | (8,215) | (63) | (82) | — | (198) | (10,004) |
| Other | — | 1 | 89 | — | — | — | (46) | 44 |
| Foreign exchange differences | 4,630 | — | 2,977 | — | 22 | 202 | 80 | 7,913 |
| **December 31, 2018** | **39,627** | **6,648** | **138,564** | **8,790** | **2,866** | **23,360** | **3,606** | **223,463** |
| **Accumulated amortisation and impairment** | | | | | | | | |
| **January 1, 2016** | **(9,873)** | **(4,261)** | **(50,557)** | **(3,619)** | **(2,996)** | **—** | **(5,560)** | **(76,866)** |
| Charge for the year | (2,092) | (1,170) | (18,002) | (620) | (46) | — | (1,389) | (23,319) |
| Disposal of UMS (Note 10) | — | — | 494 | — | — | — | 2,162 | 2,656 |
| Disposal | 2 | 582 | 10,193 | 164 | 160 | — | 2,836 | 13,937 |
| Other | (7) | 20 | 43 | — | (13) | — | (42) | 1 |
| Foreign exchange differences | 2,007 | — | 2,697 | — | 34 | — | 668 | 5,406 |
| **December 31, 2016** | **(9,963)** | **(4,829)** | **(55,132)** | **(4,075)** | **(2,861)** | **—** | **(1,325)** | **(78,185)** |
| Charge for the year | (2,180) | (1,042) | (17,614) | (616) | (57) | — | (224) | (21,733) |
| Impairment | — | — | (148) | — | — | — | — | (148) |

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

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## 23. OTHER INTANGIBLE ASSETS (Continued)

| | Licenses | Right to use radio frequencies | Billing and other software | Client base | Numbering capacity | Cost-to-obtain contracts | Other | Total |
|---|---|---|---|---|---|---|---|---|
| Disposal | 92 | 1,108 | 8,345 | 50 | 158 | — | 157 | 9,910 |
| Other | — | 2 | (17) | — | (4) | — | (31) | (50) |
| Foreign exchange differences | 570 | — | 726 | — | 8 | — | 13 | 1,317 |
| **December 31, 2017** | **(11,481)** | **(4,761)** | **(63,840)** | **(4,641)** | **(2,756)** | **—** | **(1,410)** | **(88,889)** |
| Charge for the year | (2,711) | (796) | (20,941) | (680) | (57) | (3,876) | (427) | (29,488) |
| Arising on business combinations | — | — | (1,785) | — | — | — | — | (1,785) |
| Effect on adoption of IFRS 15 (Note 7) | — | — | — | — | — | (12,368) | — | (12,368) |
| Effect on assets impairment | — | — | 44 | — | — | — | 6 | 50 |
| Disposal | 193 | 971 | 7,994 | 63 | 82 | — | 180 | 9,483 |
| Other | — | — | (70) | — | — | — | 26 | (44) |
| Foreign exchange differences | (2,114) | — | (2,187) | — | (21) | (99) | (37) | (4,458) |
| **December 31, 2018** | **(16,113)** | **(4,586)** | **(80,785)** | **(5,258)** | **(2,752)** | **(16,343)** | **(1,662)** | **(127,499)** |
| **Net book value** | | | | | | | | |
| **January 1, 2016** | **18,617** | **5,065** | **42,577** | **3,918** | **212** | **—** | **4,207** | **74,596** |
| **December 31, 2016** | **17,173** | **4,120** | **49,410** | **3,298** | **209** | **—** | **918** | **75,128** |
| **December 31, 2017** | **16,260** | **3,090** | **56,136** | **2,682** | **159** | **—** | **1,070** | **79,397** |
| **December 31, 2018** | **23,514** | **2,062** | **57,779** | **3,532** | **114** | **7,017** | **1,944** | **95,962** |

In connection with providing telecommunication services, the Group has been issued with various GSM operating licenses by the Russian Ministry of Information Technologies and Communications. In addition to the licenses received directly from the Russian Ministry of Information Technologies and Communications, the Group has been granted access to various telecommunication licenses through acquisitions. In foreign subsidiaries, the licenses are granted by the local communication authorities.

Operating licenses contain several 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, 2018 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 Ukraine was renewed in 2013 and is valid until 2026. The license for the provision of telecommunication services in Armenia is valid until 2019.

Contractual obligations to purchase intangible assets are disclosed in the Note 34.

The amount of intangible assets generated internally was not significant.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

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## 24. 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, 2018 | December 31, 2017 |
|---|---|---|
| Bank and other loans | 250,780 | 182,937 |
| Notes | 117,355 | 108,776 |
| **Total borrowings** | **368,135** | **291,713** |
| Less: current portion | (3,063) | (63,673) |
| **Total borrowings, non-current** | **365,072** | **228,040** |

***Notes***—The Group's notes consisted of the following:

| | Currency | Interest rate (actual at December 31, 2018) | December 31, 2018 | December 31, 2017 |
|---|---|---|---|---|
| MTS International Notes due 2023 (Note 2) | USD | 5.00% | 31,090 | 26,187 |
| MTS International Notes due 2020 (Note 2) | USD | 8.625% | 20,870 | 17,621 |
| MTS PJSC Notes due 2022 | RUB | 7.70% | 14,958 | 14,947 |
| MTS PJSC Notes due 2023 | RUB | 6.85% | 9,348 | 9,997 |
| MTS PJSC Notes due 2031 | RUB | 7.85% | 1,080 | 9,994 |
| MTS PJSC Notes due 2022 | RUB | 9.00% | 9,993 | 9,991 |
| MTS PJSC Notes due 2021 | RUB | 8.85% | 9,990 | 9,986 |
| MTS PJSC Notes due 2021 | RUB | 7.10% | 9,988 | — |
| MTS PJSC Notes due 2025 | RUB | 7.25% | 9,986 | — |
| MTS PJSC Notes due 2018 | RUB | 7.70% | — | 9,986 |
| MTS PJSC Notes due 2020 | RUB | 7.90% | 40 | 49 |
| Other notes due 2022 | RUB | 0.25% | 12 | 18 |
| **Total notes** | | | **117,355** | **108,776** |
| Less: current portion | | | (1,017) | (29,979) |
| **Total notes, non-current** | | | **116,338** | **78,797** |

The Group has an unconditional obligation to repurchase certain MTS PJSC Notes at par value if claimed by the noteholders subsequent to the announcement of the sequential coupon. The dates of the announcement for each particular note issue are as follows:

| | |
|---|---|
| MTS PJSC Notes due 2031 | September 2019 |
| MTS PJSC Notes due 2023 | March 2020 |

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

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## 24. BORROWINGS (Continued)

The Group discloses these notes as maturing in 2019 (MTS PJSC Notes due 2031) and in 2020 (MTS PJSC Notes due 2023) in the aggregated maturities schedule as the noteholders have the unilateral right to demand repurchase of the notes at par value upon announcement of new coupons.

As of December 31, 2018 the Group had no outstanding repurchase transactions.

***Bank and other loans***—The Group's loans from banks and financial institutions consisted of the following:

| | Maturity | Interest rate (actual at December 31, 2018) | December 31, 2018 | December 31, 2017 |
|---|---|---|---|---|
| ***USD-denominated:*** | | | | |
| Calyon, ING Bank N.V, Nordea Bank AB, Raiffeisen Zentralbank Osterreich AG | 2018 | LIBOR + 1.15% (2.994%) | — | 17,077 |
| Citibank | 2019 - 2024 | LIBOR + 0.9% (3.776%) | 10,980 | 10,592 |
| | | | **10,980** | **27,669** |
| ***RUB-denominated:*** | | | | |
| Sberbank | 2020 - 2022 | 7.50% - 8.59% | 139,515 | 149,890 |
| VTB | 2020 - 2021 | 7.20% - 8.65% | 100,000 | 5,000 |
| Other | 2024 | Various | 210 | 247 |
| | | | **239,725** | **155,137** |
| ***Other currencies:*** | | | | |
| Various financial institutions | 2019 - 2020 | Various | 75 | 131 |
| | | | **75** | **131** |
| **Total bank and other loans** | | | **250,780** | **182,937** |
| Less: current portion | | | (2,046) | (33,694) |
| **Total bank and other loans, non-current** | | | **248,734** | **149,243** |

***Compliance with covenants***—Bank loans and notes of the Group are subject to certain covenants limiting the Group's ability to incur debt, carry out transactions with related parties, create liens on properties, dispose of assets, including GSM and 3G licenses for several license areas, issue guarantees, grant loans to employees and entities, delist notes, delay coupon payments, merge or consolidate MTS PJSC with another entity or be a subject to a court decision to pay over USD 75 million (RUB 5,210 million as of the reporting date, which remains unsatisfied for more than 60 days) or be a subject to a court decision to pay over USD 250 million (RUB 17,368 million as of the reporting date, which remains unsatisfied for more than 180 days) without being appealed, discharged or waived.

The Group is required to comply with certain financial ratios and maintain ownership stakes in certain subsidiaries.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

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## 24. BORROWINGS (Continued)

The noteholders of MTS International Notes due 2020 and MTS International Notes due 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 these covenants, after certain 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, 2018.

***Available credit facilities***—As of December 31, 2018, the Group's total available unused credit facilities amounted to RUB 21,000 million and related to the following credit lines:

| | Currency | Maturity | Interest rate | Available till | Available amount |
|---|---|---|---|---|---|
| Sberbank | RUB | 2024 | To be agreed | May 2024 | 5,000 |
| VTB | RUB | 2028 | To be agreed | August 2028 | 5,000 |
| Rosselhozbank | RUB/USD/EUR | 2019 | To be agreed | November 2019 | 5,000 |
| Absolut Bank | RUB | 2019 | CBR[1] auction rate + 1.25% - 1.8% | December 2019 | 3,000 |
| SPB Bank | RUB | 2020 | To be agreed | March 2020 | 3,000 |
| **Total** | | | | | **21,000** |

(1) CBR—Central Bank of Russia

In addition, the Group has a credit facility made available by Citibank at an interest rate of MosPrime + 1.50%, with the available amount set up on request and to be repaid within 182 days.

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, 2023 and thereafter:

| | As of December 31, 2018 | |
|---|---|---|
| | **Notes** | **Bank loans and other debt** |
| Payments due in the year ending December 31, | | |
| 2019 | 12,401 | 21,849 |
| 2020 | 38,964 | 107,600 |
| 2021 | 25,670 | 150,558 |
| 2022 | 29,061 | 22,756 |
| 2023 | 32,738 | 2,131 |
| Thereafter | 11,085 | 1,068 |
| **Contractual undiscounted cash flows** | **149,919** | **305,962** |
| Less: unamortized debt issuance costs | (179) | (408) |
| Less: interest | (32,385) | (49,289) |
| Less: debt modification | — | (5,485) |
| **Total debt** | **117,355** | **250,780** |

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

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## 25. RIGHTS-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 aggreements (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 execise 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.

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.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

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## 25. RIGHTS-OF-USE ASSETS AND LEASE OBLIGATIONS (Continued)

The table below summarises the estimated terms, over which the right-of-use assets are amortized:

| | |
|---|---|
| **Lease of:** | |
| 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 |
| fiber-optic lines | 2 years |
| retail stores | Up to 8 years |
| administrative offices, warehouses, parking garages | not less than 3 years |
| vehicles | 4 - 5 years |

Right-of-use assets are tested for impairment in accordance with IAS 36 Impairment of Assets. This replace the previous requirement to recognize a provision for onerous lease contracts.

The following table presents a summary of net book value of rights-of-use assets:

| | December 31, 2018 |
|---|---|
| **Lease of:** | |
| Sites for placement of network and base station equipment | 92,500 |
| Land and buildings | 53,792 |
| Vehicles and other | 1,210 |
| Exclusive rights for trademarks | 1,505 |
| **Rights-of-use assets, net** | **149,007** |

Depreciation of the rights-of-use assets for the twelve months ended December 31, 2018 included in depreciation and amortization expense in the accompanying consolidated statement of profit or loss was as follows:

| | 2018 |
|---|---|
| **Lease of:** | |
| Sites for network and base station equipment | 7,784 |
| Land and buildings | 10,955 |
| Vehicles and other | 135 |
| Exclusive rights for trademarks | 694 |
| **Depreciation charge, total** | **19,568** |

Additions to the assets leased during the twelve months ended December 31, 2018 amounted to RUB 22,572 million.

Interest expense accrued on lease obligations for the the twelve months ended December 31, 2018 totaled RUB 13,917 million and was included in finance costs in the accompanying consolidated statements of profit or loss.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

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## 25. RIGHTS-OF-USE ASSETS AND LEASE OBLIGATIONS (Continued)

As of December 31, 2018, expenses recognized in respect of variable lease payments not included on the measurement of lease liabilities and short-term leases amounted to RUB 209 million and RUB 173 million, respectively.

The following table presents future minimum lease payments under lease arrangements together with the present value of the net minimum lease payments as at December 31, 2018:

| | December 31, 2018 |
|---|---|
| **Minimum lease payments, including:** | |
| Current portion (less than 1 year) | 30,220 |
| More than 1 to 5 years | 107,403 |
| Over 5 years | 116,420 |
| **Total minimum lease payments** | **254,043** |
| Less amount representing interest | (93,491) |
| **Present value of net minimum lease payments, including:** | |
| Current portion (less than 1 year) | 15,812 |
| More than 1 to 5 years | 62,468 |
| Over 5 years | 82,272 |
| **Total present value of net minimum lease payments** | **160,552** |
| Less current portion of lease obligations | (15,812) |
| **Non-current portion of lease obligations** | **144,740** |

Total cash outflows for leases for the year ended December 31, 2018 totaled to RUB 27,643 million, of which 13,684 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. A 1% increase in the sales of the respective stores is not expected to have any material effect on the Group's profit or loss.

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.

### Comparative information under *IAS 17 Leases*

**Accounting policy**—Under IAS 17 leases were classified as finance or operating. Leases were classified as finance whenever the terms of the lease transfered substantially all risks and rewards incidental to ownership of the leased asset to the Group. At the commencement of the lease term, the leased asset was measured at the lower of fair value or present value of the future minimum lease payments and was depreciated over the lease term. The corresponding liability was recognized in the consolidated statement of financial position within borrowings. The discount rate used in the calculating

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

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## 25. RIGHTS-OF-USE ASSETS AND LEASE OBLIGATIONS (Continued)

the present value of minimum lease payments was the interest rate implicit in the lease. If there was no interest rate in the lease, the Group's incremental borrowing rate was used.

Payments for lease contracts classified as operating were expensed on a straight-line basis over the term of the lease.

The following table presents a summary of net book value of leased property, plant and equipment:

| | December 31, 2017 |
|---|---|
| Network and base station equipment | 8,098 |
| Office equipment, vehicles and other | 63 |
| **Leased assets, net** | **8,161** |

Additions under finance lease agreements for the years ended December 31, 2017 and 2016 amounted to RUB 3,339 million and RUB 1,117 million, respectively. Depreciation of the assets under finance leases for the years ended December 31, 2017 and 2016 amounted to RUB 702 million and RUB 603 million, respectively, and was included in depreciation and amortization expense in the accompanying consolidated statement of profit or loss.

Interest expense accrued on finance lease obligations for the year ended December 31, 2017 and 2016 amounted to RUB 954 million and RUB 855 million, respectively, and was included in finance costs in the accompanying consolidated statement of profit or loss.

The following tables present future minimum lease payments under capital leases together with the present value of the net minimum lease payments as at December 31, 2017:

| | December 31, 2017 |
|---|---|
| **Minimum lease payments, including:** | |
| Current portion (less than 1 year) | 1,763 |
| More than 1 to 5 years | 6,837 |
| Over 5 years | 12,845 |
| **Total minimum lease payments** | **21,445** |
| Less amount representing interest | (9,588) |
| **Present value of net minimum lease payments, including:** | |
| Current portion (less than 1 year) | 801 |
| More than 1 to 5 years | 3,138 |
| Over 5 years | 7,918 |
| **Total present value of net minimum lease payments** | **11,857** |
| Less current portion of lease obligations | (801) |
| **Non-current portion of lease obligations** | **11,056** |

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

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## 25. RIGHTS-OF-USE ASSETS AND LEASE OBLIGATIONS (Continued)

Leased assets included transponders which are installed on a satellite and used for provision of satellite television services, network equipment and automobiles. The lease term of the transponders is twelve years. The lease term of network equipment is fifteen years. The average lease term of the automobiles is three years. The Group has an obligation to purchase these automobiles under the respective finance lease agreements at the end of the lease term.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

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## 26. RECONCILIATION OF LIABILITIES ARISING FROM FINANCIAL ACTIVITIES

| | December 31, 2017 | Financing cash flows | Operating cash flows | Acquisitions | Foreign exchange movement | Other comprehensive income | Change in fair value | Effect of new standards on opening balance | Other changes[1] | December 31, 2018 |
|---|---|---|---|---|---|---|---|---|---|---|
| Notes (Note 24) | 108,776 | (472) | — | — | 8,967 | — | — | — | 84 | 117,355 |
| Bank and other loans (Note 24) | 182,937 | 70,657 | | 167 | 2,250 | 22 | | (2,983) | (2,270) | 250,780 |
| Lease obligation (Note 25) | 11,857 | (13,577) | (13,684) | 690 | (1,456) | 1,821 | — | 140,736 | 34,166 | 160,553 |
| Credit guarantee agreement related to foreign-currency hedge (Note 30) | 996 | (981) | — | — | (15) | — | — | — | — | — |
| Contingent consideration (Note 28) | 180 | (65) | — | 940 | — | — | — | — | (115) | 940 |
| Payables related to repurchase of common stock (Note 32) | — | (22,655) | — | — | — | — | — | — | 22,655 | — |
| Dividends payable (Note 32) | 125 | (50,054) | — | — | — | — | — | — | 50,075 | 146 |
| Payable related to purchase of noncontrolling interests | — | (101) | — | — | — | — | — | — | 101 | — |
| Payables related to transactions under common control | — | (13,242) | — | 13,362 | — | — | — | — | — | 120 |
| Liability under put option agreement (Note 33) | 2,424 | — | — | — | — | 592 | 719 | — | — | 3,735 |
| Receivables related to sale of own shares | — | 89 | — | — | — | — | — | — | (89) | — |
| Hedge asset (net) | (8,129) | 4,477 | (752) | — | (2,837) | 129 | — | — | 4,316 | (2,796) |
| **Total liabilities arising from financial activities** | **299,166** | **(25,924)** | **(14,436)** | **15,159** | **6,909** | **2,564** | **719** | **137,753** | **108,923** | **530,833** |

(1) Including accrual of liabilities related to dividends declared, repurchase of common stock, additions under lease agreements, depreciation of debt issuance cost, modification gain and others changes.

| | December 31, 2016 | Financing cash flows | Operating cash flows | Acquisitions | Foreign exchange movement | Other comprehensive income | Change in fair value | Other changes[1] | December 31, 2017 |
|---|---|---|---|---|---|---|---|---|---|
| Notes (Note 24) | 78,186 | 32,860 | — | — | (2,339) | — | — | 69 | 108,776 |
| Bank and other loans (Note 24) | 195,088 | (10,530) | — | 27 | (2,051) | (12) | — | 415 | 182,937 |
| Finance lease obligation (Note 25) | 11,046 | (774) | (854) | — | (368) | — | — | 2,807 | 11,857 |
| Credit guarantee agreement related to foreign-currency hedge (Note 30) | 2,907 | (1,766) | — | — | (145) | — | — | — | 996 |
| Contingent consideration (Note 28) | 3 | — | — | 175 | 2 | — | — | — | 180 |
| Payables related to repurchase of common stock | — | (21,896) | — | — | — | — | — | 21,896 | — |
| Dividends payable (Note 32) | 87 | (51,759) | — | — | — | — | — | 51,797 | 125 |
| Payable related to purchase of noncontrolling interests | — | (7) | — | — | — | — | — | 7 | — |
| Liability under put option agreement (Note 33) | 2,243 | — | — | 402 | — | (101) | (120) | — | 2,424 |
| Hedge asset (net) | (13,632) | 3,427 | (1,233) | | 145 | 3,164 | | | (8,129) |
| **Total liabilities arising from financial activities** | **275,958** | **(50,445)** | **(2,087)** | **604** | **(4,756)** | **(3,051)** | **(120)** | **76,991** | **299,166** |

(1) Including accrual of liabilities related to dividends declared, repurchase of common stock, additions under lease agreements, depreciation of debt issuance cost, modification gain and others changes.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 27. 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.

***Retirement benefits***—MGTS, a subsidiary of the Group, has historically offered its employees certain benefits upon and after retirement, which form a defined benefit plan. The cost of providing benefits is determined using the projected unit credit method with actuarial valuation being carried out at the end of each reporting period.

***Share based settlement programs***—For 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.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 27. PROVISIONS (Continued)

The following table summarizes the movement in provisions for the year ended December 31, 2018, 2017 and 2016:

| | Tax provisions other than for income tax | Provision for decommissioning and restoration | Employee bonuses and other rewards | SEC provision | Other provisions | Total provisions |
|---|---|---|---|---|---|---|
| **At 1 January 2016** | **(525)** | **(1,459)** | **(8,237)** | **—** | **(207)** | **(10,428)** |
| Arising during the year | (1,058) | (45) | (14,085) | — | (275) | (15,463) |
| Utilised | 374 | 8 | 12,482 | — | 223 | 13,087 |
| Discount rate adjustment and imputed interest (change in estimates) | — | (142) | (51) | — | — | (193) |
| Unused amounts reversed | 742 | 430 | 1,096 | — | 34 | 2,302 |
| Disposal of a subsidiary | | — | 91 | — | — | 91 |
| Translation adjustments and other | 10 | 17 | 152 | — | — | 179 |
| **At 31 December 2016** | **(457)** | **(1,191)** | **(8,552)** | **—** | **(225)** | **(10,425)** |
| Current 2016 | (457) | — | (7,393) | — | (225) | (8,075) |
| Non-current 2016 | — | (1,191) | (1,159) | — | — | (2,350) |
| **At 1 January 2017** | **(457)** | **(1,191)** | **(8,552)** | **—** | **(225)** | **(10,425)** |
| Arising during the year | (229) | (108) | (15,181) | — | (534) | (16,052) |
| Utilised | 342 | 5 | 12,203 | — | 92 | 12,642 |
| Discount rate adjustment and imputed interest (change in estimates) | — | (103) | 41 | — | — | (62) |
| Unused amounts reversed | 33 | 338 | 1,233 | — | 101 | 1,705 |
| Translation adjustments and other | 1 | 10 | 99 | — | (79) | 31 |
| **At 31 December 2017** | **(310)** | **(1,049)** | **(10,157)** | **—** | **(645)** | **(12,161)** |
| Current 2017 | (310) | — | (8,897) | — | (645) | (9,852) |
| Non-current 2017 | — | (1,049) | (1,260) | — | — | (2,309) |
| **At 1 January 2018** | **(310)** | **(1,049)** | **(10,157)** | **—** | **(645)** | **(12,161)** |
| Arising during the year | (374) | (1,912) | (14,259) | (55,752)[1] | (941) | (73,238) |
| Utilised | 336 | 18 | 13,873 | — | 393 | 14,620 |
| Discount rate adjustment and imputed interest (change in estimates) | — | (223) | 177 | — | — | (46) |
| Unused amounts reversed | 211 | 89 | 1,079 | — | 872 | 2,251 |
| Arising due to acquisitions of subsidiaries | (113) | — | (984) | — | (1,165) | (2,262) |
| Translation adjustments and other | (2) | (32) | (107) | (3,298) | (27) | (3,466) |
| **At 31 December 2018** | **(252)** | **(3,109)** | **(10,378)** | **(59,050)** | **(1,513)** | **(74,302)** |
| Current 2018 | (252) | — | (10,096) | (59,050) | (1,513) | (70,911) |
| Non-current 2018 | — | (3,109) | (282) | — | — | (3,391) |

(1) See information relating to SEC provision in Note 34.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 28. 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.

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.

***Hedging 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. The Group determines the existence of an economic relationship between the hedging instruments and hedged item based on the currency, amount and timing of their respective cash flows. The Group assesses whether the derivative designated in each hedging relationship is expected to be and has been effective in offsetting changes in cash flows of the hedged item using the qualitative method. The hedge ratio applied by the Group is the same as that resulting from the quantity of the hedged item and the quantity of the hedging instrument actually used to hedge that quantity of the hedged item.

The Group designates derivatives as either fair value hedges or cash flow hedges in case the required criteria are met.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 28. FAIR VALUE OF FINANCIAL INSTRUMENTS (Continued)

*Fair value hedges*—Changes in the fair value of derivatives that are designated and qualified as fair value hedges are recognized in profit or loss immediately together with any changes in the fair value of the hedged asset or liability that are attributed to the hedged risk.

*Cash flow hedges*—The effective portion of changes in the fair value of derivatives that are designated and qualified as cash flow hedges are recognized in other comprehensive income.

The gain or loss relating to the ineffective portion is recognized immediately in profit or loss. Gains or losses accumulated in other comprehensive income are immediately reclassified into the consolidated statement of profit or loss when related hedged transactions affects earnings.

For derivatives that do not meet the conditions for hedge accounting, gains and losses from changes in the fair value 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.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 28. FAIR VALUE OF FINANCIAL INSTRUMENTS (Continued)

As of December 31, 2018 and 2017 financial assets and financial liabilities of the Group comprise of:

### 1. Financial assets

| | December 31, 2018 | December 31, 2017 |
|---|---|---|
| **Trade and other receivables (Note 18)** | **37,143** | **28,017** |
| **Accounts receivable, related parties (Note 31)** | **8,930** | **11,360** |
| **Cash and Cash equivalents (Note 14)** | **84,075** | **30,586** |
| | | |
| **Other financial assets:** | | |
| **Financial assets at fair value through profit or loss:** | | |
| Securities held by MTS Bank | 22,487 | — |
| Assets in Sistema Capital trust management | 11,644 | 9,600 |
| Currency forwards and options not designated as hedges | 2,200 | — |
| Cross-currency swaps not designated as hedges | 1,077 | — |
| ***Total financial assets at fair value through profit or loss*** | **37,408** | **9,600** |
| **Financial assets at fair value through OCI:** | | |
| Cross-currency swaps designated as cash flow hedges | 2,797 | 8,403 |
| Notes | 70 | 57 |
| ***Total financial assets at fair value through OCI*** | **2,867** | **8,460** |
| **Financial assets at amortized cost:** | | |
| Deposits and loans issued | 83,865 | 33,251 |
| Notes | 31,165 | 8,480 |
| Other | 2,579 | 1,810 |
| ***Total financial assets at amortized cost*** | **117,609** | **43,541** |
| **Total other financial assets** | **157,884** | **61,601** |
| Total financial assets | 288,032 | 131,564 |
| Total current financial assets | (230,642) | (120,719) |
| **Total non-current financial assets** | **57,390** | **10,845** |

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 28. FAIR VALUE OF FINANCIAL INSTRUMENTS (Continued)

### 2. Financial liabilities

| | December 31, 2018 | December 31, 2017 |
|---|---|---|
| **Trade and other payables** | **53,623** | **47,314** |
| **Accounts payable, related parties (Note 31)** | **1,301** | **1,102** |
| **Financial liabilities at amortized cost:** | | |
| **Loans and borrowings:** | | |
| Bank and other loans | 250,780 | 182,937 |
| Lease obligations | 160,552 | 11,857 |
| Notes | 117,355 | 108,776 |
| MTS Bank deposits and liabilities | 111,454 | — |
| ***Total loans and borrowings*** | **640,141** | **303,570** |
| Guarantee payment received | — | 996 |
| ***Total financial liabilities at amortized cost*** | **640,141** | **304,566** |
| **Other financial liabilities at fair value:** | | |
| **Financial liabilities at fair value through profit or loss:** | | |
| Liabilities under option agreements (Note 33) | 3,735 | 2,424 |
| Contingent consideration and other liabilities | 936 | — |
| Interest rate swaps not designated as hedges | 265 | — |
| Currency forwards not designated as hedges | 85 | — |
| Interest rate swaps designated as cash flow hedges | — | 390 |
| ***Total financial liabilities at fair value through profit or loss*** | **5,021** | **2,814** |
| **Financial liabilities at fair value through OCI:** | | |
| Cross-currency swaps designated as cash flow hedges | — | 274 |
| ***Total financial liabilities at fair value through OCI*** | **—** | **274** |
| **Total other financial liabilities at fair value** | **5,021** | **3,088** |
| Total financial liabilities | 700,086 | 356,070 |
| Total current financial liabilities | (187,160) | (115,926) |
| **Total non-current financial liabilities** | **512,926** | **240,144** |

The fair value measurement of the Group's derivative instruments and investments in Sistema Capital trust management 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.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 28. FAIR VALUE OF FINANCIAL INSTRUMENTS (Continued)

The table below presents the fair value of financial instruments carried at fair value within the statement of financial position:

| | Level of inputs | December 31, 2018 | December 31, 2017 |
|---|---|---|---|
| **Assets** | | | |
| Sistema International Funding S.A. Bonds due in 2019 (related party) (Note 15, 31) | Level 1 | 70 | 57 |
| Securities held by MTS Bank | Level 1 | 22,487 | — |
| Derivative instruments | Level 2 | 6,074 | 8,403 |
| *Currency forwards and options* | | *2,200* | *—* |
| *Cross-currency interest rate swaps* | | *3,874* | *8,403* |
| Assets in Sistema Capital trust management (related party) (Note 15, 31) | Level 2 | 11,644 | 9,600 |
| | | | |
| **Liabilities** | | | |
| Derivative instruments | Level 2 | (350) | (664) |
| *Interest rate swaps* | | *(265)* | *(390)* |
| *Cross-currency interest rate swaps* | | *—* | *(274)* |
| *Currency forwards* | | *(85)* | *—* |
| Liabilities under option agreements | Level 3 | (3,735) | (2,424) |
| Contingent consideration | Level 3 | (940) | (180) |

For the year ended December 31, 2018, 2017 and 2016, net realized gains and losses of Level 3 liabilities resulting from fair value measurements amounted to RUB 719 million loss, RUB 120 million gain and a RUB 199 million gain, respectively and were recognized as a part of change in fair value of financial instruments' in the consolidated statement of profit or loss. No unrealized gains or losses of Level 3 liabilities resulting from fair value measurements were recognized during the years ended December 31, 2018, 2017 and 2016.

The liability under put option agreement for redeemable non-controlling interests in MTS Armenia in the amount of RUB 3,629 million and RUB 2,012 million as of December 31, 2018 and 2017, respectively, 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, 2018 | December 31, 2017 |
|---|---|---|
| Post-tax discount rate | 13% | 13% |
| Revenue growth rate | 0.3 - 2.0% (av. 0.9%) | 0.0 - (0.5)% (av. –0.2%) |
| OIBDA margin | 40.5 - 43.2% (av. 41.5%) | 40.2 - 41.2% (av. 40.7%) |

The liability under option agreement for redeemable non-controlling interests in Oblachny Retail amounted to nil and RUB 412 million as of December 31, 2018 and 2017, respectively, and calculated based on an agreed fixed formula, which includes future operating and financial indicators. The most

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 28. FAIR VALUE OF FINANCIAL INSTRUMENTS (Continued)

significant quantitative inputs used to measure the fair value of the liability under option agreement are presented in the table below:

| Unobservable inputs | December 31, 2018 | December 31, 2017 |
|---|---|---|
| Discount rate | 16,7% | 10% |
| Revenue, average amount per year | 660 | 632 |
| OIBDA/EBITDA margin, average rate | (68)% | 13% |
| Net debt, average amount per year | (3,079) | (129) |

Other liability under option agreement relates to redeemable non-controlling interests in Kulturnaya Sluzhba and is insignificant.

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 borrowings, gross of debt issuance cost, as disclosed in the table below:

| | | December 31, 2018 | | December 31, 2017 | |
|---|---|---|---|---|---|
| | Level of inputs | Fair value | Carrying value | Fair value | Carrying value |
| Notes (Note 24) | Level 1 | (115,698) | (117,534) | (112,531) | (109,000) |
| Bank and other loans (Note 24) | Level 3 | (251,189) | (251,188) | (183,543) | (183,787) |
| | | **(366,887)** | **(368,722)** | **(296,074)** | **(292,787)** |

The fair value of the Group's bank and other loans is measured using a discounted cash flow technique. The discount rate used in the discounted cash flow analysis is determined on the base of the market rate for bank loans available to the Group. The carrying value of the Group's bank and other loans approximates their fair value as of December 31, 2018.

While management has used available market information in estimating the fair value of its financial instruments, the market information may not be fully reflective of the value that could be realized in the current circumstances.

There were no transfers between levels of inputs within the hierarchy during the years ended December 31, 2018, 2017 and 2016.

There were no transfers between the accounting categories of financial instruments during the years ended December 31, 2018, 2017 and 2016.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 29. BANK FINANCIAL ASSETS AND LIABILITIES

### 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, 2018.

| | December 31, 2018 |
|---|---|
| Loans to customers | 68,132 |
| Due from banks | 2,635 |
| Allowance for impairment losses | (7,729) |
| **Total bank deposits and loans to customers, net** | **63,038** |
| | |
| Less: current portion | (32,385) |
| **Bank deposits and loans to customers, non-current** | **30,653** |

The structure and amounts of bank loans to customers as of December 31, 2018 is presented in the table below:

| | December 31, 2018 |
|---|---|
| **Loans to legal entities** | |
| Corporations | 27,414 |
| Medium-sized enterprises and small businesses | 1,941 |
| **Total loans to legal entities** | **29,355** |
| **Loans to individuals** | |
| Mortgage loans | 11,668 |
| Consumer loans | 17,307 |
| Credit cards | 9,778 |
| Other | 24 |
| **Total loans to individuals** | **38,777** |
| **Due from banks** | |
| Time deposits with banks | 1,659 |
| Obligatory reserves with the Central Bank of Russia | 976 |
| **Total due from banks** | **2,635** |
| **Total bank deposits and loans to customers** | **70,767** |
| Less: allowance for impairment losses | (7,729) |
| **Total bank deposits and loans to customers, net** | **63,038** |

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 29. BANK FINANCIAL ASSETS AND LIABILITIES (Continued)

The table below summarizes carrying value of loans to customers aggregated by types of collateral obtained by the Group:

| | December 31, 2018 |
|---|---|
| Loans collateralized by guaranties | 17,984 |
| Loans collateralized by pledge of real estate | 14,237 |
| Loans collateralized by pledge of own promissory notes | 326 |
| Loans collateralized by pledge of equipment | 143 |
| Loans collateralized by securities | 32 |
| Loans collateralized by rights of claim | 15 |
| Loans collateralized by pledge of inventories | 12 |
| Unsecured loans | 35,383 |
| Allowance for impairment losses | (7,689) |
| **Total loans to customers, net** | **60,443** |

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, 2018 are presented in the table below:

| | Loans to customers | Due from banks | Total |
|---|---|---|---|
| **Balance as at the date of acquisition** | 8,444 | 42 | **8,486** |
| Provision charge/release | 636 | (2) | 634 |
| Recovery of bad debt written-off | 430 | — | 430 |
| Bad debt written-off | (1,817) | — | (1,817) |
| Foreign currency revaluation effect | (4) | — | (4) |
| **Balance as at December 31, 2018** | **7,689** | **40** | **7,729** |

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

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## 29. BANK FINANCIAL ASSETS AND LIABILITIES (Continued)

Movements in provision for impairment losses on loans to legal entities for the year ended December 31, 2018 were as follows:

| | Stage 1 | Stage 2 | Stage 3 | POCI* | TOTAL |
|---|---|---|---|---|---|
| **Balance as at the date of acquisition** | **325** | **306** | **3,714** | **182** | **4,527** |
| —Transfer to stage 1 | — | — | — | — | — |
| —Transfer to stage 2 | (2) | — | 2 | — | — |
| —Transfer to stage 3 | — | (29) | 29 | — | — |
| New financial assets originated or purchased | 54 | 65 | — | 9 | 128 |
| Change due to change of credit risk | (55) | 144 | (79) | 64 | 74 |
| Write-offs | — | — | (637) | — | (637) |
| Recovery of previously written-off assets | — | — | 124 | — | 124 |
| Foreign exchange difference | (4) | — | — | — | (4) |
| **Balance as at December 31, 2018** | **318** | **486** | **3,153** | **255** | **4,212** |

* POCI—financial assets purchased or originated credit-impaired

Movements in provision for impairment losses attributable to loans to individuals for the year ended December 31, 2018 were as follows:

| | Stage 1 | Stage 2 | Stage 3 | POCI | TOTAL |
|---|---|---|---|---|---|
| **Balance as at the date of acquisition** | **683** | **388** | **2,468** | **378** | **3,917** |
| —Transfer to stage 1 | 243 | (162) | (81) | — | — |
| —Transfer to stage 2 | (48) | 66 | (18) | — | — |
| —Transfer to stage 3 | (2) | (291) | 293 | — | — |
| New financial assets originated or purchased | 355 | — | — | — | 355 |
| Change due to change of credit risk | (475) | 317 | 217 | 20 | 79 |
| Write-offs | — | — | (1,180) | — | (1,180) |
| Recovery of previously written-off assets | — | — | 306 | — | 306 |
| **Balance as at December 31, 2018** | **756** | **318** | **2,005** | **398** | **3,477** |

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.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 29. BANK FINANCIAL ASSETS AND LIABILITIES (Continued)

The table below summarizes information regarding the quality of loans to individuals:

| | Stage 1 | Stage 2 | Stage 3 | POCI | December 31, 2018 |
|---|---|---|---|---|---|
| Low to fair risk | 34,581 | 445 | — | — | 35,026 |
| Monitoring | — | 534 | 5 | — | 539 |
| Impaired | — | — | 2,814 | 398 | 3,212 |
| Loss allowance | (756) | (318) | (2,005) | (398) | (3,477) |
| **Total** | **33,825** | **661** | **814** | **—** | **35,300** |

The table below summarizes information regarding the quality of loans to legal entities:

| | Stage 1 | Stage 2 | Stage 3 | POCI | December 31, 2018 |
|---|---|---|---|---|---|
| Low to fair risk | 22,083 | 1,555 | — | — | 23,638 |
| Monitoring | — | 1,871 | — | — | 1,871 |
| Impaired | — | — | 3,586 | 260 | 3,846 |
| Loss allowance | (327) | (477) | (3,153) | (255) | (4,212) |
| **Total** | **21,756** | **2,949** | **433** | **5** | **25,143** |

Analysis by credit quality of loans to individuals outstanding as of December 31, 2018 is as follows:

| As at December 31, 2018 | Gross loans | Provision for impairment | Net loans | Provision for impairment to gross loans |
|---|---|---|---|---|
| **Collectively assessed** | | | | |
| Not past due | 34,582 | (756) | 33,826 | 2% |
| Overdue: | | | | |
| up to 30 days | 445 | (80) | 365 | 18% |
| 31 to 60 days | 197 | (84) | 113 | 43% |
| 61 to 90 days | 136 | (77) | 59 | 57% |
| 91 to 180 days | 340 | (245) | 95 | 72% |
| over 180 days | 2,079 | (1,579) | 500 | 76% |
| **Total collectively assessed loans** | **37,779** | **(2,821)** | **34,958** | **7%** |
| **Individually impaired** | | | | |
| Not past due | 599 | (475) | 124 | 79% |
| Overdue: | | | | |
| up to 30 days | — | — | — | — |
| 31 to 60 days | 4 | (1) | 3 | 25% |
| 61 to 90 days | 1 | — | 1 | 0% |
| 91 to 180 days | 27 | — | 27 | 0% |
| over 180 days | 367 | (180) | 187 | 49% |
| **Total individually impaired loans** | **998** | **(656)** | **342** | **66%** |
| **Total** | **38,777** | **(3,477)** | **35,300** | 9% |

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 29. BANK FINANCIAL ASSETS AND LIABILITIES (Continued)

Analysis by credit quality of loans to medium-sized enterprises and small businesses outstanding as of December 31, 2018 is as follows:

| As at December 31, 2018 | Gross loans | Provision for impairment | Net loans | Provision for impairment to gross loans |
|---|---|---|---|---|
| **Collectively assessed** | | | | |
| Not past due | 1,224 | (24) | 1,200 | 2% |
| Overdue: | | | | |
| up to 30 days | 7 | (1) | 6 | 16% |
| 31 to 60 days | 2 | (1) | 1 | 40% |
| 61 to 90 days | 4 | (2) | 2 | 40% |
| 91 to 180 days | 15 | (7) | 8 | 47% |
| over 180 days | 689 | (414) | 275 | 60% |
| **Total collectively assessed loans** | **1,941** | **(449)** | **1,492** | **23%** |

### 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, 2018.

| | December 31, 2018 |
|---|---|
| Customer accounts | 100,209 |
| Due to banks and other financial institutions | 7,750 |
| Debt securities issued | 1,717 |
| Financial liabilities at fair value through profit or loss | 767 |
| Other financial liabilities | 1,011 |
| **Total bank deposits and liabilities** | 111,454 |
| Less: current portion | (108,821) |
| **Total bank deposits and liabilities, non-current** | **2,633** |

The structure and amounts of customer accounts of December 31, 2018 are presented below:

| | December 31, 2018 |
|---|---|
| **Legal entities** | |
| —Current/settlement accounts | 19,408 |
| —Term deposits | 8,188 |
| | |
| **Individuals** | |
| —Current/settlement accounts | 13,364 |
| —Term deposits | 59,249 |
| **Total customer accounts** | **100,209** |

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 29. BANK FINANCIAL ASSETS AND LIABILITIES (Continued)

The structure and amounts of due to banks as of December 31, 2018 are presented below:

| | December 31, 2018 |
|---|---|
| Loans under repurchase agreements | 5,315 |
| Loans and term deposits from banks and other financial institutions | 1,268 |
| Correspondent accounts of other banks | 1,167 |
| **Total due to banks** | **7,750** |

As of December 31, 2018, loans under repurchase agreements were secured by the following collaterals:

- securities measured at amortized cost with the value of RUB 2,283 million;
- Federal Loan Bonds (OFZ) received from Deposit Insurance Agency (DIA) as a subordinated securities loan in the amount of RUB 3,539 million.

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, 2018. 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.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 29. BANK FINANCIAL ASSETS AND LIABILITIES (Continued)

An analysis of liquidity and interest rate risk inherent to bank assets as of December 31, 2018 is presented in the following table. The maturity corresponds to the contractual terms. However, individuals are entitled to terminate the deposit agreement ahead of schedule.

| | Up to 1 month | 1 month to 3 months | 3 months to 1 year | 1 year to 5 years | Over 5 years | Maturity undefined | December 31, 2018 Total |
|---|---|---|---|---|---|---|---|
| **Financial assets** | | | | | | | |
| Financial assets at fair value through profit or loss | 13,680 | — | — | — | — | — | 13,680 |
| Due from banks | 477 | — | — | — | — | — | 477 |
| Loans to customers | 5,182 | 9,113 | 25,525 | 25,922 | 1,104 | 6,344 | 73,190 |
| Investments in securities | 111 | 4,233 | 10,838 | 14,032 | 1,300 | — | 30,514 |
| **Total interest bearing financial assets** | **19,450** | **13,346** | **36,363** | **39,954** | **2,404** | **6,344** | **117,861** |
| Cash and cash equivalents | 10,117 | — | — | — | — | — | 10,117 |
| Financial assets at fair value through profit or loss | — | — | — | — | — | 8,806 | 8,806 |
| Due from banks | 483 | 61 | 1,928 | 13 | — | — | 2,485 |
| Currency forwards and options not designated as hedges | — | 45 | 183 | — | — | — | 228 |
| Other financial assets* | 522 | 335 | 25 | — | — | 4 | 886 |
| **Total non-interest bearing financial assets** | **11,122** | **441** | **2,136** | **13** | **—** | **8,810** | **22,522** |
| **Total financial assets** | **30,572** | **13,787** | **38,499** | **39,967** | **2,404** | **15,154** | **140,383** |
| **Financial liabilities** | | | | | | | |
| Due to banks and other financial institutions | (1,268) | — | — | — | — | — | (1,268) |
| Customer accounts* | (13,012) | (7,239) | (45,971) | (1,599) | — | — | (67,821) |
| Debt securities issued | (12) | (314) | (333) | (771) | (287) | — | (1,717) |
| **Total interest bearing financial liabilities** | **(14,292)** | **(7,553)** | **(46,304)** | **(2,370)** | **(287)** | | **(70,806)** |
| Currency forwards and options not designated as hedges | — | (45) | (328) | — | — | — | (373) |
| Obligation to deliver securities | (394) | | | | | | (394) |
| Due to banks and other financial institutions | (6,482) | — | — | — | — | — | (6,482) |
| Customer accounts* | (48,854) | — | — | — | — | — | (48,854) |
| Other financial liabilities | (1,620) | (541) | (1,851) | — | — | — | (4,012) |
| Lease obligations* | (21) | (37) | (144) | (200) | (6) | — | (408) |
| **Total non-interest bearing financial liabilities** | **(57,371)** | **(623)** | **(2,323)** | **(200)** | **(6)** | **—** | **(60,523)** |
| **Total financial liabilities** | **(71,663)** | **(8,176)** | **(48,627)** | **(2,570)** | **(293)** | **—** | **(131,329)** |
| **Liquidity gap** | (41,091) | 5,611 | (10,128) | 37,397 | 2,111 | | |
| **Stable sources of funding** | **40,689** | **(13,182)** | **22,667** | **(8,128)** | **(42,046)** | | |
| **Net liquidity gap** | **(402)** | **(7,571)** | **12,539** | **29,269** | **(39,935)** | | |
| **Cumulative liquidity gap** | **(402)** | **(7,973)** | **4,566** | **33,835** | **(6,100)** | | |
| **Cumulative interest sensitivity gap** | **(5,158)** | **(10,951)** | **(1,110)** | **38,594** | **40,711** | | |
| * Including intercompany balances | (16,402) | (5) | (17) | (3) | — | — | (16,427) |

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## 29. BANK FINANCIAL ASSETS AND LIABILITIES (Continued)

Analysis of the liquidity and interest rate risks is presented in the following table. The amounts in the table below represent future aggregate undiscounted cash flows.

| | 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 | December 31, 2018 Total |
|---|---|---|---|---|---|---|---|---|
| **Interest bearing financial liablities** | | | | | | | | |
| Due to banks | 7,6% | 1,262 | 8 | — | — | — | — | **1,270** |
| Customer accounts* | 6,3% | 12,410 | 7,900 | 47,490 | 1,644 | — | — | **69,444** |
| Debt securities issued | 9,5% | 12 | 316 | 258 | 912 | 857 | — | **2,355** |
| **Total interest bearing financial liabilities** | | **13,685** | **8,224** | **47,748** | **2,556** | **857** | | **73,070** |
| **Non-interest bearing financial liablities** | | | | | | | | |
| Financial liabilities at fair value through profit or loss | | — | — | 373 | — | — | — | **373** |
| Due to banks | | 6,482 | — | — | — | — | — | **6,482** |
| Customer accounts* | | 48,854 | — | — | — | — | — | **48,854** |
| Other financial liabilities | | 750 | 159 | 1,655 | — | — | — | **2,564** |
| **Total non-interest bearing financial liabilities and commitments** | | **56,086** | **159** | **2,028** | **—** | **—** | **—** | **58,273** |
| **Total financial liabilities** | | **69,771** | **8,383** | **49,776** | **2,556** | **857** | **—** | **131,343** |
| * Including intercompany balances | | (16,465) | — | — | — | — | — | (16,465) |

The Group issued guaranties to the customers in the amount of RUB 10,587 million. These instruments, involving varying degrees of credit risk, are not reflected in the consolidated statement of financial position.The Group's maximum exposure to credit risk in relation to these financial instruments is represented by their contractual amounts.

## 30. 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 Budget Committee.

### *Capital risk*

MTS Bank, the Group's subsidiary, is subject to regulations of the Central Bank of Russia. That requires that banks comply with the minimum capital adequacy ratios of 8% calculated on the basis of statutory standalone financial statements. MTS Bank met the requirements established by the CBR. As of December 31, 2018, MTS Bank's capital adequacy ratio in accordance with CBR requirements was 11.9%.

Basel Capital Accord (Basel 1) requires that banks that operate internationally have a capital adequacy risk ratio of 8% of their risk-weighted assets for the total amount of capital and 4%—for the tier 1 capital. MTS Bank met the requirements established by the Accord. As of December 31, 2018, MTS Bank's capital adequacy ratio was 18.38% and 13.34% respectively.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

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## 30. FINANCIAL RISK MANAGEMENT (Continued)

***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, and derivative financial instruments. The sensitivity analyses in the following sections relate to the financial position as of December 31, 2018, 2017 and 2016.

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.

- Variable interest rate

The Group's bank loans denominated in US Dollars and Euros primarily bear floating interest rate. To eliminate the exposure of changes in variable interest rates related to its debt obligations, the Group enters into variable-to-fixed cross-currency interest rate swap agreements, so that cross-currency interest rate swaps matches the exact maturity dates of the underlying debt allowing for highly-effective cash flow hedges. In aggregate, the Group entered into variable-to-fixed cross-currency interest rate swap agreements designated to manage the exposure of changes in variable interest rates related to 100% and 100% of the Group's bank loans with variable rates outstanding as of December 31, 2018 and 2017, respectively.

- Fixed interest rate risk

The Group's Notes and bank loans denominated in Russian Rubles bear primarily 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 5.8% and 7.9% of the Group's Notes and bank loans with fixed rates outstanding as of December 31, 2018 and 2017, respectively.

The notional amounts of interest rate derivative instruments outstanding amounted to RUB 44,187 million and RUB 49,429 million as of December 31, 2018 and 2017, respectively.

Sensitivity analysis

A reasonably possible increase of 100 basis points in short term interest rates would have resulted in RUB 201 million, RUB 44 million and RUB 704 million future increases of interest expense for the years ended December 31, 2018, 2017 and 2016, respectively. The same decrease in short term interest rates would have resulted in RUB 201 million, RUB 44 million and RUB 704 million future decreases of finance cost for the years ended December 31, 2018, 2017 and 2016, respectively. There will be no material impact on equity.

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**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

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## 30. FINANCIAL RISK MANAGEMENT (Continued)

The interest rate sensitivity analysis was performed based on a constant level of fixed and floating rate debt.

Foreign currency risks

Foreign currency risk is the risk that the fair value or future cash flows 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 hedging significant foreign currency cash outflows with 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 interest or principal, and interest payments from RUB-denominated amounts to USD-denominated amounts at a specified rate. The rate was determined by the market spot rate upon issuance. Cross-currency interest rate swap contracts mature in 2019-2024.

In aggregate the Group entered into cross-currency interest rate swap agreements designated to manage the exposure of changes in currency exchange rate for 50.8% and 39.6% of its USD-denominated Notes and bank loans outstanding as of December 31, 2018 and 2017 respectively.

The notional amounts of currency derivative instruments amounted to RUB 34,115 million and RUB 28,669 million as of December 31, 2018 and 2017, respectively.

The Group has entered into currency forward agreements to minimize the foreign currency risk exposure for operating activities. 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 agreements, unfulfilled as of December 31, 2018, 2017 and 2016, the Group recognized RUB 1,937 million gain, nil and RUB 142 million loss in the consolidated statement of profit and loss for the years ended December 31, 2018, 2017 and 2016, respectively.

The notional amounts of currency forward instruments, unfulfilled as of December 31, 2018 and 2017, amounted to RUB 51,002 million and nil, respectively.

In 2018, several of the Group's swap agreements were early terminated early due to the early redemption of loans from Calyon, ING Bank N.V, Nordea Bank AB, Raiffeisen Zentralbank Osterreich AG. Loans and swaps were due in 2019 - 2020. The amount of RUB 505 million, net of tax, was immediately reclassified from accumulated other comprehensive income to profit for the year during the period and recognized as a part of change in fair value of financial instruments' in consolidated statement of profit or loss.

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## 30. FINANCIAL RISK MANAGEMENT (Continued)

The following table presents the effect of the Group's swap agreements designated as cash flow hedges in accumulated other comprehensive income for the years ended December 31, 2018, 2017 and 2016.

| | 2018 | 2017 | 2016 |
|---|---|---|---|
| **Accumulated derivatives income / (loss), beginning of the year, net of tax of 85 and (26) and 261, respectively** | **340** | **(103)** | **1,045** |
| Fair value adjustments on hedging derivatives, net of tax of 840 and (628) and (2,279), respectively | 3,362 | (2,512) | (9,116) |
| Amounts reclassified to profit for the year during the period—forecast transaction no longer expected to occur, net of tax of (126) and nil and nil, respectively | (505) | — | — |
| Amounts reclassified to (profit) / loss for the year during the period—hedged item has affected profit or loss, net of tax of (740) and 739 and 1,992, respectively | (2,960) | 2,955 | 7,968 |
| **Accumulated derivatives income / (loss), end of the year, net of tax of 59 and 85 and (26), respectively** | **237** | **340** | **(103)** |

The following tables demonstrate the sensitivity to a reasonably possible change in USD and EUR exchange rates, with all other variables held constant.

| | Change in rate | USD—effect on profit before tax RUB mln, | EUR—effect on profit before tax RUB mln |
|---|---|---|---|
| 2018 | +1% | (176) | 152 |
| | –1% | 176 | (152) |
| 2017 | +5% | (447) | 830 |
| | –5% | 447 | (830) |
| 2016 | +20% | (6,722) | 2,274 |
| | –20% | 6,722 | (2,274) |

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.

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

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 CBR requirements. Monitoring of adherence to the limits restricting the amount of MTS Bank's market risk is performed day-to-day.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

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## 30. FINANCIAL RISK MANAGEMENT (Continued)

***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 7 years.

Securities held by MTS Bank which are accounted for at fair value through profit and loss 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 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.

As at December 31, 2018, current liabilities exceeded current assets by RUB 26,538 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 21,000 million (Note 24).

***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 recods 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.

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.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

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## 30. FINANCIAL RISK MANAGEMENT (Continued)

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, 2018, and 2017 to be as follows:

| | December 31, 2018 | December 31, 2017 |
|---|---|---|
| Trade and other receivables | 37,143 | 28,017 |
| Deposits and loans issued | 83,865 | 33,251 |
| Notes | 31,235 | 8,537 |
| Securities held by MTS Bank | 22,487 | — |
| Assets in Sistema Capital trust management | 11,644 | 9,600 |
| Derivative financial instruments | 6,074 | 8,403 |

In accordance with the Group's financial instruments management policy, the aggregate credit risk exposure that 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 with financial institutions. The relevant financial institutions are located in different geographical regions and the Group's policy is designed to limit its exposure to any single institution or geographical region. As part of its risk management processes, the Group performs periodic evaluations of the relative credit standing of these financial institutions.

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.

On December 15, 2015, Barclays Bank and the Group signed an addendum to existing cross currency swap agreements. According to the terms of the addendum parties agreed to set credit exposure limits to one another, which permits a mitigation of their respective credit risk by requiring

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## 30. FINANCIAL RISK MANAGEMENT (Continued)

the other party to transfer collateral payments. The balance of Barclays bank's transfer of collateral payments to the Group is nil and RUB 1.0 billion as of December 31, 2018 and 2017, respectively.

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.

## 31. RELATED PARTIES

Related parties include entities under common ownership with the Group, affiliated companies and associated companies.

The aggregated impact of transactions with related parties to the Group's statements of financial position as of December 31, 2018 and 2017 and statements of profit or loss for the years then ended was the following:

| | December 31, 2018 | December 31, 2017 |
|---|---|---|
| **Statements of financial position** | | |
| Short-term investments | 12,086 | 10,064 |
| Accounts receivable, current | 6,385 | 11,358 |
| Accounts receivable, non-current | 2,545 | 2 |
| Bank loans to customers, current | 2,244 | — |
| Advances for property, plant and equipment | 1,380 | 97 |
| Right-of-use assets | 1,359 | — |
| Cash and cash equivalents | 938 | 19,715 |
| Bank loans to customers, non-current | 612 | — |
| Other investments | 149 | 767 |
| Bank deposits and liabilities, current | (42,642) | — |
| Accounts payable | (1,301) | (1,102) |
| Bank deposits and liabilities, non-current | (1,044) | — |
| Lease obligations, non-current | (1,007) | — |
| Lease obligations, current | (185) | — |

| | 2018 | 2017 |
|---|---|---|
| **Statements of profit or loss** | | |
| Revenue | (4,352) | (3,349) |
| Operating expenses / (income) | 2,396 | 4,053 |
| Finance (income) / expenses | (1,398) | (1,267) |
| Interest expenses under lease arrangements | (135) | — |

***Terms and conditions of transactions with related parties***—Outstanding balances as of December 31, 2018 were unsecured and settlements 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, 2018 and December 31, 2017, the Group had no impairment of receivables relating to significant amounts owed by related parties or expenses recognized during the years ended December 31, 2018 and 2017 in respect to bad or doubtful debts from related parties.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 31. RELATED PARTIES (Continued)

Accounts receivable from and accounts payable to related parties were as follows:

| | December 31, 2018 | December 31, 2017 |
|---|---|---|
| **Accounts receivable** | | |
| MTS Belarus, the Group's associate | 4,095 | 4,835 |
| Business Nedvizhimost, a subsidiary of Sistema | 2,561 | 4,052 |
| Sitronics, a subsidiary of Sistema | 1,107 | 317 |
| Zifrovoe TV, the Group's associate | 764 | 702 |
| MTS Bank, the Group's associate | — | 1,232 |
| Other related parties | 403 | 222 |
| **Total accounts receivable, related parties** | **8,930** | **11,360** |
| Less non-current portion | (2,545) | (2) |
| **Accounts receivable, related parties—current** | **6,385** | **11,358** |
| **Accounts payable** | | |
| MTS Belarus, the Group's associate | 678 | 828 |
| TelecomCapStroi, a subsidiary of Sistema | 237 | — |
| Moscow Business Incubator, a subsidiary of Sistema | 152 | — |
| Other related parties | 234 | 274 |
| **Total accounts payable, related parties** | **1,301** | **1,102** |

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.

The Group makes advances for the purchase of property, plant and equipment, intangible assets and other assets to related parties which are summarized as follows:

| | December 31, 2018 | December 31, 2017 |
|---|---|---|
| **Advances given for property, plant and equipment:** | | |
| TelecomCapStroi, a subsidiary of Sistema | 1,317 | — |
| Other related parties | 63 | 1 |
| **Total advances given for property, plant and equipment** | **1,380** | **1** |

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

**31. RELATED PARTIES (Continued)**

| | 2018 | 2017 |
|---|---|---|
| **Purchases of property, plant and equipment, intangible assets and other assets:** | | |
| Moscow Business Incubator, a subsidiary of Sistema | 4,450 | — |
| Mosdachtrest, a subsidiary of Sistema | 1,711 | — |
| Business Nedvizhimost, a subsidiary of Sistema | 328 | — |
| Other related parties | 158 | — |
| **Total purchases of property, plant and equipment, intangible assets and other assets** | **6,647** | **—** |

***Rights-of-use assets and lease obligations***—The following table represents carrying value of right-of-use assets leased from related parties as of December 31, 2018:

| | December 31, 2018 |
|---|---|
| **Carrying value of right-of-use assets:** | |
| Business Nedvizhimost, a subsidiary of Sistema | 919 |
| Kronshtadt, a subsidiary of Sistema | 121 |
| Other related parties | 319 |
| **Total carrying value of right-of-use assets** | **1,359** |

The following table presents summary of lease obligations which arose from lease arrangements with related parties as of December 31, 2018:

| | December 31, 2018 |
|---|---|
| **Lease obligations:** | |
| Business Nedvizhimost, a subsidiary of Sistema | 793 |
| Kronshtadt, a subsidiary of Sistema | 109 |
| Other related parties | 290 |
| **Total lease obligations** | **1,192** |
| Less non-current portion | (1,007) |
| **Lease obligations, related parties—current** | **185** |

Interest expense accrued on these lease obligations for the year 2018 amounted to RUB 135 million and was included in finance costs in the accompanying consolidated statements of profit or loss

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 31. RELATED PARTIES (Continued)

***Bank loans to customers, interbank loans due***—The following table presents loans given by MTS-Bank to related parties as of December 31, 2018:

| | December 31, 2018 |
|---|---|
| **Bank loans due, related parties** | |
| Kronshtadt, a subsidiary of Sistema | 802 |
| Leader-Invest, a subsidiary of Sistema | 612 |
| Binofarm, a subsidiary of Sistema | 412 |
| Kronshtadt Technology, a subsidiary of Sistema | 440 |
| Sistema, parent company | 254 |
| Sistema-finance, a subsidiary of Sistema | 183 |
| Technology for Aviation, a subsidiary of Sistema | 153 |
| **Total bank loans due, related parties** | **2,856** |
| Less non-current portion | (612) |
| **Bank loans due, related parties—current** | **2,244** |

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 31. RELATED PARTIES (Continued)

***Bank deposits and liabilities***—The following table presents deposits in MTS Bank held by related parties as of December 31, 2018:

| | 2018 |
|---|---|
| **Bank deposits and liabilities:** | |
| Key management personnel of the Group and its parent | 29,658 |
| Sistema, parent company | 4,610 |
| Sistema Telecom Activy, a subsidiary of Sistema | 1,542 |
| Project Michurinskiy, a subsidiary of Sistema | 952 |
| Medsi Group, a subsidiary of Sistema | 745 |
| Sistema Real Estate, a subsidiary of Sistema | 599 |
| CTV, a subsidiary of Sistema | 536 |
| Sitronics, a subsidiary of Sistema | 525 |
| Leader-Invest, a subsidiary of Sistema | 433 |
| Sistema-Invest, a subsidiary of Sistema | 338 |
| RTI, a subsidiary of Sistema | 323 |
| Sistema Venture Capital, a subsidiary of Sistema | 319 |
| BashRES, a subsidiary of Sistema | 309 |
| Sistema Capital, a subsidiary of Sistema | 239 |
| TelecomCapStroi, a subsidiary of Sistema | 238 |
| BF-Sistema, a subsidiary of Sistema | 233 |
| Business Nedvizhimost, a subsidiary of Sistema | 226 |
| MBI, a subsidiary of Sistema | 138 |
| Intourautoservice, a subsidiary of Sistema | 128 |
| Detskii Mir, a subsidiary of Sistema | 113 |
| Other related parties | 1,485 |
| **Total bank deposits and liabilities** | **43,686** |
| Less non-current portion | (1,044) |
| **Total bank deposits and liabilities—current** | **42,642** |

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 31. RELATED PARTIES (Continued)

***Investing transactions***—The Group holds certain investments in related parties which are summarized as follows:

| | December 31, 2018 | December 31, 2017 |
|---|---|---|
| **Short-term investments** | | |
| Sistema Capital, a subsidiary of Sistema (assets management) | 11,644 | 9,600 |
| Promissory notes of Intellect Telecom, a subsidiary of Sistema | 283 | 257 |
| Other loans receivable | 159 | 207 |
| **Total short-term investments in related parties** | **12,086** | **10,064** |
| **Other investments** | | |
| Promissory notes issued by Sistema | — | 618 |
| **Total other investments to related parties** | **—** | **618** |
| **Other investments in shares** | | |
| Sistema Venture Capital, a subsidiary of Sistema | 117 | 117 |
| Other investments | 32 | 32 |
| **Total investments in shares of related parties** | **149** | **149** |

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 31. RELATED PARTIES (Continued)

***Operating transactions***—For the years ended December 31, 2018, 2017 and 2016, operating transactions with related parties were as follows:

| | 2018 | 2017 | 2016 |
|---|---|---|---|
| **Revenues from related parties** | | | |
| MTS Bank, the former Group's associate (telecommunication and call center services, bank cards distribution commission) | 1,271 | 1,507 | 900 |
| Sitronics, subsidiary of Sistema (construction of a fiber optic lines) | 1,195 | 303 | — |
| Zifrovoe TV, the Group's associate (subscriber acquisition services) | 508 | 724 | 55 |
| MTS Belarus, the Group's associate (roaming and interconnect services) | 296 | 248 | 276 |
| Detsky Mir, subsidiary of Sistema (telecommunication services) | 175 | 188 | 129 |
| Medsi Group, subsidiary of Sistema (telecommunication and call center services) | 166 | 156 | 242 |
| Other related parties | 741 | 223 | 576 |
| **Total revenues from related parties** | **4,352** | **3,349** | **2,178** |
| **Operating expenses / (income) incurred on transactions with related parties** | | | |
| MTS Bank, the Group's associate (commission related expenses) | 1,217 | 2,259 | 347 |
| Koncel, a subsidiary of Sistema (sale of scrap metal) | (1,141) | — | — |
| Key management personnel of the Group and its parent (interest expense) | 705 | — | — |
| Sistema-invest, a subsidiary of Sistema (change in fair value of financial instruments held by MTS-Bank) | 325 | — | — |
| AB Safety, a subsidiary of Sistema (security services) | 324 | 302 | 271 |
| Sistema, parent company (interest expense) | 284 | — | — |
| Jet Air Group, subsidiary of Sistema (transportation services) | 135 | 172 | 183 |
| MTS Belarus, the Group's associate (roaming and interconnect services) | 104 | 121 | 161 |
| Business Nedvizhimost, a subsidiary of Sistema (rent and sale of real estate) | 39 | 821 | 246 |
| Maxima, a subsidiary of Sistema (advertising services) | 19 | 143 | 1,018 |
| Other related parties | 385 | 235 | 888 |
| **Total operating expenses / (income) incurred on transactions with related parties** | **2,396** | **4,053** | **3,114** |

Finance income, which arose from investment transactions with related parties for the years ended December 31, 2018, 2017 and 2016 was the following:

| | 2018 | 2017 | 2016 |
|---|---|---|---|
| **Finance income from related parties** | | | |
| Sistema Capital, a subsidiary of Sistema (assets management) | 465 | 369 | 128 |
| Business Nedvizhimost, a subsidiary of Sistema | 353 | 359 | 491 |
| MTS Bank, the former Group's associate | 448 | 345 | 285 |
| Other related parties | 132 | 194 | 81 |
| **Total finance income from related parties** | **1,398** | **1,267** | **985** |

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 31. RELATED PARTIES (Continued)

**MTS Bank**—On July 05, 2018 the Group acquired the controlling stake in MTS-Bank and thus it ceased to be a related party to the Group since the acquisition date (Note 5).

**East-West United Bank**—The Group maintains certain bank accounts with East-West United Bank, a subsidiary of Sistema. As of December 31, 2018 and December 31, 2017, the Group's cash position at East-West United Bank amounted to RUB 938 million and RUB 5,969 million, respectively, including short-term deposits in the amount of RUB nil and 5,810, respectively.

**Sistema**—In November 2009, the Group accepted a promissory note, issued by Sistema, as repayment of the loan principal and interest accrued to date under an agreement with Sistema-Hals. The note was interest free and was repayed in fourth quarter of 2018.

In October 2014 the Group acquired 2,501,350 Sistema Notes due in 2016 (series 04) and 1,000 Sistema International Funding S.A. bonds due in 2019 for RUB 519 million and RUB 32 million, respectively. The acquired bonds were classified as available for sale and accounted for at fair value to recognize changes in fair value in other comprehensive income. In March 2016 the Group received principal and coupon of Sistema Notes due in 2016 (series 04) in the amount of RUB 201 million.

As of December 31, 2018 and December 31, 2017, the balance of Sistema International Funding S.A. bonds due in 2019 amounted to RUB 70 million and RUB 57 million respectively.

**Business Nedvizhimost**—In February 2015 and further in May 2015, the Group sold its 100% stake in Rent Nedvizhimost to Business Nedvizhimost, a subsidiary of Sistema, for RUB 8,500 million in total. As of December 31, 2018 and December 31, 2017 the balance of accounts receivable amounted to RUB 2,561 million and RUB 4,052 million, respectively. The amount as of December 31, 2018 is due before December 31, 2021 and bears interest of CBR Key rate + 1,5% p.a.

In December 2018 the Group sold its 40.26% stake in a mutual investment fund «Sistema-Rentnaya Nedvizhimost» to Business Nedvizhimost for RUB 450 million. At the reporting date the Group accounted its share in the joint venture in sum of RUB 690 mln (Note 16).

**Sistema Capital**—In 2016 and 2017 the Group entered into trust agreements with the asset management company Sistema Capital. As of December 31, 2018 and December 31, 2017, the balance of assets under trust management amounted to RUB 11,614 million and RUB 9,600 million respectively.

***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 2018, 2017 and 2016 their total remuneration amounted to RUB 816 million, RUB 739 million and RUB 760 million, respectively. These amounts comprised of RUB 504 million, RUB 490 million and RUB 470 million in base salaries and 312 RUB million, RUB 249 million and RUB 290 million in bonuses paid pursuant to a bonus plan, respectively.

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 2018, 2017 and 2016 amounted to RUB 554 million, RUB 486 million and RUB 481 million, respectively.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 32. SHAREHOLDERS' EQUITY

***Share capital (ordinary shares)***—The Group had 1,998,381,575 authorized ordinary shares with par value 0.1 RUB as of December 31, 2018 and 2017. Preferred shares have not been 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, 2018, the total shares in treasury stock comprised 167,638,899 and 1,830,742,676 shares were outstanding. As of December 31, 2017, the total shares in treasury stock comprised 86,339,156, and 1,912,042,419 shares were outstanding.

Mobile TeleSystems' Level III American Depositary Shares (ADS) were successfully placed during the Company's initial public offering on the New York Stock Exchange on June 30, 2000. Each ADS represents 2 ordinary shares. As of December 31, 2015 the Group repurchased 33,997,667 ADSs, which were used to decrease the Group's charter capital in 2016.

MTS ordinary shares have been traded on the Moscow Exchange (previously, Moscow Interbank Currency Exchange (MICEX)) since October 2003 under the ticker symbol MTSI.

In 2016, the Group launched a Tender Offer, aiming to return cash of up to RUB 4,935 million to the holders of ordinary shares and ADSs. During the year ended December 31, 2016, through the Tender Offer the Group has repurchased 3,060,409 ordinary shares for RUB 747 million (including 1,550,495 ordinary shares purchased from Sistema for RUB 335 million).

In 2017 the Group launched a Tender Offer, aiming to repurchase its ordinary shares (including shares represented by ADSs) for up to RUB 4,647 million. Through the Tender Offer, during the year ended December 31, 2017, the Group purchased a total of 16,022,364 shares (including shares represented by ADSs) at a price per share of RUB 290, for a total cost of RUB 4,646 million. Simultaneously, the Group purchased 16,038,892 shares from Sistema Finance under the Sistema Purchase Agreement for an aggregate purchase price of RUB 4,651 million.

In 2017, the Group announced that Board of Directors has approved the repurchase of shares and ADSs by means of a share repurchase plan in the total amount of up to RUB 20,000,000,000 (the "Repurchase Plan"). This amount includes funds used for purchasing the Company's shares from Sistema Finance until April 2019. During the year ended December 31, 2017, the Group purchased 43,647,128 shares (including shares represented by ADSs) under the Repurchase Plan at prices from RUB 257 up to RUB 305 for a total cost of RUB 12,475 million.

In 2018 (under the 2017 Repurchase plan) the Group purchased 8,057,356 shares (including shares represented by ADSs) for RUB 2,837 million. Additionally the Group purchased 17,339,848 shares from Sistema Finance under the Sistema Purchase Agreement for an aggregate purchase price of RUB 4,882 million.

In July 2018, the Group announced that Board of Directors has approved the repurchase of shares and ADSs by means of a share repurchase plan in the total amount of up to RUB 30,000,000,000 (the "Repurchase Plan"), the amount includes funds used for purchasing the Company's shares from Sistema Finance. During the year ended December 31, 2018, the Group purchased 55,854,178 shares (including shares represented by ADSs) under the Repurchase Plan at prices from RUB 191 up to RUB 338, for a total cost of RUB 14,903 million. This includes 27,929,870 of shares purchased from Sistema Finance for a total amount of RUB 7,412 million.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 32. SHAREHOLDERS' EQUITY (Continued)

### 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 functional to the presentation currency.

**Cash flow hedging 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.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 32. SHAREHOLDERS' EQUITY (Continued)

The following table represents roll forward of reserves balances for the years ended December 31, 2018, 2017 and 2016:

| | Foreign currency translation reserve | Cash flow hedging reserve | Remeasurements of the net defined benefit liability |
|---|---|---|---|
| **Balances at January 1, 2016** | **9,638** | **1,045** | **493** |
| Other comprehensive (loss) / income for the year | (13,970) | (11,324) | 50 |
| Less: tax benefit | — | 2,219 | — |
| Amounts reclassified to profit for the year | (2,086) | 9,897 | — |
| Less: tax expense | — | (1,992) | — |
| **Net other comprehensive (loss) / income for the year** | **(16,056)** | **(1,200)** | **50** |
| **Balances at December 31, 2016** | **(6,418)** | **(155)** | **543** |
| Other comprehensive (loss) for the year | (2,620) | (3,140) | (40) |
| Less: tax benefit | — | 628 | — |
| Amounts reclassified to profit for the year | — | 3,748 | — |
| Less: tax expense | — | (741) | — |
| Amounts reclassified to additional paid in capital | (659) | — | — |
| Less: tax expense | — | — | — |
| **Net other comprehensive (loss) / income for the year** | **(3,279)** | **495** | **(40)** |
| **Balances at December 31, 2017** | **(9,697)** | **340** | **503** |
| Other comprehensive income for the year | 7,726 | 4,202 | 167 |
| Less: tax expense | — | (840) | — |
| Amounts reclassified to profit for the year | — | (4,331) | — |
| Less: tax benefit | — | 866 | — |
| **Net other comprehensive income / (loss) for the year** | **7,726** | **(103)** | **167** |
| **Balances at December 31, 2018** | **(1,971)** | **237** | **670** |

**Non-controlling interest**

As of December 31, 2018, MGTS and MTS Bank were the only subsidiaries of the Group, which had material non-controlling interests.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 32. SHAREHOLDERS' EQUITY (Continued)

The summarized financial information of MGTS PJSC and MTS Bank PJSC is presented as follows:

| | Year ended December 31, | | |
|---|---|---|---|
| **MGTS** | **2018** | **2017** | **2016** |
| **Non-controlling interest opening balance** | **(4,180)** | **(4,787)** | **(5,191)** |
| Profit for the year attributable to non-controlling interest | (619) | (554) | (727) |
| Dividends to non-controlling interest | 1,165 | 1,175 | 1,120 |
| Other | (15) | (14) | 11 |
| **Non-controlling interest closing balance** | **(3,649)** | **(4,180)** | **(4,787)** |

| | Year ended December 31, | | |
|---|---|---|---|
| **MTS Bank** | **2018** | **2017** | **2016** |
| **Non-controlling interest opening balance** | — | — | — |
| Profit for the year attributable to non-controlling interest | (378) | — | — |
| Acquisitions under common control | (8,320) | — | — |
| **Non-controlling interest closing balance** | **(8,698)** | — | — |

| | December 31 | |
|---|---|---|
| | **2018** | **2017** |
| Current assets | 123,879 | 22,595 |
| Non-current assets | 84,093 | 42,204 |
| Current liabilities | (141,359) | (8,959) |
| Non-current liabilities | (18,269) | (7,250) |

| | Year ended December 31, | | |
|---|---|---|---|
| | **2018** | **2017** | **2016** |
| Revenue, gross of intercompany | (51,246) | (39,565) | (40,210) |
| Profit for the year, gross of intercompany | (11,314) | (9,719) | (12,167) |

### Dividends

As a leading telecommunications group with a home base in developing markets, MTS' primary need 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.

MTS 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

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 32. SHAREHOLDERS' EQUITY (Continued)

General Meeting of Shareholders. In determining the Company's dividend payout, the Board of Directors considers a variety of factors, including:

- Macroeconomic factors and levels of competitiveness in core markets,
- Cash flow from operations,
- The outlook for earnings growth,
- Capital expenditure requirements,
- Potential acquisition opportunities,
- The state of capital markets and the Group's liquidity position, and
- The Group's overall debt position.

In 2016, the Board of Directors approved a dividend policy for the calendar years 2016 - 2018, committing to a minimum cumulative dividend payout of RUB 20.0 per ordinary share through two semi-annual payments. In addition, the Group will aim for a target payout of RUB 25.0 - 26.0 per ordinary share in each calendar year.

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 statutory accounting regulations, denominated in Russian Rubles, after certain deductions.

The following table summarizes the Group's declared cash dividends for the years ended December 31, 2018, 2017 and 2016:

| | 2018 | 2017 | 2016 |
|---|---|---|---|
| Dividends declared (including dividends on treasury shares of 3,037, 1,337 and 220 respectively) | 51,958 | 51,958 | 51,958 |
| Dividends, RUB per ADS | 52.00 | 52.00 | 52.00 |
| Dividends, RUB per share | 26.00 | 26.00 | 26.00 |

As of December 31, 2018 and 2017, dividends payable were RUB 146.2 and 125.4 million, respectively, and included in the trade and other payables within the consolidated statement of financial position.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 33. LIABILITY UNDER PUT OPTION AGREEMENT

In September 2007, the Group acquired a 80% stake in International Cell Holding Ltd ("ICH"), the 100% indirect owner of MTS Armenia (formerly CJSC "K-Telecom"), Armenia's mobile phone operator, and signed a call and put option agreement to acquire the remaining 20% stake in ICH. In 2016 ICH was liquidated after all its legal interest in MTS Armenia was transferred to Aramayo Investments Limited, a Cyprus subsidiary of the Group, in which the Group held 80% of its entire share capital, and remaining 20% stake became subject to the aforementioned option agreement. According to the option agreement, the price for the remaining 20% stake option is to be determined by a pre-agreed by the parties independent investment bank. In accordance with the option agreement as amended the call option could be exercised by the Group up to December 31, 2018. In December 2018 the Group served a call notice on the minority shareholders of MTS Armenia to purchase the remaining 20% stake in Aramayo (and indirectly in MTS Armenia).

The liability under the option agreement amounted to RUB 3,629 million and RUB 2,012 million as of December 31, 2018 and December 31, 2017 respectively (Note 28).

## 34. COMMITMENTS AND CONTINGENCIES

***Capital commitments***—As of December 31, 2018, the Group had executed purchase agreements of approximately RUB 36,875 million to acquire property, plant and equipment, intangible assets and costs related thereto.

***Agreement with Apple***—In April 2017, the Group entered into an unconditional purchase agreement with Apple Rus LLC ("Purchase agreement") to buy 615 thousand iPhone handsets at list prices at the dates of respective purchases over a period ending June 30, 2019. Pursuant to the agreement the Group is also required to incur certain iPhone advertising and promotion costs. As of December 31, 2018 the Group fully completed total purchase installment outlined by the agreement.

***Taxation***—Russia and other CIS countries currently have several laws related to various taxes imposed by both federal and regional governmental authorities. Applicable taxes include VAT, corporate income tax (profits tax), a number of turnover-based taxes, and payroll (social) taxes. Laws related to these taxes have not been in force for significant periods, in contrast to more developed market economies; therefore, the government's implementation of these regulations is often inconsistent or non-existent. Accordingly, few precedents regarding tax rulings have been established. Tax declarations, together with other legal compliance areas (for example, customs and currency control matters), are subject to review and investigation by a number of authorities, which are enabled by law to impose extremely severe fines, penalties and interest charges. These facts create tax risks in Russia and the CIS countries that are more significant than those typically found in countries with more developed tax systems.

Generally, according to Russian and Ukrainian tax legislation, tax declarations remain open and subject to inspection for a period of three years following the respective tax year. As of December 31, 2018, the tax declarations of MTS PJSC and other subsidiaries in Russia and Ukraine for the preceding three fiscal years were open for further review. Since 2016, MTS PJSC communicates with tax authorities through the Tax Monitoring regime, which enables it to disclose information and documents related to the calculation of its tax liabilities on-line.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 34. COMMITMENTS AND CONTINGENCIES (Continued)

In 2017, the Russian tax authorities completed a tax audit of MTS PJSC for the years ended December 31, 2015 and 2014. As of December 31, 2018 additional taxes, fines and penalties resulting from the tax audit in total amount of RUB 591 million were fully settled by the Group.

Pricing of goods and services provided within the Group is subject to transfer pricing rules.

The management believes that it has adequately provided for tax liabilities in the accompanying consolidated financial statements. However, the risk remains that the relevant tax authorities could take different positions with regarding interpretive issues which could have a significant effect.

The Group assessed the following contingent liabilities in respect of additional tax settlements:

| | December 31, 2018 | December 31, 2017 |
|---|---|---|
| Contingent liabilities for additional taxes other than income tax | 730 | 732 |
| Contingent liabilities for additional income taxes | 2,051 | 2,591 |

***Licenses***—In May 2007, the Federal Service for Supervision in the Area of Communications, Information Technologies and Mass Media awarded MTS a license to provide 3G services in Russia. The 3G license was granted subject to certain capital and other commitments.

In July 2012, the Federal Service for Supervision in the Area of Communications, Information Technologies and Mass Media allocated MTS the necessary license and frequencies to provide LTE telecommunication services in Russia. Under the terms and conditions of the LTE license, the Group is obligated to fully deploy LTE networks within seven years, starting from January 1, 2013, and deliver LTE services in each population center with over 50,000 inhabitants in Russia by 2019. Also, the Group is obligated to invest at least RUB 15 billion annually in the LTE roll-out until the network is fully deployed.

In March 2015, MTS-Ukraine acquired a nationwide license for the provision of UMTS (3G) telecommunications services through an open tender. The cost of the license was UAH 2,715 million (RUB 6,015 million at the acquisition date) and this was granted for 15 years. In accordance with the terms of the license, MTS-Ukraine was required to launch UMTS services in Ukraine by October 2016, and provide coverage throughout Ukraine by April 2020.

In accordance with the terms of the license, MTS-Ukraine also concluded agreements to convert the provided frequencies for commercial use with the Ministry of Defense of Ukraine, Ministry of Internal Affairs of Ukraine and State Service of Special Communications and Information Protection of Ukraine. For the conversion of frequencies, MTS-Ukraine paid UAH 358 million (RUB 865 million as of the payment date) in 2015 and UAH 299 million (RUB 645 million as of the payment date) in 2017, UAH 230 million (RUB 535 million as of the payment date) in 2018.

In January and March 2018, VF Ukraine PrJSC secured a 4G LTE licenses in the 2510-2520 / 2630-2640 and 1780-1785 / 1875-1880 MHz bands as the result of a national auction. Under the terms and conditions of the LTE licenses, VF Ukraine is obligated to deliver LTE services to not less than 90% of the population in each regional center of Ukraine (with certain exceptions) within 12 months from the date when the licenses were effective. VF Ukraine is also obligated to deliver LTE services to

**34. COMMITMENTS AND CONTINGENCIES (Continued)**

at least 90% of the population in each population center with over 10 000 inhabitants (with certain exceptions) within 42 months from the issuance of the licences. For the conversion of frequencies, MTS-Ukraine paid UAH 130 million (RUB 271 million as of the payment dates) in 2018.

The management believes that as of December 31, 2018, the Group is in compliance with conditions of the aforementioned licenses.

***Litigation***—In the ordinary course of business, the Group is a 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.

In 2017, Federal Antimonopoly Service of the Russian Federation (FAS Russia) issued a warning to MTS and some other federal operators on termination of actions containing signs of violation of the antimonopoly laws in respect of establishing unreasonable differences in tariffication of communication services for subscribers in home region and outside. Following non-compliance with the warning, FAS Russia has opened antimonopoly proceeding against MTS. FAS Russia has also opened antimonopoly proceeding against MTS for establishing high prices for communication services in national roaming. In 2018, MTS changed the principles and terms of tariffication when travelling about the country. FAS Russia held MTS administratively liable and imposed administrative fines on MTS in amount of RUB 1 million in respect of each proceeding.

In August 2018, FAS Russia has charged MTS and other federal operators with violation of antimonopoly laws in respect to establishing distinguished terms and conditions for SMS pricing for the entities with state-owned equity interest as compared to the terms and conditions for the other entities and establishing unreasonably high SMS prices. Investigation is currently in process. Following the case examination a fine may be imposed on MTS or illegally obtained income may be recovered.

FAS Russia determines the amount of illegally obtained income as the difference between the amount of revenue received from applying monopolistically high prices and the amount of revenue that could have been received if "reasonable" prices were applied. There is no information regarding the level of prices that FAS Russia considers economically justified. It is not possible to make a reliable estimation of amount of fine that could be imposed.

***Potential adverse effects of economic instability and sanctions in Russia***—In 2014 political and economic sanctions targeting certain Russian economic sectors were introduced by the EU, US and other countries. Sanctions were subsequently extended and there is significant uncertainty regarding the extent and timing of further sanctions. Furthermore, the Russian Ruble has materially depreciated against the U.S. Dollar and Euro and Ruble interest rates have increased significantly after the Central Bank of Russia raised its key rate to 17% in December, 2014. In 2018 due to Russia's ability to remain stable amid severe external shocks, Russia's sovereign credit ratings were increased from "stable" to "positive". The Central Bank of Russia has gradually decreased its key rate to 7.75% as of December 31, 2018.

These factors resulted in a lower cost of capital and a stable rate of inflation. However, in Russia there is an uneven growth dynamics, which could have a negative impact on the Group's business including ability to obtain financing on commercially reasonable terms. The management believes it is acting appropriately to support the sustainability of the Group's business in the current circumstances.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 34. COMMITMENTS AND CONTINGENCIES (Continued)

The Group has a hedging policy in place, which partly mitigates the variability of cash outflows, denominated in foreign currencies.

***Political and economic crisis in Ukraine***—During the year ended December 31, 2014, a deterioration in the political environment of Ukraine has led to general instability, economic deterioration and armed conflict in eastern Ukraine. In 2014 The National Bank of Ukraine ("NBU") passed a decree prohibiting Ukrainian companies to pay dividends to foreign investors. The decree was extended several times and its edition effective as of December 31, 2018 allows payment of dividends for the FY 2017 and all preceding periods, subject to certain restrictions. Furthermore, since 2014 the Group established a provision in respect of cash balances in several Ukrainian banks, whose liquidity was affected by the economic downturn.

The Group believes that these circumstances, despite the recent improvement, combined with political and economic instability in the country, could result in further negative impact on the Group's business including financial position and results of operations.

As of December 31, 2018, the Group held RUB 6,596 million in current accounts and deposits in Ukrainian banks.

***Anti-terror law***—On July 7, 2016 a series of anti-terror laws (also known as "Yarovaya-Ozerov bundle of laws") was enacted by the signature of the President of Russia. In general terms, the laws mandate that operators store and record phone conversations, text messages of subscribers, images, sounds, video and other types of communications by telecommunications operators for defined periods of time. These requirements are effective starting July 1, 2018. Compliance with the laws require the construction of additional storage, processing and indexing centers. The Group expects the increase in related capital expenditures, which cannot be measured reliably.

***Investigations into former operations in Uzbekistan***—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 of the Group's former subsidiary in Uzbekistan.

The Group 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 a subsidiary of the Group in Uzbekistan. Under the agreements with the DOJ, the Group agreed to pay a total criminal penalty of USD 850 million (RUR 59.1 billion as of December 31, 2018) to the United States. The Group 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 statements of profit or loss for the year ended December 31, 2018.

Under the DPA and the Order, the Group agreed to appoint an independent compliance monitor. Pursuant to the DPA and the Order, the monitorship will continue for a period of three years, and the term of the monitorship may be terminated early or extended depending on certain circumstances, as ultimately determined and approved by the DOJ and SEC.

**PJSC MOBILE TELESYSTEMS AND SUBSIDIARIES**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Amounts in millions of Russian Rubles unless otherwise stated)**

## 35. SUBSEQUENT EVENTS

***Ruble bonds placement***—In January 2019, MTS issued exchange-traded bonds totaling RUB 10 billion with a coupon rate of 8.70% and a maturity of 5 years.

***Purchase of additional stake in MTS Bank***—In February 2019 the Group purchased additional 39.48% stake in MTS Bank from Sistema for RUB 11.4 billion. Consequently, the Group's share in MTS Bank increased to 94.92%. This acquisition allows the Group to fully integrate its FinTech business.

***Sale of investment in Ozon Holdings Limited***—In March 2019 the Group sold its 18.69% stake in Ozon Holdings Limited to Sistema for RUB 7.9 billion.

***Acquisition of shares under Share Repurchase Plan***—Since the end of the reporting period the Group acquired 35,679,838 MTS shares of Common Stock representing 1.79% of share capital issued by MTS. The Group purchased MTS shares of common stock under the Share Repurchase Plan announced in 2018.

**Exhibit 1.1**

APPROVED

BY GENERAL MEETING OF
SHAREHOLDERS OF MOBILE
TELESYSTEMS PUBLIC JOINT STOCK
COMPANY

JUNE 28, 2018, MINUTES NO.43

**Mobile TeleSystems**
**Public Joint Stock Company**

# COMPANY CHARTER

**(Rev. 14)**

**MOSCOW**
**2018**

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## PART I. THE COMPANY

### 1. GENERAL PROVISIONS

1.1. Mobile TeleSystems Public Joint Stock Company (hereinafter the “Company”) was registered with the State Registration Chamber under the Ministry of Justice of the Russian Federation on March 1, 2000 under registration number R-7882.16.

1.2. On September 2, 2002, the Company was entered into the Unified State Register of Legal Entities as an entity having been registered prior to July 1, 2002, under Primary State Registration Number 1027700149124.

1.3. The Company is incorporated and operates under the Civil Code of the Russian Federation, the Federal Law “On Joint Stock Companies”, other regulatory legal acts of the Russian Federation and hereunder.

1.4. The Company’s trade name:

The Company’s full trade name in the Russian language shall be:

**C1;8G=>5 a:F8>=5@=>5 >1I5AB2> «>18;L=K5 "5;5!8AB5<K».**

The Company’s short trade name in the Russian language shall be: **A «"!»**.

The Company’s full trade name in the English language shall be:

**Mobile TeleSystems Public Joint Stock Company**.

The Company’s short trade name in the English language shall be: **MTS PJSC**.

1.5. The Company’s trade name before June 25, 2015 (the trade name was changed by the Decision of the General Meeting of Shareholders dated June 25, 2015, Minutes No. 35):

The Company’s full trade name in the Russian language was: B:@KB>5 a:F8>=5@=>5 >1I5AB2> «>18;L=K5 "5;5!8AB5<K»; the Company’s short trade name in the Russian language was: A «"!»; the Company’s full trade name in the English language was: Mobile TeleSystems Open Joint Stock Company; the Company’s short trade name in the English language was: MTS OJSC.

1.6. Location of the Company shall be: **Moscow, Russian Federation**.

1.7. Address of the Company shall be:

**4 Marksistskaya st., Moscow 109147, Russian Federation**.

1.8. The Company has been established in perpetuity.

1.9. Information about the Company’s reorganization and legal successions:

(1) The Company was established by way of reorganization in a form of merger of Mobile TeleSystems Closed Joint Stock Company (registered on October 28, 1993 with the Moscow Registration Chamber, under registration number 027.941, and on September 21, 1994, with the State Registration Chamber under registration number R-3566.16) and Russian Telephone Company Closed Joint Stock Company (registered on July 21, 1995 with the Moscow Registration Chamber under registration number 634.535, and on August 19, 1996, with the State Registration Chamber under registration number R-6068.16).

(2) The Company is a legal successor of all rights and obligations of Mobile TeleSystems Closed Joint Stock Company (registered on October 28, 1993 with the Moscow Registration Chamber, under registration number 027.941, and on September 21, 1994, with the State Registration Chamber under registration number R-3566.16) and The Russian Telephone Company Closed Joint Stock Company (registered on July 21, 1995 with the Moscow Registration Chamber under registration number 634.535, and on August 19, 1996, with the State Registration Chamber under registration number R-6068.16).

(3) The Company is a legal successor of all rights and obligations of Rosico Closed Joint Stock Company (registered with the Moscow Registration Chamber under the Moscow Government on March 4, 1994 under No. 005.821 and entered into the Unified State Register of Legal Entities on December 18, 2002 by the Moscow Department of the Russian Ministry for Taxes and Levies under Primary State Registration Number 1027700547126), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company on June 9, 2003.

(4) The Company is a legal successor of all rights and obligations of Amur Cellular Communications Closed Joint Stock Company (registered with the Administration of Blagoveshchensk city on April 11, 1996 under No. 189P and entered into the Unified State Register of Legal Entities on August 27, 2002 by the Russian Ministry for Taxes and Levies Interdistrict Inspectorate No. 1 for the Amur Region under Primary State Registration Number 1022800511810), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(5) The Company is a legal successor of all rights and obligations of Dontelecom Closed Joint Stock Company (registered with the Administration of the Rostov Region on April 14, 1994 under No. cn-1160/231 and entered into the Unified State Register of Legal Entities on October 25, 2002 by the Russian Ministry for Taxes and Levies Inspectorate for the Proletarsky District of Rostov-on-Don under Primary State Registration Number 1026104143944), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(6) The Company is a legal successor of all rights and obligations of Kuban-GSM Closed Joint Stock Company (registered with the Krasnodar Registration Chamber on May 15, 1997 under No. 6948 and entered into the Unified State Register of Legal Entities on July 30, 2002 by the Russian Ministry for Taxes and Levies Inspectorate for Krasnodar city under Primary State Registration Number 1022301190779), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(7) The Company is a legal successor of all rights and obligations of Mobile TeleSystems-Barnaul Closed Joint Stock Company (registered under the Order of the Administration of the Octyabrsky District of Barnaul city on April 25, 2000 under No. 1287 and entered into the Unified State Register of Legal Entities on September 30, 2002 by the Russian Ministry for Taxes and Levies Inspectorate for the Octyabrsky District of Barnaul city, Altai Territory under Primary State Registration Number 102201506854), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(8) The Company is a legal successor of all rights and obligations of Mobile TeleSystems-Nizhny Novgorod Closed Joint Stock Company (registered with the Nizhny Novgorod Registration Chamber on January 22, 2001 under No. 4583 and entered into the Unified State Register of Legal Entities on August 14, 2002 by the Russian Ministry for Taxes and Levies Inspectorate for the Sovetskiy District of Nizhny Novgorod city under Primary State Registration Number 1025203721168), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(9) The Company is a legal successor of all rights and obligations of Telecom-900 Closed Joint Stock Company (registered with the Moscow Registration Chamber on September 2, 1999 under No. 001.455.369 and entered into the Unified State Register of Legal Entities on September 11, 2002 by the Russian Ministry for Taxes and Levies Interdistrict Inspectorate No. 39 for Moscow city under Primary State Registration Number 1027739174682), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(10) The Company is a legal successor of all rights and obligations of Telecom-XXI Open Joint Stock Company (registered by the Resolution of the Saint-Petersburg Registration Chamber on April 4, 1997 under No. 68581 and entered into the Unified State Register of Legal Entities on August 21, 2002 by the Russian Ministry for Taxes and Levies Inspectorate for the Central District of Saint-Petersburg city under Primary State Registration Number 1027809176031), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(11) The Company is a legal successor of all rights and obligations of Udmurt Digital Networks-900 Closed Joint Stock Company (registered with the Administration of the Octyabrsky District of Izhevsk city, the Republic of Udmurtia, on May 21, 1996 under No. 598/1 and entered into the Unified State Register of Legal Entities on December 10, 2002 by the Russian Ministry for Taxes and Levies Inspectorate for the Octyabrsky District of Izhevsk city, the Republic of Udmurtia, under Primary State Registration Number 1021801168058), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(12) The Company is a legal successor of all rights and obligations of Horizon-RT Open Joint Stock Company (registered with the Russian Ministry for Taxes and Levies Inspectorate for Yakutsk, the Republic of Sakha (Yakutia) on September 26, 2003 and entered into the Unified State Register of Legal Entities on September 26, 2003 by the Russian Ministry for Taxes and Levies Inspectorate for Yakutsk, the Republic of Sakha (Yakutia) under Primary State Registration Number 1031402065419), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(13) The Company is a legal successor of all rights and obligations of Uraltel Closed Joint Stock Company (registered with the Government of the Sverdlovsk Region on July 23, 1993 under No. P-2417.16 and entered into the Unified State Register of Legal Entities on October 7, 2002 by the Russian Ministry for Taxes and Levies Inspectorate for the Verkh-Issetskiy District of Yekaterinburg city under Primary State Registration Number 1026602321206), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(14) The Company is a legal successor of all rights and obligations of Far East Cellular Systems-900 Closed Joint Stock Company (registered with the Administration of Khabarovsk city on July 17, 1996 under No. 002753-AI~ and entered into the Unified State Register of Legal Entities on July 30, 2002 by the Russian Ministry for Taxes and Levies Inspectorate for the Central District of

Khabarovsk city under the Primary State Registration Number 1022700911122), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(15) The Company is a legal successor of all rights and obligations of Siberian Cellular Systems-900 Closed Joint Stock Company (registered with the Novosibirsk Municipal Registration Chamber on November 29, 1996 under No. 7816 and entered into the Unified State Register of Legal Entities on November 23, 2002 by the Russian Ministry for Taxes and Levies Inspectorate for the Central District of Novosibirsk city under Primary State Registration Number 1025402480102), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(16) The Company is a legal successor of all rights and obligations of TAIF-TELCOM Open Joint Stock Company (registered with the State Registration Chamber under the Ministry of Justice of the Republic of Tatarstan on April 4, 2000 under No. 1213/:-1(50-02) and entered into the Unified State Register of Legal Entities on July 23, 2002 by the Russian Ministry for Taxes and Levies Interdistrict Inspectorate No. 14 for the Republic of Tatarstan under Primary State Registration Number 1021602825397), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(17) The Company is a legal successor of all rights and obligations of Tomsk Cellular Communications Closed Joint Stock Company (registered with the Federal Tax Service Inspectorate for Tomsk city on September 30, 2005 and entered into the Unified State Register of Legal Entities on September 30, 2005 by the Federal Tax Service Inspectorate for Tomsk city under Primary State Registration Number 1057002621280), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(18) The Company is a legal successor of all rights and obligations of SibChallenge Closed Joint Stock Company (registered with the Federal Tax Service Inspectorate for the Central District of Krasnoyarsk on October 3, 2005 and entered into the Unified State Register of Legal Entities on October 3, 2005 by the Federal Tax Service Inspectorate for the Central District of Krasnoyarsk city under Primary State Registration Number 1052466370648), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(19) The Company is a legal successor of all rights and obligations of BM Telecom Closed Joint Stock Company (registered with the Federal Tax Service Inspectorate for the Octyabrsky District of Ufa city on October 3, 2005 and entered into the Unified State Register of Legal Entities on October 3, 2005 by the Federal Tax Service Inspectorate for the Octyabrsky District of Ufa city under Primary State Registration Number 1050204327557), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(20) The Company is a legal successor of all rights and obligations of MTS-RTK Closed Joint Stock Company (registered with the Federal Tax Service Interdistrict Inspectorate No. 46 for Moscow city on October 4, 2005 and entered into the Unified State Register of Legal Entities on October 4, 2005 by the Federal Tax Service Interdistrict Inspectorate No. 46 for Moscow city under Primary State Registration Number 1057748460660), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(21) The Company is a legal successor of all rights and obligations of ReCom Open Joint Stock Company (registered with the Orel Registration Chamber on February 26, 1998 under No. 1244-C and entered into Unified State Register of Legal Entities on August 7, 2002 by the Ministry for Taxes and Levies Inspectorate for the Sovetskiy district of Orel city under Primary State Registration Number 1025700824544), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(22) The Company is a legal successor of all rights and obligations of Telesot-Alania Closed Joint Stock Company (registered with the Local Administration of the Promyshlenny District of Vladikavkaz city on May 14, 1997 under No. 1893 and entered into Unified State Register of Legal Entities on December 30, 2002 by the Federal Tax Service Inspectorate for the North-West Municipality District of Vladikavkaz city of the Republic of North Ossetia/Alania under Primary State Registration Number 1021500773546), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(23) The Company is a legal successor of all rights and obligations of Astrakhan Mobile Closed Joint Stock Company (registered with the International and External Economic Relations Department of the Astrakhan Region Administration on January 17, 1995 under No. 1112/081 and entered into the Unified State Register of Legal Entities on August 26, 2002 by the Russian Ministry for Taxes and Levies Inspectorate for the Kirov Municipal District of Astrakhan city under Primary State Registration Number 1023000819401), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(24) The Company is a legal successor of all rights and obligations of Mar Mobile GSM Closed Joint Stock Company (registered with the State Registration Chamber under the Ministry of Justice of the Mari El Republic on November 15, 2000 under No. 4097 and entered into the Unified State

Register of Legal Entities on July 17, 2002 by the Russian Ministry for Taxes and Levies Inspectorate for Ioshkar Ola city under Primary State Registration Number 1021200750702), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(25) The Company is a legal successor of all rights and obligations of Volgograd Mobile Closed Joint Stock Company (registered with the State Registration Chamber under the Ministry of Economy of the Russian Federation on June 23, 1995 under No. P-5193.16 and entered into the Unified State Register of Legal Entities on November 14, 2002 by Russian Ministry for Taxes and Levies Inspectorate for the Central Municipal District of Volgograd city under Primary State Registration Number 1023403440147), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(26) The Company is a legal successor of all rights and obligations of PRIMTELEFON Closed Joint Stock Company (registered with the State Registration Chamber under the Ministry of Justice of the Russian Federation on August 2, 2001 under No. P-877.16.6 and entered into the Unified State Register of Legal Entities on October 31, 2002 by the Russian Federal Tax Service Inspectorate for the Lenin Municipal District of Vladivostok city under Primary State Registration Number 1022501282671), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(27) The Company is a legal successor of all rights and obligations of Mobile Communication Systems Open Joint Stock Company (registered with the Omsk City Registration Chamber on September 17, 1996 under No. 38608040 and entered into the Unified State Register of Legal Entities on September 2, 2002 by the Russian Ministry for Taxes and Levies Inspectorate No. 2 for the Central Municipal District of Omsk city under Primary State Registration Number 1025500973728), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(28) The Company is a legal successor of all rights and obligations of BashCEL Closed Joint Stock Company (registered with the State Registration Chamber under the Ministry of Foreign Relations of the Bashkortostan Republic on November 28, 1997 under No. 80/083-N and entered into the Unified State Register of Legal Entities on June 28, 2002 by the Russian Ministry for Taxes and Levies Inspectorate for Agidel city of the Bashkortostan Republic under Primary State Registration Number 1020201436639), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(29) The Company is a legal successor of all rights and obligations of Mobile TeleSystems Closed Joint Stock Company (registered with the Federal Tax Service Interdistrict Inspectorate No. 46 for Moscow city on July 1, 2010 and entered into the Unified State Register of Legal Entities on July 1, 2010 by the Federal Tax Service Interdistrict Inspectorate No. 46 for Moscow city under Primary State Registration Number 1107746526733), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(30) The Company is a legal successor of all rights and obligations of Capital Closed Joint Stock Company (registered with the Federal Tax Service Interdistrict Inspectorate No. 46 for Moscow city on July 1, 2010 and entered into the Unified State Register of Legal Entities on July 1, 2010 by the Federal Tax Service Interdistrict Inspectorate No. 46 for Moscow city under Primary State Registration Number 1107746523521), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(31) The Company is a legal successor of all rights and obligations of Telecom Operator Closed Joint Stock Company (registered with the Federal Tax Service Interdistrict Inspectorate No. 46 for Moscow city on July 1, 2010 and entered into the Unified State Register of Legal Entities on July 1, 2010 by the Federal Tax Service Interdistrict Inspectorate No. 46 for Moscow city under Primary State Registration Number 1107746523543), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(32) The Company is a legal successor of all rights and obligations of United TeleSystems Closed Joint Stock Company (registered with the Russian Ministry for Taxes and Levies Interdistrict Inspectorate No. 46 for Moscow city on October 15, 2004 and entered into the Unified State Register of Legal Entities on October 15, 2004 by the Russian Ministry for Taxes and Levies Interdistrict Inspectorate No. 46 for Moscow city under Primary State Registration Number 1047796779535), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(33) The Company is a legal successor of all rights and obligations of COMSTAR United TeleSystems Open Joint Stock Company (initially incorporated as COMSTAR Joint Venture, entered on June 14, 1989 into the Register of the USSR Ministry of Finance under No. 598, then reregistered as COMSTAR Russian-British Limited Liability Partnership and reorganized into COMSTAR Closed Joint Stock Company (The State Registration Chamber Certificate No. P–7644.16 of Registration and Entering into the Unified State Register of Legal Entities of the Amendments to

the Foundation Documents of May 11, 1999, the Certificate of the Moscow State Registration Chamber No. 040.347 of June 15, 1999) entered into the Unified State Register of Legal Entities on July 4, 2002 by the Russian Ministry for Taxes and Levies Directorate for Moscow city under Primary State Registration Number 1027700003946), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(34) The Company is a legal successor of all rights and obligations of COMSTAR-Direct Closed Joint Stock Company (formerly named MTU-Intel Closed Joint Stock Company, registered with the Moscow Registration Chamber on March 1, 1993 under No. 474.640 and entered into the Unified State Register of Legal Entities on October 7, 2002 by the Russian Ministry for Taxes and Levies Interdistrict Inspectorate No. 39 for Moscow city under Primary State Registration Number 1027700288076), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(35) The Company is a legal successor of all rights and obligations of Dagtelecom Closed Joint Stock Company (registered with the Russian Federal Tax Service Inspectorate for the Sovetskiy District of Makhachkala city, the Republic of Dagestan, on December 4, 2009 and entered into the Unified State Register of Legal Entities on December 4, 2009 by the Russian Federal Tax Service Inspectorate for the Sovetskiy District of Makhachkala city, Republic of Dagestan, under Primary State Registration Number 1090562002552), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(36) The Company is a legal successor of all rights and obligations of Eurotel Open Joint Stock Company (formerly named ENIFCOM Open Joint Stock Company, registered with the Moscow Registration Chamber on August 19, 1997 under No. 056.414 and entered into the Unified State Register of Legal Entities on August 14, 2002 by the Russian Ministry for Taxes and Levies Interdistrict Inspectorate No. 39 for Moscow city under Primary State Registration Number 1027739071854), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(37) The Company is a legal successor of all rights and obligations of SWIT-COM Closed Joint Stock Company (registered with the Federal Tax Service Interdistrict Inspectorate No. 46 for Moscow city on September 23, 2011 and entered into the Unified State Register of Legal Entities on September 23, 2011 by the Federal Tax Service Interdistrict Inspectorate No. 46 for Moscow city under Primary State Registration Number 1117746753475), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(38) The Company is a legal successor of all rights and obligations of Universal TV Closed Joint Stock Company (registered with the Federal Tax Service Interdistrict Inspectorate No. 10 for the Tula region on June 28, 2012 and entered into the Unified State Register of Legal Entities on June 28, 2012 by the Federal Tax Service Interdistrict Inspectorate No. 10 for the Tula region under Primary State Registration Number 1127154020080), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(39) The Company is a legal successor of all rights and obligations of Altair-Tula Management Company Closed Joint Stock Company (registered with the Federal Tax Service Interdistrict Inspectorate No. 10 for the Tula region on July 9, 2012 and entered into the Unified State Register of Legal Entities on July 9, 2012 by the Federal Tax Service Interdistrict Inspectorate No. 10 for the Tula region under Primary State Registration Number 1127154021345), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(40) The Company is a legal successor of all rights and obligations of Altair Telecompany Closed Joint Stock Company (registered with the Federal Tax Service Interdistrict Inspectorate No. 10 for the Tula region on June 28, 2012 and entered into the Unified State Register of Legal Entities on June 28, 2012 by the Federal Tax Service Interdistrict Inspectorate No. 10 for the Tula region under Primary State Registration Number 1127154020036), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(41) The Company is a legal successor of all rights and obligations of Altair-Tula Closed Joint Stock Company (registered with the Federal Tax Service Interdistrict Inspectorate No. 10 for the Tula region on June 28, 2012 and entered into the Unified State Register of Legal Entities on June 28, 2012 by the Federal Tax Service Interdistrict Inspectorate No. 10 for the Tula region under Primary State Registration Number 1127154020003), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(42) The Company is a legal successor of all rights and obligations of Tambov MultiCable Networks Closed Joint Stock Company (registered with the Federal Tax Service Inspectorate for Tambov city on September 3, 2012 and entered into the Unified State Register of Legal Entities on September 3, 2012 by the Federal Tax Service Inspectorate for Tambov city under Primary State Registration Number 1126829006446), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(43) The Company is a legal successor of all rights and obligations of Infocenter Closed Joint Stock Company (registered with the Federal Tax Service Inspectorate for Kurgan city on September 3, 2012 and entered into the Unified State Register of Legal Entities on September 3, 2012 by the Federal Tax Service Inspectorate for Kurgan city under Primary State Registration Number 1124501007718), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(44) The Company is a legal successor of all rights and obligations of SibGroupInvest Company Closed Joint Stock Company (registered with the Russian Federal Tax Service Interdistrict Inspectorate No. 14 for the Altai Krai city on September 4, 2012 and entered into the Unified State Register of Legal Entities on September 4, 2012 by the Russian Federal Tax Service Interdistrict Inspectorate No. 14 for the Altai Krai under Primary State Registration Number 1122223011107), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(45) The Company is a legal successor of all rights and obligations of Skif-Line Closed Joint Stock Company (registered with the Federal Tax Service Interdistrict Inspectorate No. 46 for Moscow city on October 17, 2012 and entered into the Unified State Register of Legal Entities on October 17, 2012 by the Federal Tax Service Interdistrict Inspectorate No. 46 for Moscow city under Primary State Registration Number 1127747055336), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(46) The Company is a legal successor of all rights and obligations of SKIF-OREL Closed Joint Stock Company (registered with the Federal Tax Service Interdistrict Inspectorate No. 46 for Moscow city on October 17, 2012 and entered into the Unified State Register of Legal Entities on October 17, 2012 by the Federal Tax Service Interdistrict Inspectorate No. 46 for Moscow city under Primary State Registration Number 1127747055314), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(47) The Company is a legal successor of all rights and obligations of SKIF-TAMBOV Closed Joint Stock Company (registered with the Federal Tax Service Interdistrict Inspectorate No. 46 for Moscow city on October 17, 2012 and entered into the Unified State Register of Legal Entities on October 17, 2012 by the Federal Tax Service Interdistrict Inspectorate No. 46 for Moscow city under Primary State Registration Number 1127747055325), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(48) The Company is a legal successor of all rights and obligations of Spektr Telecompany Open Joint Stock Company (registered with the Sosnovy Bor Department of the Agency of Justice of the Leningrad Regional Registration Chamber on August 21, 2000 (State Registration Certificate series -001 No. 56713) and entered into the Unified State Register of Legal Entities on September 19, 2002 by the Federal Tax Service Inspectorate for Sosnovy Bor city of the Leningrad region under Primary State Registration Number 1024701760016), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(49) The Company is a legal successor of KR-1 Closed Joint Stock Company with respect to all rights and obligations transferred to KR-1 Closed Joint Stock Company under the spin-off balance sheet of COMSTAR-Regions Closed Joint Stock Company (registered with the Federal Tax Service Interdistrict Inspectorate No. 46 for Moscow city on August 3, 2009 and entered into the Unified State Register of Legal Entities on August 3, 2009 by the Federal Tax Service Interdistrict Inspectorate No. 46 for Moscow city under Primary State Registration Number 1097746419913), reorganized by way of spin-off of KR-1 Closed Joint Stock Company simultaneously with the merger of spinned-off KR-1 Closed Joint Stock Company into Mobile TeleSystems Open Joint Stock Company.

(50) The Company is a legal successor of all rights and obligations of Elf Closed Joint Stock Company (registered with the Federal Tax Service Interdistrict Inspectorate for Belgorod city on December 27, 2013 and entered into the Unified State Register of Legal Entities on December 27, 2013 by the Federal Tax Service Interdistrict Inspectorate for Belgorod city under Primary State Registration Number 1133123025310), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(51) The Company is a legal successor of all rights and obligations of Efkom Closed Joint Stock Company (registered with the Federal Tax Service Interdistrict Inspectorate for Belgorod city on December 27, 2013 and entered into the Unified State Register of Legal Entities on December 27, 2013 by the Federal Tax Service Interdistrict Inspectorate for Belgorod city under Primary State Registration Number 1133123025309), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(52) The Company is a legal successor of all rights and obligations of Pilot Closed Joint Stock Company (registered with the Federal Tax Service Interdistrict Inspectorate No. 5 for Kursk Oblast on December 30, 2013 and entered into the Unified State Register of Legal Entities on December 30, 2013 by the Federal Tax Service Interdistrict Inspectorate No. 5 for Kursk Oblast

under Primary State Registration Number 1134611001249), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(53) The Company is a legal successor of all rights and obligations of TVK & K Closed Joint Stock Company (registered with the Federal Tax Service Interdistrict Inspectorate No. 5 for Kursk Oblast on December 30, 2013 and entered into the Unified State Register of Legal Entities on December 30, 2013 by the Federal Tax Service Interdistrict Inspectorate No. 5 for Kursk Oblast under Primary State Registration Number 1134611001250), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(54) The Company is a legal successor of all rights and obligations of Zheleznogorsk City Telephone Communications Closed Joint Stock Company (registered with the Ministry of Taxation Interdistrict Inspectorate No. 3 for Kursk Oblast on February 18, 2004 and entered into the Unified State Register of Legal Entities on February 18, 2004 by the Ministry of Taxation Interdistrict Inspectorate No. 3 for Kursk Oblast under Primary State Registration Number 1044677000587), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(55) The Company is a legal successor of all rights and obligations of Intercom Closed Joint Stock Company (registered with the Federal Tax Service Interdistrict Inspectorate No. 4 for the Mari El Republic on January 27, 2014 and entered into the Unified State Register of Legal Entities on January 27, 2014 by the Federal Tax Service Interdistrict Inspectorate No. 4 for the Mari El Republic under Primary State Registration Number 1141224000114), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(56) The Company is a legal successor of all rights and obligations of Teleradiokompaniya “TVT” Open Joint Stock Company (registered with Kazan Branch No. 1 of the State Registration Chamber under the Ministry of Justice of the Republic of Tatarstan on September 24, 1999 and entered into the Unified State Register of Legal Entities on November 30, 2002 by the Ministry of Taxation Inspectorate for Sovetskiy district of Kazan city, Republic of Tatarstan under Primary State Registration Number 1021603629838), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(57) The Company is a legal successor of all rights and obligations of Cascade-TV Closed Joint Stock Company (registered by State Enterprise Saratov Regional Registration Center on November 9, 1999 and entered into the Unified State Register of Legal Entities on August 6, 2002 by the Ministry of Taxation Inspectorate for Oktyabrskiy district of Saratov city under Primary State Registration Number 1026403340050), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(58) The Company is a legal successor of all rights and obligations of Kuznetsktelemost Closed Joint Stock Company (registered with the Federal Tax Service Interdistrict Inspectorate for Central district of Novokuznetsk city, Kemerovo Oblast on June 18, 2012 and entered into the Unified State Register of Legal Entities by the Federal Tax Service Interdistrict Inspectorate for Central district of Novokuznetsk city, Kemerovo Oblast on June 18, 2012 under Primary State Registration Number 1124217005021), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(59) The Company is a legal successor of all rights and obligations of Telecommunications, Informatics and Communication System Closed Joint Stock Company (registered with the Federal Tax Service Interdistrict Inspectorate No. 46 for Moscow city on January 20, 2014 and entered into the Unified State Register of Legal Entities on January 20, 2014 by the Federal Tax Service Interdistrict Inspectorate No. 46 for Moscow city under Primary State Registration Number 1147746024799), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company.

(60) The Company is a legal successor of all rights and obligations of Tovarnye Znaki Closed Joint Stock Company (registered with the Federal Tax Service Interdistrict Inspectorate No. 46 for Moscow city on March 25, 2014 and entered into the Unified State Register of Legal Entities on March 25, 2014 by the Federal Tax Service Interdistrict Inspectorate No. 46 for Moscow city under Primary State Registration Number 1147746322690), reorganized by way of merger into Mobile TeleSystems Open Joint Stock Company;

(61) The Company is a legal successor of all rights and obligations of COMSTAR-Regions Closed Joint Stock Company (registered with the Federal Tax Service Interdistrict Inspectorate No. 46 for Moscow city on August 3, 2009 and entered into the Unified State Register of Legal Entities on August 3, 2009 by the Federal Tax Service Interdistrict Inspectorate No. 46 for Moscow city under Primary State Registration Number 1097746419913), reorganized by way of merger into Mobile TeleSystems Public Joint Stock Company;

(62) The Company is a legal successor of all rights and obligations of Joint Stock Company “Penza-GSM” (registered with the Administration of the Oktiabrskii District of Penza city on June 27, 1997 under No. 116 and entered into the Unified State Register of Legal Entities on August 12, 2002

by the Russian Federal Tax Service Inspectorate for the Oktiabrskii District of Penza city under Primary State Registration Number 1025801201062), reorganized by way of merger into Mobile TeleSystems Public Joint Stock Company;

(63) The Company is a legal successor of all rights and obligations of Joint Stock Company “SMARTS-Ivanovo” (registered with the Federal Tax Service Inspectorate for the Leninskii District of Samara city on August 24, 2012 and entered into the Unified State Register of Legal Entities on August 24, 2012 by the Federal Tax Service Inspectorate for the Leninskii District of Samara city under Primary State Registration Number 1126315004694), reorganized by way of merger into Mobile TeleSystems Public Joint Stock Company;

(64) The Company is a legal successor of all rights and obligations of Joint Stock Company “SMARTS-Ufa” (registered with the Federal Tax Service Inspectorate for the Leninskii District of Samara city on August 24, 2012 and entered into the Unified State Register of Legal Entities on August 24, 2012 by the Federal Tax Service Inspectorate for the Leninskii District of Samara city under Primary State Registration Number 1126315004727), reorganized by way of merger into Mobile TeleSystems Public Joint Stock Company;

(65) The Company is a legal successor of all rights and obligations to Sistema-Inventure Joint Stock Company (registered with the Moscow Registration Chamber on December 24, 2001 and entered into the Unified State Register of Legal Entities on October 7, 2002 by the TSM Interdistrict Inspectorate No. 39 for Moscow city under Primary State Registration Number 1027700287757), reorganized by way of merger into Mobile TeleSystems Public Joint Stock Company.

(66) The Company is a legal successor of all rights and obligations of SMARTS-Yoshkar Ola Joint Stock Company (registered with the Federal Tax Service Inspectorate for Yoshkar Ola on January 27, 2015 and entered into the Unified State Register of Legal Entities on January 27, 2015 by the Federal Tax Service Inspectorate for Ioshkar Ola under Primary State Registration Number 1156315000467), reorganized by way of merger into Mobile TeleSystems Public Joint Stock Company.

(67) The Company is a legal successor of all rights and obligations of COMSTAR-KhMAO Joint Stock Company (registered with the Federal Tax Service Inspectorate for the Surgut Region of the Khanty-Mansiysk Autonomous District — Yugra on August 20, 2015 and entered into the Unified State Register of Legal Entities on August 20, 2015 by the Federal Tax Service Inspectorate for the Surgut Region of the Khanty-Mansiysk Autonomous District — Yugra under Primary State Registration Number 1157746769971), reorganized by way of merger into Mobile TeleSystems Public Joint Stock Company.

(68) The Company is a legal successor of all rights and obligations of Telecom Povolzhye Limited Liability Company (registered with the Federal Tax Service Interdistrict Inspectorate No. 46 for Moscow city on May 15, 2014 and entered into the Unified State Register of Legal Entities on May 15, 2014 by the Federal Tax Service Interdistrict Inspectorate No. 46 under Primary State Registration Number 1147746543779), reorganized by way of merger into Mobile TeleSystems Public Joint Stock Company.

## 2. OBJECTIVES, SCOPE AND TYPES OF COMPANY’S ACTIVITIES

2.1. The Company’s economic activity aims to make profit by planning, marketing, establishing and operating communication networks and facilities, to provide access to Internet and to render communications services in the regions specified in the licenses issued to the Company by an authorized public agency.

2.2. To achieve the above objective, the Company’s activities shall include the telecommunications activities, in particular:

(1) mobile telecommunications activities;

(2) fixed-line telephony activities;

(3) data transmission activities;

(4) telematic services;

(5) cable television and radio services;

(6) cooperation with the national and/or international GSM operators in the Russian Federation and abroad to ensure proper servicing of the Company’s customers;

(7) cooperation with certain telephone operators in Moscow and the Russian Federation as well as with international telecom operators;

(8) settlement of accounts with customers, commercial and financial management of the network in accordance with accepted international practices;

(9) delivery and marketing of value added mobile telecom services;

(10) import, sales, leasing, installation and maintenance of terminals and related accessories;

(11) operation and maintenance of monitoring equipment for GSM networks;

(12) protection of state secret data in compliance with the laws of the Russian Federation;

(13) carrying out the works using the state secret data, conducting the activities and/or providing the services related to state secret protection;

(14) conducting any other activities following decisions of the Board of Directors aimed to achieve the Company's principal objectives.

2.3. The Company may carry out any other types of activity to the extent not prohibited by the laws of the Russian Federation.

2.4. The licensable types of activity shall be carried out on the basis of corresponding licenses.

## 3. LEGAL STATUS OF THE COMPANY

3.1. The Company is a legal entity under the Russian laws with its own separate property booked on the Company's standalone balance sheet, may acquire and exercise civil rights in its own name, assume civil obligations, sue and be sued in a court.

3.2. The Company has a round seal bearing the Company's full name in the Russian language and the Primary State Registration Number, letterheads with the Company's full name, as well as the trademarks registered under the laws. The Company may have a seal, stamps and letterheads with the Company's full name in the Russian and English languages, as well as an emblem and other means of visual identification.

3.3. The Company is entitled to participate in accordance with the established procedure in the establishment of other entities both in the Russian Federation and abroad, to have subsidiaries in the Russian Federation and abroad, to acquire shares (equities) in authorized capitals thereof, buildings, structures, land plots and other immovable property, securities, as well as any other property, to which property right may apply to in accordance with applicable laws.

3.4. In order to raise additional funds, the Company shall be entitled to issue securities of various classes permitted by the laws of the Russian Federation, including registered shares, bonds and other securities, and to independently set out the conditions of their issue and placement according to the laws of the Russian Federation and hereto.

3.5. The Company shall be entitled to participate in holding companies, financial/industrial groups, associations and other associations of business entities on the terms that do not contradict the laws of the Russian Federation and this Charter.

3.6. The Company shall be entitled to participate in unions, associations and other groupings of organizations on the terms that do not contradict the laws of the Russian Federation and this Charter. The Company shall be entitled to cooperate with international financial organizations in any form not prohibited by law.

3.7. The Company shall acquire civil rights and assume liabilities through its bodies, acting in conformity with the laws and herewith.

3.8. The Company shall not be liable for the obligations of its shareholders, and the shareholders shall not be liable for the obligations of the Company and shall bear the risk of damages, associated with its activities, to the extent of the shares held by them. The Company shall not be liable for the obligations of the state and its agencies, and the state and its agencies shall not be liable for the Company's obligations.

3.9. For the purposes of implementation of the state, social, economic and tax policies, the Company shall be responsible for safekeeping the Company's documents (administrative, financial, economic, personnel, etc.). The Company ensures the transfer of the documents of scientific and historical importance for the custody in the Moscow central archives in compliance with the list of documents agreed with Mosgorarkhiv; personnel documents shall be filed and used in the established manner.

3.10. The Company conducts mobilization training according to the laws of the Russian Federation and the regulatory documents of the Moscow Government.

3.11. The Company undertakes to comply with the laws of the Russian Federation as far as the state secret is concerned.

## 4. THE COMPANY'S PROPERTY

4.1. The Company owns its property, including the property, transferred to the Company by its shareholders. The Company's shareholders have no right of ownership to the property introduced into the Company's authorized capital.

4.2. The Company shall exercise its right to free possession, use and disposal of property in its ownership in compliance with applicable laws.

4.3. Major transactions to be effected by the Company require the obtaining of consent (subsequent approval) of the General Meeting of Shareholders or the Board of Directors in accordance with sub-clauses 27.1(23), 27.1(29), 32.2(16) hereof, as prescribed by the Federal Law "On Joint Stock Companies". Interested-party transactions shall be effected by the Company as prescribed by the Federal Law "On Joint Stock Companies".

4.4. The Company's property consists of the fixed assets and working capital, and other property, the cost of which is recorded in the Company's standalone balance sheet. The sources of the Company's assets formations, income, balance and net profit are formed in accordance with the procedure prescribed by the laws of the Russian Federation.

## 5. THE COMPANY'S BRANCHES AND REPRESENTATIVE OFFICES

5.1. The Company may, in accordance with the established procedure, establish branches and representative offices in the Russian Federation and abroad that shall operate on the basis of relevant provisions thereon. The branches and representative offices shall not be deemed legal entities, the heads thereof shall be appointed by the President and act within the powers vested in them by a power of attorney issued to them.

5.2. The list of branches and representative offices of the Company is included in the Unified State Register of Legal Entities.

## 6. DIVIDENDS

6.1. Based on the results of the first quarter, six months and nine months of the reporting year and/or based on the results of a reporting year, the Company may decide on the payment of (declare) the dividends on the placed shares.

6.2. Decision on payment (declaration) of dividends following on the results of the first quarter, six months and nine months of the reporting year may be made by an extraordinary General Meeting of Shareholders within the period prescribed by the Russian laws. The annual General Meeting of Shareholders shall decide on the distribution of profit (including payment (declaration) of dividends, except for the profit distributed as dividends following the results of the first quarter, six months and nine months of the reporting year) and losses for the reporting year.

6.3. Decision to pay dividends, the amount of dividend and the form of payment, as well as on the date on which the persons entitled to dividends are determined shall be taken based on the proposal of the Board of Directors. The amount of dividend shall not exceed the value recommended by the Board of Directors.

6.4. The time period for payment of dividends shall not exceed the time limits prescribed by the Russian laws.

6.5. The Company is obliged to pay the declared dividends on the shares of each category (type).

6.6. The amount of dividend is declared as a percentage of the par value of a share, or in rubles per one share.

6.7. The dividend may be paid in cash and, if the General Meeting of Shareholders so decided, in kind — in shares, bonds, commodities or other property.

6.8. The Russian laws provide for the restrictions in respect of the declaration and payment of dividends.

6.9. The Company shall not have the right to give any privileges in terms of dividend payment period to the owners of the shares of a certain category (type). A person who has not received the declared dividends due to the fact that the Company or the registrar does not have accurate and appropriate address or bank details required, or due to any other delay by the creditor may claim such dividends (unclaimed dividends) within 3 (three) years from the date of the decision on dividend payment. The time period prescribed for the request for payment of declared dividends shall, if missed, not be subject to renewal except for cases when a person entitled to dividends failed to request the payment of dividends under threat or by force. Upon the expiry of the time period as stipulated in this article, the declared and unclaimed dividends shall be attributed to the Company's undistributed profits.

## 7. THE COMPANY'S FUNDS AND NET ASSETS

7.1. The Company shall establish a reserve fund by an annually allocation amounting to not less than 5% (five percent) of the Company's net profit, until the reserve fund achieves 15% (fifteen percent)

of the Company's authorized capital. This reserve fund is designated to cover the Company's losses, as well as to redeem the Company's bonds and to redeem the Company's shares should other funds be unavailable. The reserve fund may not be used for any other purpose. The assets of the reserve fund may be used on the basis of the Board of Directors decision in accordance with the procedure established thereby.

7.2. The Company shall be entitled to establish other funds.

7.3. The Company's net assets value shall be evaluated based on the accounting data under the procedure stipulated by the laws of the Russian Federation.

7.4. In case the Company's net assets value becomes less than the amount of the Company's authorized capital, the Company shall take actions stipulated by the laws of the Russian Federation.

## 8. ACCOUNTING AND REPORTING IN THE COMPANY

8.1. The Company shall organize accounting and take measures to ensure that the Company's bookkeeping practice provides a trustworthy and complete reflection of the information concerning all transactions and other facts of economic activity.

8.2. The Company shall keep the documents provided for by the laws of the Russian Federation.

8.3. The Company shall disclose its financial information according to the procedure established by applicable laws and the Company's internal documents.

8.4. The President shall be liable, to the extent set out in applicable laws, for organization, status and reliability of the Company's accounting records, for a timely submission of accounting (financial) statements to the regulatory agencies, and for the trustworthiness of information about the Company's activities submitted to the Company's shareholders, creditors and other persons.

8.5. The Company's annual accounting (financial) statements, supported by the Auditor's and the Auditing Commission's report, shall be submitted by the President to the Board of Directors and the Annual General Meeting of Shareholders.

8.6. The Company's annual balance sheet is subject to preliminary approval by the Board of Directors not later than 30 (thirty) days prior to the Annual General Meeting of Shareholders.

8.7. The Auditing Commission shall certify the trustworthiness of data contained in the Company's annual report and accounting (financial) statements submitted to the Annual General Meeting of Shareholders.

## 9. INFORMATION ABOUT THE COMPANY

9.1. Information about the Company shall be submitted to the shareholders in accordance with applicable laws of the Russian Federation and other legal acts.

9.2. The Company shall ensure the shareholders' access to the documents that should be kept and provided by the Company according hereto and the laws of the Russian Federation. Information about the Company and the copies of the corresponding documents shall be made available in accordance with the procedure set forth by the laws of the Russian Federation.

9.3. The shareholders and the Company shall make all reasonable efforts to prevent an unauthorized disclosure and a leak of such information. The members of the Board of Directors, having access to the Company's confidential information, may neither disclose such information to any persons, who have no access to such information, nor use it in their own interests or interests of other persons.

9.4. If necessary, the Company may enter into confidentiality agreements with its employees, the members of the Board of Directors and the shareholders, while these persons shall enter into confidentiality agreements with each other.

9.5. Compulsory disclosure of the information shall be undertaken by the Company to the extent and in the manner stipulated by the Company's internal documents and the laws of the Russian Federation.

9.6. The foreign persons are prohibited to access the data constituting the state secret.

## 10. REORGANIZATION AND LIQUIDATION OF THE COMPANY

10.1. The Company may be voluntarily reorganized in accordance with the procedure set forth in the laws of the Russian Federation. As stipulated by the laws of the Russian Federation, the reorganization shall entail the transfer of the Company's rights and obligations to its legal successors.

10.2. The reorganization of the Company may be undertaken in the form of merger, acquisition, demerger, spin-off and transformation, as well as through combination of various reorganization forms.

10.3. The Company shall be deemed reorganized, except for the cases of reorganization in the form of acquisition, from the date of state registration of the newly established legal entities.

10.4. In the case of reorganization by way of merger into it of another company, the Company shall be deemed reorganized from the date an entry is made in the Unified State Register of Legal Entities on cessation of activities of the acquired company.

10.5. The Company may be liquidated voluntarily in accordance with the procedure established by the laws of the Russian Federation, or by court decision in cases envisaged by the laws of the Russian Federation.

10.6. The liquidation of the Company entails its dissolution without transfer of rights and obligations to other persons by way of legal succession.

10.7. Upon appointment of the liquidation commission, the latter shall be authorized to manage the Company's activities. The liquidation commission shall appear in the court on behalf of the Company being liquidated.

10.8. The liquidation commission shall publish a notice on the liquidation of the Company, on the procedure for and time period of the creditors' claims in the printed media publishing information about state registration of legal entities. The period for the creditors' claims shall be not less than 2 (two) months from the date of publishing the liquidation notice.

10.9. Upon expiration of the period for the creditors' claims, the liquidation commission shall draw up an interim liquidation balance sheet containing the data on the assets of the Company being liquidated, the creditors' claims, the results of consideration thereof as well as the list of claims satisfied by a legally effective court decision, regardless of whether such requirements were agreed by the liquidation commission. The interim liquidation balance sheet shall be approved by the General Meeting of Shareholders.

10.10. Upon completion of settlements with creditors, the liquidation commission shall draw up a liquidation balance sheet subject to approval by the General Meeting of Shareholders.

10.11. The Company's property that survived the settlement of accounts with the creditors shall be distributed by the liquidation commission among the shareholders as follows:

- firstly, payments shall be made on the shares, which the Company is obliged to redeem from the shareholders pursuant to the laws of the Russian Federation;
- secondly, payments shall be made on the accrued, but unpaid dividends on the preferred shares and of a liquidation value of the preferred shares as prescribed hereby;
- thirdly, the Company's property shall be distributed among the shareholders owning the ordinary shares and all classes of the preferred shares.

10.12. Allocation of the property at each stage shall be performed after the property allocation of the previous stage has been fully completed.

10.13. The liquidation of the Company shall be deemed completed and the Company no longer existing after a corresponding entry is made in the Unified State Register of Legal Entities.

10.14. Upon reorganization (liquidation) of the Company, as well as after the cessation of the activities involving the use of data containing the state secrets, the Company shall ensure the protection of such data and data medium through development and implementation of information security procedures, information protection, counterintelligence, safety guard and fire safety.

## 11. COMPANY CHARTER

11.1. This Charter is a constituent document of the Company. The requirements hereof are binding upon the Company's management and controlling bodies and the Company's shareholders. This Charter enters into force following its registration in compliance with the procedure established by the laws of the Russian Federation.

11.2. Decisions on amendments hereto shall be made by the General Meeting of Shareholders or by the Board of Directors according to the procedure established by law and hereby. The amendments hereto shall come into force after the state registration thereof.

11.3. The provisions hereof shall be applicable to the extent that they do not contradict the laws of the Russian Federation. Should the legislative amendments entail the conflict between certain provisions hereof and the legal acts, such provisions shall be invalidated until corresponding amendments are introduced hereto.

## PART II. THE COMPANY'S AUTHORIZED CAPITAL

### 12. AUTHORIZED CAPITAL, GENERAL PROVISIONS

12.1. The Company's authorized capital determines the minimal size of the Company's property that ensures the interests of its creditors.

12.2. The Company's authorized capital amounts to RUB 199,838,157.50 (one hundred ninety-nine million eight hundred thirty-eight thousand one hundred fifty seven rubles and fifty kopecks), divided into 1,998,381,575 (one billion nine hundred ninety-eight million three hundred eighty-one thousand five hundred seventy-five) placed registered ordinary shares of the Company with a par value of 0.1 (one-tenth) ruble (or 10 (ten) kopecks) each. The Company's authorized capital has been fully paid.

12.3. In addition to the placed registered ordinary shares, the Company declares (shall have the right to place) 100,000,000 (one hundred million) registered ordinary shares with a par value of 0.1 (one-tenth) ruble each and a total amount of 10,000,000 rubles (ten million rubles) (declared shares).

Upon placement, the declared shares shall grant the same rights as the Company's placed ordinary shares.

### 13. INCREASE OF THE COMPANY'S AUTHORIZED CAPITAL

13.1. The Company's authorized capital may be increased by increasing the par value of the Company's shares or by placing additional shares by decision of a General Meeting of Shareholders according to the sub-clauses 27.1(6) — 27.1(10) hereof or by decision of the Board of Directors according to sub-clauses 32.2(30) and 32.2(31) hereof.

13.2. The Company's authorized capital may be increased by increasing the par value of the shares only out of the Company's property. The Company's authorized capital may be increased via the placement of additional shares out of the Company's property.

13.3. Should the Company's authorized capital be increased via placement of additional shares, the number of such additional shares shall not exceed the number of the declared shares, provided for hereby. Thus, if the number of the Company's declared shares is not sufficient for the placement of the expected number of the Company's additional shares, then, in accordance with the procedure and on the terms established by the laws of the Russian Federation and hereby, the decision to increase the Company's authorized capital may be made simultaneously with the decision on amending this Charter with respect to the number of the Company's declared shares as may be required to take the decision on the increase of the authorized capital.

13.4. The Company's additional shares may be placed by subscription or conversion, as well as by distribution among all the Company's shareholders in the case the Company's authorized capital is increased out of its property.

13.5. The Company shall be entitled to place additional shares by either public or private subscription.

13.6. The price of placing the additional shares for the persons enjoying a preemptive right to the shares can be lower than the price of placing for other persons, but not more than by 10% (ten percent). The price of placing the additional shares cannot be lower than their par value.

13.7. The Company's additional shares, placed by subscription, can be paid in cash, securities, other commodities, property rights or other rights, having a monetary valuation.

13.8. The Company's additional shares, placed by subscription, shall be deemed placed upon full payment thereof.

13.9. In the case where the Company's authorized capital is increased out of the Company's property by placing additional shares, such shares shall be distributed among all shareholders. In doing so, each shareholder shall be offered the shares of the same category (type), as it owns, on pro rata basis.

13.10. The amount, by which the Company's authorized capital is increased out of the Company's property, shall not exceed the difference between the net Company's asset value and the amount of the Company's authorized capital and reserve fund.

### 14. DECREASE OF THE COMPANY'S AUTHORIZED CAPITAL

14.1. The Company shall be entitled, and in the cases stipulated by the laws of the Russian Federation obliged, to decrease its authorized capital by reducing the par value of the shares or by reducing

the total number thereof, including by acquisition of a part of the shares in the cases stipulated by the laws of the Russian Federation and hereby.

14.2. The decision to decrease the Company's authorized capital by reducing the par value of the shares or by acquisition of a part of the shares with a view to reduce the total number thereof, shall be made by the General Meeting of Shareholders according to sub-clauses 27.1(11) and 27.1(12) hereof.

14.3. The decision to decrease the Company's authorized capital by reducing the par value of the shares may provide for the payment of monetary funds to the Company's shareholders and/or the transfer to them of equity securities, owned by the Company and placed by other legal entity.

14.4. The Company's authorized capital may be decreased by reducing the total number of the placed shares, including the acquisition and retirement of some shares at the Company's disposal in the following cases:

(1) in the case of retirement of some shares, acquired by the Company following the decision to decrease the Company's authorized capital by acquisition and retirement of some shares aimed to reduce the total number thereof;

(2) if the shares redeemed by the Company at the shareholders' request failed to be sold within one year from the date of redemption thereof (except for the case of redemption of shares following the decision to reorganize the Company);

(3) redemption of the Company's shares upon reorganization thereof;

(4) the reorganization of the Company by way of spin-off by the retirement of the converted shares;

(5) if the shares, acquired by the Company by decision of the Company's competent body, established by the Company Charter, failed to be sold within 1 (one) year from the date of acquisition thereof;

(6) in other cases provided for by the laws of the Russian Federation.

14.5. The decision to decrease the Company's authorized capital by acquiring some shares aimed to reduce the total number thereof shall be made by the General Meeting of Shareholders.

14.6. Within 3 (three) working days following the Company's decision to decrease its authorized capital, the Company shall notify of its decision the authority, that carries out state registration of legal entities, and publish twice (once a month) in printed media where the information on the state registration of legal entities is published a notice on reduction of the Company's authorized capital. The Company's creditor may, if its right of claim arose prior to publication of a notice on Company's authorized capital reduction, within 30 (thirty) days after the date of the last publication of the notice demand early performance of the Company's relevant obligations or, unless early performance of the obligations is possible, the termination of obligations and reimbursement of the respective costs.

## PART III. SHARES AND OTHER EQUITY SECURITIES OF THE COMPANY

### 15. THE COMPANY'S SHARES

15.1. The Company's ordinary share is a registered equity security granting its owner (shareholder) a specific scope of proprietary rights, including the right to participate in managing the Company, the right to receive a part of Company's profit in form of dividend, as well as the right to receive a part of the property after liquidation of the Company.

15.2. The Company's issued and placed shares are ordinary registered shares of the same par value. The par value of the shares is expressed in rubles, regardless of the form and the way they have been paid for.

15.3. The Company's shares are publicly traded on the terms established by the laws of the Russian Federation on securities.

15.4. The Company has a right to place one or more classes of the Company's preferred shares.

15.5. The par value of the shares of the same category (type) shall be the same.

15.6. The par value of the Company's placed preferred shares shall not be lower than the par value of ordinary shares and shall not exceed 25% (twenty five percent) of the Company's authorized capital.

15.7. The procedure of formation and floatation of the Company's fractional shares shall be set forth hereby and the laws of the Russian Federation.

15.8. The scope of rights granted by the Company's share shall be defined by the laws of the Russian Federation and hereby.

15.9. The rights granted by the Company's share shall be transferred to the acquirer thereof at the time of rights to such security are transferred.

## 16. BONDS AND OTHER EQUITY SECURITIES OF THE COMPANY

16.1. Apart from the Company's additional shares, the Company shall be entitled to place bonds, options and other equity securities according to the requirement of the laws of the Russian Federation.

16.2. The Company has no right to place the bonds and other equity securities, convertible into the Company's shares, if the number of the Company's declared shares of certain categories and types is less than the number of the shares of such categories and types, the right to purchase which is granted by such securities. In such cases, according to the procedure and on the terms, stipulated by the laws of the Russian Federation and hereby, the decision to place equity securities convertible into the Company's shares may be taken simultaneously with the decision to introduce the amendments hereto in respect of the number of the Company's declared shares as may be required to make such decision.

16.3. The placing price of the equity securities convertible into the Company's shares for the persons having a preemptive purchase right can be lower than the placing price for other persons, but not more than by 10% (ten percent). The placing price of the equity securities convertible into the Company's shares may not be lower than the par value of the shares, such equity securities are converted into.

16.4. The equity securities placed by the Company (except for the Company's additional shares placed by subscription) may be paid only in cash.

16.5. The Company's equity securities placed by subscription shall be deemed placed if paid for in full.

16.6. The Company's bonds may be redeemed in cash or in kind according to the decision on the issue thereof.

16.7. A bond shall attest the right of its owner to demand the redemption of a bond (payment of the par value, or the par value and interest) within the established period.

16.8. Placement of bonds and other equity securities (including bonds and other equity securities convertible into shares) shall be performed on the basis of the decision of the General Meeting of Shareholders or the Board of Directors.

16.9. The decision to issue bonds shall specify the form, period and other terms of bond redemption.

16.10. A bond shall have a par value. The bonds may be placed by the Company after its authorized capital is paid in full.

16.11. The Company may place bonds with flat maturity term or bonds redeemable by series on certain dates.

16.12. The Company shall provide for the possibility of early redemption of the bonds at request of bond owners. At the same time, the decision to issue bonds shall indicate the cost of the redemption and the earliest date when such bond may be presented for an early redemption.

16.13. The Company shall be entitled to place the bonds, including the bonds secured by pledge of certain property, or the bonds under security provided to the Company by a third party for the issue of bonds, and debenture bonds.

16.14. The bonds are represented by registered bonds and bearer bonds. When issuing registered bonds, the Company shall keep the register of the owners thereof. A lost registered bond can be renewed by the Company for a reasonable charge. The rights of the holder of a lost bearer bond shall be restored by court, according to the procedure established by the laws of the Russian Federation.

16.15. The procedure for issuing the securities, depending on the kind of securities and the manner of placement thereof, shall be set forth by the laws of the Russian Federation.

## 17. CONSOLIDATION AND SPLITTING OF SHARES

17.1. By decision of the General Meeting of Shareholders, the Company shall be entitled to consolidate the Company's placed shares, which results in conversion of two or more shares into one new share of the same category (type). In this case, respective amendments shall be introduced hereto with respect to the share's par value and the number of the Company's placed and declared shares.

17.2. Unless the purchase of the whole number of the shares by a shareholder is possible during the consolidation, the parts of the shares (fractional shares) shall be formed.

17.3. By decision of the General Meeting of Shareholders, the Company shall be entitled to split the Company's placed shares, which results in conversion of one share into two or more shares of the same category (type). In this case, respective amendments shall be introduced hereto with respect to the share's par value and the number of the Company's placed and declared shares of the corresponding category (type).

## 18. PAYMENT FOR THE SHARES AND OTHER EQUITY SECURITIES UPON PLACEMENT THEREOF

18.1. The Company's shares placed at the time of its establishment have been paid in full by the Company's founders following the decision on establishing the Company and the terms of agreement on the establishment of the Company.

18.2. Additional shares and equity securities of the Company, placed by subscription, shall be deemed placed if paid in full.

18.3. The Company's additional shares placed by subscription may be paid in cash, securities, other commodities or property rights or other rights, having a monetary valuation. The Company's additional shares may be paid by offsetting the Company's liabilities in case of private offering.

18.4. The form of payment for the Company's additional shares shall be defined by decision on placement thereof. The payment for other equity securities of the Company shall be made only in cash.

18.5. In the case of in-kind payment for the additional shares of the Company, the property used to pay for the shares shall be valuated according to article 77 of Federal Law "On Joint Stock Companies".

18.6. In the case of in-kind payment for the Company's shares, an independent appraiser shall be engaged to evaluate the market value of such property, unless otherwise stipulated by the laws of the Russian Federation. The property's monetary value determined by the Board of Directors may not exceed the monetary value determined by an independent appraiser.

## 19. ACQUISITION OF THE PLACED SHARES BY THE COMPANY

19.1. The Company shall be entitled to acquire the shares placed by it based on the decision of the General Meeting of Shareholders on decrease of the Company's authorized capital by acquiring a part of the placed shares in order to reduce the total number thereof. The decision to decrease the authorized capital may not be taken, if the nominal value of the shares, remaining in circulation, would be less than the minimal amount of the authorized capital stipulated by the laws of the Russian Federation. The shares acquired by decision of the General Meeting of Shareholders on decrease of the authorized capital shall be retired upon acquisition thereof.

19.2. The Company shall be entitled to acquire the placed shares by decision of the Board of Directors. Such a decision may be taken if the par value of the shares remaining in circulation makes up at least 90% (ninety percent) of the Company's authorized capital. The acquired shares do not grant the right of vote, are not taken into consideration when counting the votes, and no dividends are accrued on such shares. Such shares shall be sold at their market price no later than 1 (one) year from the date of acquisition thereof. Otherwise, the General Meeting of Shareholders shall take a decision to decrease the Company's authorized capital by retiring the mentioned shares.

## 20. REDEMPTION OF THE COMPANY'S SHARES AT THE SHAREHOLDERS' REQUEST

20.1. The shareholders, holding the voting shares, shall be entitled to request the redemption of all or a part of the shares owned by them in the following cases:

(1) making a decision by the General Meeting of Shareholders on the reorganization of the Company or on the consent to, or subsequent approval of a major transaction that involves a property with a value exceeding fifty percent (50%) of the book value of the Company's assets according to the Company's accounting (financial) statements as of the last reporting date (including that being at the same time an interested-party transaction);

(2) introduction of amendments to the Company's Charter (making a decision by the General Meeting of Shareholders, which serves the basis for amending the Company's Charter) or approval of the revised Charter, resulting in restriction of their rights;

(3) decision made by the General Meeting of Shareholders on applying for the delisting of the Company's shares and/or equity securities convertible into the Company's shares.

(4) the decision of the General Meeting of Shareholders to terminate the Company's public status.

20.2. The request referred to above may be put forward by the shareholders, who voted against adoption of the respective decisions or who did not take part in the voting on such issues not later than 45 (forty five) days from the day of adoption of a respective decision by the General Meeting of Shareholders. The requests received by the keeper of the register of the Company's shareholders (registrar) after the aforesaid time or containing incomplete or unreliable information shall not be taken for consideration.

20.3. The redeemed shares shall be put at the Company's disposal and sold at the market price thereof within 1 (one) year of the date of redemption. Otherwise, the General Meeting of Shareholders shall make a decision to decrease the authorized capital of the Company by retiring the mentioned shares.

## PART IV. THE COMPANY'S SHAREHOLDERS

### 21. THE COMPANY'S SHAREHOLDERS

21.1. Any individual, having exercised the ownership of the Company's shares according to the procedure established by the laws of the Russian Federation and hereby shall be deemed the Company's shareholder. The number of the Company's shareholders is unlimited.

21.2. Unless otherwise specified by the laws of the Russian Federation, in the case two or more persons have the legitimate common shared ownership right to one or more shares of the Company, such persons shall be recognized as one shareholder and shall exercise the rights of the Company's shareholder thus granted to them, including the right to vote at the General Meeting of Shareholders by one of them or by their common representative at their discretion. Powers of the mentioned persons shall be duly formalized. The co-owners of the share are jointly liable for all obligations assumed by the shareholders.

21.3. A person, having entered into ownership of the Company's fractional share on the grounds envisaged by the laws of the Russian Federation and hereby, shall be recognized as the Company's shareholder. The Company's fractional share grants to the shareholder the rights granted by the Company's whole share, to the extent corresponding to such part of the whole share that this fractional share represents.

21.4. The shareholder's legal status is defined by the scope of rights granted to it and obligations assigned to it. The rights of the Company's shareholder(s) in relation to the Company and other shareholders are conditional on the category and type, as well as the number of the shares, owned by them.

21.5. Access to the state secret information shall be provided to the Company's shareholders under security clearance executed in compliance with the procedure stipulated by the laws of the Russian Federation.

### 22. THE REGISTER OF SHAREHOLDERS

22.1. The rights of the Company's shareholders to the shares owned by them are attested in the system of registration — the registrar's records in the personal accounts — or, in the case of registration of the rights to the Company's shares in a depositary, — the records in the custody accounts in depositaries.

22.2. The right to the Company's share shall be transferred to the acquirer thereof after the registrar makes a record on the personal account of the acquirer in the registration system, or, in case of registration of the rights to the Company's shares in a depositary — after a person, performing the depositary activity, makes a record on the custody account of the acquirer.

22.3. The Register of Shareholders shall contain data on each registered person, the number and categories (types) of the shares recorded to the name of such persons, as well as other data stipulated by the current laws.

22.4. The Register of Shareholders of the Company shall be maintained by a registrar according to the laws of the Russian Federation.

### 23. SHAREHODERS' RIGHTS

23.1. The shareholders (shareholder), holding in the aggregate 1 (one) whole ordinary share of the Company, shall have 1 (one) vote at the General Meeting of Shareholders. A fractional ordinary share shall grant its owner a proportional part of the vote.

23.2. Every ordinary registered share of the Company provides the shareholder holding it the same scope of rights, including:

(1) the right to take part in governing the Company and to participate personally or via representative in the General Meeting of Shareholders with the right to vote on all the issues within its terms of reference with the number of votes, corresponding to the quantity of ordinary shares held by it;

(2) the right to receive dividend from the net profit of the Company;

(3) the right to receive a part of the Company's property in the case of its liquidation;

(4) the right to freely alienate all or a part of the shares owned by it without prior agreement of other shareholders or the Company;

(5) the right to demand the redemption of all or a part of the shares owned by it in cases and according to the procedure, established by law;

(6) the preemption right to acquire the shares placed by the Company through public subscription, as well as in the cases stipulated by the laws of the Russian Federation, through a private subscription of additional ordinary shares and equity securities, convertible into the ordinary shares, in proportion to the number of the shares of certain category, owned by such shareholder;

(7) when exercising the preemption right to acquire additional shares placed by the Company and other equity securities, convertible into the shares of the Company, the right at their own discretion to pay for such placed equity shares in cash, in case the decision setting a basis for the placement of such equity securities provides for in-kind payment thereof;

(8) the right to request, in the manner prescribed by law, from the Company's registrar to confirm the shareholder's rights to the Company's shares owned by such shareholder by issuing an extract from the register of the Company's shareholders, which shall not be regarded as a security;

(9) the right to request the Company to issue an extract from the list of persons entitled to participate in the General Meeting of Shareholders containing the data about the shareholder concerned, or a certificate, confirming that it is not included in the list of the persons entitled to participate in the General Meeting of Shareholders;

(10) the right to request the Company to issue an extract from the list of persons entitled to request the Company to redeem the shares held by them, containing the data about the shareholder concerned, or a certificate, confirming that such shareholder is not included in the list of the persons entitled to request the Company's redemption of shares;

(11) the right to request the Company to issue an extract from the list of the persons, having a preemptive right to acquire additional shares and other equity securities placed by the Company, containing the data about the shareholder concerned, or a certificate, confirming that such shareholder is not included in the list of such persons;

(12) the right of access to the Company's documents defined by the Federal Law "On Joint Stock Companies";

(13) upon preparation for the General Meeting of Shareholders, the right of free access to the information (materials) that shall be made available to the shareholder upon exercising the right to participate in the General Meeting of Shareholders;

(14) the right, where provided for by law, to file a claim in court to invalidate a transaction entered by the Company, and to claim the application of consequences of its invalidity, and consequences of invalidity of void transactions of the Company;

(15) according to the procedure established by the laws of the Russian Federation, the right to claim in the court against the decision passed by the General Meeting of Shareholders in violation of the laws of the Russian Federation and hereof (including any decision taken in violation hereof concerning convening and holding the annual and extraordinary General Meetings of Shareholders), in case the claimant did not participate in the General Meeting of Shareholders or voted against such decision, and that such decision violates its rights and legitimate interests;

(16) other rights, envisaged by the laws of the Russian Federation in effect.

23.3. The shareholders (shareholder), holding in the aggregate at least 1% (one percent) of the voting shares of the Company shall also have the right to:

(1) request the Company to provide a list of persons entitled to participate in the General Meeting of Shareholders, except for information about their will, if they are included in such list;

(2) in accordance with the law, demand that consent to an interested-party transaction be obtained;

(3) request to provide information on the interested-party transaction that has been effected in the absence of consent to do so;

(4) file a claim in court to invalidate a major transaction that has been effected in violation of the procedure for obtaining consent to such transaction;

(5) where provided for by law, file a claim in court to invalidate an interested-party transaction;

(6) according to the procedure established by law, to put a claim against a member of the Board of Directors, a member of the Management Board and the President to reimburse the damages caused to the Company.

23.4. The shareholder registered in the share registry system with more than 1% (one percent) of the voting shares of the Company recorded on his personal account shall also have the right to request the Company's registrar to provide the information from the register on the names of the registered persons and the number of shares of each category (each type) recorded on their personal accounts.

23.5. The shareholder(s) holding in the aggregate at least 2% (two percent) of voting shares of the Company shall also have the right to:

(1) submit issues to the agenda of an Annual General Meeting of Shareholders, as well as to propose the candidates (including self-nomination) for the Board of Directors, Auditing Commission and Counting Commission, and nominate the Auditor;

(2) nominate the candidates (including self-nomination) for the Board of Directors, if the proposed agenda of an Extraordinary General Meeting of Shareholders includes an issues of election of the Board of Directors;

(3) in case of approval by the Board of Directors of the resolution on refusal to include certain issues in the agenda of the General Meeting of Shareholders or certain candidate in the list of the candidates for election to a respective body of the Company or in case the Board of Directors evades taking a relevant decision, file a claim for compelling the Company to include the proposed issues in the agenda of the General Meeting of Shareholders or a candidate into the list of candidates for election to a respective body of the Company.

23.6. At the same time, the shareholder(s) holding in the aggregate at least 10% (ten percent) of the voting shares of the Company, shall also be entitled to:

(1) request a convening of an Extraordinary General Meeting of Shareholders on any of the issues within its terms of reference;

(2) in case the Board of Directors fails to approve within the period provided for in clause 28.9 hereof the decision on holding an Extraordinary General Meeting of Shareholders or in case the decision to refuse holding an Extraordinary General Meeting of Shareholders, file a claim for compelling the Company to hold an Extraordinary General Meeting of Shareholders;

(3) request an interim inspection (revision) of the Company's financial and economic activities by the Auditing Commission;

(4) request an interim independent audit inspection of the Company's activities.

23.7. At the same time, the Shareholder(s) holding in the aggregate at least 25% (twenty-five percent) of the Company's voting shares shall also be entitled to a free access to the accounting documents and the minutes of meetings of the Management Board.

## 24. SHAREHOLDERS' OBLIGATIONS

24.1. The obligations of the shareholders are determined by the laws of the Russian Federation and hereby. The shareholders of the Company are particularly obliged to:

(1) observe the provisions hereof and the Company's internal documents, respect the will of the other shareholders expressed in the decisions of the General Meeting of Shareholders;

(2) timely and following other terms and procedures envisaged by the laws of the Russian Federation, hereby and internal documents of the Company, make payments for the shares and other equity securities placed by the Company;

(3) under the existing laws, notify the Company of their possible interest in conducting transactions by the Company, and communicate to the Company any other statutorily required information.

(4) not to disclose confidential information on the Company's activity.

24.2. The Company's shareholders shall have no right to act on behalf of the Company without special powers vested in accordance with procedure established by the laws of the Russian Federation.

# PART V. THE COMPANY'S MANAGEMENT BODIES

## 25. THE STRUCTURE OF THE COMPANY'S MANAGEMENT BODIES

25.1. The Company shall be managed through the Company's management bodies.

25.2. The Company's management bodies include the General Meeting of Shareholders, the Board of Directors, the Management Board (collective executive body of the Company) and the President (sole executive body of the Company).

25.3. Additional internal structural subdivisions (including counsels, committees and commissions) may be established at the corresponding body of the Company.

## 26. GENERAL MEETING OF THE COMPANY'S SHAREHOLDERS

26.1. The General Meeting of Shareholders shall be the superior management body of the Company.

26.2. The General Meeting of Shareholders shall perform its activity according to the provisions hereof, the Company's internal documents approved by decision of the General Meeting of Shareholders, and the requirements of the laws of the Russian Federation.

26.3. The General Meeting of Shareholders of MTS PJSC shall be held in Moscow.

26.4. The Company is obliged to conduct annual (regular) General Meeting of Shareholders every year.

26.5. The Annual General Meeting of Shareholders shall consider the issues related to the election of the Board of Directors, Auditing Commission, approval of the Auditor, the issues referred to in sub-clause 27.1(19) hereof, and other issues within the terms of reference of the General Meeting of Shareholders.

26.6. The General Meetings of Shareholders held in addition to the annual meetings shall be deemed extraordinary. An Extraordinary General Meeting of Shareholders may decide on the issues concerning an early termination of the powers of the members of the Board of Directors and concerning the election of the Board of Directors, concerning an early termination of the powers of the Auditing Commission members and concerning the election of the Auditing Commission, approval of the Auditor, and other issues, stipulated by the laws of the Russian Federation.

## 27. TERMS OF REFERENCE OF THE GENERAL MEETING OF SHAREHOLDERS

27.1. The following matters shall fall within the terms of reference of the General Meeting of Shareholders:

(1) **amendment of the Charter (except when a respect decision is referred to the terms of reference of the Board of Directors), as well as the approval of the Company's Charter as restated**;

- (the decision shall be made by qualified majority (three fourth) of votes of shareholders holding the Company's voting shares and participating in the General Meeting of Shareholders)
- (decision on making amendments to the Charter excluding the indication that the company is public, shall be made by the General Shareholders Meeting by a majority of 95% (ninety five percent) of votes of all shareholders holding all categories (types) of shares of the Company).

(2) **reorganization of the Company**;

- (the decisions to reorganize the Company shall be made only at the request of the Board of Directors by qualified majority (three fourth) of votes of shareholders holding the Company' voting shares, who participate in the General Meeting of Shareholders)

(3) **liquidation of the Company, appointment of liquidation commission and approval of interim and final liquidation balance sheet**;

- (decision shall be made by qualified majority (three fourth) of votes of shareholders holding the Company's voting shares, who participate in the General Meeting of Shareholders)

(4) **determining the number of members of the Board of Directors, election of the members and making decisions concerning the early termination of the powers of the members of the Board of Directors, as well as making decision on remuneration and/or compensation to the members of the Board of Directors during the execution of their obligations**;

- (decision on election of the Board members shall be made by cumulative voting. Upon the cumulative voting, the number of the votes that belong to each shareholder is multiplied by the number of the individuals to be elected in the Board of Directors, and a shareholder has a right to give the votes, received in such manner, to one candidate or to distribute them among two or more candidates. The candidates who received the largest number of the votes shall be deemed elected to the Board of Directors);
- (decisions on all other issues shall be made by simple majority (more than a half) of votes of shareholders holding the Company's voting shares, who participate in the General Meeting of Shareholders)

(5) **determining the number, par value and category (type) of the Company's authorized shares and the rights granted by such shares**;

- (decision shall be made by qualified majority (three fourth) of votes of shareholders holding the Company's voting shares, who participate in the General Meeting of Shareholders)

(6) **increase of the Company's authorized capital by increasing the par value of the Company's shares**;

- (decision shall be made only at the request of the Board of Directors by simple majority (more than a half) of votes of shareholders holding the Company's voting shares, who participate in the General Meeting of Shareholders)

(7) **increase of the Company's authorized capital by placing additional shares only among the shareholders of the Company, in case of the Company's authorized capital is increased out of its property**;

- (decision shall be made only at the request of the Board of Directors by simple majority (more than a half) of votes of shareholders holding the Company's voting shares, who participate in the General Meeting of Shareholders)

(8) **increase of the Company's authorized capital by placing additional shares by way of private subscription**;

- (decision shall be made only at the request of the Board of Directors by qualified majority (three fourth) of votes of shareholders holding the Company's voting shares, who participate in the General Meeting of Shareholders)

(9) **increase of the Company's authorized capital by placing by way of public subscription the ordinary shares, constituting more than 25% (twenty-five percent) of the previously placed ordinary shares of the Company**;

- (decision shall be made only at the request of the Board of Directors by qualified majority (three fourth) of votes of shareholders holding the Company's voting shares, who participate in the General Meeting of Shareholders)

(10) **if the Company receives a voluntary or mandatory offer to acquire the shares, as well as other equity securities convertible into the Company's shares - increase of the Company's authorized capital by placing additional shares not exceeding the number and the categories (types) of authorized shares, according to the procedure stipulated by the laws**;

- (decision shall be made by simple majority (more than a half) of votes of shareholders holding the Company's voting shares, who participate in the General Meeting of Shareholders)

(11) **decrease of the Company's authorized capital by reducing the par value of the Company's shares**;

- (decision shall be made only at the request of the Board of Directors by qualified majority (three fourth) of votes of shareholders holding the Company's voting shares, who participate in the General Meeting of Shareholders)

(12) **decrease of the Company's authorized capital by acquisition by the Company of a part of the shares for the purpose of reducing the total number thereof, as well as by redemption of the acquired or redeemed shares of the Company**;

- (decision shall be made by simple majority (more than a half) of votes of shareholders holding the Company's voting shares, who participate in the General Meeting of Shareholders)

(13) **placement of equity securities convertible into the Company's ordinary shares by private subscription**;

- (decision shall be made by qualified majority (three fourth) of votes of shareholders holding the Company's voting shares, who participate in the General Meeting of Shareholders)

(14) **placement of equity securities convertible into the Company's ordinary shares by public subscription, in the case of placement of equity securities convertible into the Company's ordinary shares, constituting more than 25% (twenty-five percent) of the previously placed ordinary shares**;

- (decision shall be made only at the request of the Board of Directors by qualified majority (three fourth) of votes of shareholders holding the Company's voting shares, who participate in the General Meeting of Shareholders)

(15) **placement of the securities convertible into shares, including the Company's options, if the Company receives a voluntary or mandatory offer to acquire the shares, as well as other equity securities convertible into the Company's shares, according to the procedure stipulated by the laws**;

- (decision shall be made by simple majority (more than a half) of votes of shareholders holding the Company's voting shares, who participate in the General Meeting of Shareholders, except for the cases, prescribed by sub-clauses 27.1(13) and 27.1(14) hereof)

(16) **determining the number of members of the Auditing Commission, election of its members and making decision concerning an early termination of the powers of the Auditing Commission members, as well as making decision to remunerate and/or compensate the Auditing Commission members during the execution of their duties**;

- (decision of election of the Auditing Commission members shall be made by simple majority (more than a half) of votes of shareholders holding the Company's voting shares, not being the members of the Board

of Directors or the individuals, holding positions in the Company's management bodies, participating in the General Meeting of Shareholders);

- (decisions on other issues shall be made by simple majority (more than a half) of votes of shareholders holding the Company's voting shares, who participate in the General Meeting of Shareholders)

(17) **appointment of the Auditor**;

- (decision shall be made by a simple majority (more than a half) of votes of shareholders holding the Company's voting shares, who participate in the General Meeting of Shareholders)

(18) **payment (declaration) of dividend based on the results of the first quarter, six months, nine months of a reporting year**;

- (decision shall be made by a simple majority (more than a half) of votes of shareholders holding the Company's voting shares, who participate in the General Meeting of Shareholders)

(19) **approval of the annual reports, annual accounting statement, including Income and Loss Statements (Income and Loss accounts) of the Company, as well as profit distribution (including dividend payment (declaration)), except for the Company's profit distributed as dividends based on the results of the first quarter, six months, nine months of a reporting year and losses based on the results of a reporting year**;

- (decision is made by a simple majority (more than a half) of votes of shareholders holding the Company's voting shares, who participate in the General Meeting of Shareholders)

(20) **determining the procedure for conducting the General Meeting of Shareholders**;

- (decision is made by a simple majority (more than a half) of votes of shareholders holding the Company's voting shares, who participate in the General Meeting of Shareholders)

(21) **determining the number of members of the Counting Committee, electing the members of the Counting Committee and early termination of their power**;

- (decision is made by a simple majority (more than a half) of votes of shareholders holding the Company's voting shares, who participate in the General Meeting of Shareholders)

(22) **consolidation and splitting of shares**;

- (decision is made only at the request of the Board of Directors by a simple majority (more than a half) of votes of shareholders holding the Company's voting shares, who participate in the General Meeting of Shareholders)

(23) **making decisions on the consent to, or subsequent approval of interested-party transactions in accordance with the procedure stipulated by the laws and hereby, when the subject of a transaction or of several interrelated transactions is a property whose value according to the Company's books (offer price of the acquired property) is equal to 10% (ten percent) or more of the Company's assets book cost according to its accounting (financial) statement as at the last reporting date, except for the transactions referred to in sub-clauses 27.1(24) and 27.1(25) hereof**;

(24) **making decisions on the consent to, or subsequent approval of interested-party transactions in accordance with the procedure stipulated by the laws and hereby, when the subject of a transaction or of several interrelated transactions are the sale of the shares exceeding 2% (two percent) of the previously placed ordinary shares of the Company and ordinary shares, to which the previously placed securities and equity securities may be converted**;

(25) **making decisions on the consent to, or subsequent approval of interest-party transactions in accordance with the procedure stipulated by the laws and hereby, when the subject of a transaction or of several interrelated transactions involve the sale of preferred shares of the Company amounting to over2% (two percent) of the previously placed shares of the Company and shares, to which the previously placed equity securities convertible into shares may be converted**;

(26) **making decisions on the consent to, or subsequent approval of interest-party transactions in accordance with the procedure stipulated by the laws and hereby, if the number of directors who are disinterested 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**;

(27) **if the Company receives a voluntary or compulsory offer to purchase the shares, as well as any other equity securities, convertible into the Company's shares, the General Meeting of Shareholders shall make a decision on the consent to, or subsequent approval of interested-party transactionsaccording to the procedure prescribed by the legislation of the RF**;

- (decisions on the approval of interested-party transactions in all cases referred to in sub-clauses 27.1 (23) – 27.1(26) above shall be taken only at the request of the Board of Directors by a simple majority (more than a half)) of the votes of all disinterested shareholders owning the Company's voting shares, who participate in the voting);

- (decisions on the approval of interested-party transactions in the case referred to in sub-clause 27.1 (27) above shall be taken by a simple majority (more than a half)) of the votes of all disinterested shareholders owning the Company's voting shares, who participate in the voting)

(28) **making decisions on the consent to, or subsequent approval of major transactions in accordance with the procedure stipulated by the laws and hereby in the case when the subjects of the transaction is a property the value of which exceeds 50% (fifty percent) of the Company's assets book cost defined according to its accounting (financial) statement as at the last reporting date**;

- (decision is made only at the request of the Board of Directors by a qualified majority (three quarters) of votes of shareholders holding the Company's voting shares, who participate in the General Meeting of Shareholders);

- (if a major transaction is at the same time an interested-party transaction and if the issue on the consent to its settlement is put before the General Meeting of Shareholders for consideration in accordance with Chapter XI of the Federal Law "On Joint Stock Companies", the decision shall be deemed made if ¾ (three quarters) of votes of shareholders holding the Company's voting shares, who participate in the General Meeting of Shareholders, and the majority of votes of all disinterested shareholders holding voting shares, who participated in the General Meeting of Shareholders, cast in favour of the decision);

(29) **making decisions on the consent to, or subsequent approval of major transactions in accordance with the procedure stipulated by laws and hereby in the case, when the members of the Board of Directors fail to reach unanimous decision on the obtaining a consent to, or subsequent approval of such major transaction, as requested by sub-clause 32.2(16) hereof, and the relevant issue has been put by the Board of Directors to the General Meeting of Shareholders for resolution**;

- (decision is made only at the request of the Board of Directors by a simple majority (more than a half) of votes of shareholders holding the Company's voting shares, who participate in the General Meeting of Shareholders);

- (if a major transaction is at the same time an interested-party transaction and if the issue on the consent to its settlement is put before the General Meeting of Shareholders for consideration in accordance with Chapter XI of the Federal Law "On Joint Stock Companies", the decision shall be deemed made by a simple majority (more than a half) of votes of all disinterested shareholders holding voting shares, who participated in the General Meeting of Shareholders cast in favour of the decision).

(30) **making a decision on participation in financial and industrial groups, associations and other unions of commercial organizations**;

- decision is made only at the request of the Board of Directors by a simple majority (more than a half) of votes of shareholders holding the Company's voting shares, who participate in the General Meeting of Shareholders)

(31) **approval of internal documents regulating the activities of the Company's bodies**;

- (decision is made only at the request of the Board of Directors by a simple majority (more than a half) of votes of shareholders holding the Company's voting shares, who participate in the General Meeting of Shareholders)

**(32) if the Company receives a voluntary or compulsory offer to acquire shares, as well as any other equity securities convertible into the Company's shares, making decision on the consent to, or subsequent approval of the transaction or several interrelated transactions connected with the acquisition, alienation or an opportunity of alienation by the Company, directly or indirectly, of any property amounting to 10% (ten percent) or more of Company's assets book cost, defined based on its accounting statement as at the last reporting date, unless such transactions are entered into in the course of the Company's regular business activities or have been made before the Company received such voluntary or compulsory offers;**

- (decision shall be made by simple majority (more than a half) of votes of shareholders holding the Company's voting shares, who participate in the General Meeting of Shareholders)

(33) **if the Company receives a voluntary or compulsory offer to acquire the shares, as well as any other equity securities convertible into the Company's shares, taking a decision on increasing the remuneration for the persons holding positions in the Company's management bodies, setting the terms of termination of their powers and increase of compensations paid to such persons in the case of termination of their powers**;

- (decision shall be made by simple majority (more than a half) of votes of shareholders holding the Company's voting shares, who participate in the General Meeting of Shareholders)

(34) **if the Company receives a voluntary or compulsory offer to acquire the shares, as well as any other equity securities convertible into the Company's shares – approval of acquisition by the Company of outstanding shares**;

- (decision shall be made by simple majority (more than a half) of votes of shareholders holding the Company's voting shares, who participate in the General Meeting of Shareholders)

(35) **making a decision on applying for delisting of the Company's shares and/or equity securities, convertible into the Company's shares**;

- (decision is made by a qualified majority (three quarters) of votes of shareholders holding the Company's voting shares, who participate in the General Meeting of Shareholders)

(36) **other issues stipulated by the laws of the Russian Federation and hereby**.

27.2. The issues falling within the terms of reference of the General Meeting of Shareholders may not be referred to the Board of Directors or Executive Bodies of the Company.

27.3. The General Meeting of Shareholders shall not be entitled to consider the issues falling beyond its terms of reference and to take decisions on these issues.

27.4. The decisions of the General Meeting of Shareholders on the issues not included in the agenda of the General Meeting of Shareholders (unless all the shareholders of Company participated in the meeting) or approved in violation of the terms of reference of the General Meeting of Shareholders or approved in the absence of quorum for holding the General Meeting of Shareholders or approved without majority of the shareholders' votes required for approval of the decisions shall be null and void regardless of appeal of such decisions.

## 28. PREPARATION AND CONVOCATION OF THE GENERAL MEETING OF SHAREHOLDERS

28.1. An annual General Meeting of Shareholders shall be held not earlier than 2 (two) months prior to and not later than 6 (six) months after the end of the reporting year. An annual General Meeting of Shareholders shall be convened by the Board of Directors. The date of an annual General Meeting of Shareholders shall be defined by the Board of Directors.

28.2. An extraordinary General Meeting of Shareholders shall be held following a decision of the Board of Directors on its own initiative, at the request of the Auditing Commission, Auditor and the shareholders (shareholder), holding in the aggregate at least 10% (ten percent) of the Company's voting shares as at the date of the request or on other grounds provided for by the laws of the Russian Federation. An extraordinary General Meeting of Shareholders shall be convened by the Board of Directors or otherwise in cases provided for by the laws of the Russian Federation. In case the Board of Directors fails to make a decision on convocation of an extraordinary General Meeting of Shareholders within the period provided for in clause 28.9 hereof, or decides to refuse the convocation thereof, the Company's body or persons requesting a meeting shall be entitled to file a claim for compelling the Company to hold an extraordinary General Meeting of Shareholders.

28.3. The request for convening an annual General Meeting of Shareholders shall contain the issues to be included in the agenda. The request for an extraordinary General Meeting of Shareholders may contain the draft decisions on each of the issues under consideration, as well as the proposal on the form of the meeting.

28.4. The decision of the Board of Directors that initiates the convocation of an extraordinary General Meeting of Shareholders shall be adopted by a simple majority of members of the Board of Directors participating in the meeting. This decision shall include the approval of: (1) the wording of the agenda issues; (2) the form of the meeting. The Minutes of the meeting of the Board of Directors where such decision has been made shall contain the names of the members of the Board of Directors who voted in favour of the decision, against it or abstained.

28.5. The decision of the Auditing Commission to convene an extraordinary General Meeting of Shareholders shall be passed by a simple majority of the members of the Auditing Commission participating in the meeting and shall be submitted to the Board of Directors. The said request shall be signed by the members of the Auditing Commission who voted for passing this decision.

28.6. The request of the Auditor initiating the convocation of an extraordinary General Meeting shall be signed by it and submitted to the Board of Directors.

28.7. The shareholder(s) holding in the aggregate at least 10% (ten percent) of the Company's voting shares who initiate the convocation of an extraordinary General Meeting of Shareholders shall submit to the Board of Directors a written request specifying, in addition to the information indicated in clause 28.3 hereof, the following information: (1) the full name and/or the trade name of the shareholders, (2) information about the voting shares held by them. Such request shall be signed by the shareholder or its authorized representative. If the request is signed by a representative acting on behalf of the shareholder by proxy, the power of attorney shall be attached. Shareholder(s) of the Company not entered in the register of Company's shareholders may send a demand to convene the Extraordinary General Meeting of Shareholders also by giving appropriate orders (instructions) to a person registering their rights to shares. These orders (instructions) comply with the Russian Law on securities.

28.8. A request of the persons initiating the convocation of an extraordinary General Meeting of Shareholders shall be submitted in writing by sending to the Company's address of a registered

letter or a registered letter with delivery confirmation, or by sending by a courier, or delivered to the secretary of the Board of Directors against the signature or to the Company's clerical office or any other department empowered to receive the correspondence addressed to the Company. The request to convene an extraordinary General Meeting of Shareholders may be sent as an electronic document signed by a qualified electronic signature, obtained in accordance with Federal Law No. 63-FZ "On Electronic Signature" of April 6, 2011, to the e-mail address of the Company: shareholder@mts.ru. Demands of shareholder(s) not entered in the register of Company's shareholders and having given order (instruction) to a person registering their rights to shares, shall be made in accordance with the Russian Law on securities.

28.9. Within 5 (five) days of the date of such request, the Board of Directors shall pass a decision to convene or refuse the convocation of an extraordinary General Meeting of Shareholders. The decision to convene or refuse the convocation of an extraordinary General Meeting of Shareholders shall be sent to the persons requesting the meeting within 3 (three) days.

28.10. The list of the persons, entitled to participate in the General Meeting of Shareholders is compiled by the Company's registrar in accordance with the Russian Law on securities as at a certain date, set by the Board of Directors in compliance with the laws of the Russian Federation and herewith.

28.11. The Board of Directors, while preparing for holding the General Meeting of Shareholders, shall define:

- form of the General Meeting of Shareholders (joint attendance or absentee voting);
- the date, place and time of the meeting and/or the deadline for accepting the voting ballots and the mailing address, to which the filled in ballots shall be sent;
- the date, place and time of registration of the persons entitled to participate in the General Meeting of Shareholders held in a form of joint attendance;
- deadline for determination (setting) the persons entitled to participate in the General Meeting of Shareholders;
- the deadline for receipt of proposals of shareholders to nominate the candidates for the Board of Directors of the Company, if the proposed agenda of the extraordinary General Meeting of Shareholders includes an issue of election of members for the Board of Directors;
- agenda of the General Meeting of Shareholders;
- the way in which the shareholders shall be notified of the General Meeting of Shareholders;
- a list of information (materials) to be transferred to the shareholders upon preparing to hold the General Meeting of Shareholders and procedure for delivery of such materials;
- form and text of the voting ballots as well as the wording of resolutions on the agenda of the General Meeting of Shareholders, which shall be sent in electronic form (as electronic documents) to the nominee shareholders entered in the register of Company's shareholders.

In preparation for the General Meeting of Shareholders, the Board of Directors by its decision may provide for filling out voting ballots in electronic form on the site in the "Internet" data telecommunications network. In this case, the Board of Directors determines the address of the site, on which the persons entitled to attend the General Meeting of Shareholders can fill out ballots in electronic form.

28.12. The agenda of an annual General Meeting of Shareholders shall include the issues relating to the election of members of the Board of Directors, Auditing Commission, approval of the Auditor, and to the approval of the Company's annual reports, annual or accounting statements, profits and losses distribution.

28.13. The Board of Directors shall not be entitled to amend the wordings of the issues to be included in the agenda of the General Meeting of Shareholders, and the wordings of decisions on such issues.

28.14. Voting at the General Meeting of Shareholders shall be carried out by voting ballots. If the General Meeting of Shareholders is held in form of joint attendance or in form of absentee voting, the voting ballot shall be sent by registered mail or by courier or delivered against signature to each person, entered in the Register of Shareholders and entitled to participate in the General Meeting of Shareholders not later than 20 (twenty) days before the date of the General Meeting of Shareholders.

28.15. Those shareholders shall be deemed to have taken part in the General Meeting of Shareholders in form of joint attendance, who have registered for participation in this meeting, as well as the shareholders whose ballots have been received at least 2 (two) days before the date of the General Meeting of Shareholders. Those shareholders shall be deemed to have taken part in the General Meeting of Shareholders in form of absentee voting, whose ballots have been received before the deadline for accepting the ballots. Shareholders are considered attending the general meeting of shareholders if, in accordance with the Russian Law on securities, they have given order (instruction) on voting to persons registering their rights to shares, provided that the

statements of their will are received no later than 2 (two) days prior to the General Meeting of Shareholders or before the deadline for receipt of ballots in case the General Meeting of Shareholders is conducted in the form of absentee voting.

28.16. The notice of the General Meeting of Shareholders shall be posted on the official website of the Company (www.mts.ru) not less than 30 (thirty) calendar days prior to the date of the General Meeting of Shareholders, unless the laws provide for a longer period.

28.17. The notice of the General Meeting of Shareholders may additionally be delivered to the persons entitled to participate in the General Meeting of Shareholders and entered in the Register of Shareholders by registered post at the addresses referred to in the Register of Shareholders, or delivered to those persons against signature simultaneously with sending or delivery of the ballots for voting in order provided in sub-clause 28.14 hereof.

28.18. The date of shareholders' notification of the General Meeting of Shareholders shall be determined by the date of posting of the text of the notice on the website of the Company specified in sub-clause 28.17 hereof.

28.19. The text of the notice on the General Meeting of Shareholders may, by decision of the Board of Directors, be sent also in electronic form to those Company's shareholders who have communicated to the Company or the registrar their electronic addresses for such notices.

28.20. The information and files on the agenda of the General Meeting of Shareholders are provided to persons registering their rights to Company's shares in a depositary by providing them to the Company's registrar for direction to a nominee holder entered in the Register of Shareholders in accordance with the Russian Law on securities.

28.21. Additional requirements for the procedure for convening and holding the General Meeting of Shareholders are stipulated by the laws of the Russian Federation and the Company's internal documents.

28.22. The list of information and materials concerning the agenda to be provided to the shareholders and the procedure thereof are set forth by the laws of the Russian Federation. By decision of the Board of Directors, the information that shall be made available to the persons entitled to participate in the General Meeting of Shareholders, unless it is confidential or constitutes a trade secret, may be partially or fully disclosed on the website of the Company.

28.23. The proposals on inclusion of the issues in the agenda of an annual General Meeting and the proposals on nominating the candidates for the Company's bodies elected by the General Meeting of Shareholders shall be submitted to the Company by the Company's shareholders holding at least 2 (two) percent of the voting shares within 100 (hundred) days after the end of the reporting year. The proposals on the agenda and the candidates to the Company's bodies shall be sent to the Company's address by registered mail with delivery confirmation or by courier, or delivered to the Company's secretary against signature or to the Company's clerical office or any other department empowered to receive the correspondence addressed to the Company. Proposals shall be signed by the shareholder or his proxy (representative). If the proposal is signed by proxy (representative), the power of attorney shall be attached to the proposal. The proposals on the agenda and proposals on nominating the candidates for the Company's bodies may be sent as an electronic document signed by a qualified electronic signature, obtained in accordance with Federal Law No. 63-FZ "On Electronic Signature" of April 6, 2011, to the e-mail address of the Company: shareholder@mts.ru. Shareholders not entered in the register of Company's shareholders, may make proposals for the Shareholders not entered in the register of Company's shareholders, may make proposals for the agenda and proposals for nomination of candidates to the Company bodies also by issuing orders (instructions) to a person registering their rights to shares, in the manner prescribed by the Russian Law on securities.

## 29. HOLDING THE GENERAL MEETING OF SHAREHOLDERS

29.1. Decisions of the General Meeting of Shareholders may be taken by holding a meeting (joint attendance of the Company's shareholders for discussing the agenda issues and passing the decisions on the issues put to vote).

29.2. Decision of the General Meeting of Shareholders may also be taken without holding a meeting, by way of absentee voting.

29.3. The General Meeting of Shareholders, the agenda of which includes such issues as election of the Board of Directors, Auditing Commission, approval of the Auditor and the issues referred to in sub-clause 27.1(19) hereof may not be held in form of absentee voting.

29.4. The persons included in the list of persons, entitled to participate in the General Meeting of Shareholders, as well as the persons, to whom the rights for the shares of the aforesaid persons have been transferred by way of legal succession or reorganization, or their representatives acting

by proxy or by virtue of law may participate in the General Meeting of Shareholders. If the General Meeting of Shareholders is held in a form of joint attendance, the persons included in the list of persons entitled to participate in the General Meeting of Shareholders (or their representatives) shall be entitled to participate in such meeting or to mail the filled-in voting ballots to the Company, or fill out an online ballot form on the website in the "Internet" data telecommunications network at the address specified in the notice on convening the General Meeting of Shareholders, if this is provided by the decision to convene the General Meeting of Shareholders.

29.5. Registration of the persons participating in the General Meeting of Shareholders held in a form of a joint attendance shall be carried out by Counting Commission. The Counting Commission shall be elected by the General Meeting of Shareholders and shall include at least 3 (three) persons. Unless the Counting Commission has been established, its functions shall be performed by the secretary of by the Board of Directors or by any other person designated by the Board of Directors. The functions of the Counting Commission may be performed by the Company's registrar. In the case where the number of the shareholders holding the voting shares exceeds 500 (five hundred), the functions of the Counting Commission shall be performed by the Company's registrar. So far as it relates to the functions of the Counting Commission, the latter shall be an independent permanent body of the General Meeting of Shareholders. Its functions shall be to: (1) verify the powers of the persons registered for participation in the General Meeting of Shareholders, (2) verify the power of attorney of the shareholders' representatives for compliance thereof with the laws of the Russian Federation, (3) keep records of the powers of attorney and the rights granted thereby, recording these in a corresponding log, (4) hand out and send the voting ballots and other information (materials) relating to the General Meeting of Shareholders and to maintain a log of issued (sent) voting ballots, (5) determine a quorum of the General Meeting of Shareholders, (6) count the votes and tally voting results, (7) execute the Minutes containing the voting results, (8) perform other functions stipulated by the laws of the Russian Federation, by the Company's internal documents relating to the activity of the Counting Commission or by an agreement between the Company and the person acting as Counting Commission.

29.6. Transfer of the rights (powers) to a representative of a persons entitled to participate in the General Meeting of Shareholders shall be in a form of a power of attorney issued following the requirements of the laws of the Russian Federation. Sample power of attorney for voting is available on the official website of the Company (www.mts.ru). Any shareholder may at any time replace its representative and personally exercise the rights granted by the share by canceling the power of attorney in accordance with the procedure prescribed by the laws. In the cases where the share is jointly owned by several persons, the voting right at the General Meeting of Shareholder shall be exercised, on their discretion, by any joint holder of such share or by the representative of the joint shareholders. The powers of each of the aforesaid persons shall be duly formalized.

29.7. The General Meeting of Shareholders held in form of joint attendance is declared open if by the time of its holding there is a quorum with respect to at least one issue on the agenda of this General Meeting of Shareholders. Registration of the persons entitled to participate in the General Meeting of Shareholders, who failed to register before its opening, shall finish after the last issue on the agenda of the General Meeting (the last issue on the agenda of the General Meeting in respect of which the quorum is present) is discussed and prior to the time provided for the voting to the persons who have failed to vote so far.

29.8. If the agenda of the General Meeting of Shareholders includes the issues to be voted upon by different voters, a quorum necessary to take decisions on these issues shall be defined separately for each such issue. The absence of quorum for the decisions to be taken on the issues that require a presence of certain voters shall not impede the decision-making on the issues to be voted upon by different voters, for which a quorum is present.

29.9. A quorum of the General Meeting of Shareholders is defined depending on the composition of the voters with respect to the issues included in the agenda of the General Meeting of Shareholders.

29.10. All shareholders holding the Company's ordinary shares shall be counted as voters on any issue included in agenda of the General Meeting of Shareholders, except for the following issues:

- regarding approval of related-party transactions (sub-clauses 27.1(23) — 27.1(27) hereof) — the Company's shareholders who, in the manner prescribed by the law of the Russian Federation, are recognized as an interested persons with respect to such transaction, shall be excluded from the voters;

- regarding election of members of the Auditing Commission — the Company's shareholders, being members of the Board of Directors and persons holding positions in the Company's management bodies, shall be excluded from the voters.

29.11. A quorum of the General Meeting of Shareholders on any issue included in the agenda of the General Meeting of Shareholders is defined as a simple majority (more than a half) of the shareholders entitled to vote on the relevant issue.

29.12. If a quorum is present, the number of votes necessary to take a corresponding decision at the General Meeting of Shareholders, stated in clause 27.1 hereof, is defined according to the total number of the votes of the shareholders participating in the General Meeting of Shareholders, except for voting on the consent to, or subsequent approval of an interested-party transaction (sub-clauses 27.1(23) — 27.1(27) hereof). In the above stated case, the number of votes required to make a corresponding decision at the General Meeting of Shareholders is determined based on the total number of votes of shareholders holding the Company's voting shares who are not interested in the transaction and participate in the voting.

29.13. If by the time of the beginning of the General Meeting of Shareholders quorum is not satisfied for all the issues included in agenda of the General Meeting of Shareholders the General Meeting of Shareholders may be postponed for not more than 2 (two) hours.

29.14. In the absence of quorum for an annual General Meeting of Shareholders, the General Meeting of Shareholders shall be held once again with the same agenda. In the absence of quorum for an extraordinary General Meeting of Shareholders, the General Meeting of Shareholders shall be held once again with the same agenda.

29.15. The repeated General Meeting of Shareholders is valid (has quorum), if the shareholders participating therein hold in the aggregate not less than 30% (thirty percent) of the votes of the Company's outstanding voting shares.

29.16. Upon convening the repeated General Meeting of Shareholders instead of the meeting that failed to take place, the procedure for convocation thereof is defined following the provisions of article 28 hereof relating to the convocation and holding an extraordinary General Meeting of Shareholders. The ballots for voting at the repeated meeting shall be sent in accordance with the procedure provided for by the laws of the Russian Federation.

29.17. In the absence of quorum for an annual General Meeting of Shareholders, the repeated General Meeting of Shareholders with the same agenda shall be held within 60 (sixty) days at the latest pursuant to a court ruling. No additional claim is required. The repeated General Meeting of Shareholders shall be convened and held by a person or the Company's body specified in the court ruling and, if the said person or the Company's fail to hold an annual General Meeting of Shareholders within the period prescribed by the court, the repeated General Meeting of Shareholders shall be convened and held by other persons or the Company's body having appealed to court provided that such persons or the Company's body were specified in the court ruling.

29.18. If the repeated General Meeting of Shareholders is held less than in 40 (forty) days after the General Meeting of Shareholders which has not been held, the persons entitled to participate in the General Meeting of Shareholders are defined (recorded) as of the date on which the persons, who were entitled to participate in that General Meeting of Shareholders which has not been held, were defined (recorded).

29.19. Voting at the General Meeting of Shareholders is held under the principle "one voting share— one vote", except for cumulative voting in cases, stipulated by the laws and hereby.

29.20. Voting on all the issues on the agenda at the General Meeting of Shareholders shall be conducted only by voting ballots. The Board of Directors shall approve the ballot form and wording. Voting by ballots is equal to receiving by the Company's registrar of statements of will made by the persons entitled to attend the general meeting of shareholders, not entered in the register of Company's shareholders of the Company and, in accordance with the requirements of the Russian Law on securities, having given an order (instruction) on voting to persons registering their rights to shares.

29.21. A voting ballot shall be deemed invalid with respect to the agenda issue specified thereon if:

(1) there are corrections in the ballots' details;

(2) there are discrepancies between the ballot submitted to the Counting Committee and the ballot approved by the Board of Directors;

(3) more than one voting option is left in the voting ballot; unless the vote is taken in accordance with instructions of the persons who have acquired the shares after the date of a list of the persons entitled to participate in the General Meeting of Shareholders, or in compliance with instructions of the owners of depositary securities;

(4) no voting option is left in the ballot;

(5) all voting options have been crossed out;

(6) the ballot has no signature of the shareholder (or the authorized representative of the shareholder);

(7) the Company, after having received the voting ballots signed by a representative acting by proxy, was notified, not later than 2 (two) days prior to the date of the General Meeting of Shareholders, that this representative has been replaced (recalled);

(8) in the course of counting the votes, two or more filled-in voting ballots of one person, with different voting options on the same issue have been discovered. This rule shall not apply to the ballots signed by a person having issued a proxy for voting with respect to the shares that have been transferred after the date of making up a list of the persons entitled to participate in the General Meeting of Shareholders and/or by the persons acting on the basis of such proxy, where in the boxes used for indicating a number of votes given for each voting option the number of votes cast for the respective option is indicated and appropriate marks are available as stipulated by the regulatory legal acts of the Russian Federation;

(9) in the ballot for voting on the issue of election of the of the Auditing Commission or the members of the Counting Committee more candidates than the number of persons that shall be elected to the Company's respective body are voted for. This rule shall not apply to the voting ballots that have been signed by a person voting on the shares that have been transferred after the date of making up a list of the persons entitled to participate in the General Meeting of Shareholders, in accordance with the instructions received from the persons who acquired such shares, and/or by a person voting on the shares circulating outside the Russian Federation in the form of depositary securities, that contain appropriate marks stipulated by the regulatory legal acts of the Russian Federation;

(10) the ballot has affirmative votes for alternative versions of decisions;

(11) in the course of cumulative voting, a shareholder has distributed between the candidates to the Board of Directors a number of votes that exceeds the numbers of votes possessed by such shareholder;

(12) the ballots were submitted to the Counting Committee after the counting of votes started. The votes represented by the invalid ballots shall not be counted when tabulating the voting results.

29.22. Additional requirements to conducting of the General Meeting of Shareholders are set forth in the laws of the Russian Federation and in the Company's internal documents.

## 30. DOCUMENTS OF THE GENERAL MEETING OF THE COMPANY'S SHAREHOLDERS

30.1. According to results of voting, the Counting Committee executes the Minutes containing the voting results, which shall be signed by members of the Counting Committee or by a person, who performs its functions. The Minutes of the voting results shall be executed not later than 3 (three) working days after the General Meeting of Shareholders or the deadline for accepting the voting ballots if the General Meeting of Shareholders is held in a form of absentee voting.

30.2. Decisions made at the General Meeting of Shareholders and voting results shall be disclosed at the General Meeting of Shareholders, during which the voting was held, as well as shall be delivered not later than 4 (four) working days after the closing date of the General Meeting of Shareholders or, if the General Meeting of Shareholders was held in form of absentee voting, the deadline for receipt of ballots in the form of the Report on the voting results to the persons, included in the list of the persons entitled to participate in the General Meeting of Shareholders, in accordance with the procedure, stipulated in respect of notification about the General Meeting of Shareholders. The Report on the voting results at the General Meeting of Shareholders shall be signed by a person, presiding at the General Meeting of Shareholders and by the secretary of the General Meeting of Shareholders. The results of the voting on electing the Board of Directors and the Auditing Commission shall be disclosed at the General Meeting of Shareholders and take effect after being disclosed. If on the date of determination (setting) the persons entitled to attend the General Meeting of Shareholders the person entered in the register of Company's shareholders is a nominee shareholder, the information contained in the Report on the voting results shall be provided to the nominee shareholder in accordance with the Russian Law on securities to provide information and files to persons exercising rights relating to the Company's shares.

30.3. The chairman of the General Meeting of Shareholders shall be elected by majority of votes of the shareholders participating in the meeting. The chairman shall perform the following functions: (1) conducts the General Meeting of Shareholders, (2) observes the compliance with the regulations of the General Meeting of Shareholders, and (3) signs the minutes of the General Meeting of Shareholders.

30.4. Report on the voting results shall be attached to the Minutes of the General Meeting of Shareholders.

30.5. The Minutes of the General Meeting of Shareholders shall be executed within 3 (three) working days of the General Meeting of Shareholders in two original copies. Both copies are signed by the chairman and by secretary of the General Meeting of Shareholders. The extracts from the Minutes of the General Meeting of Shareholders shall be signed by the secretary of the General Meeting of Shareholders.

30.6. After the Report on results of the voting is executed and the Minutes of the General Meeting of Shareholders are signed, the voting ballots shall be sealed up by the Counting Commission and handed over for custody in the Company's archives.

30.7. Additional requirements to the form of and the procedure for executing the documents of the General Meeting of Shareholders are set forth by the laws of the Russian Federation and internal documents of the Company.

## 31. THE COMPANY'S BOARD OF DIRECTORS

31.1. The Board of Directors exercises overall management of the Company's activities, except for resolving the issues, referred by law and hereby to the terms of reference of the General Meeting of Shareholders.

31.2. Only individual is allowed to be a member of the Board of Directors. The persons elected in the Board of Directors may be reelected unlimited number of times. A person holding no shares of the Company may become a member of the Board of Directors. The requirements to the persons elected to the Board of Directors, may be established by the Regulations on the Board of Directors.

31.3. The President, as well as members of the Management Board are not allowed to simultaneously hold the position of the Chairman of the Board of Directors.

31.4. The members of the Board of Directors are elected by the General Meeting of Shareholders in accordance with the procedure, stipulated by the laws of the Russian Federation and hereby for the period till the next annual General Meeting of Shareholders. If an annual General Meeting of Shareholders failed to be held within a stated period, the powers of the Board of Directors shall terminate, except for the powers to prepare, convene and hold an annual General Meeting of Shareholders.

31.5. Number of members of the Board of Directors is defined by decision of the General Meeting of Shareholders and may not be less than 7 (seven). Until a decision is taken setting other number of members of the Board of Directors, the shareholders, while nominating the candidates for the positions of the members of the Board of Directors, shall be guided by the existing number of members of the Board of Directors defined by the General Meeting of the Shareholders as at the time of such nomination.

31.6. The Chairman of the Board of Directors shall organize and manage the activities of the Board of Directors. The Chairman of the Board of Directors presides at the meetings of the Board of Directors and ensures that minutes are maintained at the meetings.

31.7. The Chairman of the Board of Directors and the Deputy Chairmen of the Board of Directors shall be elected by the members of the Board of Directors from among the members of the Board of Directors by a simple majority of votes, present at the meeting. The Board of Directors is entitled to reelect at any time the Chairman of the Board of Directors and the Deputy Chairmen of the Board of Directors by a simple majority of votes from the total votes of the members of the Board of Directors.

31.8. The Board of Directors shall pass decisions and organize work in accordance with the Regulations on the Board of Directors approved by the General Meeting of Shareholders.

31.9. The members of the Board of Directors shall perform their duties reasonably and in good faith with due care and diligence to the benefit of the Company and its shareholders, to achieve sustainable and successful development of the Company.

31.10. The Board of Directors shall annually report on its activity to the General Meeting of Shareholders.

31.11. The duties of the members of the Board of Directors shall be defined by the laws of the Russian Federation, hereby and by internal documents of the Company. The members of the Board of Directors shall, in particular:

(1) comply with the requirements hereof and of the decisions of the General Meeting of Shareholders;

(2) provide information to the Company, in a timely manner, about themselves, their possible interest in conducting transactions by the Company and any other information provided for by the legislation of the RF, notify the Company of any changes in such information in accordance with the procedure prescribed by the legislation of the RF.

31.12. By decision of the General Meeting of Shareholders, the members of the Board of Directors shall, in the period of performing their duties, receive remuneration and compensation for their expenses connected with performing their functions as members of the Board of Directors. The amounts of

such remunerations and compensation shall be established by the decision of the General Meeting of Shareholders. The liability of the members of the Board of Directors during the performance of their duties may be insured if the Company's management bodies so decide.

## 32. TERMS OF REFERENCE OF THE COMPANY'S BOARD OF DIRECTORS

32.1. In order to maintain a stable financial status and competitiveness of the Company, the Board of Directors shall establish an effective organizational structure and a management system for the Company, develop basic strategic and tactical goals, and enforce the implementation thereof by the Company.

32.2. The following shall fall within the terms of reference of the Board of Directors:

(1) **identifying the guidelines of the Company's activity, defining the Company's development strategy, working out the Company's investment policy, defining new types of the Company's activity, approving the Company's annual budgets (finance plans), examining the principal directions of activity and development strategy of the subsidiaries**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(2) **approving the Company's organizational structure (in the form of a list containing the positions in the Company and the Company's structural subdivisions directly reporting to the President)**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(3) **examining the results of the financial and economic activity of the Company and its subsidiaries; preliminary examination of the Company's annual reports and annual accounting statements**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(4) **convocation of annual and extraordinary General Meetings of Shareholders, except for cases stipulated in sub-clause 23.6(2) hereof**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(5) **approval of the agenda of the General Meeting of Shareholders**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(6) **setting the final date for compiling the list of persons entitled to participate in the General Meeting of Shareholders, and other issues, related to preparation and holding the General Meeting of Shareholders and meetings of the Board of Directors and falling within the terms of reference of the Board of Directors pursuant to the law of the Russian Federation and hereto**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(7) **placing bonds or other equity securities by the Company (including equity securities convertible into the Company's shares), except for cases when the relevant decision falls within the terms of reference of the General Meeting of Shareholders**;

- (decision on placing of equity securities convertible into the Company's shares shall be unanimously taken by all members of the Board of Directors exclusive of the retired members of the Board of Directors);

- (decision on placing of bonds or other equity securities shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(8) **determining, in cases stipulated by law, the price (monetary value) of the property that is the subject of the transactions conducted by the Company, as well as the placing price or the procedure for determining thereof and repurchasing of the Company's equity securities**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting. If a person interested in one or several transactions, where the property price (monetary value) is determined by the Board of Directors, is member of the Board of Directors, the decision shall be made by a simple majority of votes of directors who are not interested in the transaction and meet the requirements set forth in clause 3, Article 83 of the Federal Law "On Joint Stock Companies". If the number of such directors is less than a half (1/2) of the elected members of the Board of Directors, a decision shall be made unanimously by all members of the Board of Directors, herewith votes of the retired members of the Board of Directors shall not be taken into account)

(9) **purchasing the shares, bonds and other securities paced by the Company in cases and in the manner stipulated by the laws of the Russian Federation, except for the cases where the purchase is connected with decrease of the Company's authorized capital**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(10) **appointing the President; defining the number of the Management Board members, electing the Management Board members; approving the terms of labor, civil and any other types of agreements concluded with the President and the Management Board members, amendments thereto and termination thereof; early termination of the powers of the President and the Management Board members**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(11) **transfer of powers of the sole executive body of the Company to a commercial organization (managing organization) or an individual entrepreneur (manager) under agreement; approval of the terms of civil and any other types of agreements concluded with the managing organization (manager), amendments thereto and termination thereof; early termination of powers of the managing organization (manager)**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(12) **recommendations to the General Meeting of Shareholders regarding the amount of the remuneration to be paid and/or the procedure of compensating for the members of the Auditing Commission, as well as determining the remuneration for the Auditor**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(13) **recommendations to the General Meeting of Shareholders regarding the amount of dividend on the shares and the procedure for paying the dividends**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(14) **use of the Company's reserve fund and other funds, and the approval of internal documents regulating the procedure for formation and using the Company's funds**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(15) **approval of the Company's internal documents, except for the internal documents, the approval of which falls within the terms of reference of the General Meeting of Shareholders, the Management Board and the President, namely the internal documents regulating the Company's business principles relating to the strategy, investments, new types of the Company's activity, human resource management policy, personnel motivation and loyalty system, risk management and internal control, corporate management**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(16) **making decisions on the consent to, or subsequent approval of transactions involving the property valued at 25% (twenty five percent) to 50% (fifty percent) of the book value of the Company's assets determined according to its accounting (financial) statements as of the last reporting date, including making decisions on the consent to, or subsequent approval of transactions recognized as major transactions in accordance with the Federal Law "On Joint Stock Companies"**;

- (decision on approval of transactions, referred to herein, shall be made unanimously by all members of the Board of Directors with exception of the retired members of the Board of Directors)

(17) **making decisions on the consent to, or subsequent approval in the manner stipulated by law of interested-party transactions, except for the cases where the relevant decision-making falls within the terms of reference of the General Meeting of Shareholders under clauses 27.1(23) — 27.1(27) hereof**;

- (decision shall be made by a simple majority (more than a half) of votes of all directors who are not interested in the transaction and meet the requirements set forth in clause 3, Article 83 of the Federal Law "On Joint Stock Companies");

(18) **approval of the Company's registrar and the terms of his assignment, and termination of this assignment**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(19) **taking a decision on purchase of the Company's shares that have been redeemed and acquired for other reasons and are in the Company's possession in compliance with the requirements of the laws of the Russian Federation and hereof**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(20) **approval of the decisions on issuing, prospectus, reports on the results of acquiring the Company's securities by the Company**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(21) **including in the agenda of the General Meeting of Shareholders the issues in the cases, stipulated by the laws of the Russian Federation and hereby**;

- (decisions on including all mentioned issues in agenda of the General Meeting of shareholders shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(22) **taking decision on the Company's participation, changing the share and termination of participation in the commercial organizations (except for the cases where such decision falls within the terms of reference of the General Meeting of Shareholders in compliance with sub-clause 27.1(30) hereof), including those on establishing the Company's subsidiaries**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(23) **approval of holding by the President and the Management Board members the positions in management bodies of other organizations, entering into the labor relations with other employers (except for the scientific, teaching and creative activities)**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(24) **adopting recommendations in relation to the voluntary or compulsory offer received by the Company, in compliance with Chapter XI.1 of the Federal Law "On Joint Stock Companies", which include the assessment of the offer price of the securities to be purchased and probable change of their market price after the purchase thereof, assessment of plans of the person who has made such voluntary or compulsory offer, in relation to the Company, including in relation to its personnel**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(25) **approval of candidates for the position of the Company's Corporate Secretary (the Head of the special unit acting as the Corporate Secretary) and approval of the decision on termination of its office; the approval of the principles of his remuneration system; approval of the Regulations on the Corporate Secretary (the special unit acting as the Corporate Secretary); assessment of work of the Corporate Secretary (the Head of the special unit acting as the Corporate Secretary) and approval of reports on its work**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(26) **appointment of the secretary of the Board of Directors and termination of its powers, and the approval of the principles for assessing its work and remuneration system**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(27) **approving the specimen of the trademark, as well as the emblems and other means of visual identification of the Company**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(28) **establishing the committees, commissions and other internal structural subdivisions under the Board of Directors, defining their powers and approving the personnel thereof, reviewing and approving the reports on the results of their activities**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(29) **approval of the transactions connected with alienation or possible alienation of the land plots, buildings (including those under construction), residential and non-residential premises (in respect of the facilities with the total area in excess of 1,000 (one thousand) square meters)**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(30) **increase of the Company's authorized capital by placing the Company's additional shares by way of an public subscription, except for the cases set forth in sub-clause 27.1(9) hereof**;

- (decision shall be made unanimously by all members of the Board of Directors, except for the votes of the retired members of the Board of Directors)

(31) **increase of the Company's authorized capital by placing the Company's additional shares by converting into these shares of the previously issued equity securities convertible into the Company's shares**;

- (decision shall be made unanimously by all members of the Board of Directors, except for the votes of the retired members of the Board of Directors)

(32) **approval of the transactions involving a property costing more than USD 100,000,000 (one hundred million) in ruble equivalent at the exchange rate of the Central Bank of the Russian Federation as at the date of the decision, but not exceeding 25% (twenty five percent) of the Company's assets book cost defined according to its accounting (financial) statement as at the last reporting date**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(33) **formulating the Company's position with respect to the corporate conflicts among the Company's shareholders, Company's bodies and employees of the Company**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(34) **approval of candidates to be nominated to boards of directors (supervisory boards) of the Company's foreign subsidiaries put on the list to be approved by the Board of Directors**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(35) **approval of the candidates to fill the vacancies of the Company's top officials, who report directly to the President**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(36) **approval of the general principles of the work appraisal and remuneration and motivation system for the Company's top officials, who report directly to the President**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(37) **approval of the decisions on appointment of the head of internal audit department of the Company and his dismissal as well as determining the amount of his remuneration**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(38) **approval of the transactions on the acquisition, alienation and encumbrance of the shares and participation interests in the authorized capitals of other companies and the approval of material terms and conditions of such transactions, including, but not limited to, the provisions specifying the number of the acquired, alienated and encumbered shares, or the provisions specifying the size of the acquired, alienated or encumbered participation interest and the price of the transaction**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(39) **determining the Company's (the Company's representatives') position on the issues concerning the Company's (Company's representatives') participation (non-participation) in the voting, casting "in favour", "against" or "abstained" votes (a) at the general meetings of shareholders (participants), (b) at the meetings of the board of directors, (c) at the meetings of the collective executive bodies, and (d) upon decision-making by the sole executive management bodies of the subsidiaries of the Company, as well as business entities in which the Company and/or such subsidiaries of the Company participate, directly or indirectly, on the following issues:**

**on concluding the shareholder agreements (participation agreements), simple partnership agreements, trust management agreements (if the business entities referred to in this subclause 32.2(39) act as trustors), on participation of the Company's subsidiaries in investment funds and commercial organizations and/or on participation of the enterprises in which Company and/or such subsidiary participates, directly or indirectly, in investment funds and commercial organizations (on entering as a participant (shareholder) into an existing organization or establishment of a new organization),**

**on the change of the participation interest or on termination of such participation, including making transactions on acquisition, alienation or encumbrance of the shares and participation interests in the authorized capitals of such organizations and the approval of material terms and conditions of such transactions, including, but not limited to, the provisions specifying the number of the acquired, alienated or encumbered shares or provisions specifying the size of the acquired, alienated or encumbered participation interests and the price of the transaction;**

**HOWEVER, the provisions of this sub-clause 32.2(39) shall not apply to the cases of decision-making by the management bodies on the reorganization of 100% subsidiaries of the Company and the companies where a respective subsidiary of the Company holds, directly or indirectly, 100% of the authorized capital, in form of transformation, or acquisition, or merger with each other;**

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(40) **consideration of the information and reports of the President and the Management Board on the following issues:**

**a) Company's activities;**

**b) performance by the President and the Management Board of their duties and responsibilities;**

**c) performance by the Company's top officials, who report directly to the President, of their duties and responsibilities;**

**d) implementation of the decisions of the General Meetings of Shareholders and the Board of Directors;**

**e) complying by the Company with the provisions of the laws of the Russian Federation related to combating the misuse of insider information and manipulation of market**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(41) **approval of reports of the Company's executive bodies on effectiveness of the risk management system (process) and internal control system (process) of the Company, including compliance systems**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(42) **decision-making on the issues falling within the terms of reference of the Board of Directors pursuant to the rules and recommendations of security exchanges, security trading organizers, public organizations and state authorities of foreign countries that regulate the security circulation and listing (including bonds, depositary receipts, other equity securities convertible into shares) and derivative securities (including debenture notes and other derivative instruments) of the Russian issuers on the territory of such foreign countries, applicable to the Company's activity and placement of securities by the Company, including the issues of limiting the placing price, placing period, essential conditions, placement and circulation parameters for such securities (including derivative securities), setting liability limitations applied by the Company in connection with such issue and/or in connection with the existing contractual obligations of the Company**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(43) **decision-making on applying for listing the Company's shares and/or equity securities convertible into the Company's shares**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(44) **consideration of the results of assessment of performance of the Board of Directors**;

- (decision shall be made by a simple majority (more than a half) of votes of members of the Board of Directors participating in the meeting)

(45) **decision-making on other issues falling within the terms of reference of the Board of Directors pursuant to the laws of the Russian Federation, hereto, and to the Company's contractual obligations, as well as pursuant to the foreign laws applicable to the Company as an issuer of the securities placed outside the Russian Federation.**

32.3. The Board of Directors shall play a key role in major corporate actions taken by the Company.

32.4. Major corporate actions include: reorganization of the Company, acquisition of thirty (30) or more percent of the Company's voting shares (merger), settlement of major transactions by the Company, as well as transactions provided for by sub-clauses 32.2(29), 32.2(32) and 32.2(38)

hereof, increase or decrease of the authorized capital of the Company, listing or delisting of the Company shares.

32.5. With respect to major corporate actions, the Board of Directors shall take decisions on the performance of such actions in accordance with sub-clauses 32.2(16), 32.2(29), 32.2(30), 32.2(31), 32.2(32), 32.2(38), 32.2(43) hereof, or develop recommendations for the General Meeting of Shareholders on the matters provided for by sub-clauses 27.1(2), 27.1(6), 27.1(7), 27.1(8), 27.1(9), 27.1(10), 27.1(11), 27.1(12), 27.1(28), 27.1(29), 27.1(35) thereof.

32.6. Issues referred by the law of the Russian Federation and this Charter to the terms of reference of the Board of Directors may not be delegated to the Executive Body of the Company.

## 33. MEETINGS OF THE BOARD OF DIRECTORS

33.1. The Board of Directors shall organize its activity in accordance with the Regulations on the Board of Directors in form of joint attendance meetings of the members of the Board of Directors based on free discussions of agenda issues for the purpose of making the decisions within the terms of reference of the Board of Directors. If the meetings are held in form of the joint attendance, the written opinions of the absent members of the Board of Directors shall be taken into account. The Board of Directors may hold the meetings by means of electronic (telephone) communication facilities. In such case the secretary of the Board of Directors ensures the magnetic (electronic) tape recording of the meeting of the Board of Directors. Participation in the meeting of the Board of Directors by means of electronic (telephone) communication facilities shall be deemed equal to the personal presence. If necessary, the Board of Directors may take decisions by absentee voting pursuant to the Regulations on the Board of Directors. The decision to hold the meeting of the Board of Directors in form of absentee voting shall be taken by the Chairman of the Board of Directors.

33.2. The meetings of the Board of Directors shall be convened as necessary, but at least twice a quarter, and shall be convened by the Chairman of the Board of Directors on his own initiative, at the request of the member of the Board of Directors, the Auditing Commission or the Auditor, as well as at the request of any of the Company's Executive Bodies.

33.3. Not later than 30 (thirty) days before the annual General Meeting of Shareholders, the meeting of the Board of Directors shall be held in order to approve preliminary the Company's annual report, annual accounting (financial) statement, including profits and losses statements, the Auditor's report, report of the Auditing Commission following the results of examination of the annual accounting (financial) statement, that shall be submitted for approval of the annual General Meeting of Shareholders. At the meeting of the Board of Directors, the Chairman of the Board of Directors shall submit to the Board of Directors complete current financial information, as well as complete report on the current state of the Company and on basic results of the Company's business activity and plans.

33.4. The meetings of the Board of Directors shall be held at the location of the Company or at any other place, defined by the Board of Directors.

33.5. The members of the Board of Directors shall be notified of the coming meeting of the Board of Directors in advance. Such a notice shall include the meeting agenda.

33.6. A quorum required to hold the meetings of the Board of Directors shall make up a half of the elected members of the Board of Directors. Should the number of the members of the Board of Directors become less than a number constituting such quorum, the Board of Directors shall make a decision to hold an extraordinary General Meeting of Shareholders in order to elect new members of the Board of Directors. In this case, the powers of the Board of Directors shall terminate, except for the powers related to preparation, convening and holding such extraordinary General Meeting of Shareholders.

33.7. When taking decisions at the meetings of the Board of Directors, each member of the Board of Directors shall have 1 (one) vote.

33.8. Unless otherwise specified by the laws of the Russian Federation or hereby, the decision of the Board of Directors shall be deemed passed, if a simple majority (more than a half) of the members of the Board of Directors participating in the meeting have casted a positive vote. Should the votes be equally split, the Chairman of the Board of Directors shall have a casting vote.

33.9. For the purpose of defining a quorum and counting the voting results on the issues included in the agenda of the meeting of the Board of Directors, a written opinion of an absent member of the Board of Directors shall be taken into account. A written opinion of the member of the Board of Directors shall be attached to the minutes of the meeting.

33.10. In the cases, stipulated by the Federal Law "On Joint Stock Companies", when voting on the relevant issues, the votes of the retired members of the Board of Directors shall be disregarded. The following members of the Board of Directors shall be referred to the retired:

(1) a member of the Board of Directors who has submitted to the Company (to the name of the Chairman of the Board of Directors) a notice of voluntary resignation — after such notice has been received by the Chairman of the Board of Directors;

(2) a member of the Board of Directors disqualified by a court ruling;

(3) a deceased Board member.

If the resignation notice has been received by the Company less than 10 (ten) calendar days prior to the regular meeting of the Board of Directors, the notifying member of the Board of Directors shall be deemed retired after the next scheduled meeting of the Board of Directors prior to which the notice had been submitted. The signature of the member of the Board of Directors on the resignation notice shall be notarized. The resignation notice of the Chairman of the Board of Directors may be addressed to the Deputy Chairman of the Board of Directors.

33.11. No transfer of the voting right from one member of the Board of Directors to another shall be permitted.

33.12. The casting vote of the Chairman of the Board of Directors shall not be used by the Deputy Chairman of the Board of Directors or any other member of the Board of Directors, who performs the Chairman's functions in the absence of the Chairman of the Board of Directors.

33.13. The minutes of the meetings of the Board of Directors shall be maintained by the secretary of the Board of Directors. The minutes of the meetings of the Board of Directors shall be executed within 3 (three) days after the meeting date. The minutes of the meetings of the Board of Directors shall be signed by the secretary and the Chairman of the Board of Directors. The minutes shall be accompanied by the documents approved by the Board of Directors. Extracts from the minutes of the meetings of the Board of Directors shall be signed by the secretary of the Board of Directors.

33.14. Additional requirements to the procedures of holding the meetings of the Board of Directors are set by the laws of the Russian Federation, by Regulations on the Board of Directors and by other internal documents of the Company.

## 34. EXECUTIVE BODIES OF THE COMPANY

34.1. The Executive bodies of the Company shall be the collective executive body (the Management Board) and the sole executive body (the President).

34.2. The Executive bodies shall manage current activities of the Company and report to the Board of Directors and to the General Meeting of Shareholders.

34.3. The terms of reference of the Executive Bodies of the Company shall include addressing the issues of the Company's current activities, except for those issues, referred to the terms of reference of the General Meeting of Shareholders and the Board of Directors.

34.4. The Executive Bodies of the Company shall be established by the Board of Directors.

34.5. The rights and obligations of executive bodies shall be regulated by the laws of the Russian Federation, hereby and by internal documents of the Company.

34.6. The Executive Bodies of the Company shall organize the Company's activities and be responsible for results of these activities, ensure the enforcement of decisions taken by the General Meetings of Shareholders and by the Board of Directors.

34.7. The Executive Bodies shall ensure creation and maintenance of an effective risk management and internal control system in the Company, and are responsible for implementation of the decisions of the Board of Directors related to organization of risk management and internal control system.

34.8. The Executive Bodies of the Company shall be responsible for effective economic, financial, scientific and technical and social policies of the Company.

34.9. The President and the Management Board members shall be permitted to hold concurrently the positions in management bodies of other organizations, to enter into the labor relations with other employers (except for the scientific, teaching and creative activities) with the Board of Directors' consent.

34.10. The Board of Directors shall be entitled to take decision on an early termination of the President's powers, as well as powers of certain Management Board member or all Management Board members and on establishing new Executive Bodies of the Company.

34.11. If the functions of the sole executive body are performed by a managing organization (the manager), then such managing organization (the manager) shall not be entitled to exercise similar functions in the organization competing with the Company.

## 35. MANAGEMENT BOARD OF THE COMPANY

35.1. The Management Board shall, within its terms of reference, set forth hereby, by decisions of the General Meetings of Shareholders and of the Board of Directors, and by internal documents of the Company endorsed by the General Meetings of Shareholders, be responsible for the following issues:

(1) organizing an efficient management of the Company's current operations;

(2) developing basic principles for planning the Company's activity;

(3) development and implementation of the Company's current economic policy with a view of increasing the Company's profitability and competitiveness;

(4) drafting quarterly, annual and perspective plans of the Company's activity, budget and investment program and overseeing the execution thereof;

(5) drafting and founding the proposals on improvement of internal organizational and managerial structure of the Company;

(6) drafting and submitting for approval by the Board of Directors of the proposals on strategic organization and planning of the Company's overall activity;

(7) development of financial and investment strategies and lists of specific tasks for the Company's daily operations;

(8) drafting and submitting for approval by the Board of Directors the key standards of the corporate conduct, including those relating to confidentiality and information resources management;

(9) developing and enhancing the Company employees' motivation system;

(10) drafting the proposals to the President and the Board of Directors relative to the annual results to be achieved by the Company in pursuing the general goals of activity;

(11) submitting the reports to the Board of Directors, the Auditing Commission and the Auditor;

(12) by decision of the Management Board Chairman, a preliminary consideration of materials to be submitted to the members of the Board of Directors and the Company's shareholders upon preparation for the meetings of the Board of Directors and the General Meetings of Shareholders;

(13) supporting the enforcement of the decisions taken by the General Meetings of Shareholders and the Board of Directors;

(14) interaction with the Company's subsidiaries;

(15) examination of activity results of the subsidiaries;

(16) drafting proposals to the Board of Directors for approval of the Company's budget and the finance and economic activity plan, as well as for introducing the amendments to the previously approved budget of the Company;

(17) approval of the internal documents submitted for the Management Board consideration by decision of the President;

(18) participation in resolving labor disputes and appointment of a representative from among the Company's administration for an out-of-court settlement of disputes;

(19) development and submission to the Board of Directors of proposals on the issues set forth in sub-clause 32.2(39) hereof and in cases when decision-making by the Board of Directors on reorganization set forth in sub-clause 32.2(39) hereof is not required, preliminary approval of such reorganizations;

(20) taking decisions on the Company's participation and termination of participation in non-commercial organizations (except for cases when corresponding decision-making fall within the terms of reference of the General Meeting of shareholders according to sub-clause 27.1(30) hereof);

(21) working out the position of the Company (Company's representatives) on participation (non-participation) in the voting, casting "in favour", "against" or "abstained" votes (a) at the general meetings of shareholders (participants), (b) at the meetings, (c) at the meetings of the collective executive bodies, and (d) upon decision-making by the sole executive management bodies of the subsidiaries of the Company, as well as business entities in which the Company and/or such subsidiaries of the Company participate, directly or indirectly, on the issue of participation or termination of participation of the Company's subsidiaries in non-commercial organizations, and/or on participation or termination of participation of business entities in which the Company and/or such subsidiaries of the Company participate, directly or indirectly, in non-commercial organizations;

(22) establishing the Company's subsidiaries and opening representative offices, as well as deciding on liquidation thereof; approval of the regulations on the subsidiaries and representative offices;

(23) discussion of other issues of the Company's current activities.

35.2. The President shall be entitled to submit to the Management Board for consideration any issue of the Company's current activity that does not fall within the terms of reference of the General Meeting of Shareholders or the Board of Directors.

35.3. Personal and quantitative membership of the Management Board shall be approved by the Board of Directors as advised by the President. The Management Board members shall be elected for a 3-year period. The Management Board members may be reelected for unlimited number of terms.

35.4. A contract with a Management Board member shall be signed on behalf of the Company by the Chairman of the Board of Directors or by a person authorized by the Board of Directors. Terms and conditions of such contract shall be approved by the Board of Directors. The Management Board members, who signed the contracts with the Company, are subject to specific labor regulations set forth in chapter 43 of the Labor Code of the Russian Federation.

35.5. The Board of Directors shall be entitled to terminate the powers of any Management Board member at any time.

35.6. When the powers of the Management Board member are terminated, such member shall, within the period defined by the contract, present a report on his/her activity to the Board of Directors.

35.7. The Management Board shall carry out its activities by holding meetings and taking decisions. The Management Board meetings shall be conducted according to a plan. The Management Board meetings shall be convened by the Management Board Chairman or at request of any member of the Management Board, the Board of Directors, the Auditing Commission or the Auditor. A decision of the Management Board on the issues falling within its terms of reference may be passed by absentee voting.

35.8. Agenda of a regular meeting of the Management Board is defined according to the plan of the Management Board activity, by proposals of the Chairman and members of the Management Board. At such meetings, a written opinion of an absent Management Board member shall be taken into account when defining a quorum and tabulating the voting results.

35.9. The Management Board shall be entitled to make decisions (has a quorum) if at least a half of Management Board members participated therein. If the number of the present members of the Management Board is less than necessary for a quorum, the Board of Directors shall take a decision on establishing a new Management Board.

35.10. Decisions on the issues included in the agenda of the Management Board meetings shall be made by a simple majority of votes of the present Management Board members. Should the votes be split equally, the Management Board Chairman shall have a casting vote.

35.11. If the Management Board member disagrees with a decision taken, he/she may request that his/her special opinion be attached to the minutes of the Management Board meeting; within 2 (two) days after the date of the Management Board meeting, he/she shall submit such special opinion in writing to the secretary of the Management Board.

35.12. The Management Board members shall act within their terms of reference provided for herein, in the Company's internal documents, by decisions of the General Meetings of Shareholders, of the Board of Directors and/or based on the powers of attorney of the President.

## 36. THE PRESIDENT OF THE COMPANY

36.1. The President shall be vested with all necessary powers to execute an overall management the Company's activity and to resolve corresponding issues that do not fall within the terms of reference of the General Meeting of Shareholders, the Board of Directors and the Management Board.

36.2. The President shall represent the viewpoint of the executive bodies at the meetings of the Board of Directors and at the General Meetings of Shareholders.

36.3. The President shall head the Management Board and organize its work.

36.4. The President shall act without power of attorney on behalf of the Company and represent it in relationships with any persons on any issues, including representing and defending the Company before state authorities and in court.

36.5. Within his/her terms of reference, the President shall perform the following functions:

(1) to dispose, on behalf of the Company, of the Company's property and funds;

(2) to enter, on behalf of the Company, into transactions both in the Russian Federation and abroad, except for the cases provided for by the laws of the Russian Federation and hereby. However, the transactions involving property costing more than USD 100,000,000 (one hundred million) in ruble equivalent, as well as the transactions involving alienation/possible alienation of land plots or buildings (including facilities under construction), residential and non-residential premises

(involving the facilities with the total area exceeding 1,000 (one thousand) square meters), shall be made in accordance with the requirements hereof;

(3) approve the list of the Company's personnel, hires and dismisses the Company's staff in compliance with the laws of the Russian Federation, approves the Company's internal working rules and sets out the remuneration system, incentives for excelled employees, and applies disciplinary sanctions;

(4) defines the detailed internal structural and functional division of the Company's main departments directly reporting to the President (blocks, business units and other subdivisions of the same status), as well as approves the organizational structure and the detailed internal structural and functional division of all other Company's structural elements including departments, divisions and other Company units of the same status;

(5) organizes financial and tax accounting and financial reporting, ensures safekeeping of the accounting documents, accounting registers and accounting statements;

(6) takes measures to ensure the confidentiality of state secrets through development and implementation of information security procedures, information protection, counterintelligence, safety guard and fire safety;

(7) determines the content and volume of the data constituting a trade secret or other confidential information of the Company, as well as security procedures in compliance with the laws of the Russian Federation;

(8) adopts the measures for ensuring the safety of commercial and confidential information, related to the Company;

(9) represents the Company in court and in arbitration court;

(10) issues the powers of attorney for performing any actions on behalf of the Company, including those with power of substitution;

(11) issues the orders, approves the internal documents of the Company regulating the Company's financial and economic activity, activity of internal structural subdivisions of the Company and other internal documents except for those documents, the approval or which falls within the terms of reference of the General Meeting of Shareholders and the Board of Directors;

(12) submits, at its discretion, the documents indicated in sub-clause 36.5(11) hereof for consideration by the Management Board;

(13) exercises any other powers required for everyday management of the Company's activity.

36.6. The President shall, within the powers vested in him/her, issue the orders and give written and verbal instructions that shall be binding upon the Company's employees.

36.7. The President shall be appointed by the Board of Directors for 3 (three) years, and may be reelected for unlimited number of times.

36.8. The rights and obligations, terms and amount of remuneration to the President shall be set forth in the agreement entered into with the President. Such agreement shall be signed on behalf of the Company by the Chairman of the Board of Directors or by a person, authorized by the Board of Directors. Terms and conditions of such agreement shall be approved by the Board of Directors.

36.9. The requirements that shall be met by the persons elected for the position of the President may be set forth by the Regulations on the President and/or by a decision of the Board of Directors.

36.10. The President, in performing the functions vested in him/her, shall be governed by the laws of the Russian Federation, provisions hereof and internal documents of the Company.

## PART VI. CONTROL OVER THE COMPANY'S FINANCIAL AND ECONOMIC ACTIVITIES

### 37. THE COMPANY'S AUDITOR

37.1. To audit and approve the annual financial statements of the Company the General Meeting of Shareholders shall approve, on an annual basis, the Auditor.

37.2. The agreement with the Auditor shall define the procedure for organizing and conducting the audit of the Company's financial and economic activity.

### 38. THE COMPANY'S AUDITING COMMISSION

38.1. Monitoring the financial and economic activities of the Company (internal audit) shall be carried out by the Auditing Commission, constituted of 3 (three) persons.

38.2. Activity of the Auditing Commission shall be regulated by the laws of the Russian Federation, hereby and by the Regulations on the Auditing Commission adopted in accordance herewith.

38.3. The Auditing Commission shall be elected by the General Meeting of Shareholders from among the shareholders or candidates nominated by the shareholders, provided that they are not the members of the Board of Directors, do not hold any position in the Executive Bodies of the Company, and do not perform functions of the Chief Accountant of the Company, for a period till the next annual General Meeting of Shareholders. The members of the Auditing Commission may be reelected for the next term. Powers of all or any member of the Auditing Commission may be terminated on reasonable grounds by decision of the General Meeting of Shareholders made by a simple majority of votes.

38.4. The Auditing Commission's activities shall be managed by its Chairman elected at the first meeting of the Auditing Commission.

38.5. The Auditing Commission shall carry out the audit on its own initiative, by instruction of General Meeting of Shareholders, of the Board of Directors or at the request of the shareholders owing in the aggregate not less than 10% (ten percent) of the Company's voting shares. Regular auditing shall be carried out at least once a year. During the auditing, the members of the Auditing Commission shall be entitled to request the Company's officials to make available all necessary documents and provide personal explanations. The Auditing Commission shall submit the auditing results to the General Meeting of Shareholders and the Board of Directors.

38.6. In addition to the annual audit stipulated by the laws of the Russian Federation, the Company may, at the request of the shareholders owing in the aggregate not less than 10% (ten percent) of the voting shares, undergo an additional audit at any time by any auditing firm chosen by the requesting shareholder. Such additional audit shall be undertaken on the account of the requesting shareholder. The Company's officials shall ensure the free access of the relevant auditing firm to the Company's accounting documents and to other documents required to perform such audit.

38.7. The Company's annual report and annual accounting (financial) statement shall be submitted to the General Meeting of Shareholders only if accompanied by an Auditing Commission's report.

38.8. The results of document auditing and audits carried out by the Auditing Commission shall be formalized in form of protocols signed by the Chairman and by those members of the Auditing Commission, who performed the auditing, and shall be discussed at the Auditing Commission meetings. Protocols of audit and examinations, as well as Auditing Commission reports on annual financial statements and accounting reports of the Company shall be submitted to the Board of Directors.

38.9. Auditing Commission shall be entitled, if necessary, to engage the experts and independent audit companies on a contractual basis. In this case, additional costs shall be approved by the Board of Directors. The Auditing Commission's evaluation of the costs shall be coordinated with the Board of Directors. The Auditing Commission shall be entitled to engage the Company's staff without damaging a regular working process of the Company.

38.10. The members of the Auditing Commission may be remunerated for performing their functions. The amount of such remuneration shall be established by decision of the General Meeting of Shareholders following a recommendation of the Board of Directors. Technical and financial support of the Auditing Commission's activities shall be vested in the President.

38.11. The following shall fall within the terms of reference of the Auditing Commission:

(1) carrying out documental auditing of financial and economic activity of the Company (comprehensive or selective), its trade, settling, foreign currency and other operations;

(2) checking the compliance with adopted cost evaluations, standards and limits;

(3) checking the timeliness and correctness of payments to the suppliers of the goods and services, payments to the state budgets, accruing and paying dividends, redemption of other liabilities;

(4) checking the observance by the Company and its management bodies of normative and legal acts, as well as decisions of the General Meeting of Shareholders and of the Board of Directors;

(5) checking the reliability of everyday accounting, bookkeeping practice and statistical accounting and recording in the Company;

(6) checking the cash and property status of the Company;

(7) checking the observance of the rules of records management and keeping financial documentation;

(8) checking the observance of the recommendations issued based on the previous audits and checks.

(9) confirmation of integrity of data contained in the report on interested-party transactions concluded by the Company in the reporting year.

38.12. Members of the Auditing Commission shall be entitled to take part in meetings of the Board of Directors with a right of consultative vote.

38.13. The members of the Auditing Commission shall be responsible for negligent performance of duties vested in them in accordance with the laws of the Russian Federation and herewith.

38.14. The members of the Auditing Commission shall be financially liable to the Company for any damage incurred by their disclosure of information, constituting the trade secret of the Company.

38.15. Additional requirements with respect to the working procedure and rights and obligations of the Auditing Commission shall be set forth by the Regulations on the Auditing Commission.

**Exhibit 1.2**

APPROVED BY

GENERAL MEETING OF SHAREHOLDERS
MOBILE TELESYSTEMS PUBLIC JOINT STOCK COMPANY

ON JUNE 28, 2018, MINUTES NO.43

**AMENDMENTS AND ADDITIONS TO THE CHARTER OF MOBILE TELESYSTEMS PUBLIC JOINT STOCK COMPANY**

Clause 1.9 of the Charter of Mobile TeleSystems Public Joint Stock Company "Information about Reorganizations and Succession of the Entity" shall be supplemented with subclauses reading as follows:

(69) The Entity is a full legal successor in respect of all rights and obligations of Stream Digital Limited Liability Company (registered by the Interdistrict Inspectorate of the Federal Tax Service No. 46 for Moscow on December 22, 2015, a registration entry made by the Interdistrict Inspectorate of the Federal Tax Service No. 46 for Moscow into the Unified State Register of Legal Entities under the Primary State Registration Number 5157746197791 on December 22, 2015), reorganized via incorporation into Mobile TeleSystems Public Joint Stock Company.

(70) The Entity is a full legal successor in respect of all rights and obligations of Cellular Communication of Bashkortostan Joint-Stock Company (registered by the Administration of Kirovsky district of Ufa of the Republic of Bashkortostan on December 23, 1993, a registration entry made by the Interdistrict Inspectorate of the Federal Tax Service No. 39 for the Republic of Bashkortostan into the Unified State Register of Legal Entities under the Primary State Registration Number 1020202562160 on December 11, 2002), reorganized via incorporation into Mobile TeleSystems Public Joint Stock Company.

**Exhibit 1.3**

APPROVED BY

GENERAL MEETING OF SHAREHOLDERS
MOBILE TELESYSTEMS PUBLIC JOINT-STOCK COMPANY

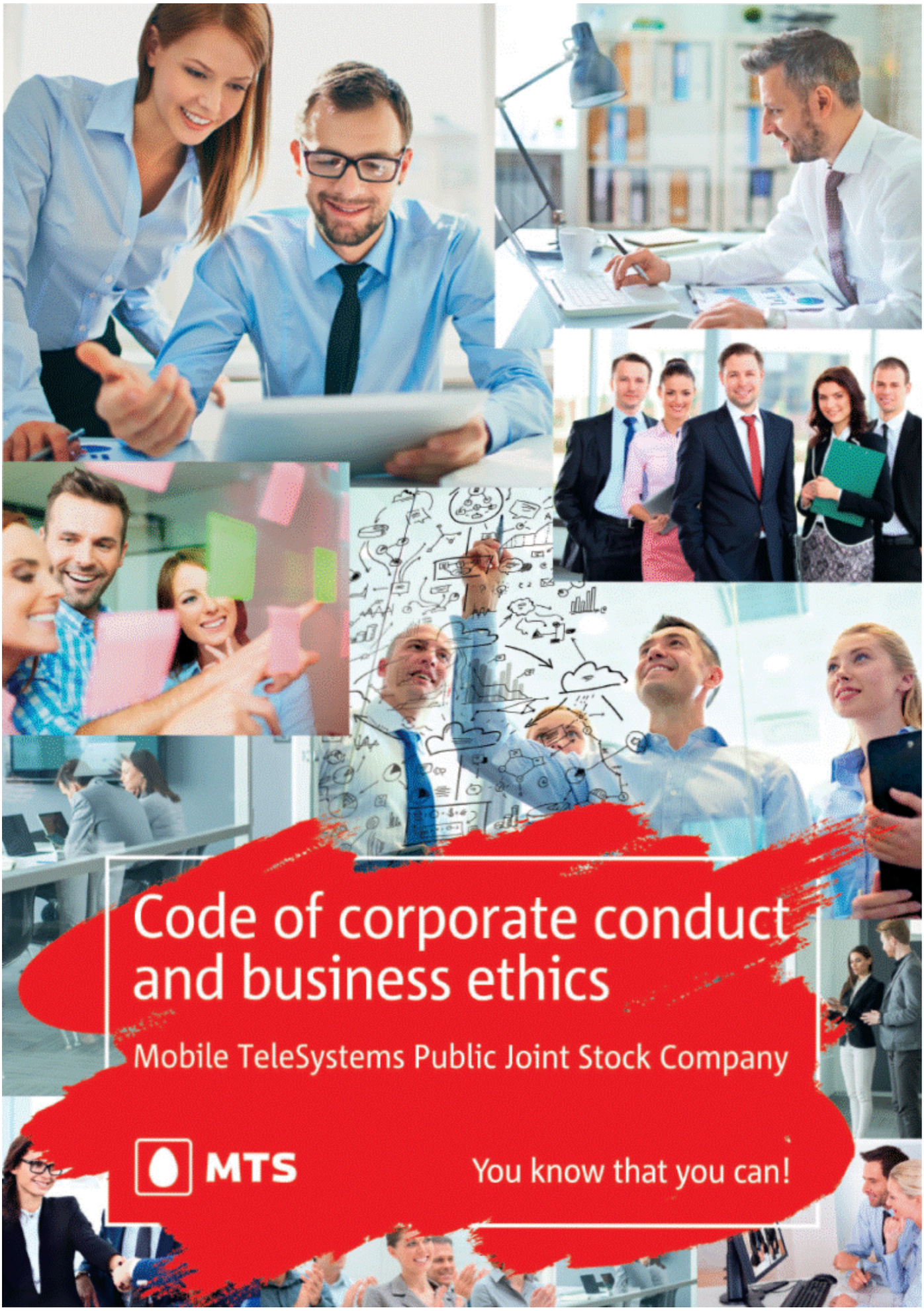
ON JUNE 28, 2018, MINUTES NO.43

**AMENDMENTS TO THE CHARTER
OF MOBILE TELESYSTEMS
PUBLIC JOINT STOCK COMPANY**

Clause 12.2 of the Charter of Mobile TeleSystems Public Joint Stock Company shall be amended to read as follows:

“The Company’s authorized capital is RUB 189,421,557 (one hundred eighty nine million four hundred twenty one thousand five hundred and fifty seven rubles) 80 kopeks and consists of 1,894,215,578 (one billion eight hundred ninety four million two hundred fifteen thousand five hundred and seventy eight) outstanding ordinary registered shares of the Company with a par value of RUB 0.1 (zero point one tenth of the ruble) or 10 (ten) kopeks each. The Company’s authorized capital is paid up in full.”

**Exhibit 1.4**


Code of corporate conduct and business ethics
Mobile TeleSystems Public Joint Stock Company
MTS
You know that you can!

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# Introduction

This Code of Corporate Conduct and Business Ethics (hereinafter, the "Code") contains the basic principles of business practice that are in place at Mobile TeleSystems Public Joint Stock Company (hereinafter, "MTS"). In its operations, MTS abides by applicable law and adheres to generally accepted standards of business ethics. The company does not tolerate any form of business practice running contrary to these rules.

The Code of Corporate Conduct and Business Ethics should be viewed as a document containing the minimal set of standards and requirements adopted in our company for the purpose of facilitating the pursuit of honest and ethical business practices and preventing improprieties. The Code sets out the rules and standards to which employees must adhere in their daily work. In such cases that demand compliance with higher standards than those commonly accepted in commercial practice, or that fall under a regulatory act of greater legal force pursuant to applicable law, MTS will adhere to such higher standards and apply the corresponding regulatory act.

This Code is not intended as an exhaustive set of rules and does not provide recommendations for every situation that may be encountered in the course of business. So, should you need to make a business decision in a situation not envisioned by the Code, ask yourself the following questions:

1. **Is it legal?**
2. **Is it honest and fair?**
3. **Is it in the company's interests?**
4. **Does it comply with the company's rules?**
5. **Is it in line with the reputation of the company?**
6. **Am I authorized to do it?**
7. **Would I feel comfortable if information about my actions were published in the mass media?**

If the answer to any of the foregoing questions is "no," you should not proceed with what you were about to do.

The Code also provides pointers on where to seek advice and what to do in the case of a violation of Code provisions.

The Code applies to members of the Board of Directors, senior management and all other MTS employees (hereinafter, the term "employees" shall be understood to mean all individuals to whom the Code applies). All employees must be thoroughly familiar with this Code and abide by the principles and procedures set forth herein. The standards of corporate conduct and business ethics presented in the Code also extend to all companies forming part of the MTS Group.

Pursuant to the company's rules, behavior running contrary to statutes of the law or this Code may result in disciplinary action, including dismissal/termination of the respective employment agreement, based on the actual circumstances of each specific case and pursuant to applicable law.

Employees who have violated the law or this Code must compensate MTS for material damage caused by such violations, in accordance with labour law and other applicable legislation, and pay civil damages. They may also be subject to administrative or criminal prosecution in accordance with applicable law. The company expects all of its employees to work honestly and conscientiously — this being a mandatory requirement of employment in the company.

# MTS and its employees

- Work environment
- Workplace behavior
- Communication and training
- Conflict of interest
- Gifts and entertainment
- Confidential or proprietary information
- Safeguarding and use of company property

MTS has repeatedly been cited by the industry's leading consulting firms and expert agencies as a premier employer. The reputation of one of the best employers in the Russian market is one of the factors for our success, which is why caring for our employees is a top priority at MTS. We are convinced our attitude towards our employees largely determines their conscientious behavior at the company.

**Our key asset is our people. Today, we're concentrating our efforts on the search for ingenious, innovatively-minded specialists as well as on continuous employee development within the company. The recognition of our high business efficiency is predicated on the high professional level of our personnel.**

# Work environment

The company promotes a friendly corporate culture and an atmosphere of gratitude, care and recognition towards those who help grow our business — our colleagues! The company undertakes to abide by all applicable laws and norms dealing with labor legislation, to ensure the social protection of company employees, and to observe the principle of equal opportunities for all employees based on their professional merits. This applies to all aspects of employment, including hiring, training, promotion, compensation, discipline and dismissal.

The ticket to the ongoing professional development of employees of our company is high-quality, timely training.

MTS operates its own Corporate University, an institution whose mission statement is as follows: "We create opportunities for growth, expanding the boundaries of our people and business, to secure a confident future for MTS."

The company prohibits discrimination and harassment, violence or the threat of violence, as well as any and all inappropriate behavior towards any company employee. MTS strictly adheres to the principle of equal, respectful treatment towards all company employees, irrespective of their personal background and circumstances regarding: race, skin color, gender, ethnicity, nationality, religious beliefs, citizenship, age, physical capabilities, marital status, sexual orientation, culture and other legally protected individual characteristics. All employees are responsible for observing this principle.

# Workplace behavior

The company strives to ensure a safe, comfortable work environment for its employees, however, the maintenance and preservation of a healthy work atmosphere also depends on employees' adherence to the rules of working behavior.

Labor discipline is mandatory subordination of all employees to the requirements established by the internal code of labor conduct and to respective employment agreements, including job descriptions and local regulatory acts. In the event of the violation of labor discipline (commission of a disciplinary offence), i.e. non-performance or improper performance by fault of an employee of the work duties assigned thereto, MTS may impose disciplinary sanctions.

Question: **What types of behavior are categorically prohibited at the company?**

Answer: **The company prohibits any behavior posing a risk to human health in the workplace, for example:**

- **arriving to work in a state of alcoholic, narcotic or toxic intoxication, as well as the consumption of alcoholic beverages or narcotics;**
- **intentional causing of harm to the health or property of other employees;**
- **interfering with the work of other employees;**
- **smoking in prohibited areas in the territory and within the premises of MTS.**

All employees are obliged to observe the labor safety requirements and fire safety rules envisioned by applicable Russian Federation law and the company's regulatory acts.

MTS employees must treat their work colleagues with respect, provide assistance to newcomers, follow the applicable rules of business ethics, and help foster a friendly work atmosphere. Employees are prohibited from using vulgar language when communicating with other employees, counterparties and clients of the company.

Question: **Are there any dress code requirements at the company?**

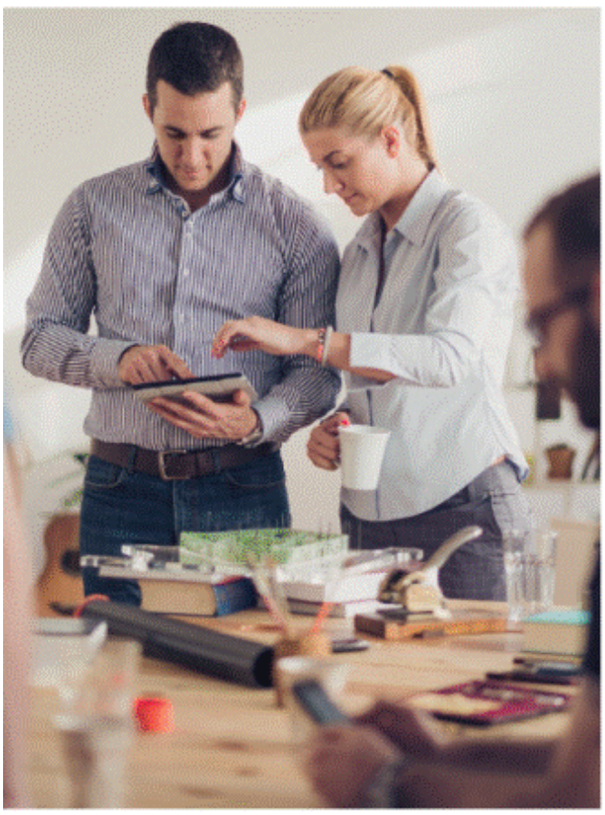
Answer: **Yes, working at MTS does require employees to follow a specific dress code. MTS requires its employees to wear formal business attire, athletic wear and sneakers are prohibited. Employees are expected to maintain a neat and tidy appearance that does not distract others from their work, wear clean, well-ironed clothes and polished shoes, have well-groomed hair and pay careful attention to their personal hygiene.**
**On the final day of the working week, most employees are free to wear more "casual" attire[1]. However, if you're meeting with company clients or counterparties, you'll have to wear proper business attire on that day as well.**

Employees should spend all of their working time endeavoring to perform their job duties with maximum efficiency, striving to foster and maintain good relationships, strengthening counterparty confidence and enhancing the business image of MTS.

[1] Comfortable daily attire.

# Communication and training

The provisions of the Code of Corporate Conduct and Business Ethics are communicated to all company employees, upon being hired, under signature. Moreover, to ensure a proper understanding and adherence to the requirements of the Code, all employees are obliged to undergo an electronic training course and testing on issues relating to the adherence to the Code, within three months following the beginning of employment with the company. The course provides clear explanations of the Code's provisions and fair business practices, legal requirements and standards of behavior which are expected from employees. Training is conducted for all current employees once every two years.



At the company, a remote course of training in anti-corruption legislation has been developed that must also be gone through by all employees, in a similar fashion to the course related to the Code.

There is annual testing of the company's managers on their awareness and the certification of adherence to the Code of Business Conduct and Ethics and Anti-Corruption Policy.

In addition to obligatory electronic courses, face-to-face compliance training is conducted at the company for the purpose of maintaining employees' continuous awareness of legal requirements, in-house policies and procedures binding on each MTS employee; employees are also kept informed, periodically, by mailing of communications related to the Code and compliance requirements.

The remote testing and training system existing at the company offers all MTS employees a variety of training courses which cover certain rules and requirements established at the company, in greater detail, including those contained herein.

We believe that regular employee training and communication is an indispensable condition for fair and responsible behavior at our company.

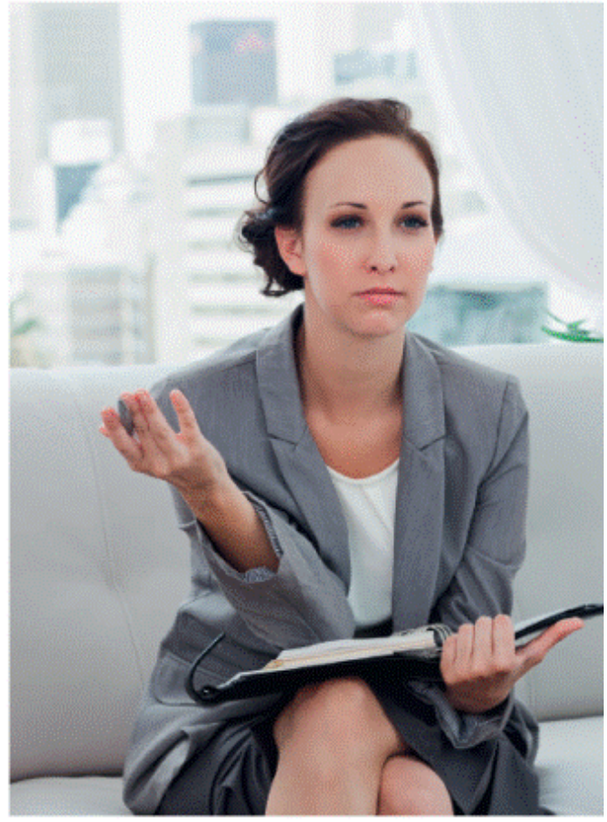
# Conflict of interest

The company expects all of its employees to take a conscientious attitude towards the performance of their respective job duties and prohibits the derivation of personal gain from the positions occupied thereby.

A conflict of interest occurs when an employee has any kind of personal relationship, financial interest or other concern that could hinder him / her from acting in the company's best interests, primarily in terms of his / her ability to impartially and effectively perform his / her work, and / or which could result in financial losses for the company. All employees are obliged to avoid actions or relationships that contradict or are capable of contradicting the company's best interests.

**Conflict of interest** — a situation in which the personal interest (whether direct or indirect) of an employee influences or is capable of influencing the proper performance thereby of his / her job (work) duties and which gives rise, or is capable of giving rise, to a conflict between the personal interest of the employee and the rights and lawful interests of the company, is capable of affecting the objective and efficient performance of employee's duties and is capable of resulting in damage to the rights and lawful interests, property and / or business reputation of the company.

**Personal interest** — the opportunity for the employee, while performing his / her job duties, to derive a personal gain in terms of money, valuables, or other tangibles or services and / or other property rights, whether for him / herself and / or for family members and / or immediate relatives.



The company has adopted a separate policy, entitled: "Conflict of Interest Management." Should you find yourself in a conflict-of-interest situation or you suspect that such a conflict could arise, you should promptly notify your immediate supervisor or the Compliance Department to the case for further guidance, and urgently take measures to eliminate the conflict of interest, where so required by the company.

**Why is it so important to protect our company from potential conflicts of interest?**

1. **In order to prevent possible financial losses for the company.**
2. **In order to prevent situations in which biased decisions are made against the company's best interests.**
3. **In order to prevent situations in which the existence of business interests outside the company could hinder an employee from properly performing his / her job duties.**

For the purposes of preventing conflict-of-interest situations, the company has instituted annual certification for senior managers. Upon being hired, new employees are familiarized with the "Conflict of Interest Management" policy and required to complete and sign a special form, entitled: "Disclosure of Conflict-of-Interest Information." Employees who have occupied positions in state / municipal service within the past two years must obtain the additional consent of the respective public organization.

Question: **My relative is an MTS PJSC employee just like I am, but he works at one of the company's other structural divisions. Is this considered a conflict of interest?**

Answer: **No, a conflict of interest arises when one relative is directly subordinate to another.**

Question: **The company where I or my relatives serve as cofounders is an MTS supplier. Would that situation be a conflict of interest?**

Answer: **Yes, if your direct job duties involve the authority to make decisions with respect to that company.**

Question: **My spouse is an employee of an MTS competitor. Is this a conflict of interest?**

Answer: **In this case, you must notify your immediate supervisor to that effect, and, where necessary, Compliance Department officers in order to find an optimal solution for ensuring that your family ties can't harm the company.**

# Gifts and entertainment

The giving and receiving of gifts, as well as attending entertainment or official events, is common business practice, yet in certain situations, it's a practice that can expose the company's business to serious risk. For this reason, the company has introduced a number of restrictions establishing the permissible circumstances for the giving and receiving of gifts and event invitations, as well as the criteria which restrict allowable gifts and their recipients.

Within the scope of its anticorruption policy, the company has adopted a separate Regulation "On Gifts and Entertainment at MTS PJSC," with which all company employees must be thoroughly familiar.

The company permits the giving and receiving of symbolic gifts typical of common business practice, so long as they comply with the requirements of local law. Russian anticorruption legislation prohibits individuals occupying state positions or holding public office in the various constituent entities / of the Russian Federation and at the municipal level from receiving remuneration (loans, financial and / or other types of compensation, services, paid entertainment, vacation, travel reimbursements) and gifts not envisioned by applicable Russian Federation law from private individuals and legal entities in connection with the performance thereby of their official duties[1].

**Using gifts (just as other types of hospitality) to anyone for the purposes of gaining commercial benefit and business advancement to MTS is unacceptable.**

[1] RF Federal Law No. 273-FZ "On Combating Corruption" dated December 25th, 2008.

Gifts and participating in entertainment events must in no way influence an employee's ability to make fair and impartial business decisions. In other words, gifts and participation in entertainment events must never be offered in exchange for information, favorable attitudes or business opportunities that would not otherwise be offered.

**Gifts in cash form or their equivalent (gift cards, vouchers, certificates) are prohibited at MTS.**

Gifts and entertainment events are not always appropriate, even when they conform to allowable criteria. Each employee is responsible for taking a commonsense approach to such issues. As a rule, it's permissible for an employee to give gifts or tickets to entertainment events to certain clients and counterparties or receive them from such parties, provided the gift or event attendance could not reasonably be interpreted as an inducement or reward for a particular business decision. That said, all costs of gifts and entertainment events must be reflected in the respective expense reports.

Question: **A client has invited me to attend an out-of-town conference, and is offering to pay for all related travel and accommodation expenses. Can I accept his invitation?**

Answer: **The invitation can be accepted, provided that you are not currently in the process of negotiating or making a business decision in favor of the client, and that the conference is directly related to your work specialty, is of practical interest, will not involve entertainment events for most of the trip, and the value of expenses undertaken by the inviting party is reasonable.**

If you're in doubt as to whether it's appropriate to give a gift or invite a client to an event, or you're worried that a gift that's been presented to you cannot be accepted under company rules, you should contact your immediate supervisor or a Compliance Department officer.

Each employee must make every effort to refuse or return a gift that fails to comply with the aforementioned rules. If it is not possible to decline or return the gift, the affected employee must immediately report the receipt of the gift to his / her immediate supervisor or a Compliance Department officer, who will be able to provide further guidance on whether it is required to transfer the gift to the company or donate it to an appropriate charitable organization.

# Confidential or proprietary information

In the process of working at the company, an employee is exposed to information and data of a confidential nature. The list of information material constituting a commercial secret is provided in the Policy "Regulations on Information Security (Confidentiality) Procedures of MTS PJSC." Their safeguarding against unauthorized access is vital to the success of company operations and could be of tremendous significance to the preservation of jobs of all employees.

Upon being hired by the company, a newcomer assumes the ethical and legal obligation to refrain from disclosing confidential information or information constituting a commercial secret, even if he / she subsequently decides to leave the company.

Question: **What rules must be followed by an MTS employee who has been entrusted with confidential information in order to guard against its accidental disclosure?**

Answer: **All of the company's employees must comply with MTS PJSC information security (confidentiality) procedures, namely:**

- **ensure the safety of confidential data being in the employee's possession;**
- **transfer confidential data to other employees according to the rules established at the company;**
- **not transfer confidential data to any third parties and not disclose such data to the public;**
- **meet the requirements of MTS PJSC local regulatory acts related to data protection;**
- **should any unauthorized persons attempt to obtain protected data or any facts of disclosure of confidential data be revealed, immediately inform MTS PJSC Department of Security and Security Procedures, Security Block, Corporate Center (division, group of security of a region) of MTS PJSC;**
- **keep confidential official secrets of ministries and agencies, which became known to an employee in connection with civil law relations, and also confidential information of companies with which MTS PJSC has business (partner) relations;**
- **after the termination of civil law relations with MTS PJSC, hand over all media containing confidential information, that is, scripts, rough copies, documents, etc., which were in the employee's possession in connection with the performance of contractual obligations towards MTS PJSC, with a certificate issued, to an employee responsible for confidential records management and, in the absence of such employee, to the head of the corporate business unit;**
- **immediately inform MTS PJSC Department of Security and Security Procedures, Security Block, Corporate Center (division, group of security of a region) of loss or shortage of media containing confidential information, or loss or shortage of identity documents, ID cards, personal seals, keys to data rooms, storages, safes (metal cabinets), and of any other facts that may result in disclosure of protected data.**

**Other MTS employees, including your work colleagues, should not have access to your work computer, laptop or mobile device. It is recommended to always lock your computer when leaving your workplace.**
**Take care to safeguard documents containing confidential information, and don't leave them in the open at your workstation. Use a paper shredder to destroy discarded documents containing confidential information.**

Each employee is personally responsible for complying with MTS PJSC information security (confidentiality) procedures.

# Safeguarding and use of company property

Every company employee is expected to safeguard company resources and assets. Should a company employee suspect that another company employee (including part-time employees, temporary employees, consultants and contract workers) is displaying a negligent attitude towards MTS property or is causing it damage, he / she must report the situation to his / her management. If, for any reason, the employee is not comfortable discussing the issue with his / her management, he / she must contact the appropriate specialists from the company's Security Block.

Employees are obliged to safeguard the company's property and ensure its efficient use for business purposes. It is prohibited to use the company's funds or property for any illegal or improper purposes. Theft, negligence, recklessness and waste can have a direct impact on company profitability.

**In order to ensure the safeguarding and proper use of MTS property, every company employee must:**

1. **take due care to prevent the theft, destruction or misuse of MTS PJSC property;**
2. **immediately report actual or suspected instances of the theft, destruction, careless treatment and / or misuse of MTS property to his / her immediate supervisor or the Security Block specialists;**
3. **use telephones, other electronic communications devices, written materials and other MTS property solely for business purposes;**
4. **safeguard all electronic programs, data, communications and hard copies against accidental third-party access;**
5. **use MTS property strictly for the lawful business purposes envisioned by the respective job duties.**

Question: **My colleague, while away on a business trip, asks me to send him a presentation to his personal email. Can I send it from my work email? After all, he needs it for work.**

Answer: **You shouldn't do it. The presentation could contain confidential information concerning the company, and there's always a risk that material sent in this manner, to external servers, could wind up in third-party hands. Such action may afford grounds for taking disciplinary actions against you or your colleague. The company has made provisions for gaining remote access to one's work email.**

Employees should be aware that MTS PJSC property includes all data and correspondence transmitted and received by the company's electronic and telephone communications systems or contained therein. MTS PJSC property also includes all written correspondence. To the extent permitted by applicable law, the company has the means and reserves the right to monitor all correspondence, electronic and telephone communication, and gives its consent to its disclosure to and processing by third parties, including law enforcement agencies. Thus, it's also important to pay attention to message contents, adhere to a professional style, and state pertinent facts in a brief, clear and unambiguous manner.

Question: **Why should I follow the rules of correspondence and treat message contents with care when I'm communicating with a colleague?**

Answer: **Because it's important. You must always bear in mind that the message could fall into the hands of an unintended party. Moreover, messages sent from the company's electronic mail system are considered company property and may be used as evidence in external agencies. For example, such seemingly innocuous phrases as "lend assistance," "incentivize the client" or "thanks for prompt cooperation" could be interpreted ambiguously and used against you. Just imagine if the contents of your letter were published in a prominent newspaper.**

# MTS and its clients

- Customer requests
- Fair marketing
- Combating fraud on communication networks
- Data privacy

We at MTS believe that life is a canvas of possibility for all, and everyone has the potential, from his / her birth, to translate these possibilities into realities to the benefit of him / herself and the world around them. We believe that every individual is a potential hero who can accept the challenge and cope with any situation.

Potential heroes – these are people who inspire MTS and who we create our products for. Using the possibilities provided by our products, technologies or services, an individual overcomes obstacles on the way to his / her goal and unlocks his / her potential.

# Customer requests

We all have lots of friends and acquaintances who are subscribers of our company and often contact us for help in resolving service issues. Every employee must seize these opportunities to demonstrate the high level of service offered by our company. Even when it comes to acquaintances, we must always come across as professional MTS representatives and provide accurate information, insofar as our words shape the company's image.

An employee must have a firm grasp of the tariff plans, services and roaming tariffs in place at the company, know how to find the required information, and where necessary — present it to the client in an intelligent manner.

An employee must know and bring to the masses MTS values and brand's mission.

Amid the changing environment, we instill confidence in everybody, help an individual to unlock his / her potential and move towards new possibilities. MTS is a source of possibilities.

Each and every employee should demonstrate an interest in the company's products. Moreover, employees should remember the sources of information that can be accessed at any time, such as the website, the Customer Service Center and the "MTS Service" mobile application — these can and should be recommended to your friends and acquaintances.

Should your acquaintances contact you for a consultation, you can always suggest that they look for the answer to their question, for example, at www.mts.ru or through the "MTS Service" mobile application and, where possible, take part in the information search yourself. This will create a favorable impression of you as an employee and of the entire company.

**Consultation**

Client: **Hi. I need your help — you work at MTS, don't you? What's the cheapest tariff they have?**

Answer: **The company offers a range of different tariff plans. You can choose the one that's suitable for you by figuring out how often you make calls — and considering the operator your conversation partner uses. What's more, all tariff plans offer the option of connecting to services that will help you save money on calls, SMS and Internet use. In order to choose the best tariff plan for you, you can visit the MTS website yourself or call the Customer Service Center — my colleagues will be happy to provide you with a consultation.**

**When responding to a client request, we must always be sure that his / her expectations are met with respect to the resolution of the issue at hand. It would be impossible to provide standard solutions for all situations, but in atypical situations employees should be guided by the following questions:**

1. **If I were in the client's shoes, would I view MTS' response to the given situation as fair to me and my interests?**
2. **Would I, finding myself in a similar situation, want my mobile operator to treat me exactly the same way as MTS is planning to treat this client?**
3. **Can I envision a fairer approach to this MTS client in this specific situation than the one currently under consideration?**
4. **Would I feel comfortable in front of my friends and acquaintances if information concerning MTS' planned actions were published in the mass media?**

# Fair marketing

**We make every effort to ensure that our clients receive secure, high-quality roaming services.**

MTS always informs its clients outside the home network, through SMS messages, that they have an opportunity to:

- top up their account by bank card when roaming;
- optimize their expenses by activating the "Zero Without Borders" and "BIT Abroad" services and the cost thereof;
- contact the embassy of the Russian Federation in the country of stay.

MTS provides roaming clients a free of charge opportunity to contact the MTS Customer Service Center and receive an MTS consultation by calling +7 (495) 766-01-66.

**We don't send spam to our clients, and don't allow anyone else to do it.**

MTS takes care to ensure that the total number of information messages of advertising nature received by a client in a single month is strictly in line with the contact policy in place at MTS.

MTS does not do business with content service providers who send messages containing misleading information to MTS clients.

We strive to use fair and ethical methods of promoting our own services. MTS takes care to ensure that any information on MTS products and services is true and complete and does not misrepresent true product features and is communicated to the client in an accessible and understandable manner.

MTS does not use any methods of advertising its products and services which can be perceived as unethical or do harm to competitors or consumers.

### We track the quality and cost of content.

MTS controls the quality and billing accuracy of content services, whether branded (offered under the MTS brand) or furnished in the form of content provider services.

MTS does not pursue the commercial launch of content services that have not been subjected to proper quality and billing-accuracy testing (services not accompanied by the requisite positive conclusion of the respective MTS division responsible for testing).

### We leave no client complaint unaddressed.

Every complaint from an MTS client (whether submitted verbally or in writing) must be reviewed within the established timeframe and followed-up with a substantiated decision.

MTS regularly analyzes incoming client complaints for the purposes of identifying the real causes of their origination, and develops and implements appropriate corrective measures aimed at the elimination of these causes in order to prevent (minimize the possibility of) their repeated occurrence.

If a company employee is contacted by a friend with a complaint, this signal must under no circumstances be ignored. The friend should be invited to contact the Customer Service Center by calling +7 (800) 250-08-90, where Center staff will be happy to get to the bottom of the situation and solve the problem.

**Complaint**

Client: **I was charged 150 rubles yesterday. I didn't send any SMS, didn't make many calls, and didn't go online. To whom at MTS can I send a complaint to get my money back?**

Answer: **You should call the Customer Service Center and consult a specialist. If the charge was debited in error, they'll certainly help you to get your money back. You can order an account statement on your profile page on the MTS website or at a conveniently-located MTS store. Let's go look at the website together!**

# Combating fraud on communication networks

Fraud on communications networks — includes the intentional activity of certain individuals on communication networks, including fraudulent activity, aimed at the unlawful receipt of services and / or unauthorized use of client and / or communications-operator resources without proper payment thereof, the unlawful accessing of official client and / or operator information, including for the purposes of deriving financial gain, as well as other actions aimed at causing damage or other harm to the client and / or the operator. Such activity, in particular, includes: SIM-card cloning, equipment tampering and the generation of international PRS traffic, unauthorized access to subscriber profile pages for the purposes of the siphoning of funds, and the unauthorized termination of international traffic.

The company takes steps to combat fraud on communications networks.

**Fraud involving SMS services, fraudulent content providers** – is one of the most widespread types of fraud on communications networks resulting in financial losses borne by subscribers. MTS actively combats such types of fraud. A system has been launched that makes it possible to identify and filter fraudulent SMS messages and SMS spam sent to MTS subscribers from the networks of other communications operators, including foreign carriers (telecom operators). We conduct a regular analysis of subscriber complaints against the actions of content providers. In the event that the actions of a specific content provider are deemed unfair, it will be subject to appropriate penalty sanctions.

**Fraud involving the use of GSM and ISUP gateways in communications networks.** The company exercises constant control for the purpose of identifying illegally installed gateways in the MTS network.

**Fraud involving the use of data transmission services.** The company has established controls over subscriber misusages in terms of data transmission services, including when in international and national roaming.

**Roaming fraud.** The company exercises control over subscriber misusages in terms of voice and data transmission services, when roaming internationally and nationally, as well as control over subscriber connection to "International and National Roaming" and "International Access" services.

For the purposes of improving subscribers' awareness of corporate efforts aimed at combating fraud, the company has created the website safety.mts.ru, featuring information on measures to protect subscribers from fraud, and security services the company offers to its subscribers.

Question: **What should a company employee do if he / she becomes aware of an instance of fraud or is contacted by a subscriber with a fraud complaint?**

Answer: **If a company employee has information concerning instances of fraud against subscribers or the company, the employee must send it to the hotline at: hot_fraud@mts.ru or fraud@nnov.mts.ru.**
**Subscribers can be directed to the information posted on safety.mts.ru and, if necessary, complete a feedback form at http://www.mts.ru/feedback/.**

# Data privacy

As a leading telecom operator, MTS is also a major personal data carrier for whom the confidentiality of subscriber information has the same priority as the uninterrupted provision of communications services.

Employees working with personal data must know and comply with the following personal data handling principles:

- processing of an employee's personal data must only be undertaken for the strictly defined purposes of his / her official duties;
- the basis for the processing of personal data in MTS PJSC operations is the respective contract concluded with the subscriber, to which the subscriber is a contracted party, the respective employment agreement with the concerned employee, as well as the subscriber's consent to the processing of his / her personal data;
- the transfer of personal data to third parties must be undertaken solely on legal grounds, in such a way that ensures its confidentiality and protection against unauthorized access, through the use of data security facilities;
- processing of special categories of personal data is prohibited at MTS PJSC, with the exception of some cases provided for by the laws of the Russian Federation.

Question: **What is personal data?**

Answer: **Personal data is any information related to a specific individual (subscriber, employee, visitor, etc.).**

Question: **What is personal data processing?**

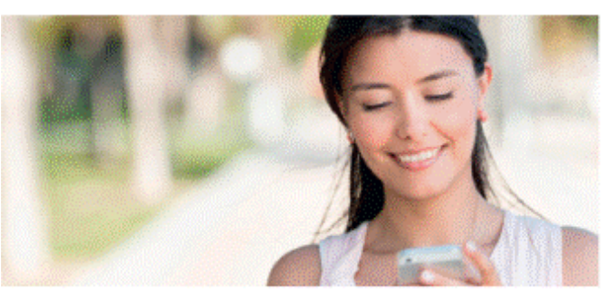
Answer: **Personal data processing means any action (operation) or sequence of actions (operations) with personal data, taken with, or without, the use of automatic means, including the gathering, recording, systematization, accumulation, storage, refinement (update, modification), retrieval, transfer (dissemination, provision, access), anonymization, blocking, deletion and destruction of personal data.**

Question: **What's encompassed by a special category of personal data?**

Answer: **A special category of personal data is information concerning racial and / or national background, political views, religious or philosophical beliefs, health or relationship status, private life and other certain categories of data.**

Question: **Whom can I contact if I have a question concerning personal data?**

Answer: **You can always address any question involving personal data to: privacy@mts.ru.**



MTS strives to assure its subscribers of company reliability and guarantees the confidentiality of their personal data. The policy entitled: "Personal Data Processing at Mobile TeleSystems PJSC" outlines the principles, procedure and terms governing the processing of the personal data of subscribers, MTS employees and other individuals whose personal data are processed by MTS, as well as the processing of such data by third parties at the instruction of MTS.

# MTS and the public

- Corporate social responsibility
- Philanthropy
- Public appearances, statements and interacting with the mass media and social networks
- Environment

The development strategy in place at MTS has been developed and is currently being implemented in accordance with public demand and consumer expectations. The overarching mission of the company is to improve people's quality of life. At MTS, quality of life is understood to mean the totality of socio-economic or other criteria reflecting a person's achieved level and degree of prosperity in different areas of his / her life as one of the key prerequisites for the sustainable, social development of civil society and the individual.

# Corporate social responsibility

Corporate Social Responsibility (CSR) is the responsibility of the organization for the impacts its decisions and operations have on society and the environment through transparent and ethical conduct.

One of MTS' objectives is CSR integration into all aspects of company activities. To comply with CSR principles, the company ensures that its business is conducted in a way that:
- meets present time requirements;
- does not endanger the ability of future generations to satisfy their own wants;
- encourages sustainable development, better health and increased public prosperity;
- takes into consideration the expectations of stakeholders;
- complies with applicable law and adheres to international rules of conduct and best practices;
- promotes better company transparency and improvements to its management system.

The key areas of the company's CSR involve support to the innovative activity of talented youth, educational projects on safe and productive Internet use by children and the elderly, the development of corporate volunteering and environmental, social and philanthropic projects, implementation of the best Russian and international practices in CSR and sustainable business development and the publishing of the MTS annual sustainability report.

**"Children on the Internet"** is one of federal projects by MTS in the field of CSR encompassing a set of educational events incorporating an interactive exhibition and series of instructional lessons for schoolchildren, teacher-parent meetings and master classes for teachers across Russia. The main goal of the project is to inform children, parents and teachers of the potential risks of Internet use, approaches to defense against web-based threats and the positive opportunities offered by the worldwide web in terms of education, personal development, social networking and leisure pursuits. Find more details at: www.safety.mts.ru.

**"Telecom Idea"** is an international project aimed at promoting the implementation of innovative ideas and advancements developed by young people in the area of information and communication technologies, as well as the formation of a professional community of young innovators around the company. Find more details at: www.telecomideas.com.

**"Internet for All Ages"** — a federal educational project targeting the Internet use of people from the older generation. It's a public awareness program involving the training of the elderly in Internet literacy and boosting their level of social adaptation in today's information society. Find more details at: www.svvp.ru.

Every company employee, as a representative of MTS, must adhere to the minimum standards of socially-responsible conduct with respect to users of the information media.

All employees, whether directly or indirectly, bear responsibility for the company's youngest subscribers and must not facilitate the posting or further distribution of malicious and / or unlawful content. Such information includes unethical material running contrary to commonly accepted morals and social norms: the widespread network distribution of sexually explicit images, pornography, aggressive online games, games of chance, propaganda promoting an unhealthy lifestyle (consumption of narcotics, alcohol, tobacco, the intentional development of anorexia / bulimia, etc.), scenes of violence, the causing of harm to human health and life, various means of committing suicide, obscenities / offensive language and other such information.

In furtherance of the law on combating Internet piracy[1], company employees are prohibited from using or facilitating the use and further online distribution of pirated content.

[1] RRF Federal Law No. 187-FZ as of July 2nd, 2013 "On Amendments to Certain Legislative Acts of the Russian Federation Concerning the Protection of Intellectual Rights in Information and Telecommunication Networks"

The company has instituted an MTS corporate volunteer movement called "Simply Be Good." Within the scope of the movement, volunteers lend assistance to the young wards of sponsored children's institutions, veterans of the Great Patriotic War (WWII), disabled children and those from underprivileged families. Volunteers organize festivities, master classes, excursions and lectures for them, participate in their ongoing social integration, collect funds for their treatment, and hold campaigns aimed at the promotion of child safety, support for Russia's student community and preservation of the country's cultural heritage.

Question: **How can I become a volunteer?**

Answer: **If you've decided to become a volunteer, you can register at: csr@mts.ru. You'll be given information on upcoming events involving MTS volunteers, and you'll be able to make your own contribution to this noble common endeavor. Follow movement news on the portal by following the "Simply Be Good" logo.**

Question: **Can an employee initiate a social project on his / her own?**

Answer: **Any employee can participate in supporting any community-focused events on their own private initiative, provided they do not violate applicable law or common ethical norms. As a volunteer representing the company, an employee may only act within the scope of the corporate policy on CSR by agreement with the respective coordinator from the Corporate Social Responsibility Department in the HR Block.**

## Sustainability Report

**Since 2008, MTS has been publishing the Sustainability Report, which includes a description of the main areas and achievements of the company in social corporate responsibility towards society and all stakeholders: employees, subscribers, shareholders, investors and partners.**

**The Sustainability Report represents, as transparently as possible, MTS's contribution to the development of brand-presence regions and the telecom industry as a whole; demonstrates corporate tools ensuring the high quality and performance reliability of the operator; describes the company's key social and philanthropic projects.**

**When creating the report, we are guided by the GRI (Global Reporting Initiative) Sustainability Reporting Guidelines, an international reporting standard for voluntary use by organizations reporting on sustainable development. The Guidelines offer a list of specific indicators for reporting on social, ecological and economic activities of the organization.**

**The Sustainable Development Report is certified by the Russian Union of Industrialists and Entrepreneurs (RSPP) on an annual basis.**

**Reports are available at the company's web-site: http://www.company.mts.ru/comp/social_responsibility/soc_report/.**

# Philanthropy

MTS advocates the ideology of philanthropy. We tell our partners that the social responsibility factor is crucial to building the company's reputation.

A strategic and high-priority area of MTS' philanthropic activity involves the implementation of projects aimed at support of children: their health, education and cultural development.

**MTS' philanthropy program "Share Kindness,"** coordinated by the MTS Public Relations Department, involves the rendering of charitable assistance to critically-ill children in need of urgent medical care whose families cannot afford the cost of the required long-term treatment. Within the scope of this program, MTS cooperates with a variety of significant highly-reputable federal foundations. The principles underlying the program work are grounded in transparency, openness and security.

**MTS' key philanthropy project "Generation M"** involves both the creative development of Russian children through online tools and rendering emergency medical assistance to critically-ill children.

Question: **How does MTS ensure the transparency of charitable donations?**

Answer: **The MTS Security Service checks all appeals for medical assistance in order to prevent fraud, and provides program foundations with specialized consultations.**
**Funds are transferred to trusted foundations of repute, which in turn forward the funds to appropriate hospitals, rehabilitation centers, and drug purchase. These foundations provide MTS with strict accounting records, which we then relay to our clients and partners participating in the program.**
**For example, within the scope of the "Share Kindness" program, MTS cooperates only with those foundations that provide targeted assistance to children: "Konstantin Khabensky Foundation," "Sozidanie" ("Creation"), "Center for Humanitarian Programs," "Podsolnukh" ("Sunflower"), "AiF. Dobroye Serdtse" ("AiF. Tender Heart"). MTS provides all companies interested in helping specific children with a ready-made, secure and trusted tool.**

MTS philanthropic activities also involve providing support for the ongoing development of the education and healthcare system, athletics and sport facilities, art and creativity resources, and community-based infrastructure.

In the event that a company employee receives an appeal or request for charitable assistance, whether from an organization or private individual, it must be forwarded to the Public Relations Department, which is responsible for philanthropic programs, or to pr@mts.ru.

# Public appearances, statements and interacting with the mass media and social networks

The Public Relations Department is the company's only division authorized to make official statements, issue press releases and comments, and is also responsible for coordinating all communications by company representatives authorized to interact with the mass media. In the event that a company employee is approached by a member of the media with questions regarding MTS, whether directly or indirectly, he / she must direct this person to the MTS Public Relations Department.

**Employees of MTS Group companies are categorically forbidden to make public comments on their own.**

Employees must be cautious and abide by certain rules when posting information about the company on the Internet and communicating on social networking sites. If a company employee who has been registered on a social networking site discloses information about his / her place of work, his / her comments could be construed as the company's official position. Thus, employees are discouraged from making public comments about the actions of competitors or regulators or engaging in defamatory or offensive rhetoric against other users.

In the event that MTS employees are approached by social networkers with complaints or questions, the contact must be reported to blogs@mts.ru. If the employee notices complaints regarding MTS operation or any actions of its employee, or, vice versa, positive feedback concerning MTS online, these comments can be forwarded to the same address.

MTS employees can participate independently in discussions concerning MTS products. To do so, they must first notify the company's blog secretary (at blogs@mts.ru, making sure to indicate "For the blog secretary" in the subject line) of the upcoming discussion to coordinate their participation.

**We strongly discourage employees from taking part in conversations on topics banned from discussion in the public domain as potentially harmful to the company's reputation and capitalization when appearing in the media.**

This restriction applies to the following topics:
- technical network malfunctions, billing, MTS services and customer care;
- public apologies;
- relations with government agencies, regional and municipal authorities, the actions of government bodies, competitors and market partners;
- information concerning counterparties and clients;
- information concerning the private lives of employees;
- market behavior of competitors and partners, including their services and tariffs;
- price forecast in MTS markets and the company's commercial plans.

Question: **I've been invited to participate as a speaker at a business conference on behalf of MTS. Is getting the go-ahead from my supervisor enough for me to accept the invitation?**

Answer: **No. Before confirming your participation, you'll have to get your speech (the fact of participation itself and all content materials) approved by the Public Relations Department or the respective regional PR-managers. Before presenting, you'll also need to familiarize yourself with the speaker's handbook.**

Question: **Does participating in a conference as a speaker on behalf of MTS entitle me to answer any questions, including from journalists?**

Answer: **No, you're only authorized to answer questions related to your area of specialization. If a question you're asked goes beyond the scope of the speech approved by the Public Relations Department, you must calmly yet confidently say: "No comment." That's a normal stance for any public company. If you get a question from a journalist, you must explain that you're not authorized to speak with the press, adding that all questions by members of the press should be directed to the Press Service at pr@mts.ru.**

Question: **My friend reached out to me on a social networking site, and started complaining about the poor quality of MTS signals. Can I explain to him the reason behind the worsening quality of the signal?**

Answer: **No. You'll have to give your friend the appropriate contact information for customer service blogs@mts.ru and ask him to write a detailed message about the crux of the problem. The Customer Service Department will be sure to help.**

# Environment

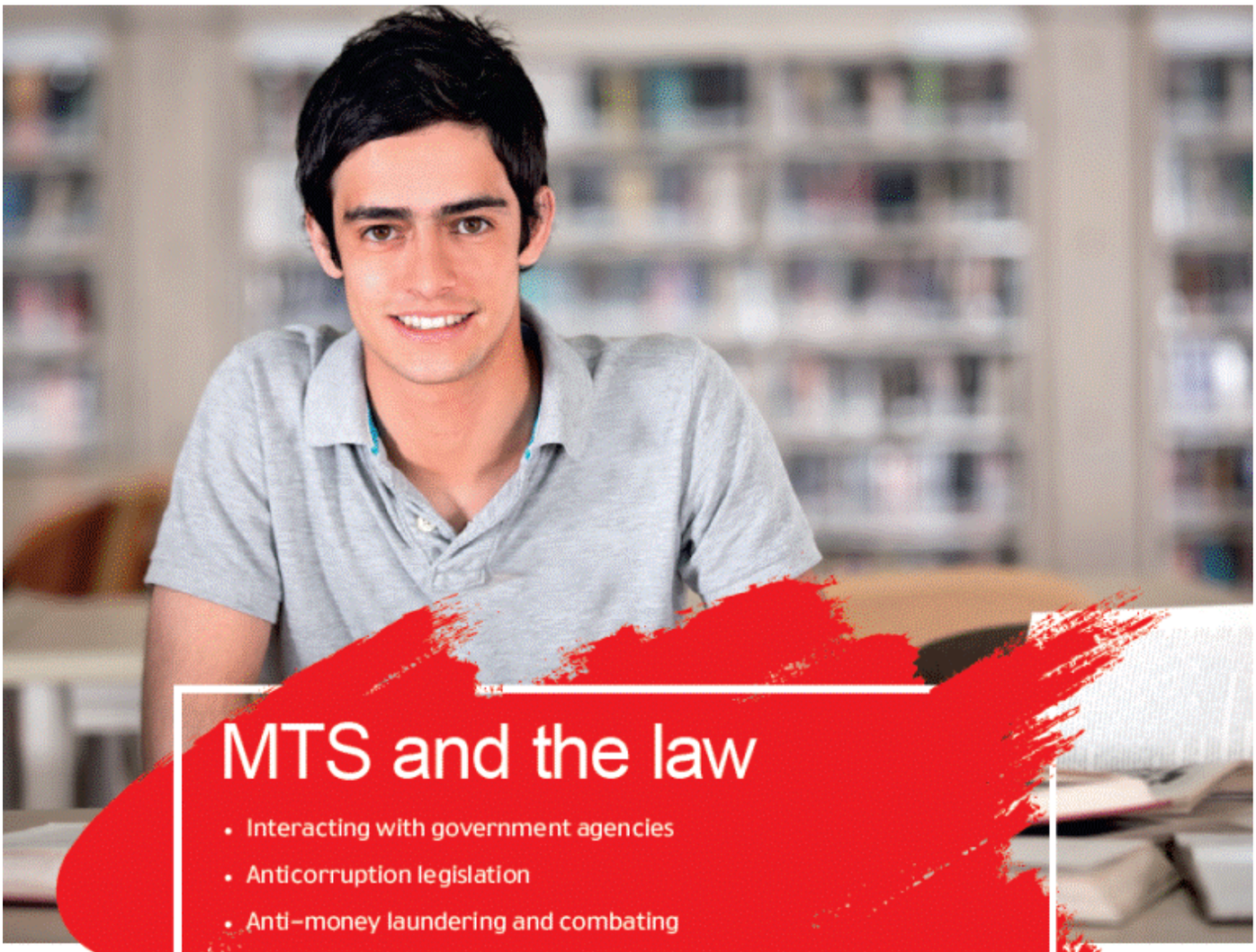
We strive to put the world around us into perspective, and are concerned about environmental preservation and the conservation of natural resources. The initiatives launched at MTS are aimed at caring for the environment. The company organizes and takes part in ambitious municipal environmental projects and propagandizes an eco-friendly culture and environmental protection activities. MTS actively encourages its employees to participate in the company's eco initiatives; one of them is the "Save a Tree" public wastepaper collection project conducted on a quarterly basis.

**"Eco-Office"** — an MTS program aimed at the fostering of ecological knowledge, ethics and culture on the part of company employees. Within the scope of the program, the company organizes various eco projects envisioning the rational preservation, consumption and recycling of natural resources.

**"Eco-Telecom"** — a series of company initiatives, which are aimed at heightening the environmental awareness of staff and the public and demonstrate the responsibility of the business for environmental conservation.

Question: **What contribution can every employee make towards environmental protection?**

Answer: **The company has launched a project involving the collection of used batteries and power cells for recycling. Anyone can drop them off at the company's administrative offices.**



# MTS and the law

- Interacting with government agencies
- Anticorruption legislation
- Anti-money laundering and combating the financing of terrorism
- Prohibited content
- Competition and antitrust legislation
- Use of insider information
- Business transparency and financial statements integrity
- Company accounts and records

The company's activities are governed by a number of laws and various regulatory requirements. Every employee must have a firm grasp of the requirements of the legislative norms binding on the company. All employees must strictly adhere to the provisions of the policies and regulations developed at MTS in order to ensure the compliance of company operations with the requirements established by the applicable law. Employees must not participate in any acts, or facilitate any acts by third parties, violating any of the laws, rules and / or instructions applicable to MTS.

# Interacting with government agencies

Within its normal course of business, MTS has frequently to interact with government agencies. Regardless of whether the government agency is an MTS subscriber or MTS regulator in a given situation, all employees must interact with the government agency solely within the limits of applicable law and the requirements established by MTS bylaws and policies.

Thus, the legislation tightly regulates the procedure for the provision of services to government agencies. When participating in tenders held by government agencies, employees must be exceedingly cautious and stringently adhere to the requirements of all MTS bylaws, including the requirements of the "Anticorruption Legislation" and "Competition and Antitrust Legislation" sections of this Code.

A similar interaction procedure should be followed in cases where the concerned government agency is issuing any sort of permit, license or approval or otherwise provides public services to MTS.

While MTS has always strived to cooperate with government agencies in the performance of their official functions, including the holding of scheduled audits and investigations, any MTS employee receiving an inquiry of any kind from a government agency in the course of such an audit or investigation must immediately contact the appropriate legal department.

Question: **I got a call from someone I used to go to school with who now works in the tax inspectorate, and he asked me to privately give him some information on a particular MTS deal. He said that the tax inspectorate has the right to request such information. What should I do?**

Answer: **You must immediately contact your legal department and tell them about the situation so that the competent employees can ensure that MTS' legal rights and responsibilities are honored.**

# Anticorruption legislation

The company adheres to the principles of compliance with anticorruption legislation in all types of business relations, regardless of the country in which the company pursues its economic activity.

Pursuant to the rules of anticorruption legislation applicable to the company, employees and persons, acting on behalf or in the interests of MTS, are prohibited, whether directly or through an intermediary, from rendering, offering, promising or approving payments in the form of monetary funds or any other valuables, as well as from proffering any financial or other gain or advantage, to any third parties with the intention, by virtue of the official position occupied thereby, of exerting undue influence on their actions (or ensuring their inaction) or inducing or rewarding their improper performance of the official or otherwise legally-envisioned duties entrusted thereto.

Furthermore, all company employees are prohibited, whether directly or through an intermediary, from demanding, approving the acceptance or accepting any payments in the form of monetary funds or any other valuables, as well as any financial or other gain or advantage, where the acceptance of such payments, gains or advantages in and of itself constitutes the improper performance of the official or otherwise legally-envisioned duties entrusted thereto or a reward for their improper performance.

For the purposes of this Code, applicable anticorruption legislation means the Russian anticorruption legislation, the U.S. Foreign Corrupt Practices Act, the UK Bribery Act, and similar anticorruption legislation in the countries where the company is engaged in economic activity.

The underlying principles and requirements concerning the compliance with the provisions of anticorruption legislation applicable to the company are set forth in the policy entitled "Anticorruption Laws Compliance Policy" which is binding on all members of the company's Board of Directors, executives, employees, subsidiaries and affiliates, as well as on all third parties acting on behalf or in the interests of the company.

Question: **Why does the anticorruption legislation of the United States and Great Britain apply to MTS operations?**

Answer: **MTS is a public company whose securities have been traded on the New York Stock Exchange since 2000. Registration on the U.S. Exchange entails that foreign companies assume the obligation to comply with a number of requirements provided for by the local legislation. Thus, aside from requirements mandating the existence of an internal control system, ensuring the reliability of financial reporting and others, MTS operations are governed by the requirements of the U.S. Foreign Corrupt Practices Act (FCPA), which prohibits U.S. companies and foreign companies whose shares are traded on the American stock exchange from engaging in any corrupt activity whatsoever with respect to public officials abroad.**
**Similarly, MTS operations and those of its primary shareholder are also bound by the requirements of anticorruption legislation of Great Britain. MTS is a subsidiary of a company whose securities have been placed on the London Stock Exchange, which, in conjunction with a host of other factors, may serve as grounds for the application to its operations and the operations of MTS of the requirements of the U.K. Bribery Act.**

## Anti-money laundering and combating the financing of terrorism

The company fulfills its obligations in the manner prescribed by the applicable legislation in terms of exercising control over operations involving monetary funds or other assets for the purposes of preventing, detecting and interdicting acts associated with the legalization (laundering) of criminal proceeds and financing of terrorism.

The company identifies subscriber numbers allocated to persons named in the List of Organizations and Individuals concerning whom there is information that they are involved in extremist or terrorist activity, for the purpose of freezing (blocking) their funds. At MTS, a special officer has been appointed who is responsible for the implementing of these processes.

MTS adheres to the subscriber identification requirements, wherefore modifications have been made to the registration form and service conditions, and also an additional subscriber verification process has been introduced for the situation where a subscriber is performing operations through the mobile commerce platform.

MTS provides the Rosfinmonitoring (Federal Financial Monitoring Service) with information, as required by law, in a timely manner.

## Prohibited content

In accordance with the requirements of applicable law, MTS cooperates with the Unified Register of the domain names, website references and network addresses that make it possible to identify websites containing information banned from circulation in the Russian Federation. Access restriction is undertaken in accordance with the requirements and within the timeframe established by applicable law.

If an MTS employee comes across a website whose content, in the employee's opinion, includes banned information, he / she can independently notify the regulator through the Roskomnadzor (Service for Supervision of Communications, Information Technology and Mass Media) portal at: eais.rkn.gov.ru

# Competition and antitrust legislation

The company complies with antitrust legislation and adheres to the principles of fair competition in all types of business relations, regardless of the region of presence.

The most dangerous violation is the existence of a cartel between competitors, and concerted acting in the market. MTS employees must refrain from actions which are aimed at a uniform behavior towards competitors, this applies, inter alia, to the sharing of information on commercial plans, whether directly or through an intermediary, negotiating, signing or oral approval of antitrust arrangements in any form whatsoever.

MTS makes decisions regarding its business, including price setting, independently and without regard to activities of other companies.

Question: **Bumping into each other at an industry conference, two of my colleagues from competing companies started a conversation about industry difficulties and suggested coordinating our rate policies in order to support sector profitability. What should I do in that situation?**

Answer: **You must tell your conversation partners that it is beyond the pale to negotiate such matters with MTS, stop the conversation and at the first opportunity report the incident in detail to the department responsible for antitrust compliance system.**

Question: **A friend of mine is employed with another telecom operator, and he participated in the launch of an interesting tariff plan. I would like to implement such product at MTS, but I doubt whether it would be profitable. I may not discuss such matters with him, but information could be passed on by our mutual acquaintance who has no employment in the telecom industry. Is it permissible?**

Answer: **No, never. The use of non-public information may result in the fact that the behavior of these two companies is considered as concerted and aimed at giving up the price competition. That said, no matter, whether this contact was direct or through an intermediary.**

MTS does not use its market position to prevent or restrict the competition or violate somebody's legal interests, and always strives to treat its clients and contractors, including prospective, in a fair and equal manner in all aspects of its business.

MTS does not utilize methods of unfair competition, is respectful of competitors in any markets and strives to fair and lawful competition.

Question: **I am preparing a presentation to solicit a large corporate client. In order to convince the client to change their operator, I want to include information in the presentation that the services provided by MTS are of higher quality. Is it permissible?**

Answer: **Mentioning MTS advantages in comparison to competitors must be true and proven. You may include such information, if you give clear comparison criteria and the source of information.**

Violation of the provisions of antitrust legislation can result in fines and other civil, administrative and criminal sanctions, up to and including imprisonment. Should a company employee have any questions in connection with any decision or actions, including those of another MTS employee or a MTS partner, which may result in the violation of the antirust legislation, or if an employee is not certain about the legality of any action or decision, he / she must contact — until the respective decision / action has been made / carried out — the department responsible for the antitrust compliance system.

The underlying principles and requirements concerning the compliance with the provisions of antitrust legislation applicable to the company are set forth in MTS Antitrust Policy which is binding on all company employees.

# Use of insider information

The use of corporate insider information is legally restricted in the countries in which MTS securities are traded. The outline of such restrictions is that individuals privy to insider information about a given company are prohibited from conducting transactions involving the securities of that company or passing such information on to third parties for the purposes of conducting transactions.

Insider information is information about a company that has not been publicly disclosed and that, if disclosed, could have an impact on the value of the company's securities. Such information could involve, for example:

- financial figures;
- information on upcoming mergers and acquisitions (M&A);
- information on the obtainment of an important license;
- information on planned dividends;
- information on major litigation.

Question: **My cousin owns MTS shares and wants to sell them, but I know that in a couple of weeks MTS is going to announce quarterly results that significantly outperform analysts' forecasts. Can I advise him to hold off on the sale to gain more for the shares?**

Answer: **Absolutely not. Until announced publicly, information concerning the company's financial results is considered insider information, and its use, even in the form of advice to a relative, would be a violation on your part of applicable law both in Russia and the USA.**

MTS employees privy to insider information about MTS must not conduct transactions involving MTS securities, pass such information on with the aim of conducting such transactions or engage in similar acts involving insider information concerning other companies obtained in the course of the performance of their job duties.

In order to assist MTS employees, a policy has been adopted on compliance with the requirements of insider information law. Among other things, the policy establishes closed periods during which the existence of insider information is most likely and throughout which the conclusion of transactions involving MTS securities is restricted for all company employees.

Every employee may contact with questions relating to insider information the Corporate Law Department or to the address: insidecompliance@mts.ru.

# Business transparency and financial statements integrity

MTS PJSC is a public company with securities traded on the Russian and U.S. stock exchanges. Pursuant to regulatory documents governing the operation of the securities market, the company provides the appropriate regulatory authorities with reports on the financial results of its activities, and also discloses a significant amount of non-financial information. This disclosure encompasses the timely and accurate reporting of all material including non-public information that could have an impact on the value of MTS securities. The disclosed information is intended for both external and internal users for the purposes of obtaining an objective view of the results of the company's financial-economic activities, its plans and areas of further development.

The gathered information must meet the general requirements of the majority of interested participants such as investors, employees, creditors, suppliers and contractors, buyers and customers, government agencies and the general public.

Information disclosure is undertaken in such a way so as to ensure a reasonable balance between informational transparency and protection of the company's commercial interests. In order to ensure compliance with the requirements of applicable law whose violation could result in considerable financial losses and even the criminal prosecution of the company as a whole and of individual company employees, every employee must play his / her role in the information disclosure system. That said, the public disclosure of information is only permitted by individuals duly authorized by company management to do so, as enshrined in the company's bylaws.

In order to ensure the efficient performance of MTS obligations with respect to information disclosure, the company has created a Disclosure Committee and introduced the position of disclosure coordinator, who are together responsible for ensuring the accuracy and timeliness of information disclosure to all investors, shareholders and other stakeholders.

Question: **A personal acquaintance has approached an MTS employee with a request to provide him with certain information about company activities. Does the employee have the right to give out such information?**

Answer: **Before giving out any kind of information, the employee needs to know exactly what kind of information is being requested by the third party. Company management is responsible for determining the composition and volume of information constituting a commercial / official secret, as well as the procedure for its protection. All company employees are responsible for maintaining the secrecy of confidential information. If the requested information is not confidential, it is subject to open publication in the mass media, or on the official company website, etc., links to it can be sent to the MTS employee's acquaintance.**

Employees responsible for administering accounting records and submitting data for report compilation must guarantee that all business operations are reflected in the company's financial statements and that accompanying explanations are delivered fully, precisely, promptly and in a format that is easily understood by the user.

Employees must inform their supervisor, and report in the manner specified herein, about any and all known instances of the non-disclosure of assets or liabilities and / or the indication of false or falsified information in order to avoid the onset of legal, financial or other repercussions for MTS and the causing of serious harm to the company's business reputation.

Question: **I heard from a colleague, who works at a major company which is an MTS supplier, that they're having production problems and won't be able to meet their obligations to supply the equipment needed for the planned expansion of the MTS network. Do I have to disclose this information publicly?**

Answer: **No. You must immediately pass the information on to the current disclosure coordinator (the relevant information is posted on the internal portal in the section entitled "For Employees" — "Corporate Governance" — "Statement on the MTS PJSC Information Policy") so that he / she can assess its relevance and the need for its disclosure. In the event of an affirmative conclusion, the information will be disclosed by a duly authorized MTS employee in accordance with the necessary procedures.**

# Company accounts and records

Accounting documents fully and precisely reflect the business transactions conducted by the company, and serve as the basis for the compilation of various types of reports and information disclosures in accordance with the requirements of applicable law and based on generally-accepted practice.

Accounting records are the source of data supporting the adoption of important managerial decisions concerning further company development.

Accounting records include financial and management statements, the operating chart of accounts, accounting policies, bookkeeping ledgers, primary accounting documents confirming the conclusion of business transactions, sales invoices, documents on the auditing of financial-and-economic activity, payroll accounts and much more.

The company has put in place approved policies governing the management of accounting documents and requirements concerning their compilation, submission, storage, archiving and destruction.

During the physical destruction of documents, company employees should be guided by the following principles:
- destruction must always be authorized;
- documents concerning upcoming or current litigation and investigations are not subject to destruction;
- the destruction of documents must be undertaken in such a way that the confidentiality of any information contained therein is maintained;
- all copies of documents cleared for destruction, including confidential, back-up and reserve copies, must also be destroyed.

Question: **When should accounting documents be archived? Can archived documents be used again? Who is authorized to retrieve documents from the archive?**

Answer: **The archiving of accounting documents must be undertaken in accordance with the company's approved document management schedule. Prior to being transferred to the enterprise archive, documents must be stored in specially-designated areas or in locked cabinets under the supervision of individuals duly authorized by the management of the respective division.**
**The release of archived documents for temporary use by the employees of structural divisions is performed by archive workers, and only on the basis of a special request approved by the manager of the respective division.**
**Accounting documents may only be seized from the archive by investigative authorities, preliminary inquiry agencies, prosecutors' offices, courts, tax inspectorates and internal affairs agencies on the basis of their respective decrees, issued in accordance with applicable Russian Federation law.**

# Communicating and reporting on code violations

In the event that an employee is uncertain about how to proceed appropriately in a given situation, or he / she thinks that his / her actions could lead to a violation of the Code, he / she should discuss the situation with his / her immediate supervisor, the manager of his / her department or a Compliance Department officer. Employees can also contact any senior manager in the Security Block, Internal Control and Audit Block, Corporate Law Department or HR Block.

If a company employee witnesses or learns of a violation of the Code, applicable legislation or the company's bylaws by other company employees, it is his / her duty to report the issue so as to assist MTS in dealing with the various problems that could arise.

Any employee wishing to report a violation should send the respective message to the hotline of the Internal Control and Audit Block at: control&audit@mts.ru, using available mail servers and the services placed on the MTS corporate portal. Employees can also contact their immediate supervisor personally or any senior manager.

The hotline of the Internal Control and Audit Block has been set up to improve the efficiency of the processes involved in preventing and managing the associated risks as well as detecting possible instances of fraud, improprieties and violation in the following areas:

- business accounting, tax accounting and reporting;
- internal control and internal audit;
- asset management and property usage;
- financial operations, procurement and logistics, sales and client servicing, contractual relations, third-party payments and other processes essential to business and operating activities;
- compliance with commercial secret policies;
- compliance with the requirements of applicable law (including anticorruption, antitrust and labour law);
- compliance with the Code of Conduct and Business Ethics;
- compliance with internal procedures on insider information.

A report on the activities of the Internal Control and Audit Block hotline is sent to the MTS PJSC Audit Committee on a regular basis.

MTS will review all credible information concerning Code violations. All messages concerning actual or possible Code violations will be considered thoroughly and confidentially, and the individuals providing the pertinent information, may do it anonymously.

MTS strictly prohibits the application of any repressive measures whatsoever against any employee making an effort in good faith to secure assistance and report actual or possible violations.

# Conclusion

The basic principles of MTS business practices contained in the Code adhere to the highest standards of business ethics. All employees bear responsibility for compliance with the Code and are personally responsible for their own actions.

Issues dealing with violations of the Code, ethical conflicts, results of inspections conducted based on employees' reports of unethical behavior on the part of MTS employees (colleagues, managers, subordinates) are considered at meetings of the MTS PJSC Discipline Committee. In addition, such information is presented to the Audit Committee on a quarterly basis.

All employees must bear in mind that non-compliance with the mandatory requirements of the Code may result in financial losses and cause irreparable damage to the sterling reputation of the company and the good standing MTS enjoys in the business community. In other words, the behavior of an employee in his / her capacity as MTS representative that fails to comply with applicable law or the Code may lead to serious consequences for the employee and company alike.

In addition to the Code, each employee must make him / herself aware of the separate policies and regulations relating directly to his / her area of work specialization.

**MTS reserves the right to make amendments and additions to the Code at any time, without prior notice.**

MTS

You know that you can!

**Exhibit 4.313**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 132675 dated September 08, 2015**

For Rendering

***mobile radio telephone services***

This License is granted to

***Closed Joint Stock Company***

***SIBINTERTELECOM***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027501155032***

Tax Identification Number (TIN)

***7536005204***

---

Location address (place of residence):

*47, Smolenskaya street, Chita, Zabaikalye Territory, 672027*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until September 08, 2020.*

This License is granted by decision of the licensing body - Order dated July 10, 2015 No. 437-pGc

Appendix being an integral part of this license is executed on 2 sheets.

Deputy Head /signature/ O.A. Ivanov

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MINISTRY OF TELECOM AND MASS COMMUNICATIONS
OF THE RUSSIAN FEDERATION
FEDERAL SERVICE FOR SUPERVISION
IN THE SPHERE
OF COMMUNICATIONS, INFORMATION TECHNOLOGY
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PSRN 1087746736296

**Exhibit 4.314**

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**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 160409 dated April 28, 2018**

For Rendering

***mobile radio telephone services***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until April 28, 2023.*

This License is granted by decision of the licensing body - Order dated November 28, 2017 No. 731-@GA

Appendix being an integral part of this license is executed on 2 sheets.

Deputy Head /signature/ O.A. Ivanov

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OF COMMUNICATIONS, INFORMATION TECHNOLOGY
AND MASS MEDIA
PSRN 1087746736296

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**LICENSE**

**No. 160410 dated April 28, 2018**

For Rendering

***mobile radio telephone services***

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***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

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Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

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OF COMMUNICATIONS, INFORMATION TECHNOLOGY
AND MASS MEDIA
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**Exhibit 4.316**

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**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 161213 dated April 28, 2018**

For Rendering

***mobile radio telephone services***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until April 28, 2023.*

This License is granted by decision of the licensing body - Order dated December 26, 2017 No. 799-@GA

Appendix being an integral part of this license is executed on 3 sheets.

Deputy Head /signature/ O.A. Ivanov

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AND MASS MEDIA
PSRN 1087746736296

**Exhibit 4.317**

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**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 161214 dated May 07, 2018**

For Rendering

***telecommunication services for provision***

***of communication channels***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until May 07, 2023.*

This License is granted by decision of the licensing body - Order dated December 26, 2017 No. 799-@GA

Appendix being an integral part of this license is executed on 2 sheets.

Deputy Head /signature/ O.A. Ivanov

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IN THE SPHERE
OF COMMUNICATIONS, INFORMATION TECHNOLOGY
AND MASS MEDIA
PSRN 1087746736296

**Exhibit 4.318**

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**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 161215 dated April 28, 2018**

For Rendering

***mobile radio telephone services***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

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Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until April 28, 2023.*

This License is granted by decision of the licensing body - Order dated December 26, 2017 No. 799-@GA

Appendix being an integral part of this license is executed on 3 sheets.

Deputy Head /signature/ O.A. Ivanov

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MINISTRY OF TELECOM AND MASS COMMUNICATIONS
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AND MASS MEDIA
PSRN 1087746736296

**Exhibit 4.319**

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**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 161216 dated April 28, 2018**

For Rendering

***mobile radio telephone services***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until April 28, 2023.*

This License is granted by decision of the licensing body - Order dated December 26, 2017 No. 799-@GA

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Deputy Head /signature/ O.A. Ivanov

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MINISTRY OF TELECOM AND MASS COMMUNICATIONS
OF THE RUSSIAN FEDERATION
FEDERAL SERVICE FOR SUPERVISION
IN THE SPHERE
OF COMMUNICATIONS,
INFORMATION TECHNOLOGY
AND MASS MEDIA
PSRN 1087746736296

**Exhibit 4.320**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 161217 dated May 07, 2018**

For Rendering

***data communication services excluding data communication services for the purposes of voice data communication***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until May 07, 2023.*

This License is granted by decision of the licensing body - Order dated December 26, 2017 No. 799-@GA

Appendix being an integral part of this license is executed on 2 sheets.

Deputy Head /signature/ O.A. Ivanov

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MINISTRY OF TELECOM AND MASS COMMUNICATIONS
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OF COMMUNICATIONS,
INFORMATION TECHNOLOGY
AND MASS MEDIA
PSRN 1087746736296

**Exhibit 4.321**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 161218 dated May 07, 2018**

For Rendering

***telecommunication services for provision***

***of communication channels***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until May 07, 2023.*

This License is granted by decision of the licensing body - Order dated December 26, 2017 No. 799-@GA

Appendix being an integral part of this license is executed on 2 sheets.

Deputy Head /signature/ O.A. Ivanov

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PSRN 1087746736296

**Exhibit 4.322**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 161219 dated May 07, 2018**

For Rendering

***telecommunication services for provision***

***of communication channels***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until May 07, 2023.*

This License is granted by decision of the licensing body - Order dated December 26, 2017 No. 799-@GA

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Deputy Head /signature/ O.A. Ivanov

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PSRN 1087746736296

**Exhibit 4.323**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 161220 dated May 07, 2018**

For Rendering

***telecommunication services for provision***

***of communication channels***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until May 07, 2023.*

This License is granted by decision of the licensing body - Order dated December 26, 2017 No. 799-@GA

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Deputy Head /signature/ O.A. Ivanov

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PSRN 1087746736296

**Exhibit 4. 324**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 161221 dated May 07, 2018**

For Rendering

***telematic services***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until May 07, 2023.*

This License is granted by decision of the licensing body - Order dated December 26, 2017 No. 799-@GA

Appendix being an integral part of this license is executed on 2 sheets.

Deputy Head /signature/ O.A. Ivanov

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PSRN 1087746736296

**Exhibit 4.325**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 161222 dated May 07, 2018**

For Rendering

***mobile radio telephone services***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until May 07, 2023.*

This License is granted by decision of the licensing body - Order dated December 26, 2017 No. 799-@GA

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Deputy Head /signature/ O.A. Ivanov

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**Exhibit 4.326**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 161223 dated May 07, 2018**

For Rendering

***telecommunication services for provision***

***of communication channels***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until May 07, 2023.*

This License is granted by decision of the licensing body - Order dated December 26, 2017 No. 799-@GA

Appendix being an integral part of this license is executed on 2 sheets.

Deputy Head /signature/ O.A. Ivanov

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PSRN 1087746736296

**Exhibit 4.327**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 161531 dated June 18, 2018**

For Rendering

***cable television***

This License is granted to

***Public Joint Stock Company***

***"Moscow City Telephone Network"***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027739285265***

Tax Identification Number (TIN)

***7710016640***

---

Location address (place of residence):

*119017, Moscow, Bolshaya Ordynka St., 25, bld. 1*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until June 18, 2023.*

This License is granted by decision of the licensing body - Order dated January 18, 2018 No. 11-@GA

Appendix being an integral part of this license is executed on 2 sheets.

Deputy Head /signature/ O.A. Ivanov

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**Exhibit 4.328**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 161954 dated May 23, 2018**

For Rendering

***intra zonal communications services***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until May 23, 2023.*

This License is granted by decision of the licensing body - Order dated February 06, 2018 No. 53-@GA

Appendix being an integral part of this license is executed on 2 sheets.

Deputy Head /signature/ O.A. Ivanov

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**Exhibit 4.329**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 161957 dated July 10, 2018**

For Rendering

***local telephone communication services***

***using payphones***

This License is granted to

***Public Joint Stock Company***

***"Moscow City Telephone Network"***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027739285265***

Tax Identification Number (TIN)

***7710016640***

---

Location address (place of residence):

*119017, Moscow, Bolshaya Ordynka St., 25, bld. 1*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until July 10, 2023.*

This License is granted by decision of the licensing body - Order dated February 06, 2018 No. 53-@GA

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Deputy Head /signature/ O.A. Ivanov

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**Exhibit 4.330**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 162566 dated August 02, 2018**

For Rendering

***mobile radio telephone services***

This License is granted to

***Public Joint Stock Company***

***"Moscow City Telephone Network"***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027739285265***

Tax Identification Number (TIN)

***7710016640***

---

Location address (place of residence):

*119017, Moscow, Bolshaya Ordynka St., 25, bld. 1*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until August 02, 2023.*

This License is granted by decision of the licensing body - Order dated February 19, 2018 No. 85-@GA

Appendix being an integral part of this license is executed on 3 sheets.

Deputy Head /signature/ O.A. Ivanov

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**Exhibit 4.331**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 163838 dated August 01, 2018**

For Rendering

***intra zonal communications services***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until August 01, 2023.*

This License is granted by decision of the licensing body - Order dated April 03, 2018 No. 195-@GA

Appendix being an integral part of this license is executed on 2 sheets.

Deputy Head /signature/ O.A. Ivanov

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**Exhibit 4.332**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 163839 dated August 01, 2018**

For Rendering

***intra zonal communications services***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until August 01, 2023.*

This License is granted by decision of the licensing body - Order dated April 03, 2018 No. 195-@GA

Appendix being an integral part of this license is executed on 2 sheets.

Deputy Head /signature/ O.A. Ivanov

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PSRN 1087746736296

**Exhibit 4.333**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 163840 dated August 01, 2018**

For Rendering

***intra zonal communications services***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until August 01, 2023.*

This License is granted by decision of the licensing body - Order dated April 03, 2018 No. 195-@GA

Appendix being an integral part of this license is executed on 2 sheets.

Deputy Head /signature/ O.A. Ivanov

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PSRN 1087746736296

**Exhibit 4.334**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 164187 dated October 24, 2016**

For Rendering

***local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until October 24, 2021.*

This License is granted by decision of the licensing body - Order dated April 17, 2018 No. 236-@GA

Appendix being an integral part of this license is executed on 2 sheets.

Deputy Head /signature/ O.A. Ivanov

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PSRN 1087746736296

**Exhibit 4.335**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 165243 dated August 02, 2018**

For Rendering

***communication channel provision services***

This License is granted to

***Limited Liability Company***

***Sputnikovoe TV***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1127746631495***

Tax Identification Number (TIN)

***7709909783***

---

Location address (place of residence):

*5 Vorontsovskaya Str., bldg. 2, Moscow, 109147, Russian Federation*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until August 02, 2023.*

This License is granted by decision of the licensing body - Order dated May 24, 2018 No. 340-@GA

Appendix being an integral part of this license is executed on 2 sheets.

Deputy Head /signature/ O.A. Ivanov

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PSRN 1087746736296

**Exhibit 4.336**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 165418 dated May 23, 2018**

For Rendering

***radio telephone services***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until May 23, 2023.*

This License is granted by decision of the licensing body - Order dated June 09, 2018 No. 392-@GA

Appendix being an integral part of this license is executed on 3 sheets.

Deputy Head /signature/ O.A. Ivanov

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**Exhibit 4.337**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 166424 dated October 02, 2018**

For Rendering

***telecommunication services***
***for provision of communication channels***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until October 02, 2023.*

This License is granted by decision of the licensing body - Order dated June 26, 2018 No. 457-@GA

Appendix being an integral part of this license is executed on 2 sheets.

Deputy Head /signature/ O.A. Ivanov

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**Exhibit 4.338**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 166425 dated October 31, 2018**

For Rendering

***data communication services excluding data communication services for the purposes of voice data communication***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until October 31, 2023.*

This License is granted by decision of the licensing body - Order dated June 26, 2018 No. 457-@GA

Appendix being an integral part of this license is executed on 2 sheets.

Deputy Head /signature/ O.A. Ivanov

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**Exhibit 4.339**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 166443 dated December 11, 2018**

For Rendering

***telecommunication services***
***for provision of communication channels***

This License is granted to

***Public Joint Stock Company***

***"Moscow City Telephone Network"***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027739285265***

Tax Identification Number (TIN)

***7710016640***

---

Location address (place of residence):

*119017, Moscow, Bolshaya Ordynka St., 25, bld. 1*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until December 11, 2023.*

This License is granted by decision of the licensing body - Order dated June 26, 2018 No. 85-@GA

Appendix being an integral part of this license is executed on 2 sheets.

Deputy Head /signature/ O.A. Ivanov

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**Exhibit 4.340**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 166444 dated December 11, 2018**

For Rendering

***local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities***

This License is granted to

***Public Joint Stock Company***

***"Moscow City Telephone Network"***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027739285265***

Tax Identification Number (TIN)

***7710016640***

---

Location address (place of residence):

*119017, Moscow, Bolshaya Ordynka St., 25, bld. 1*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until December 11, 2023.*

This License is granted by decision of the licensing body - Order dated June 26, 2018 No. 457-@GA

Appendix being an integral part of this license is executed on 2 sheets.

Deputy Head /signature/ O.A. Ivanov

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**Exhibit 4.341**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 166445 dated December 11, 2018**

For Rendering

***data communication services excluding data communication services for the purposes of voice data communication***

This License is granted to

***Public Joint Stock Company***

***"Moscow City Telephone Network"***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027739285265***

Tax Identification Number (TIN)

***7710016640***

Location address (place of residence):

*119017, Moscow, Bolshaya Ordynka St., 25, bld. 1*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until December 11, 2023.*

This License is granted by decision of the licensing body - Order dated June 26, 2018 No. 457-@GA

Appendix being an integral part of this license is executed on 2 sheets.

Deputy Head /signature/ O.A. Ivanov

**Stamp here**

***Official seal:***

MINISTRY OF TELECOM AND MASS COMMUNICATIONS
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AND MASS MEDIA
PSRN 1087746736296

**Exhibit 4.342**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 166704 dated July 19, 2016**

For Rendering

***mobile radio telephone services***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until July 19, 2021.*

This License is granted by decision of the licensing body - Order dated July 11, 2018 No. 529-@GA

Appendix being an integral part of this license is executed on 2 sheets.

Deputy Head /signature/ O.A. Ivanov

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MINISTRY OF TELECOM AND MASS COMMUNICATIONS
OF THE RUSSIAN FEDERATION
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IN THE SPHERE
OF COMMUNICATIONS, INFORMATION TECHNOLOGY
AND MASS MEDIA
PSRN 1087746736296

**Exhibit 4.343**

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF TELECOM, INFORMATION TECHNOLOGIES AND MASS COMMUNICATIONS**

**LICENSE**

***No. 166958* dated *November 24, 2018***

To render

***telecommunication services for provision***

***of communication channels***

This license has been granted to

***Public Joint Stock Company***

***"Mobile TeleSystems"***

Legal Entity (Individual Entrepreneur)
Primary State Registration Number
(PSRN/OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN/INN)

***7740000076***

---

Principal place of business (residence)*:*

*109147, Moscow, Marksistskaya St., 4*

The territory of the services is specified in appendix hereto.

This license is valid through:

*November 24, 2023*

This license is granted based on the decision of the licensing authority - Order *No. 529- @GA* dated *July 11, 2018*

This license has an appendix which is as an integral part hereof and executed in two sheets

Deputy Head /signature/ O.A. Ivanov

**Stamp here**

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AND MASS MEDIA
PSRN 1087746736296

**Exhibit 4.344**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 167215 dated May 21, 2017**

For Rendering

***mobile radio telephone services***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until May 21, 2022.*

This License is granted by decision of the licensing body - Order dated July 27, 2018 No. 566-@GA

Appendix being an integral part of this license is executed on 3 sheets.

Deputy Head /signature/ O.A. Ivanov

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AND MASS MEDIA
PSRN 1087746736296

**Exhibit 4.345**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 167216 dated February 21, 2017**

For Rendering

***mobile radio telephone services***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until February 21, 2022.*

This License is granted by decision of the licensing body - Order dated July 27, 2018 No. 566-@GA

Appendix being an integral part of this license is executed on 2 sheets.

Deputy Head /signature/ O.A. Ivanov

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AND MASS MEDIA
PSRN 1087746736296

**Exhibit 4.346**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 167990 dated September 08, 2015**

For Rendering

***mobile radio telephone services***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until September 08, 2020.*

This License is granted by decision of the licensing body - Order dated September 03, 2018 No. 638-@GA

Appendix being an integral part of this license is executed on 2 sheets.

Deputy Head /signature/ A.A. Pankov

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PSRN 1087746736296

**Exhibit 4.347**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 167991 dated July 05, 2018**

For Rendering

***mobile radio telephone services***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until June 05, 2023.*

This License is granted by decision of the licensing body - Order dated September 03, 2018 No. 638-@GA

Appendix being an integral part of this license is executed on 2 sheets.

Deputy Head /signature/ A.A. Pankov

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AND MASS MEDIA
PSRN 1087746736296

**Exhibit 4.348**

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF TELECOM, INFORMATION TECHNOLOGIES AND MASS COMMUNICATIONS**

**LICENSE**

***No. 167992* dated *December 29, 2016***

To render

***telecommunication services for provision***

***of communication channels***

This license has been granted to

***Public Joint Stock Company***

***"Mobile TeleSystems"***

Legal Entity (Individual Entrepreneur)
Primary State Registration Number
(PSRN/OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN/INN)

***7740000076***

---

Principal place of business (residence)*:*

*109147, Moscow, Marksistskaya St., 4*

The territory of the services is specified in appendix hereto.

This license is valid through:

*December 29, 2021*

This license is granted based on the decision of the licensing authority - Order *No. 638- @GA* dated *September 03, 2018*

This license has an appendix which is as an integral part hereof and executed in two sheets

Deputy Head /signature/ A.A. Pankov

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AND MASS MEDIA
PSRN 1087746736296

**Exhibit 4.349**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 168186 dated December 11, 2018**

For Rendering

***mobile radio telephone services***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until December 11, 2023.*

This License is granted by decision of the licensing body - Order dated September 03, 2018 No. 638-@GA

Appendix being an integral part of this license is executed on 2 sheets.

Deputy Head /signature/ A.A. Pankov

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**Exhibit 4.350**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 168309 dated September 03, 2018**

For Rendering

***cable radio***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until September 03, 2023.*

This License is granted by decision of the licensing body - Order dated September 03, 2018 No. 638-@GA

Appendix being an integral part of this license is executed on 2 sheets.

Deputy Head /signature/ A.A. Pankov

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**Exhibit 4.351**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 168612 dated December 30, 2018**

For Rendering

***mobile radio telephone services***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until December 30, 2023.*

This License is granted by decision of the licensing body - Order dated September 14, 2018 No. 660-@GA

Appendix being an integral part of this license is executed on 3 sheets.

Deputy Head /signature/ A.A. Pankov

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PSRN 1087746736296

**Exhibit 4.352**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 168613 dated December 30, 2018**

For Rendering

***mobile radio telephone services***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until December 30, 2023.*

This License is granted by decision of the licensing body - Order dated September 14, 2018 No. 660-@GA

Appendix being an integral part of this license is executed on 3 sheets.

Deputy Head /signature/ A.A. Pankov

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**Exhibit 4.353**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 168614 dated December 30, 2018**

For Rendering

***mobile radio telephone services***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until December 30, 2023.*

This License is granted by decision of the licensing body - Order dated September 14, 2018 No. 660-@GA

Appendix being an integral part of this license is executed on 3 sheets.

Deputy Head /signature/ A.A. Pankov

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PSRN 1087746736296

**Exhibit 4.354**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 168615 dated December 30, 2018**

For Rendering

***radio telephone services***

This License is granted to

***Open Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until December 30, 2023.*

This License is granted by decision of the licensing body - Order dated September 14, 2018 No. 660-@GA

Appendix being an integral part of this license is executed on 3 sheets.

Deputy Head /signature/ A.A. Pankov

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PSRN 1087746736296

**Exhibit 4.355**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 168616 dated December 30, 2018**

For Rendering

***mobile radio telephone services***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until December 30, 2023.*

This License is granted by decision of the licensing body - Order dated September 14, 2018 No. 660-@GA

Appendix being an integral part of this license is executed on 3 sheets.

Deputy Head /signature/ A.A. Pankov

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**Exhibit 4.356**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 168617 dated December 30, 2018**

For Rendering

***mobile radio telephone services***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until December 30, 2023.*

This License is granted by decision of the licensing body - Order dated September 14, 2018 No. 660-@GA

Appendix being an integral part of this license is executed on 3 sheets.

Deputy Head /signature/ A.A. Pankov

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**Exhibit 4.357**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 168618 dated December 30, 2018**

For Rendering

***mobile radio telephone services***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until December 30, 2023.*

This License is granted by decision of the licensing body - Order dated September 14, 2018 No. 660-@GA

Appendix being an integral part of this license is executed on 3 sheets.

Deputy Head /signature/ A.A. Pankov

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**Exhibit 4.358**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 168619 dated December 26, 2018**

For Rendering

***local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until December 26, 2023.*

This License is granted by decision of the licensing body - Order dated September 14, 2018 No. 660-@GA

Appendix being an integral part of this license is executed on 2 sheets.

Deputy Head /signature/ A.A. Pankov

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**Exhibit 4.359**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 168620 dated December 30, 2018**

For Rendering

***mobile radio telephone services***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until December 30, 2023.*

This License is granted by decision of the licensing body - Order dated September 14, 2018 No. 660-@GA

Appendix being an integral part of this license is executed on 3 sheets.

Deputy Head /signature/ A.A. Pankov

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**Exhibit 4.360**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 168621 dated December 30, 2018**

For Rendering

***mobile radio telephone services***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until December 30, 2023.*

This License is granted by decision of the licensing body - Order dated September 14, 2018 No. 660-@GA

Appendix being an integral part of this license is executed on 3 sheets.

Deputy Head /signature/ A.A. Pankov

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PSRN 1087746736296

**Exhibit 4.361**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 168622 dated December 30, 2018**

For Rendering

***mobile radio telephone services***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until December 30, 2023.*

This License is granted by decision of the licensing body - Order dated September 14, 2018 No. 660-@GA

Appendix being an integral part of this license is executed on 3 sheets.

Deputy Head /signature/ A.A. Pankov

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**Exhibit 4.362**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 168623 dated December 30, 2018**

For Rendering

***mobile radio telephone services***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until December 30, 2023.*

This License is granted by decision of the licensing body - Order dated September 14, 2018 No. 660-@GA

Appendix being an integral part of this license is executed on 3 sheets.

Deputy Head /signature/ A.A. Pankov

**Stamp here**

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AND MASS MEDIA
PSRN 1087746736296

**Exhibit 4.363**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 168624 dated December 30, 2018**

For Rendering

***mobile radio telephone services***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until December 30, 2023.*

This License is granted by decision of the licensing body - Order dated September 14, 2018 No. 660-@GA

Appendix being an integral part of this license is executed on 3 sheets.

Deputy Head /signature/ A.A. Pankov

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AND MASS MEDIA
PSRN 1087746736296

**Exhibit 4.364**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 169190 dated October 04, 2018**

For Rendering

***Cable radio***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until October 04, 2023.*

This License is granted by decision of the licensing body - Order dated October 04, 2018 No. 710-@GA

Appendix being an integral part of this license is executed on 2 sheets.

Deputy Head /signature/ D.A. Paltsyn

**Stamp here**

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AND MASS MEDIA
PSRN 1087746736296

**Exhibit 4.365**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 169448 dated January 19, 2019**

For Rendering

***intra zonal communications services***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until January 19, 2024.*

This License is granted by decision of the licensing body - Order dated October 18, 2018 No. 735-@GA

Appendix being an integral part of this license is executed on 2 sheets.

Deputy Head /signature/ A.A. Pankov

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PSRN 1087746736296

**Exhibit 4.366**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 169449 dated January 19, 2019**

For Rendering

***intra zonal communications services***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until January 19, 2024.*

This License is granted by decision of the licensing body - Order dated October 18, 2018 No. 735-@GA

Appendix being an integral part of this license is executed on 2 sheets.

Deputy Head /signature/ A.A. Pankov

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**Exhibit 4.367**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 169450 dated January 19, 2019**

For Rendering

***intra zonal communications services***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until January 19, 2024.*

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Deputy Head /signature/ A.A. Pankov

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PSRN 1087746736296

**Exhibit 4.368**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 169451 dated January 19, 2019**

For Rendering

***intra zonal communications services***

This License is granted to

***Public Joint Stock Company***

***Mobile TeleSystems***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN)

***7740000076***

---

Location address (place of residence):

*4, Marksistskaya Str., Moscow, 109147*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

*until January 19, 2024.*

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Deputy Head /signature/ A.A. Pankov

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**Exhibit 4.369**

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF TELECOM, INFORMATION TECHNOLOGIES AND MASS COMMUNICATIONS**

**LICENSE**

***No. 169452* dated *January 19, 2019***

To render

***intra zonal communications services***

This license has been granted to

***Public Joint Stock Company***

***"Mobile TeleSystems"***

Legal Entity (Individual Entrepreneur)
Primary State Registration Number
(PSRN/OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN/INN)

***7740000076***

---

Principal place of business (residence)*:*

*109147, Moscow, Marksistskaya St., 4*

The territory of the services is specified in appendix hereto.

This license is valid through:

*January 19, 2024*

This license is issued based on the decision of the licensing authority - Order *No. 735-@GA* dated *October 18, 2018*

This license has an appendix as an integral part, which is executed on two sheets

Deputy Head /signature/ A.A. Pankov

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AND MASS MEDIA
PSRN 1087746736296

**Exhibit 4.370**

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF TELECOM, INFORMATION TECHNOLOGIES AND MASS COMMUNICATIONS**

**LICENSE**

***No. 169453* dated *January 19, 2019***

To render

***intra zonal communications services***

This license has been granted to

***Public Joint Stock Company***

***"Mobile TeleSystems"***

Legal Entity (Individual Entrepreneur)
Primary State Registration Number
(PSRN/OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN/INN)

***7740000076***

---

Principal place of business (residence)*:*

*109147, Moscow, Marksistskaya St., 4*

The territory of the services is specified in appendix hereto.

This license is valid through:

*January 19, 2024*

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**Exhibit 4.371**

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF TELECOM, INFORMATION TECHNOLOGIES AND MASS COMMUNICATIONS**

**LICENSE**

***No. 169454* dated *January 19, 2019***

To render

***intra zonal communications services***

This license has been granted to

***Public Joint Stock Company***

***"Mobile TeleSystems"***

Legal Entity (Individual Entrepreneur)
Primary State Registration Number
(PSRN/OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN/INN)

***7740000076***

---

Principal place of business (residence)*:*

*109147, Moscow, Marksistskaya St., 4*

The territory of the services is specified in appendix hereto.

This license is valid through:

*January 19, 2024*

This license is issued based on the decision of the licensing authority - Order *No. 735-@GA* dated *October 18, 2018*

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Deputy Head /signature/ A.A. Pankov

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**Exhibit 4.372**

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF TELECOM, INFORMATION TECHNOLOGIES AND MASS COMMUNICATIONS**

**LICENSE**

***No. 169455* dated *January 19, 2019***

To render

***intra zonal communications services***

This license has been granted to

***Public Joint Stock Company***

***"Mobile TeleSystems"***

Legal Entity (Individual Entrepreneur)
Primary State Registration Number
(PSRN/OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN/INN)

***7740000076***

---

Principal place of business (residence)*:*

*109147, Moscow, Marksistskaya St., 4*

The territory of the services is specified in appendix hereto.

This license is valid through:

*January 19, 2024*

This license is issued based on the decision of the licensing authority - Order *No. 735-@GA* dated *October 18, 2018*

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Deputy Head /signature/ A.A. Pankov

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**Exhibit 4.373**

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF TELECOM, INFORMATION TECHNOLOGIES AND MASS COMMUNICATIONS**

**LICENSE**

***No. 169456* dated *January 19, 2019***

To render

***intra zonal communications services***

This license has been granted to

***Public Joint Stock Company***

***"Mobile TeleSystems"***

Legal Entity (Individual Entrepreneur)
Primary State Registration Number
(PSRN/OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN/INN)

***7740000076***

---

Principal place of business (residence)*:*

*109147, Moscow, Marksistskaya St., 4*

The territory of the services is specified in appendix hereto.

This license is valid through:

*January 19, 2024*

This license is issued based on the decision of the licensing authority - Order *No. 735-@GA* dated *October 18, 2018*

This license has an appendix as an integral part, which is executed on two sheets

Deputy Head /signature/ A.A. Pankov

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PSRN 1087746736296

**Exhibit 4.374**

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF TELECOM, INFORMATION TECHNOLOGIES AND MASS COMMUNICATIONS**

**LICENSE**

***No. 169457* dated *January 19, 2019***

To render

***intra zonal communications services***

This license has been granted to

***Public Joint Stock Company***

***"Mobile TeleSystems"***

Legal Entity (Individual Entrepreneur)
Primary State Registration Number
(PSRN/OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN/INN)

***7740000076***

---

Principal place of business (residence)*:*

*109147, Moscow, Marksistskaya St., 4*

The territory of the services is specified in appendix hereto.

This license is valid through:

*January 19, 2024*

This license is issued based on the decision of the licensing authority - Order *No. 735-@GA* dated *October 18, 2018*

This license has an appendix as an integral part, which is executed on two sheets

Deputy Head /signature/ A.A. Pankov

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PSRN 1087746736296

**Exhibit 4.375**

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF TELECOM, INFORMATION TECHNOLOGIES AND MASS COMMUNICATIONS**

**LICENSE**

***No. 170007* dated *December 21, 2016***

To render

***mobile radio telephone services***

This license has been granted to

***Public Joint Stock Company***

***"Mobile TeleSystems"***

Legal Entity (Individual Entrepreneur)
Primary State Registration Number
(PSRN/OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN/INN)

***7740000076***

---

Principal place of business (residence)*:*

*109147, Moscow, Marksistskaya St., 4*

The territory of the services is specified in appendix hereto.

This license is valid through:

*December 20, 2021*

This license is issued based on the decision of the licensing authority - Order *No. 788-@GA* dated *November 16, 2018*

This license has an appendix as an integral part, which is executed on two sheets

Deputy Head /signature/ A.A. Pankov

**Stamp here**

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PSRN 1087746736296

**Exhibit 4.376**

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF TELECOM, INFORMATION TECHNOLOGIES AND MASS COMMUNICATIONS**

**LICENSE**

***No. 170425* dated *February 17, 2019***

To render

***data transmission services for voice***

This license has been granted to

***Public Joint Stock Company***

***"Mobile TeleSystems"***

Legal Entity (Individual Entrepreneur)
Primary State Registration Number
(PSRN/OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN/INN)

***7740000076***

---

Principal place of business (residence)*:*

*109147, Moscow, Marksistskaya St., 4*

The territory of the services is specified in appendix hereto.

This license is valid through:

*February 17, 2024*

This license is issued based on the decision of the licensing authority - Order *No. 816-@GA* dated *November 30, 2018*

This license has an appendix as an integral part, which is executed on two sheets

Deputy Head /signature/ A.A. Pankov

**Stamp here**

***Official seal:***

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PSRN 1087746736296

**Exhibit 4.377**

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF TELECOM, INFORMATION TECHNOLOGIES AND MASS COMMUNICATIONS**

**LICENSE**

***No. 170426* dated *February 17, 2019***

To render

***data transmission services for voice***

This license has been granted to

***Public Joint Stock Company***

***"Mobile TeleSystems"***

Legal Entity (Individual Entrepreneur)
Primary State Registration Number
(PSRN/OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN/INN)

***7740000076***

---

Principal place of business (residence)*:*

*109147, Moscow, Marksistskaya St., 4*

The territory of the services is specified in appendix hereto.

This license is valid through:

*February 17, 2024*

This license is issued based on the decision of the licensing authority - Order *No. 816-@GA* dated *November 30, 2018*

This license has an appendix as an integral part, which is executed on two sheets

Deputy Head /signature/ A.A. Pankov

**Stamp here**

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**Exhibit 4.378**

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF TELECOM, INFORMATION TECHNOLOGIES AND MASS COMMUNICATIONS**

**LICENSE**

***No. 170427* dated *February 17, 2019***

To render

***data transmission services for voice***

This license has been granted to

***Public Joint Stock Company***

***"Mobile TeleSystems"***

Legal Entity (Individual Entrepreneur)
Primary State Registration Number
(PSRN/OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN/INN)

***7740000076***

---

Principal place of business (residence)*:*

*109147, Moscow, Marksistskaya St., 4*

The territory of the services is specified in appendix hereto.

This license is valid through:

*February 17, 2024*

This license is issued based on the decision of the licensing authority - Order *No. 816-@GA* dated *November 30, 2018*

This license has an appendix as an integral part, which is executed on two sheets

Deputy Head /signature/ A.A. Pankov

**Stamp here**

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**Exhibit 4.379**

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF TELECOM, INFORMATION TECHNOLOGIES AND MASS COMMUNICATIONS**

**LICENSE**

***No. 170428* dated *February 17, 2019***

To render

***data transmission services for voice***

This license has been granted to

***Public Joint Stock Company***

***"Mobile TeleSystems"***

Legal Entity (Individual Entrepreneur)
Primary State Registration Number
(PSRN/OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN/INN)

***7740000076***

---

Principal place of business (residence)*:*

*109147, Moscow, Marksistskaya St., 4*

The territory of the services is specified in appendix hereto.

This license is valid through:

*February 17, 2024*

This license is issued based on the decision of the licensing authority - Order *No. 816-@GA* dated *November 30, 2018*

This license has an appendix as an integral part, which is executed on two sheets

Deputy Head /signature/ A.A. Pankov

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**Exhibit 4.380**

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF TELECOM, INFORMATION TECHNOLOGIES AND MASS COMMUNICATIONS**

**LICENSE**

***No. 170429* dated *February 17, 2019***

To render

***data transmission services for voice***

This license has been granted to

***Public Joint Stock Company***

***"Mobile TeleSystems"***

Legal Entity (Individual Entrepreneur)
Primary State Registration Number
(PSRN/OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN/INN)

***7740000076***

---

Principal place of business (residence)*:*

*109147, Moscow, Marksistskaya St., 4*

The territory of the services is specified in appendix hereto.

This license is valid through:

*February 17, 2024*

This license is issued based on the decision of the licensing authority - Order *No. 816-@GA* dated *November 30, 2018*

This license has an appendix as an integral part, which is executed on two sheets

Deputy Head /signature/ A.A. Pankov

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**Exhibit 4.381**

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF TELECOM, INFORMATION TECHNOLOGIES AND MASS COMMUNICATIONS**

**LICENSE**

***No. 170430* dated *February 17, 2019***

To render

***data transmission services for voice***

This license has been granted to

***Public Joint Stock Company***

***"Mobile TeleSystems"***

Legal Entity (Individual Entrepreneur)
Primary State Registration Number
(PSRN/OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN/INN)

***7740000076***

---

Principal place of business (residence)*:*

*109147, Moscow, Marksistskaya St., 4*

The territory of the services is specified in appendix hereto.

This license is valid through:

*February 17, 2024*

This license is issued based on the decision of the licensing authority - Order *No. 816-@GA* dated *November 30, 2018*

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Deputy Head /signature/ A.A. Pankov

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**Exhibit 4.382**

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF TELECOM, INFORMATION TECHNOLOGIES AND MASS COMMUNICATIONS**

**LICENSE**

***No. 170431* dated *February 17, 2019***

To render

***data transmission services for voice***

This license has been granted to

***Public Joint Stock Company***

***"Mobile TeleSystems"***

Legal Entity (Individual Entrepreneur)
Primary State Registration Number
(PSRN/OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN/INN)

***7740000076***

---

Principal place of business (residence)*:*

*109147, Moscow, Marksistskaya St., 4*

The territory of the services is specified in appendix hereto.

This license is valid through:

*February 17, 2024*

This license is issued based on the decision of the licensing authority - Order *No. 816-@GA* dated *November 30, 2018*

This license has an appendix as an integral part, which is executed on two sheets

Deputy Head /signature/ A.A. Pankov

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**Exhibit 4.383**

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF TELECOM, INFORMATION TECHNOLOGIES AND MASS COMMUNICATIONS**

**LICENSE**

***No. 170432* dated *February 17, 2019***

To render

***data transmission services for voice***

This license has been granted to

***Public Joint Stock Company***

***"Mobile TeleSystems"***

Legal Entity (Individual Entrepreneur)
Primary State Registration Number
(PSRN/OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN/INN)

***7740000076***

---

Principal place of business (residence)*:*

*109147, Moscow, Marksistskaya St., 4*

The territory of the services is specified in appendix hereto.

This license is valid through:

*February 17, 2024*

This license is issued based on the decision of the licensing authority - Order *No. 816-@GA* dated *November 30, 2018*

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Deputy Head /signature/ A.A. Pankov

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IN THE SPHERE
OF COMMUNICATIONS, INFORMATION TECHNOLOGY
AND MASS MEDIA
PSRN 1087746736296

**Exhibit 4.384**

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF TELECOM, INFORMATION TECHNOLOGIES AND MASS COMMUNICATIONS**

**LICENSE**

***No. 170433* dated *February 17, 2019***

To render

***intra zonal communications services***

This license has been granted to

***Public Joint Stock Company***

***"Mobile TeleSystems"***

Legal Entity (Individual Entrepreneur)
Primary State Registration Number
(PSRN/OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN/INN)

***7740000076***

---

Principal place of business (residence)*:*

*109147, Moscow, Marksistskaya St., 4*

The territory of the services is specified in appendix hereto.

This license is valid through:

*February 17, 2024*

This license is issued based on the decision of the licensing authority - Order *No. 816-@GA* dated *November 30, 2018*

This license has an appendix as an integral part, which is executed on two sheets

Deputy Head /signature/ A.A. Pankov

**Stamp here**

***Official seal:***
MINISTRY OF TELECOM AND MASS COMMUNICATIONS
OF THE RUSSIAN FEDERATION
FEDERAL SERVICE FOR SUPERVISION
IN THE SPHERE
OF COMMUNICATIONS, INFORMATION TECHNOLOGY
AND MASS MEDIA
PSRN 1087746736296

**Exhibit 4.385**

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF TELECOM, INFORMATION TECHNOLOGIES AND MASS COMMUNICATIONS**

**LICENSE**

***No. 170434* dated *February 17, 2019***

To render

***data transmission services for voice***

This license has been granted to

***Public Joint Stock Company***

***"Mobile TeleSystems"***

Legal Entity (Individual Entrepreneur)
Primary State Registration Number
(PSRN/OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN/INN)

***7740000076***

---

Principal place of business (residence)*:*

*109147, Moscow, Marksistskaya St., 4*

The territory of the services is specified in appendix hereto.

This license is valid through:

*February 17, 2024*

This license is issued based on the decision of the licensing authority - Order *No. 816-@GA* dated *November 30, 2018*

This license has an appendix as an integral part, which is executed on two sheets

Deputy Head /signature/ A.A. Pankov

**Stamp here**

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PSRN 1087746736296

**Exhibit 4.386**

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF TELECOM, INFORMATION TECHNOLOGIES AND MASS COMMUNICATIONS**

**LICENSE**

***No. 170435* dated *February 17, 2019***

To render

***data transmission services for voice***

This license has been granted to

***Public Joint Stock Company***

***"Mobile TeleSystems"***

Legal Entity (Individual Entrepreneur)
Primary State Registration Number
(PSRN/OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN/INN)

***7740000076***

---

Principal place of business (residence)*:*

*109147, Moscow, Marksistskaya St., 4*

The territory of the services is specified in appendix hereto.

This license is valid through:

*February 17, 2024*

This license is issued based on the decision of the licensing authority - Order *No. 816-@GA* dated *November 30, 2018*

This license has an appendix as an integral part, which is executed on two sheets

Deputy Head /signature/ A.A. Pankov

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**Exhibit 4.387**

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF TELECOM, INFORMATION TECHNOLOGIES AND MASS COMMUNICATIONS**

**LICENSE**

***No. 170436* dated *February 17, 2019***

To render

***data transmission services for voice***

This license has been granted to

***Public Joint Stock Company***

***"Mobile TeleSystems"***

Legal Entity (Individual Entrepreneur)
Primary State Registration Number
(PSRN/OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN/INN)

***7740000076***

---

Principal place of business (residence)*:*

*109147, Moscow, Marksistskaya St., 4*

The territory of the services is specified in appendix hereto.

This license is valid through:

*February 17, 2024*

This license is issued based on the decision of the licensing authority - Order *No. 816-@GA* dated *November 30, 2018*

This license has an appendix as an integral part, which is executed on two sheets

Deputy Head /signature/ A.A. Pankov

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**Exhibit 4.388**

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF TELECOM, INFORMATION TECHNOLOGIES AND MASS COMMUNICATIONS**

**LICENSE**

***No. 170616* dated *November 15, 2018***

To render

***mobile radio telephone services***

This license has been granted to

***Public Joint Stock Company***

***"Mobile TeleSystems"***

Legal Entity (Individual Entrepreneur)
Primary State Registration Number
(PSRN/OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN/INN)

***7740000076***

---

Principal place of business (residence)*:*

*109147, Moscow, Marksistskaya St., 4*

The territory of the services is specified in appendix hereto.

This license is valid through:

*November 21, 2021*

This license is issued based on the decision of the licensing authority - Order *No. 864-@GA* dated *December 21, 2018*

This license has an appendix as an integral part, which is executed on three sheets

Deputy Head /signature/ A.A. Pankov

**Stamp here**

***Official seal:***
MINISTRY OF TELECOM AND MASS COMMUNICATIONS
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IN THE SPHERE
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**Exhibit 4.389**

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF TELECOM, INFORMATION TECHNOLOGIES AND MASS COMMUNICATIONS**

**LICENSE**

***No. 170831* dated *March 04, 2019***

To render

***intra zonal communications services***

This license has been granted to

***Public Joint Stock Company***

***"Mobile TeleSystems"***

Legal Entity (Individual Entrepreneur)
Primary State Registration Number
(PSRN/OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN/INN)

***7740000076***

---

Principal place of business (residence)*:*

*109147, Moscow, Marksistskaya St., 4*

The territory of the services is specified in appendix hereto.

This license is valid through:

*March 04, 2024*

This license is issued based on the decision of the licensing authority - Order *No. 864-@GA* dated *December 21, 2018*

This license has an appendix as an integral part, which is executed on two sheets

Deputy Head /signature/ A.A. Pankov

**Stamp here**

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**Exhibit 4.390**

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF TELECOM, INFORMATION TECHNOLOGIES AND MASS COMMUNICATIONS**

**LICENSE**

***No. 171610* dated *April 28, 2018***

To render

***mobile radio telephone services***

This license has been granted to

***Public Joint Stock Company***

***"Mobile TeleSystems"***

Legal Entity (Individual Entrepreneur)
Primary State Registration Number
(PSRN/OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN/INN)

***7740000076***

---

Principal place of business (residence)*:*

*109147, Moscow, Marksistskaya St., 4*

The territory of the services is specified in appendix hereto.

This license is valid through:

*April 28, 2023*

This license is issued based on the decision of the licensing authority - Order *No. 38-@GA* dated *January 29, 2019*

This license has an appendix as an integral part, which is executed on three sheets

Deputy Head /signature/ A.A. Pankov

**Stamp here**

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MINISTRY OF TELECOM AND MASS COMMUNICATIONS
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**Exhibit 4.391**

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF TELECOM, INFORMATION TECHNOLOGIES AND MASS COMMUNICATIONS**

**LICENSE**

***No. 171678* dated *January 29, 2019***

To render

***cable radio services***

This license has been granted to

***Public Joint Stock Company***

***"Mobile TeleSystems"***

Legal Entity (Individual Entrepreneur)
Primary State Registration Number
(PSRN/OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN/INN)

***7740000076***

---

Principal place of business (residence)*:*

*109147, Moscow, Marksistskaya St., 4*

The territory of the services is specified in appendix hereto.

This license is valid through:

*January 29, 2024*

This license is issued based on the decision of the licensing authority - Order *No. 38-@GA* dated *January 29, 2019*

This license has an appendix as an integral part, which is executed on two sheets

Deputy Head /signature/ A.A. Pankov

**Stamp here**

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**Exhibit 4.392**

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF TELECOM, INFORMATION TECHNOLOGIES AND MASS COMMUNICATIONS**

**LICENSE**

***No. 171974* dated *June 05, 2014***

To render

***mobile radio telephone services***

This license has been granted to

***Joint Stock Company***

***"Sibintertelecom"***

Legal Entity (Individual Entrepreneur)
Primary State Registration Number
(PSRN/OGRN, OGRNIP)

***1027501155032***

Tax Identification Number (TIN/INN)

***7536005204***

---

Principal place of business (residence)*:*

*672027, Zabaykalsky region, Chita, Smolenskaya St., 47*

The territory of the services is specified in appendix hereto.

This license is valid through:

*June 05, 2019*

This license is issued based on the decision of the licensing authority - Order *No. 111-@GA* dated *February 26, 2019*

This license has an appendix as an integral part, which is executed on two sheets

Deputy Head /signature/ A.A. Pankov

**Stamp here**

***Official seal:***
MINISTRY OF TELECOM AND MASS
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**Exhibit 4.393**

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF TELECOM, INFORMATION TECHNOLOGIES AND MASS COMMUNICATIONS**

**LICENSE**

***No. 172049* dated *August 22, 2017***

To render

***mobile radio telephone services***

This license has been granted to

***Public Joint Stock Company***

***"Mobile TeleSystems"***

Legal Entity (Individual Entrepreneur)
Primary State Registration Number
(PSRN/OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN/INN)

***7740000076***

---

Principal place of business (residence)*:*

*109147, Moscow, Marksistskaya St., 4*

The territory of the services is specified in appendix hereto.

This license is valid through:

*August 22, 2022*

This license is issued based on the decision of the licensing authority - Order *No. 111-@GA* dated *February 26, 2019*

This license has an appendix as an integral part, which is executed on two sheets

Deputy Head /signature/ A.A. Pankov

**Stamp here**

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**Exhibit 4.394**

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF TELECOM, INFORMATION TECHNOLOGIES AND MASS COMMUNICATIONS**

**LICENSE**

***No. 172367* dated *February 26, 2019***

To render

***mobile radio telephone services***

This license has been granted to

***Public Joint Stock Company***

***"Mobile TeleSystems"***

Legal Entity (Individual Entrepreneur)
Primary State Registration Number
(PSRN/OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN/INN)

***7740000076***

---

Principal place of business (residence)*:*

*109147, Moscow, Marksistskaya St., 4*

The territory of the services is specified in appendix hereto.

This license is valid through:

*February 26, 2024*

This license is issued based on the decision of the licensing authority - Order *No. 111-@GA* dated *February 26, 2019*

This license has an appendix as an integral part, which is executed on two sheets

Deputy Head /signature/ A.A. Pankov

**Stamp here**

***Official seal:***

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**Exhibit 4.395**

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF TELECOM, INFORMATION TECHNOLOGIES AND MASS COMMUNICATIONS**

**LICENSE**

***No. 172368* dated *February 26, 2019***

To render

***mobile radio telephone services***

This license has been granted to

***Public Joint Stock Company***

***"Mobile TeleSystems"***

Legal Entity (Individual Entrepreneur)
Primary State Registration Number
(PSRN/OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN/INN)

***7740000076***

---

Principal place of business (residence)*:*

*109147, Moscow, Marksistskaya St., 4*

The territory of the services is specified in appendix hereto.

This license is valid through:

*February 26, 2024*

This license is issued based on the decision of the licensing authority - Order *No. 111-@GA* dated *February 26, 2019*

This license has an appendix as an integral part, which is executed on two sheets

Deputy Head /signature/ A.A. Pankov

**Stamp here**

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**Exhibit 4.396**

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF TELECOM, INFORMATION TECHNOLOGIES AND MASS COMMUNICATIONS**

**LICENSE**

***No. 172369* dated *February 26, 2019***

To render

***cable radio services***

This license has been granted to

***Public Joint Stock Company***

***"Mobile TeleSystems"***

Legal Entity (Individual Entrepreneur)
Primary State Registration Number
(PSRN/OGRN, OGRNIP)

***1027700149124***

Tax Identification Number (TIN/INN)

***7740000076***

---

Principal place of business (residence)*:*

*109147, Moscow, Marksistskaya St., 4*

The territory of the services is specified in appendix hereto.

This license is valid through:

*February 26, 2024*

This license is issued based on the decision of the licensing authority - Order *No. 111-@GA* dated *February 26, 2019*

This license has an appendix as an integral part, which is executed on two sheets

Deputy Head /signature/ A.A. Pankov

**Stamp here**

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**Exhibit 4.397**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 169794 dated April 17, 2018**

For Rendering

***data communication services excluding data communication services for the purposes of voice data communication***

This License is granted to

***Public Joint Stock Company***

***"Moscow City Telephone Network"***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027739285265***

Tax Identification Number (TIN)

***7710016640***

---

Location address (place of residence):

*119017, Moscow, Bolshaya Ordynka St., 25, bld. 1*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

until *April 17, 2024.*

This License is granted by decision of the licensing body - Order dated November 01, 2018 No. 754-@GA

Appendix being an integral part of this license is executed on 3 sheets.

Deputy Head /sinature/ A.A. Pankov

**Stamp here**

***Official seal:***

MINISTRY OF TELECOM AND MASS COMMUNICATIONS
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**Exhibit 4.398**

/Emblem of the Russian Federation/

**FEDERAL SERVICE FOR SUPERVISION IN THE SPHERE OF COMMUNICATIONS, INFORMATION TECHNOLOGY AND MASS MEDIA**

**LICENSE**

**No. 169795 dated April 17, 2018**

For Rendering

***local telecommunications services, except for local telecommunications services via coin-box telephones and multiple-access facilities***

This License is granted to

***Public Joint Stock Company***

***"Moscow City Telephone Network"***

Primary State Registration Number of a Legal Entity
(Individual Entrepreneur) (OGRN, OGRNIP)

***1027739285265***

Tax Identification Number (TIN)

***7710016640***

---

Location address (place of residence):

*119017, Moscow, Bolshaya Ordynka St., 25, bld. 1*

The territory covered by telecommunications services is specified in the Appendix.

This License is granted for a term:

until *April 17, 2024.*

This License is granted by decision of the licensing body - Order dated November 01, 2018 No. 754-@GA

Appendix being an integral part of this license is executed on 3 sheets.

Deputy Head /signature/ A.A. Pankov

**Stamp here**

***Official seal:***

MINISTRY OF TELECOM AND MASS COMMUNICATIONS
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**Exhibit 8.1**

The table below presents our significant subsidiaries and investees, the places of incorporation and our effective ownership interests therein as of December 31, 2018.

| Subsidiary | Accounting Method | Ownership Interest | Place of Incorporation/ Organization |
|---|---|---|---|
| Russian Telephone Company (RTC) | Consolidated | 100.0% | Russia |
| Vodafone Ukraine | Consolidated | 100.0% | Ukraine |
| MTS Turkmenistan | Consolidated | 100.0% | Turkmenistan |
| Sibintertelecom | Consolidated | 100.0% | Russia |
| NVision Group | Consolidated | 100.0% | Russia |
| Sitronics Telecom Solutions | Consolidated | 100.0% | Russia |
| NVision Czech Republic | Consolidated | 100.0% | Czech Republic |
| Sputnikovoe TV | Consolidated | 100.0% | Russia |
| Stream LLC | Consolidated | 100.0% | Russia |
| Dega Retail Holding Limited | Consolidated | 100.0% | British Virgin Islands |
| Stream Digital LLC(1) | Consolidated | 100.0% | Russia |
| MTS Energo | Consolidated | 100.0% | Russia |
| Praliss Enterprises Limited | Consolidated | 100.0% | Cyprus |
| LLC “MTDŻK” (Ticketland) | Consolidated | 100.0% | Russia |
| Kulturnaya Sluzhba LLC (Ponominalu) | Consolidated | 100.0% | Russia |
| IT Grad LLC | Consolidated | 100.0% | Russia |
| Metro-Telecom | Consolidated | 95.0% | Russia |
| MGTS Group | Consolidated | 94.7% | Russia |
| MTS Armenia | Consolidated | 80.0% | Armenia |
| Kulturnaya Sluzhba LLC (Ponominalu) | Consolidated | 78.2% | Russia |
| Navigation Information Systems Group | Consolidated | 77.7% | Russia |
| MTS Bank | Consolidated | 55.4% | Russia |
| Oblachny Retail LLC | Consolidated | 50.8% | Russia |
| MTS International Funding DAC(2) (“MTS International”) | Consolidated | SE | Ireland |
| MTS Belarus | Equity | 49.0% | Belarus |
| Sistema Capital | Equity | 30.0% | Russia |
| Zifrovoe TV | Equity | 20.0% | Russia |
| OZON Holdings Limited | Equity | 18.7% | Cyprus |
| YOUDO Web Technologies | Equity | 13.7% | Cyprus |

(1) A wholly-owned subsidiary, through which the Group currently repurchases its own shares.

(2) 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.

**Exhibit 12.1**

I, Alexey V. Kornya, certify that:

1. I have reviewed this annual report on Form 20-F 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: April 19, 2019

/s/ Alexey V. Kornya
Alexey V. Kornya
Chief Executive Officer

**Exhibit 12.2**

I, Andrey M. Kamenskiy, certify that:

1. I have reviewed this annual report on Form 20-F 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: April 19, 2019

/s/ Andrey M. Kamenskiy
Andrey M. Kamenskiy
Chief Financial Officer

**Exhibit 13.1**

**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 of the Company for the year ended December 31, 2018 (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: April 19, 2019

/s/Alexey Kornya
Alexey V. Kornya
Chief Executive Officer

**Exhibit 13.2**

**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 of the Company for the year ended December 31, 2018 (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: April 19, 2019

/s/Andrey Kamenskiy
Andrey M. Kamenskiy
Chief Financial Officer