



Rostelecom

GEARING UP FOR THE FUTURE

Annual Report 2022

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About the Report

This Annual Report 2022 (the “Annual Report” or the “Report”) has been prepared by PJSC Rostelecom (“Rostelecom” or the “Company”) and its subsidiaries (jointly, “Rostelecom Group” or the “Group”), based on PJSC Rostelecom’s management reports and in line with the Company’s consolidated financial statements prepared under the International Financial Reporting Standards (“IFRS”) for the year ending 31st December 2022. PJSC Rostelecom’s Annual Report was pre-approved by the Board of Directors and the 2022 Annual General Shareholders’ Meeting.

As a public joint stock company with securities listed on the Moscow Exchange, Rostelecom is committed to the recognised standards of corporate governance and disclosure while protecting its own economic interests and complying with applicable laws and internal procedures to ensure information confidentiality and non-disclosure of insider information. We strive to maintain a reasonable balance in the public disclosure of information about the Company’s operations, ensuring that disclosures are accessible and easy to use for all stakeholders.

PJSC Rostelecom’s Annual Report was pre-approved by the Board of Directors and the Annual General Shareholders’ Meeting.

Disclaimer

This Report contains certain statements regarding future events, which include (but are not limited to):

- assessment of the Company’s future operating and financial results, as well as forecasts with regard to factors affecting the present value of future cash flows
- the Company’s plans to take ownership stakes in other organisations
- the Company’s anticipated capital expenditures and plans to construct and also to modernise its network
- the Company’s expectations as to the growth in demand for its services, plans to enhance existing and develop new services, as well as their pricing forecasts
- the Company’s plans with respect to improving its corporate governance practices
- the Company’s expectations as to its position in the telecommunications market and forecasts on the development of the market segments within which the Company operates
- economic outlook and industry trends
- the Company’s expectations as to the regulation of the Russian telecommunications industry and assessment of the impact of the regulatory initiatives on the Company’s activities
- assessment of the risks affecting the Company’s financial and business operations
- other statements regarding matters that are not historical facts.

Such statements are subject to risks, uncertainties and other factors, which could cause actual results to differ from those expressed or implied by these statements. These risks, uncertainties, and other factors include:

- risks related to changes in the political, economic, and social conditions in Russia, as well as changes in the global economic conditions
- risks related to the Russian legislation, regulation, and taxation, including laws, regulations, decrees, and decisions governing the Russian telecommunications industry, the securities industry, as well as currency and exchange controls related to Russian entities and their official interpretation by regulatory bodies
- risks related to the Company, including the achievement of the anticipated results, the levels of profitability and growth, the ability to create and meet demand for the Company’s services, including their promotion, and the ability of the Company to remain competitive in a globalised telecommunications market and in the face of competition from digital services in the Russian telecom market
- technological risks associated with the functioning and development of the telecommunications infrastructure, technological innovations, as well as the convergence of technologies
- other risks and uncertainties.

For a more detailed information of these and other factors, see the Company’s public filings. Most of the above-enlisted factors are beyond the Company’s control or cannot be predicted by the Company. In the view of the afore-mentioned factors, the Company does not recommend relying on the statements regarding future events presented in this Report without proper guidance. The Company assumes no obligation to publicly update these statements – neither to reflect events or circumstances after the date of this Report, nor to report on any unanticipated events, except as required by applicable law.

Minor discrepancies between sums of percentage changes, constituent figures and totals in the charts and tables of the Annual Report are subject to rounding.

Statements regarding future events include, but are not limited to, the meaning defined by the US federal securities laws, and are, therefore, regulated by these laws, which release from liability for any act done or omitted in good faith.



01 ROSTELECOM TODAY

1.1. Highlights

Rostelecom is Russia’s largest integrated provider of digital services and solutions operating in all segments of the telecommunications market. The Company serves millions of households, public entities, and private enterprises.

The Company is a key participant in the Digital Economy of the Russian Federation programme, implementing nationwide technological and IT projects, and opening up new opportunities in all areas of Russian citizens’ lives.

118,989

EMPLOYEES IN THE ROSTELECOM GROUP

Rostelecom continuously expands the penetration of its networks and services, pursuing projects and programmes that make a difference across Russia. With a unified approach across all regions, we can deliver large-scale and highly efficient projects. We focus our efforts on ensuring digital equality and affordable communications not only in cities but also in the most remote and the smallest communities.

Rostelecom Group comprises 65 regional branches and over 200 subsidiaries and affiliates engaged in providing services across Russia.

Key achievements in 2022

Revenue

627 RUB bn
+8 % YoY

OIBDA

251 RUB bn
+15 % YoY

Net profit

35 RUB bn
+11 % YoY

48.1 million
mobile subscribers

11.4 million
fibre broadband subscribers

+57 %
growth in the user base of the Wink video service

5.5 thousand
traffic enforcement cameras

>820 thousand
cumulative sales of cloud video surveillance cameras for home security

410 thousand
apartments connected to the Rostelecom Key service

+38 %
growth in revenue from digital services

+39 %
growth in revenue from cloud services

+19 %
growth in recurring revenue from proprietary cybersecurity products

1.3 million km
fibre optic lines

40.3 million
households passed with fibre

43.4 Tbps
backbone network capacity

Nº1
in broadband and IPTV in Russia

Nº1
in data centres and IaaS in Russia

Nº1
in the market by number of Wi-Fi hotspots

Key achievements in 2022

Metric ¹	2018	2019	2020	2021	2022	Change 2022/2021, %
Revenue, RUB bn	320.2	475.8	546.9	580.0	627.1	8 %
OIBDA, RUB bn	100.9	170.7	194.1	218.8	251.4	15 %
Free cash flow, RUB bn	14.8	30.3	22.7	32.5	45.2	39 %
Net profit, RUB bn	15.0	21.9	25.4	31.8	35.2	11 %
CAPEX, RUB bn	73.2	134.4	136.0	147.8	116.9	(21%)
Broadband and VPN subscribers, million	13.0	13.2	13.5	13.5	13.7	2 %
Mobile subscribers, million	–	46.0	46.6	47.5	48.1	1%
Pay TV subscribers, million	10.2	10.4	10.8	10.9	11.1	2 %
Backbone network capacity, Tbps	20.3	25.2	32.6	40.1	43.4	8 %
Data centre racks, thousand	5.9	11.5	13.2	13.7	15.0	10 %

Metric ¹	2018	2019	2020	2021	2022	Change 2022/2021, %
Headcount, thousand	128.6	135.2	136.7	126.8	119.0	(6 %)
Salary expenses, RUB bn	69.8	85.0	98.6	99.5	111.2	12 %
Investment in training, RUB m	496.0	575.4	442.5	479.0	456.0	(5 %)
Contributions to Telecom-Soyuz and Alliance private pension funds, RUB m	756.7	1,020.0	1,392.0	1,191.4	1,260.3	6 %
Health and safety expenses, RUB m	697.8	772.8	1,865.0	1,589.6	821.0	(48 %)
Income tax, RUB m	4,427.0	5,513.0	8,659.0	8,984.0	10,098.0	12 %
Other taxes, RUB m	5,747	5,892	5,605	13,918	1,104	(92 %)
Member fees, charitable giving, payments to trade unions, RUB m	767.0	874.0	951.0	922.0	1,167.0	18 %
Environmental expenditure, RUB m	159.5	162.4	174.0	163.9	174.5	6 %

¹ Data are as per the methodology in place at the time results for respective periods were published.

1.2. Innovative products and services

Our mission is to provide convenient and high-quality digital services for a comfortable life and effective business.

Rostelecom creates a sustainable digital environment in all areas of Russian citizens' lives. The Company's innovative services and strategic initiatives are changing the lives of millions of people across the country for the better. We continue to consistently develop and deploy various digital products and solutions for the society, businesses, and the state.



Innovative products launched by Rostelecom in 2022¹



Gaming services

Options to connect Lesta Games, VK Play, 4game, GFN Cloud Gaming, and VK Play Cloud as well as a subscription to Rostelecom Books were added to the igrovoy.ru platform. An exclusive GFN Cloud Gaming daily payment plan was launched



Rostelecom Print Service

The updated service allows users to monitor printer consumables online and receive alerts when cartridge levels are low, which helps optimise costs and prevent possible data leaks



Extra control options for the Wink video service

In 2022, the mini version of the popular Wink product saw a new voice functionality added to its integrated voice assistant Marusya to control the video service; the voice control feature was made available with a wider range of devices and launched for smart TV and Android devices



Web-Videoconferencing

Rostelecom launched a new cloud-based service, providing a secure videoconferencing platform with a user-friendly interface to businesses of all sizes. Based entirely on Russian solutions, the service uses the Company's own cloud capacity and provides a secure environment for communication



Vulnerability management service within the Solar MSS ecosystem and new versions of information security solutions

Over 2022, the Company launched Russia's first vulnerability management service. The solution is part of the Solar MSS ecosystem and is delivered by Rostelecom's National Cloud Platform. The list of released updates for information security solutions includes Solar Dozor 7.8, Solar appScreener 3.12, Solar inRights 3.1, Solar webProxy 3.7, and Solar addVisor 1.2



Additional options for Virtual PBX

Service users can now benefit from the following extra options:

- Call tracking to help businesses identify the most successful promotion channels and optimally allocate the advertising budget
- Protection against robocalls to 8,800 numbers to avoid unwanted costs for incoming calls and keep the line available for human users

¹ For more details, see the Operating Review section.

Rostelecom’s socially significant priority projects

Major nationwide infrastructure projects are central to building a digital economy. Each such a project makes a difference for millions of people and is a milestone in the transition towards a common digital space. Rostelecom is fully committed to these vital projects of national significance.



Throughout 2022, Rostelecom acted as an operator and contractor for a number of ambitious projects and major contracts:

- Provided data services for previously connected social infrastructure facilities
- Continued installing 2G/4G base stations under the second phase of the Bridging the Digital Divide project (BDD 2.0)
- Provided video surveillance and online broadcasting of the primary and secondary periods of the Unified State Examination
- Completed works under the Digital Education project in the pilot regions (video surveillance and Wi-Fi in educational institutions) and provided a secure single data transmission network for educational institutions, including traffic filtering to block unwanted content
- Continued developing the Unified Biometric System (UBS), which received the status of a state information system.

National digitalisation in 2022

Bridging the digital divide

1st stage

13,912 access points are organised in small settlements to provide data transmission services and provide access to the Internet

122

thousand km

is the length of the FOCL

2st stage

Over the course of 2022, Rostelecom started to provide mobile radio telephony services in 655 communities, fulfilling its obligations under the contract with the Russian Ministry of Digital Development, Communications and Mass Media on time and in full

Telemedicine

>100

thousand

consultations were held

Digital Regions

8

thousand

new cameras were connected, bringing the total number of video surveillance cameras in operation to 380 thousand

Unified State Examination

3.5

million

hours of broadcasting provided in 2022

50 %

of doctors in Russia work in Rostelecom's information systems

>1.1

thousand

new traffic enforcement cameras were installed, bringing the total to 5,480 by the end of the year.

The weight and dimension compliance service became available in 34 regions of Russia; with 22 new stations built in the reporting year to bring the total number of weighing stations in operation to 163

1.3. Key events

History milestones



Key events of 2022

(Beginning. Continued on page 21)

01

January

- 10 AK BARS Bank issued a digital bank guarantee on a blockchain platform to Rostelecom
- 19 Rostelecom completed phase 1 of the Digital Education project
- VTB Bank and Rostelecom tested a new service to exchange electronic messages on financial transactions
- 24 Rostelecom installed video surveillance and Wi-Fi hotspots at schools in the Tyumen Region
- 27 ALFA-BANK issued a digital bank guarantee on the Masterchain platform to Rostelecom
- Rostelecom was included in the 2022 Bloomberg Gender-Equality Index

02

February

- 1 Sergey Bochkarev was appointed the CEO of Rostelecom's data centre subsidiary
- Rostelecom installed video surveillance and upgraded the access control system at the URAL automobile plant
- 2 Rostelecom provided the Federal Treasury with Virtual PBX
- 10 Rostelecom launched voicebot services by VS Robotics for business customers
- 15 Rostelecom completed phase 2 of the Udomlya data centre, commissioning 800 racks
- 17 Rostelecom was named the best employer among Russia's telecom companies by hh.ru

03

March

- 10 Rostelecom launched an online course on mobile app development
- The Russian producers of software for cloud IT infrastructure and virtualisation set up the Cloud Platform joint venture (BASIS brand)
- 15 Rostelecom and CoreClass presented a digital environmental monitoring platform
- 24 Rostelecom reinforced its B2B segment leadership in installed cloud video surveillance cameras, according to TelecomDaily
- 30 Rostelecom once again ranked first in Russia in B2B pay TV services, according to J'son & Partners Consulting
- 31 Rostelecom provided video surveillance for the early Unified State Examination 2022
- Rostelecom fortified its leading position in the key solutions for business customers market (B2B broadband, Virtual PBX and 8 800), according to a rating by TMT Consulting

04

April

- 1 Rostelecom launched an option for business customers to connect mobile numbers to a virtual PBX
- 4 CryptoSDK module developed by Rostelecom was included in the Russian software registry
- 5 Rostelecom fortified its leadership in the public Wi-Fi access market, according to a rating by TMT Consulting
- 12 Rostelecom and the Pension Fund of Russia launched Online Services of Government Bodies and Agencies, a new module for the ABC of the Internet programme
- 14 Rostelecom's two new IT products were included in the Russian software registry (Single Integration Platform and New Trouble Ticket Management)
- 18 Rostelecom installed 90 thousand smart electricity meters in the Perm Region
- 20 Rostelecom froze attractive service bundle prices for small and medium-sized enterprises for two years
- 28 RANEPa and Rostelecom agreed on a digital partnership

05

May

- 11 Rostelecom tested a new AI-driven document digitisation service
- The Wink video service platform was included in the Russian software register
- 30 Rostelecom offered telecom operators an integrated solution to manage a customer's network infrastructure

06

June

- 7 Rostelecom placed exchange-traded bonds for RUB 15 billion at 10.2 % p. a.
- 14 Rostelecom and VK launched the Cloudy partner tariff plan
- 15 Rostelecom won a silver medal in the Business Champions League (cybersports)
- 16 Rostelecom implemented a remote printer management service for the Single Governmental Cluster
- 23 Rostelecom joined the Interdepartmental Electronic Document Management System
- 27 Rostelecom and National Media Group (NMG) signed an agreement of intent to merge the Wink and more.tv video services into a joint venture
- The Rostelecom Key, Unified Product Catalogue, and Rostelecom SKIT SP services were included in the Russian software registry
- 30 Rostelecom shareholders approved the final dividend of RUB 4.56 per share for 2021

Key events of 2022

(Continuation. Beginning on page 19)

07 July	19	Rostelecom strengthened its leading position in the data centre market, according to CNews Analytics
	26	Rostelecom placed exchange-traded bonds worth RUB 15 billion at 8.75 % p. a.
08 August	15	Rostelecom launched a website for operators, securing an inflow of orders for connecting facilities under the BDD project
	16	Rostelecom's video surveillance system at the Unified State Examination 2022 provided over 3.5 million hours of broadcasting
	17	Rostelecom launched a new videoconferencing service for companies of all sizes
	25	Rostelecom voice assistant handled 80 % of calls to hotlines and help desks without involving a human operator
09 September	31	Rostelecom signed a supply agreement with T8 to purchase DWDM ¹ equipment, software, and licences
	6	AK&M affirmed Rostelecom's top sustainability rating
	13	Rostelecom tested a wireless network at the Uchalinsky Mining and Processing Plant
	14	Rostelecom and ARTMEDIAEDUCATION opened a call for applications for a competition of social initiatives for children
		Rostelecom and Agrotek agreed to jointly develop digital technologies in agriculture
10 October	15	Rostelecom and MIREA – Russian Technological University opened a scientific and educational IT Import Substitution Centre
		Rostelecom's Smart Home service was included in the Russian software registry
	3	Rostelecom co-founded the Centre for Biometric Technologies (CBT) in Russia
	6	For a third year in a row, Rostelecom topped the national Anti-corruption Ranking of Russian Business
	26	Rostelecom launched the Russian Arctic's first-ever data centre
	31	Rostelecom began a major upgrade of its telecom networks in Saint Petersburg

¹ Dense Wavelength Division Multiplexing – advanced technology for carrying multiple optical channels on the same fibre.

11 November	2	Rostelecom launched a single technical support number for major business customers
	8	Rostelecom launched a service for telecom operators to build and operate secure GOST VPN networks
	9	Rostelecom significantly expanded the functionality of its website for operators, adding an equipment placement order form and an interactive map of facilities under the BDD project
	21	Rostelecom launched Sherpa RPA, a Russian platform to automate business processes
12 December	25	Rostelecom built a fibre link to the northernmost region of the Republic of Sakha (Yakutia)
	30	Rostelecom received the highest score in the Corporate Philanthropy Leaders ranking compiled by the Donors Forum association
	1	Rostelecom placed its debut exchange-traded social bonds worth RUB 10 billion
	8	Rostelecom was named platinum employer in Forbes ranking
	15	Rostelecom completed the submarine FOCL from Petropavlovsk-Kamchatsky to Anadyr
	19	Rostelecom installed smart lighting in Rostov-on-Don
		JSC CBT became the operator of the Unified Biometric System
	27	Rostelecom completed stage 1 of the Next Generation Transit Europe-Asia backbone line
	29	Rostelecom received a grant from the Russian Information Technology Development Foundation and teamed up with PROTEI R&D Centre for a project to finalise and launch a 4G Core network
Key events after the reporting period		The Russian Government, Rostelecom, 1C, and VK signed an agreement of intent to develop high-tech projects under the New System-Wide Software roadmap
		The Russian Government, Rostelecom, KNS Group, and the Rostec State Corporation signed an agreement of intent to develop high-tech projects under the Modern and Promising Mobile Networks roadmap
	19th January 2023	As part of the Digital Economy of the Russian Federation national programme and the Digital Education federal project, Rostelecom completed large-scale works to provide wireless broadband internet access (Wi-Fi) and video surveillance systems in 9,000 schools
	31th January 2023	Rostelecom and PROTEI R&D Centre completed phase 1 of a joint project to finalise and launch a 4G Core network

1.4. ESG and sustainable business

Creating a sustainable digital space

Rostelecom's responsible approach to business implies openness and honesty with customers, partners, investors, and other stakeholders as well as a sound focus on charitable and volunteering activities and building positive and mutually beneficial relationships between the Company and its employees. Rostelecom sees care for the future of society as its principal social role.

Rostelecom integrated the United Nations Sustainable Development Goals (UN SDGs) into the management of the Company's operations and considers them when preparing annual reports and designing sustainability projects.

United Nations Sustainable Development Goals prioritised by Rostelecom

First priority goals



Goal 4
Ensure inclusive and equitable quality education and promote lifelong opportunities for all



Goal 8
Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all



Goal 9
Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation



Goal 10
Reduce inequality within and among countries



Goal 11
Make cities and communities inclusive, safe, resilient and sustainable

Rostelecom's ESG performance in 2022

Environmental

36 thousand tonnes
of waste was given away for disposal, neutralisation and landfilling, up 8 % year-on-year

14 %
reduction in the emissions of air pollutants

174.5 RUB million
environmental investments and expenditures

Social

39 %
of employees are women

32.2 hours
the average training time per employee

934.5 RUB million
health and safety investments

Governance

10 out of 11 Board members are non-executive and independent directors

2 women on the Company's Management Board

29 %
of ordinary (voting) shares in free float¹

15.6 RUB bn
paid to shareholders as dividends to in 2022

Second priority goals



Goal 12
Ensure sustainable consumption and production patterns



Goal 13
Take urgent action to combat climate change



Goal 15
Protect, restore and promote sustainable use of terrestrial ecosystems



Goal 16
Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels



Goal 17
Strengthen the means of implementation and revitalise the global partnership for sustainable development

¹ Of the total outstanding ordinary shares as at 31 December 2021.

1.5. Investment case

Rostelecom's investment story is based on the sustainable growth and digital transformation of the business combined with an attractive dividend yield. Rostelecom is committed to the continuous advancement of the operational efficiency and communications network upgrades, prioritising the development of human capital and the long-term growth of shareholder value.

Motivation

Management Long-Term Incentive Programme for 2020–2022.

- Share matching plan (SMP)
- Three annual implementation cycles: 2020, 2021, and 2022
- KPIs: free cash flow, net profit, ROIC¹.

1,000

employees are eligible for the Programme

Dividends

4.56

RUB

per share in 2022

Position in the market

Nº1

by NPS² in the mobile market, with 48.1 million customers

Leader in the Russian broadband and IPTV market³

39 % — B2C broadband

44 % — B2B broadband

39 % — B2C Pay TV

Leader in the Russian data centre and IaaS market

>15 thousand data centre racks

26 %⁴ — data centre market share

25 %⁵ — IaaS market share

Efficiency

4%

or 279 thousand sq. m – the decrease in the Company's real estate portfolio as a result of the optimisation programme

5.4

+17 %
year-on-year

RUB million

revenue per employee

8.5

RUB bn

real estate income in 2022

Infrastructure

43.4

Tbps

backbone network capacity

40.3

+1 million
year-on-year

million

households are covered by fibre

¹ Return on Invested Capital.

² Net Promoter score – an index reflecting consumer loyalty to a product or company (likelihood to recommend).

³ By revenue, according to TMT consulting data.

⁴ By number of racks, according to iKS-Consulting and company data.

⁵ Sources: iKS-Consulting, company data.

02 STRATEGIC REPORT



2.1. Chairman's statement



Dear Shareholders,

Over the course of 2022 Rostelecom continued to deliver on the corporate Strategy 2025, cementing its leadership across core markets and developing the priority business segments.

The Company remains the flagship of the Russian telecom industry both by volume and the quality of services provided to society, businesses, and the state but also in terms of contribution to developing a nationwide digital environment and designing unique Russian products and services. As such, Rostelecom has already become the partner of choice for leading government and business customers as well as for a vast number of households across Russia.

Our choice of development areas has proven successful as witnessed by the steady rise in the key performance metrics from revenue to profitability. Even amidst the unprecedented pressure on Russia and the industry in 2022, Rostelecom demonstrated sound progress in the most innovative and promising market segments, creating new products and services and ensuring seamless operation of critical infrastructure.

For many years, we have been the government's key partner in implementing the Digital Economy programme. Throughout 2022, Rostelecom provided data services for previously connected social infrastructure facilities and continued installing base stations under the second phase of the Bridging the Digital Divide project.

In 2022, we ensured video surveillance and online broadcasting services at the primary and secondary periods of the Unified State Examination by using over 132 thousand cameras to support seamless data transmission and providing a secure single data network for educational institutions. Other projects of Rostelecom included the continued development of the Unified Biometric System.

Our digital projects for various sectors of the economy and the public administration change the lives of millions of people for the better and contribute to the improvement of the existing telecom architecture, boosting information security, bridging the digital divide, and bringing communications services and internet access to public authorities, local governments, healthcare facilities, and other social infrastructure facilities.

At the end of 2022, Rostelecom telemedicine services were successfully delivered in 16 regions of Russia, with over 100 thousand consultations provided in total. Over 8,000 new CCTV cameras were connected, over 1,000 new traffic enforcement cameras were installed, and 22 new weigh stations were built during the year.

As one of Russia's largest employers, Rostelecom is committed to providing comfortable working conditions for its people and the company creates opportunities for development and self-fulfilment. During 2022, Rostelecom's labour costs exceeded RUB 111 billion while occupational health costs came in at RUB 934.5 million.

>111

RUB BILLION ROSTELECOM'S
LABOUR COSTS IN 2022

We consistently invest in human capital development, all the more so, because today progress in areas that are key to the business and the industry is driven by the most talented and motivated employees. Rostelecom provides its employees with a wide range of training programmes and drives labour productivity by improving working conditions and by implementing social support and process digitisation programmes. In the course of 2022, the Company invested RUB 456 million in employee training.

132

THOUSANDS OF CAMERAS WERE USED
TO SUPPORT SEAMLESS DATA TRANSMISSION
DURING THE UNIFIED STATE EXAM

Rostelecom has been successfully adopting sustainable business development practices and using advanced technologies to train employees and educate customers as well as protect the environment and better the well-being of society. Rostelecom strictly complies with all applicable laws, the company is guided by the principles of transparency and accountability and is committed to ethical stakeholder engagement.

Rostelecom seeks to reduce its environmental footprint and foster an environmental culture in society. During the year, the Company invested RUB 175 million in environmental projects and activities.

175

RUB MILLION INVESTED IN ENVIRONMENTAL
PROJECTS AND ACTIVITIES

On behalf of the Board, I would like to thank my colleagues and all of Rostelecom's employees for their outstanding performance. The direction that we have set – to grow Rostelecom into a leading integrated provider of digital services and products and a premium partner for all customers – will remain unchanged in the coming years.

Sergey Ivanov. Chairman of the Board of Directors PJSC Rostelecom

2.2. Letter from the President

Dear Shareholders, Partners and Colleagues,

Over 2022, Rostelecom's team continued to work hard, delivering steady growth in key financial and operational performance metrics.

More crucially, we maintain the high quality of the services and proprietary products we provide to our customers, confirming our status as an industry leader, Russia's largest integrated provider of digital services and solutions and a reliable partner for society, businesses, and the state.

In the course of 2022, Rostelecom's revenue hiked by 8 %, OIBDA - by 15 %, free cash flow - by 39 %, and net profit - by 11 %. The management's efforts to ensure operational resilience in the new economic environment boosted our operational and financial performance and helped achieve our targets. Rostelecom markedly bolstered its flexibility, adapted to the new economic environment, and has a safety margin both technology-wise and financially. At the same time, we continued to hone our operational efficiency and streamline our real estate portfolio, with its total area down by 4 % by 2022-end. During the year, the Company also succeeded in reducing its leverage from 2.3x to 2.0x of net debt (including lease liabilities)/OIBDA.

A logical intermediate outcome of our progress on the corporate Development Strategy 2025 is the accelerated growth of revenue from digital products and services. Our focus on prospective growth as a digital customer-centric business driven by people and innovative data processing and transmission technologies is paying off. The key contribution to revenue growth in 2022 came from digital clusters, the promotion of end-to-end digital products in the B2B/B2G segment and the mobile business.

Revenue from digital services rose by 38 % in 2022, driven by the development of platform solutions for the digital government and the promotion of the Digital Region project as well as information security services and cloud solutions.



Rostelecom continues to work on and operate the e-government infrastructure providing citizens and organisations with digital access to public services.

The Company is actively adding in-demand public services to the Public Services Portal, which is becoming increasingly popular among Russians. The number of registered portal users has already topped 100 million, with a daily audience of over 10 million, while the number of monthly services provided over the past three years has tripled to 18 million. In 2022, the Company also further ameliorated the functionality of the Public Services Portal-related mobile apps. The Gosuslugi Auto mobile app now offers the Europrotocol Online service across Russia, whereby drivers can complete road accident reports without traffic police officers and present their driving license in a digital format (as a QR code). The Gosuslugi Culture mobile app can now be used to buy movie tickets (over 5.7 million tickets were sold using this feature in 2022).

On top of this, Rostelecom carried on to expand the footprint of its seamless digital healthcare solutions. Rostelecom's Health products are featured across 49 Russian regions and include medical and laboratory information management systems, a unified radiology information system, a central archive of medical images, an integrated emergency medical care information system, and a platform for telemedicine consultations and the remote monitoring of patients with chronic diseases. Over 50 % of the country's doctors are covered by our digital healthcare products, while some of them have started using telemedicine consultations in their practice, with over 100 thousand such consultations provided in 2022. During the year, Rostelecom launched the Become a Blood Donor service on the Public Services Portal and created a unified bone marrow donors registry. One of the Company's undisputed social-impact milestones in this area has been the digitisation of conventional healthcare services: we have organised electronic medical appointment bookings for as many as 5 million patients, with as many as 35 million health insurance policies, 10 million birth or death certificates and 1.5 million weapon possession certificates issued electronically to date.

As part of its efforts to deliver strategic priorities in 2022, Rostelecom consolidated its leadership in the data centre market, both in terms of active rack count and revenue growth, and in innovative cloud

technology, primarily through a 39 % revenue increase in the cloud service segment. The Company's promotion-driven revenue from private cloud services almost quadrupled. Our revenue from VPN services grew by 18 %, partially due to contracts with major customers.

15%

OIBDA HIKE IN 2022

Rostelecom's mobile business also remains our key growth driver. Our engagements with high-value customers both to further enlarge the existing customer base and win new subscribers as well as bettered customer loyalty and a high quality of services drove the accelerated growth of our mobile operator's financial performance. Over 2022, our subscriber base went up to 48.1 million amid more extensive mobile data traffic and reduced churn. We maintain our focus on driving quality base growth by targeting active data users, our biggest profit generator.

During all of 2022, the Wink platform, which combines IPTV and online video streaming functionalities, continued to rapidly win new customers by offering unique subscriptions and exclusive content. Throughout the course of 2022, the base of active Wink users skyrocketed by 57 % to almost 5 million, while the number of paid subscriptions more than doubled over the same period. As a result, Wink ranked second among Russia's largest online video streaming services by the number of paying subscribers. In the year in question, Rostelecom and National Media Group set up a strategic

alliance to merge the Wink and more.tv video services into a joint venture operated under the Wink brand.

We receive high satisfaction scores from our retail customers for the quality of services from our Smart Home product offering. The Rostelecom Key service is used by more than 400 thousand households all across Russia. We sold over 800 thousand cameras to retail customers during the year to set up cloud video surveillance for home security, which also contributed to a more than twofold year-on-year increase in service revenue.

Our Information Security cluster's positive revenue momentum continued during the year I would particularly emphasise the 47 % increase in revenue from the JSOC family solutions and the 19 % rise in revenue from our proprietary products, consolidating Rostelecom's leadership in the Russian cybersecurity market.

In 2022, the number of fibre-to-the-home customers grew faster than the market. The steady rise in the customer base for our B2C fibre broadband service was supported by Rostelecom's market leadership by gross additions. The number of business and government customers with fibre-optic connectivity also grew noticeably.

>40

MILLION HOUSEHOLDS WERE COVERED BY MODERN HIGH-SPEED FIBRE

During 2022, Rostelecom significantly extended the capacity of its backbone network to 43.4 Tbps to provide customers with high-quality digital services driven by modern communications technologies. Over 40 million households were covered by modern high-speed fibre.

During the year, we continued to execute priority strategic projects, including those within the Digital Economy national programme. Each of these initiatives makes a difference for millions of people and is a milestone in building a common, advanced digital space in Russia.

Rostelecom makes a significant contribution to the sustainable development of society and the telecom industry. We create long-term economic, environmental, and social value for both current and future generations.

Investing in human capital is one of our top priorities. Rostelecom has in place a range of programmes for employee motivation and skill upgrading as well as for onboarding young talent. The Company provides its employees with a wide range of training courses and drives productivity by ameliorating working conditions, social support, and process digitisation programmes.

Rostelecom made it to the top of the 2022 Corporate Philanthropy Leaders rating in a competition held by the Donors Forum with the support of Russia's Federation Council, Ministry of Science and Higher Education, Ministry of Culture, and Ministry of Economic Development among other partners. The Company also won the Best Corporate Social Investment Programme in the Area in Terms of Sustainability and Business Strategy category with its Digital Region social investment programme.

The main challenge for the management team in the near future is to adapt to the changing market conditions, in particular, in terms of selecting key investment projects and finding new sources of business growth.

I would like to express my sincere gratitude to the entire Rostelecom team for their consistently sound performance despite all headwinds. We continue to devise unique products and solutions that are in demand in the market by leveraging advanced and, substantially, Russian technologies.

We are looking forward to pursuing new ambitious projects, which means more exciting challenges for our team that we are sure we will pass with flying colours!

Mikhail Oseevsky

President of PJSC Rostelecom

2.3. Strategy 2021–2025

Over the course of 2021, Rostelecom adopted a new strategy for 2021–2025¹, maintaining the focus of its development direction on its transformation into an integrated provider of digital services and a reliable partner for society, business, and the state.

Key priorities of the strategy for 2021–2025

1

Pursue a smart growth in traditional businesses to provide a higher return on investment and a steady cash flow

2

Outperform the market in selected new business segments – achieve leading positions

3

Maintain and expand Rostelecom's role as the key partner in digitalisation of socially significant services and projects

4

Increase operational efficiency in traditional business segments

¹ Approved by the Board of Directors on 19 April 2021 (Minutes No. 9, dated 20 April 2021).

ROSTELECOM 2025 VISION

Rostelecom's ambition is to maintain its leadership in all traditional communications segments while successfully developing digital businesses, including through new strategic partnerships.

Rostelecom's vision for its future development is focused on becoming a digital customer-centric group of companies driven by human capital and cutting-edge digital data processing and transmission technologies ([for more details, see 2021 Annual Report](#)).

WHO WE ARE



A DIGITAL PARTNER FOR SOCIETY, BUSINESS, AND THE STATE

A CUSTOMER-CENTRIC DIGITAL GROUP OF COMPANIES

- | | |
|---|---|
| 1 _____
A powerhouse that shapes the Russian telecommunications market | 2 _____
The No. 1 player in selected new business segments |
| 3 _____
Customer-centric transformation, cost efficiency leadership | 4 _____
Sustainable financial growth |

HOW TO GET THERE



PEOPLE

DIGITAL FRAMEWORK

- | | |
|---|---|
| 1 _____
Network infrastructure and distributed data centre network | 2 _____
New solutions: information security and cloud services |
| 3 _____
Leading role in digitising public services | 4 _____
Own IT cluster |

1

Pursue a smart growth in traditional businesses to provide a higher return on investment and a stronger cash flow

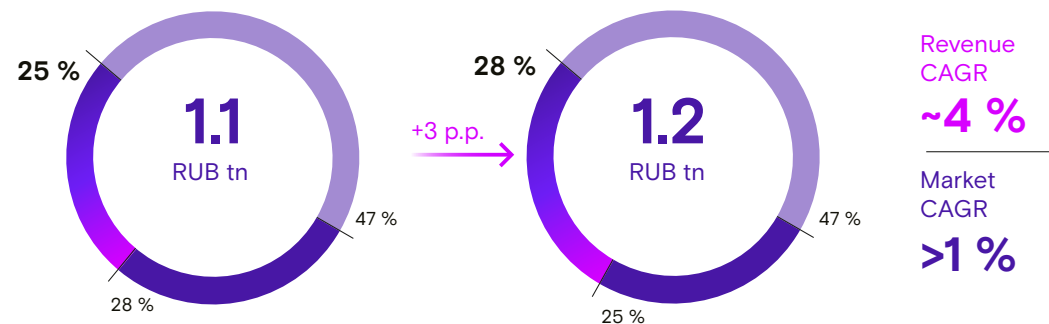
According to the strategy for 2021–2025, Rostelecom is transforming itself into a powerhouse that shapes the Russian telecommunications market. The Company plans to secure its leadership in traditional telecommunications services in

terms of subscribers and revenue with a target base of over 100 million retail customers, while maintaining a leading position as a partner for business and the state.

MARKET SHARE¹

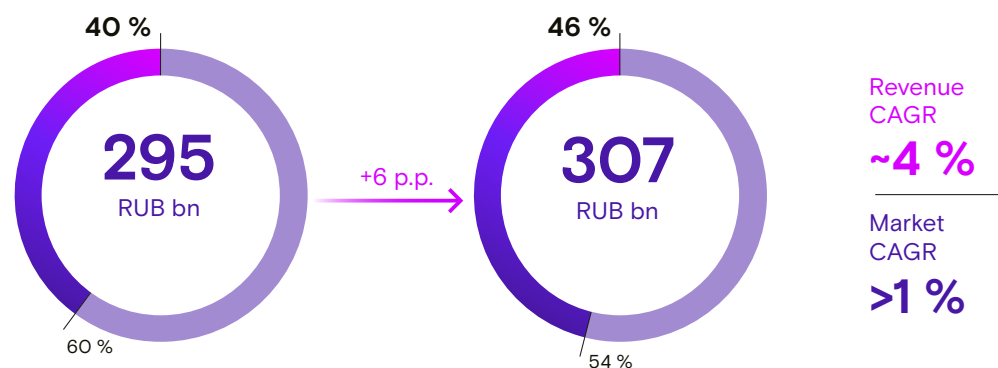
B2C²

— Rostelecom
— Others
— No. 1 player



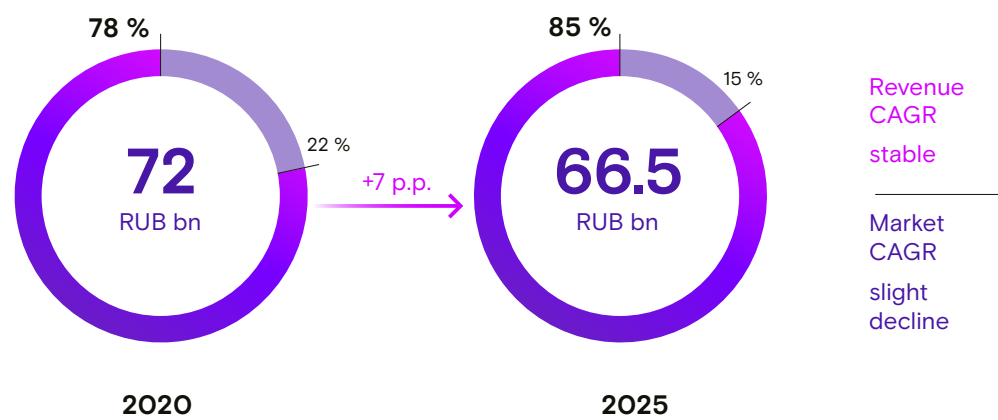
B2B/G³

— Rostelecom
— Others



B2O⁴

— Rostelecom
— Others



¹ Source: market forecasts by TMT Consulting, J'son & Partners Consulting, IKS-Media, operators' filings, Company data.
² B2C includes fixed telephony, broadband, mobile, cable TV, and IPTV services.
³ B2B includes fixed telephony (including virtual PBX and IP), broadband, mobile, VPN and channel lease, and M2M.
⁴ B2O includes interconnection and traffic transit services, IP transit, VPN and channel lease, and infrastructure services.

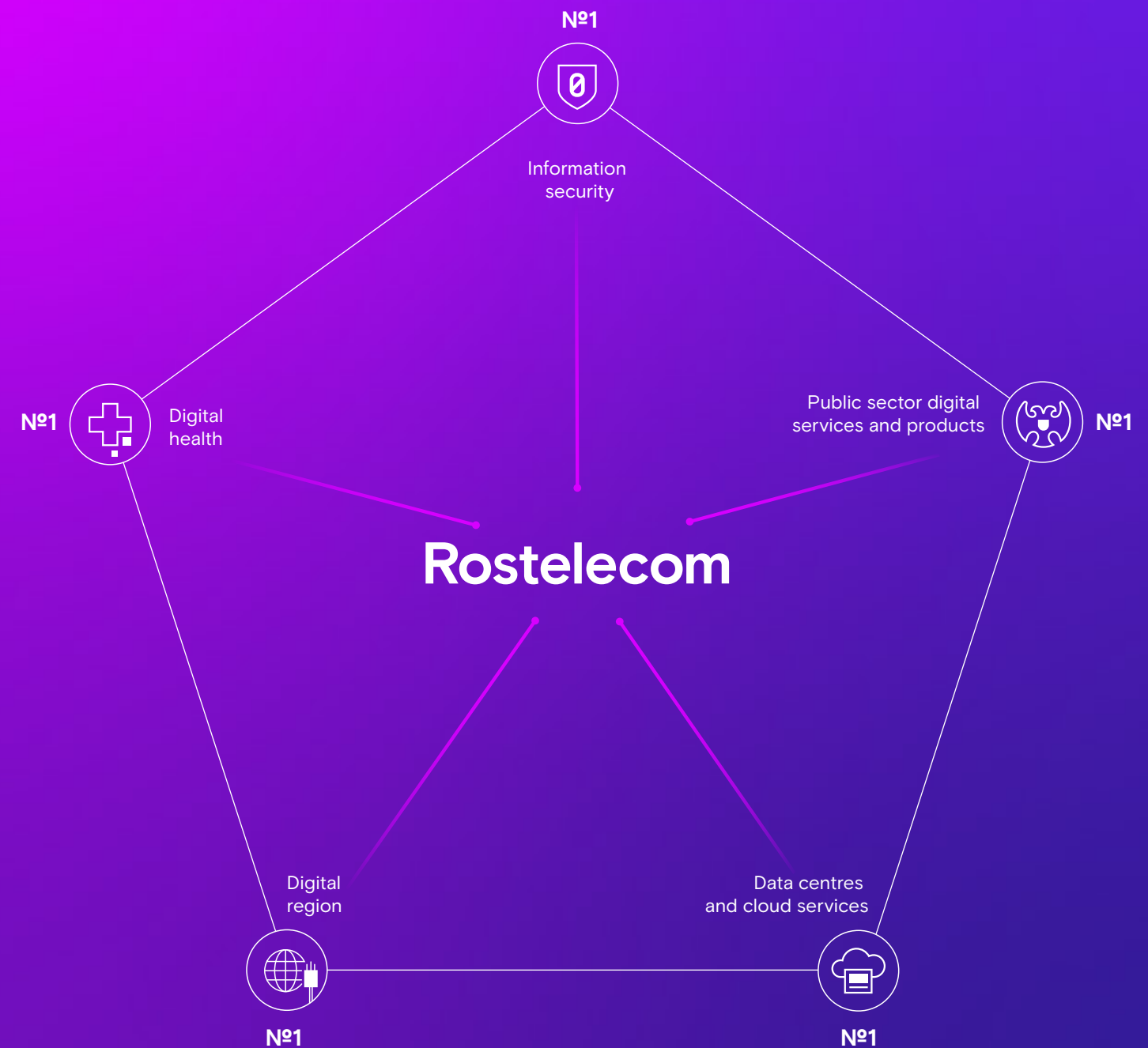
2

Outperform the market in selected new business segments – achieve leading positions

Rostelecom will not build a wide ecosystem at its own expense. When developing new digital businesses, the Company will focus on a limited number of adjacencies to its key IT and telecom products, with a priority objective to become the No. 1 player in each selected market by 2025.

In addition to the Company's own resources, Rostelecom plans to use venture projects, partnerships, and M&A to develop new businesses.

The strategy provides for developing five new businesses in the cluster format.



3

Maintain and expand Rostelecom’s role as the key partner in digitalisation of socially significant services and projects

AMBITION

REMAIN THE GOVERNMENT’S KEY PARTNER AND CONSOLIDATE THE COMPANY’S LEADERSHIP

KEY PRIORITIES



Be the No. 1 operator of choice in all traditional services



Become the No. 1 mobile operator for government customers



Develop the E-Government project and interdepartmental cooperation systems



Achieve leadership in the provision of Digital Region services



Support the implementation of healthcare projects



Participate in the Digital Economy national project and address tasks around the provision of communications services (the Bridging the Digital Divide project, connecting social infrastructure facilities to the Internet, etc.)

TARGETS

Nº1

MAINTAIN LEADERSHIP IN PROVIDING TRADITIONAL SERVICES TO GOVERNMENT CUSTOMERS

Nº1

MAINTAIN AND EXPAND ROSTELECOM’S ROLE AS THE KEY PARTNER IN DIGITALISATION OF SOCIALLY SIGNIFICANT SERVICES AND PROJECTS



4

**Increase operational efficiency
in traditional business segments**

AMBITION

BOOST BUSINESS EFFICIENCY THROUGH COST OPTIMISATION

KEY LEVERS



Reduce the share of personnel costs in revenue, including by increasing labour productivity



Optimise other indirect costs, including:

- materials, repairs and maintenance;
- other operating expenses.¹



Better operational efficiency:

- Reduce the number of management levels
- Streamline the asset portfolio, including the sale of real estate
- Review and simplify key processes through the operational efficiency improvement programme

2025 TARGETS

20%

**TARGET SHARE OF PAYROLL
IN REVENUE**

UP TO 2 P.P.

**OIBDA MARGIN HIKE DUE
TO THE OPTIMISATION
OF OTHER COSTS**

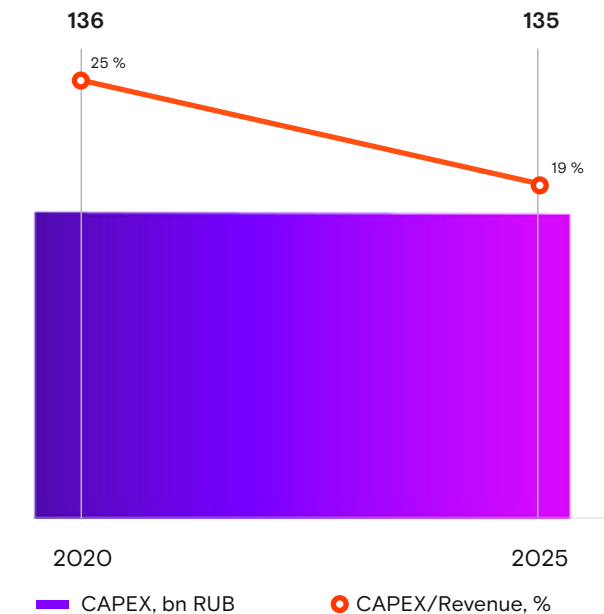
>40%

TARGET OIBDA MARGIN

**Enhanced
efficiency
in traditional
businesses will
be achieved
through:**

- cost optimisation, including costs associated with organisational transformation (reduction of management levels)
- changes in the approach to investment
- a customer approach in building development and optimisation models
- optimisation of the asset portfolio, including the sale of real estate
- review and simplification of key business processes
- reduction in the share of personnel costs in revenue, including by increasing labour productivity.

A smart approach to investment²



The Company will strive to implement a smart approach to investments, which involves:

- transition to a less capital-intensive growth model in traditional businesses
- investment focused on priority regions in traditional businesses
- larger investment in the development of the fastest-growing products.

¹ Including maintenance expenses; security services; support and maintenance of software and databases; third party services; administration-related expenses; and fees for audit, information and consulting services, etc.

² The forecast takes into account investments only in existing/known government projects.

ROSTELECOM GROUP'S 2025 STRATEGIC TARGETS

REVENUE

revenue increase

>700 RUB
bn

OIBDA

OIBDA increase

x1.5

NET PROFIT

net profit increase

x2

NET DEBT

achieve the target
Net debt¹ / OIBDA

<x2.5

CAPEX

ensure that capital expenditure (CAPEX)
in absolute terms is at the 2020 level

ESG INITIATIVES

As part of its strategy to 2025, Rostelecom continues to consistently pursue its stated ESG goals, highlighting the importance of the Company's sustainability initiatives.

E

Environmental

- Reduce energy consumption (excluding the Data Centres and Cloud Services cluster) by 15 % by 2025-end
- Increase the use of renewable energy
- Implement programmes to collect and recycle old cable networks, network equipment and subscriber devices
- Launch Green Office environmental management systems across all offices by 2025.

S

Social responsibility

- Gender equality: achieve female representation both in management and across the Company at 40 % by 2025
- Regional equality: functional decentralisation through Company-wide competence centres in the regions and creation of equal opportunities for career migration.

G

Corporate governance

- Integrate ESG in procurement and supply management by 2025
- Promote and instill ESG principles among customers, including by offering commercial products and solutions that enable their ESG journeys.

¹ Net debt includes lease liabilities.

Summary report on the strategy results in 2022

Nº	Priority	2022 result	2025 ambition	Comment
1	Pursue smart growth in traditional businesses to provide a higher return on investment and a stronger cash flow	Revenue over RUB 627 bn	Revenue RUB 700 bn+	Targets achieved ahead of plan
2	Outperform the market in selected new business segments – achieve leading positions	Revenue growth from new business areas 26 %	Become the No. 1 player in each selected market	Growth rate above / in line with the market
3	Maintain and expand Rostelecom’s role as the state’s key digitalisation partner	Implemented projects: <ul style="list-style-type: none">Fan IDsGosuslugi Auto appDigital health projects	Remain the state’s key digitalisation partner	Rostelecom successfully implemented important projects to digitise public services
4	Increase operational efficiency in traditional business segments	CAPEX/Revenue 19 %	CAPEX of RUB 135 bn (CAPEX/Revenue <19 %)	The CAPEX to Revenue ratio is within the targeted range

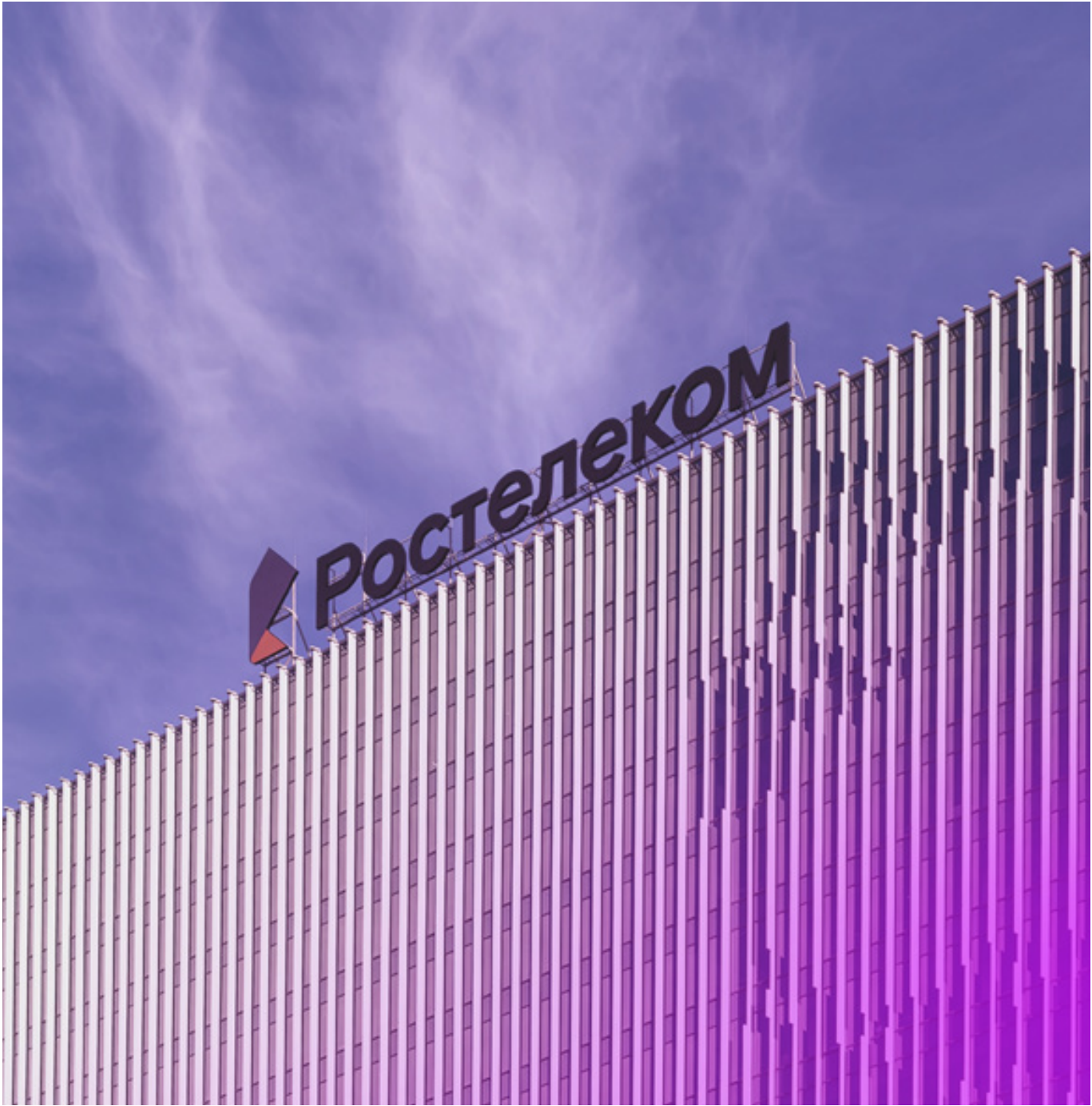
Long-Term Development Programme

In 2021, Rostelecom started implementing a new Long-Term Development Programme for 2021–2025¹, developed in line with Rostelecom’s updated Development Strategy for 2021–2025², directives of the Russian Government and methodological recommendations of the Russian Ministry of Economic Development.

The Long-Term Development Programme covers all aspects of Rostelecom’s activities both in strengthening market positions in traditional businesses and achieving leadership in new

business areas, infrastructural and innovative development, digital transformation, and business efficiency.

The activities outlined in the Programme are supported by the necessary resources and are balanced in terms of the Company’s financial capabilities.



¹

Approved by the Board of Directors on 30 December 2021 (Minutes No. 07, dated 30 December 2021).

²

Approved by the Board of Directors on 19 April 2021 (Minutes No. 9, dated 20 April 2021).

2.4. Business model

RESOURCES

BRAND AND REPUTATION

Nº1 **Nº1**

by awareness
in the broadband
and Pay TV segments¹

by NPS
in the mobile
services²

INTELLECTUAL PROPERTY

Stable growth
in revenue from
proprietary products

INFRASTRUCTURE

40.3 m households have
access to fibre

EMPLOYEES

119 thsd – total
headcount

FINANCE

116.9 rub bn – CAPEX

¹ Source: IRC Group
² Source: IPSOS

LEADERSHIP IN KEY MARKETS

SEGMENTS



B2C

Broadband, Pay TV / Wink,
mobile, gaming services



B2B/G

Broadband + VPN, virtual PBX,
Wi-Fi, telephony



B2O

Traffic routing, interconnection,
and traffic transit services,
O2O services

CLUSTERS

DATA CENTRES AND CLOUD SERVICES



IaaS, PaaS, SaaS, TIONIX,
NGENIX, co-location, CDN,
BASIS cloud platform

INFORMATION SECURITY



Solar JSOC, Solar Dozor, Solar
addVisor, Solar appScreener

DIGITAL REGIONS



Traffic enforcement cameras,
electricity meters, weight and
dimension compliance, ACS,
Safe City

PUBLIC SECTOR DIGITAL SERVICES AND PRODUCTS



Public Services Portal, Unified State
Examination, Unified Biometric System,
All-Russian Population Census,
Bridging the Digital Divide

DIGITAL HEALTH



Unified digital platforms of medical
information systems, laboratory
information management systems,
radiology

STRATEGIC PRIORITIES

RISK MANAGEMENT

ESG INITIATIVES

VALUE CREATION FOR STAKEHOLDERS

CUSTOMERS



Advanced, high-performance
digital ecosystems
covering a wide range
of tasks

EMPLOYEES



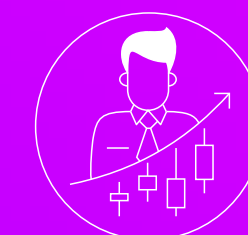
1,000

participants of the share
option programme

1.4

rub bn invested
in our people

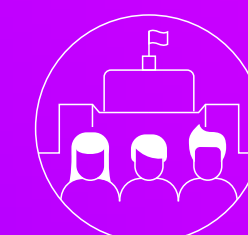
SHAREHOLDERS



4.56

rub – total dividend per share

GOVERNMENT AND SOCIETY



11.5

rub bn – taxes, environmental
spending and charity expenses
in 2022

2.5. Industry overview and competitive analysis

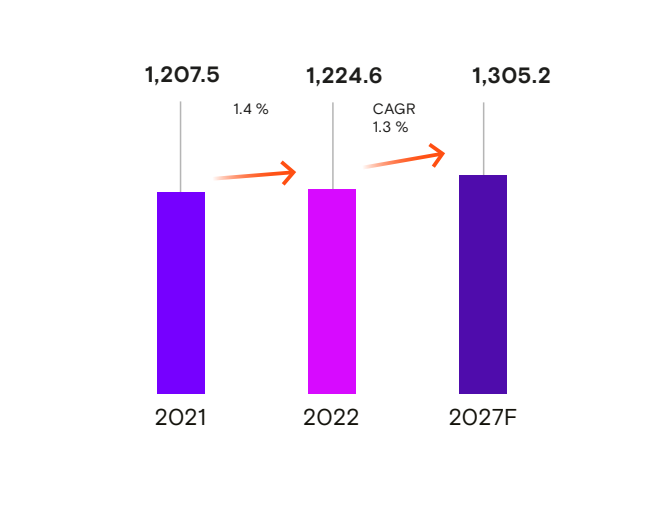
Telecom services for retail customers (B2C)

Experts estimate that the populations of key Russian regions and cities will demonstrate an accelerated growth. According to the Federal State Statistics Service (Rosstat), higher migration flows between regions will lead to a vast portion of the population becoming concentrated in a few large regions and urban agglomerations.

Rostelecom is the only universal market participant with a significant presence across all market segments, including mobile, broadband, pay TV, and fixed-line telephony. At the same time, major players have consolidated the mobile and fixed-line segments between themselves, while the broadband and online video streaming services markets remain fragmented as the combined market shares of other players exceed 30 %.

The Russian retail telecom market is expected to grow at a CAGR of about 1%–2 % until 2027. The mobile market's growth will remain the key driver, primarily due to a higher-than-average revenue per user (ARPU) levels. The online video streaming services market will also grow apace, potentially exceeding RUB 126 billion in 2027 primarily due to customer base growth and market consolidation. Experts expect the subscriber base to be generally stable as declines in fixed-line telephony subscribers and the optimisation in mobile SIM card numbers will be offset by a growth in pay TV and online video streaming service subscribers.

B2C market, bn RUB



Source: TMT Consulting

B2C market in 2022 / revenue shares of major players



Source: TMT Consulting

¹ Excluding Rostelecom's multi-SIM cards.

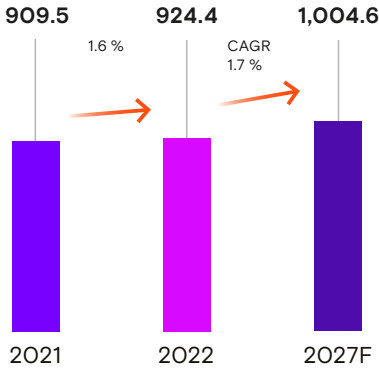
Mobile market

The number of SIM cards in the market is expected to decline as costs are optimised and the number of additional SIM cards held by subscribers decreases. Operators’ revenue growth will be driven primarily by a higher quality of the subscriber base and larger service bundles with value-added digital services. While the number of mobile data users grows every year, they will also place increased demands for data speed and the ability

to transfer large data volumes, with mobile players trying to match their expectations with consistently high levels of service quality.

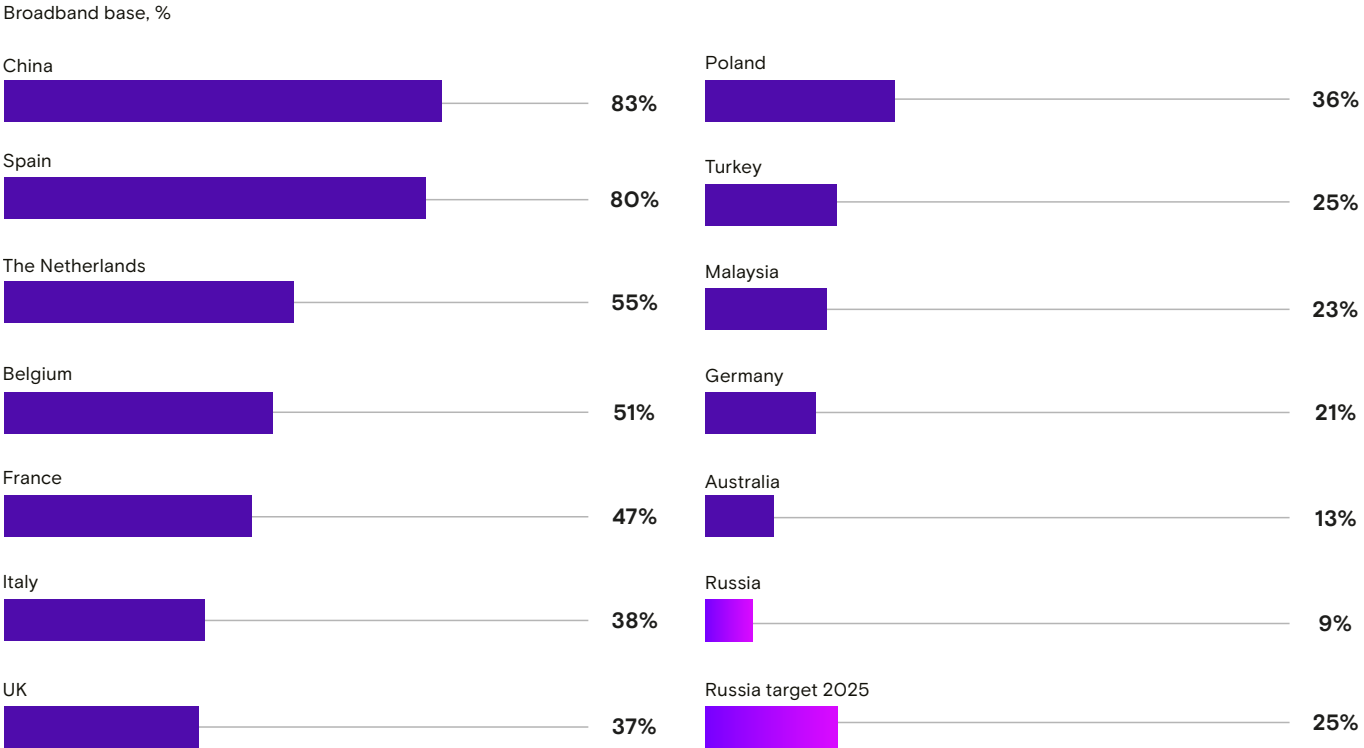
Increasing the fixed mobile convergence (FMC) can contribute to reducing the subscriber churn and higher total ARPU. FMC has a substantial growth potential due to the currently low penetration of the broadband user base in Russia and the possible expansion in the number of services per user.

Mobile market, bn RUB



Source: TMT Consulting

FMC penetration



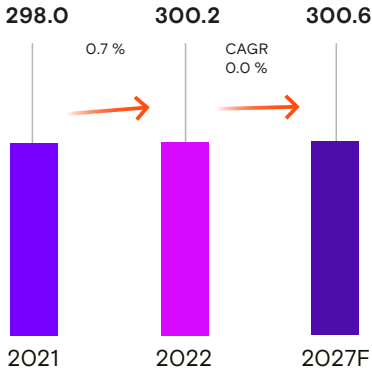
Source: Analysys Mason

Fixed-line market (broadband, pay TV and fixed telephony)

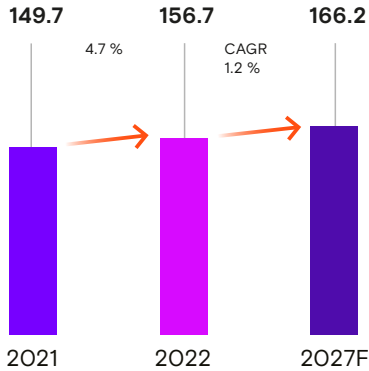
In recent years, the fixed-line market (broadband, pay TV and fixed telephony) has been growing growing at about 2 % annually, but the market has reached saturation in broadband, its core fixed-line service, which dampens its further growth. The broadband market continues to be driven primarily by new

home builds. In pay TV, only the IPTV segment is expected to show a positive trend, but this will depend both on the broadband performance and the growth of its competitor, the OTT¹ market.

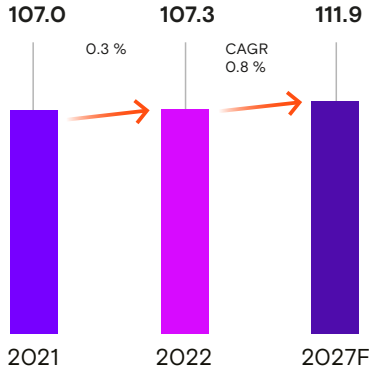
Fixed-line communications market, bn RUB



Broadband market, bn RUB

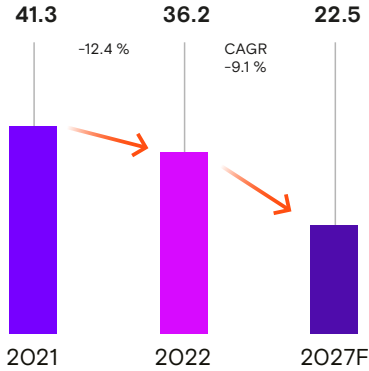


Pay TV market, bn RUB



Source: TMT Consulting

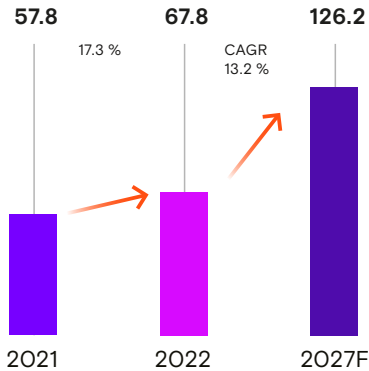
Fixed-line telephony market, bn RUB



Online video streaming services (VoD/OTT)

Online video streaming services are among the fastest growing telecom markets with a CAGR² of around 13 % until 2027. Today, the major players in the Russian online video streaming services market include Okko, ivi, Kinopoisk, and Wink (Rostelecom). By 2027, the online video streaming services market is expected to become more consolidated and still have the potential to grow. The penetration of OTT subscriptions will boom to 45 %, with the market expected to grow rapidly until 2030, given that the penetration of online video streaming services is much higher in more mature markets at approximately 75 %. The hike in Smart TV penetration from 50 % in 2020 to 70 % by 2030 and the demand for original content will be among the key growth drivers. Customers are expected to use two or three online video streaming service subscriptions to have access to various content. Within the next four or five years, online video streaming services are expected to increasingly integrate with large ecosystems such as banks, telecom operators, and digital companies.

Online video streaming services market, bn RUB



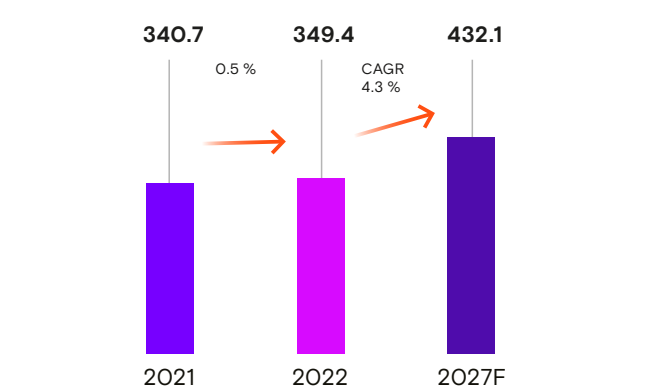
¹ Over the Top – video signal delivery from a content provider directly to a user device over data networks without direct contact with a telecom operator.
² Compound Annual Growth Rate.

Telecom services for business and government customers (B2B/B2G)

The Russian business in these segments is highly consolidated: the top three industries account for about 70 % of the aggregate revenue of Russian operators, while Moscow, the Moscow Region, and Saint Petersburg generate about 50 % of all relevant revenues in Russia.

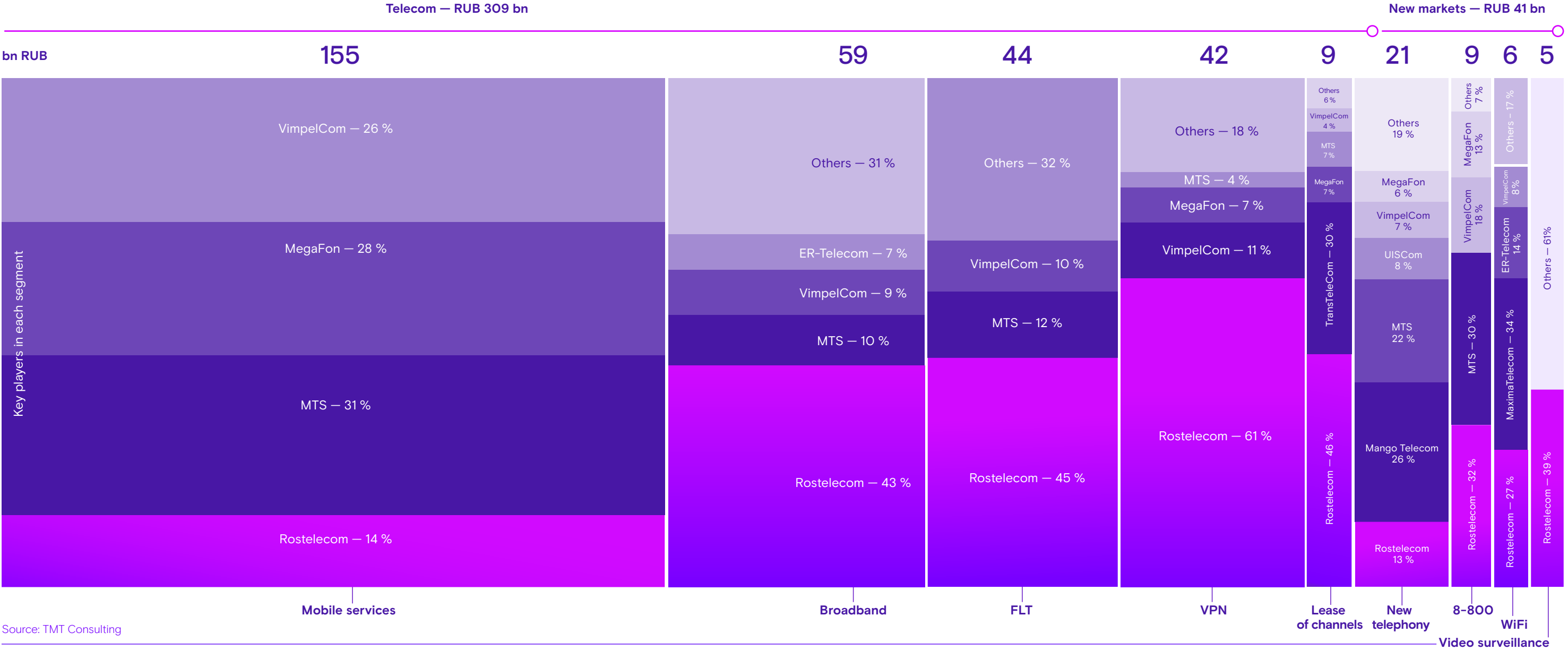
The aggregate revenue pool of traditional and new B2B/B2G telecom services is estimated at about RUB 350 billion, with CAGR to 2027 expected to hover at around 4 %–5 %. The declining share of traditional services is expected to be offset by new telecom products (New Telephony, 8 800, Wi-Fi, and Video Surveillance), which are rapidly growing but are still no match for traditional services by market size in monetary terms.

B2B/B2G traditional telecom market, bn RUB



Source: TMT Consulting

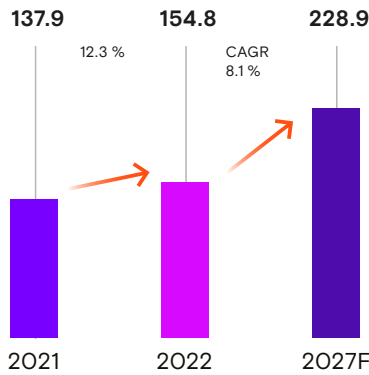
Telecom and adjacent markets (B2B/B2G), 2022



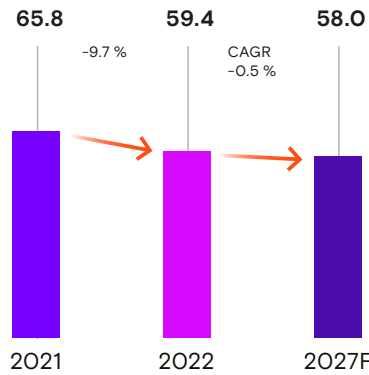
Source: TMT Consulting

Growth forecasts for specific product markets

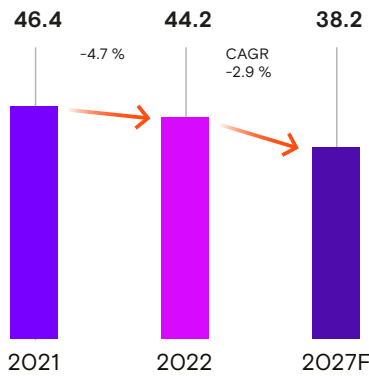
Mobile market growth forecast, bn RUB



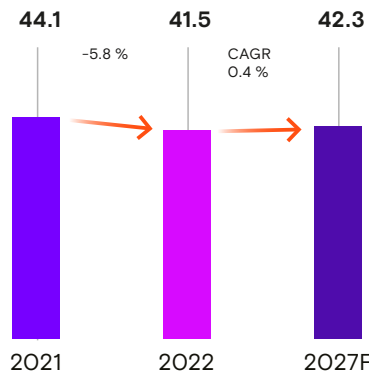
Broadband market growth forecast, bn RUB



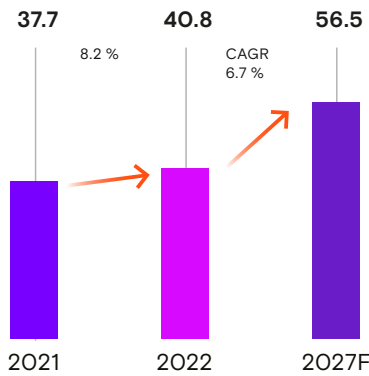
Fixed-line telephony market growth forecast, bn RUB



VPN market growth forecast, bn RUB



New markets growth forecast, bn RUB



Source: TMT Consulting

The B2B/B2G segment of the mobile market is expected to maintain its growth momentum in the medium term, with tailwinds from the higher contribution from value-added services (IoT, A2P SMS,¹ etc.).

For traditional communications services, the market size was affected by the completion of the third phase of the nationwide project to connect social infrastructure facilities to the internet. Looking forward, the traditional communications market is expected to grow steadily, driven by slight increases in VPN services as operators advance their B2G projects and amid a slight decline in channel lease services as customers migrate to broadband and VPNs. Other tailwinds for the market include a slight fall in broadband and fixed-line telephony services amid price competition and budget optimisation in the B2G segment.

B2O market

In recent years, the Russian telecommunications market has in effect been stabilising. According to TMT Consulting, J'son & Partners Consulting, iKS-Consulting, and Rostelecom's estimates, the Russian B2O segment has demonstrated a moderate downward trend as compared to the industry overall. According to consolidated estimates, the respective market size is expected to reach RUB 187 billion by 2025.

Rostelecom is the leader in the B2O market, with a market share exceeding 47 % in 2022. There are also several other significant market players (TransTeleCom, MegaFon and VimpelCom), with the largest of them accounting for no more than 15 % of the market.

The total B2O market can be broadly divided into traditional telecom services (including interconnection and traffic transit services, IP transit, lease of channels, and VPN) and infrastructure services.

Growth in the new markets will mainly come from virtual PBX and cloud video surveillance. The positive trends in the virtual PBX market will slow down; however, the 2022–2027 average CAGR will be close to 11% thanks to the regional expansion and growth of solutions for medium and large businesses based on virtual PBX (voice analytics, call tracking, voice assistants, etc.). The cloud video surveillance market will grow at double-digit rates, with CAGR averaging around 10 % over 2022–2027. The tailwinds will include the deployment of the Digital Economy national programme, as well as the introduction of the Smart City and Safe City solutions in Russian regions and the growth of intelligent transport systems.

By now, two major divergent trends have taken shape in the market:

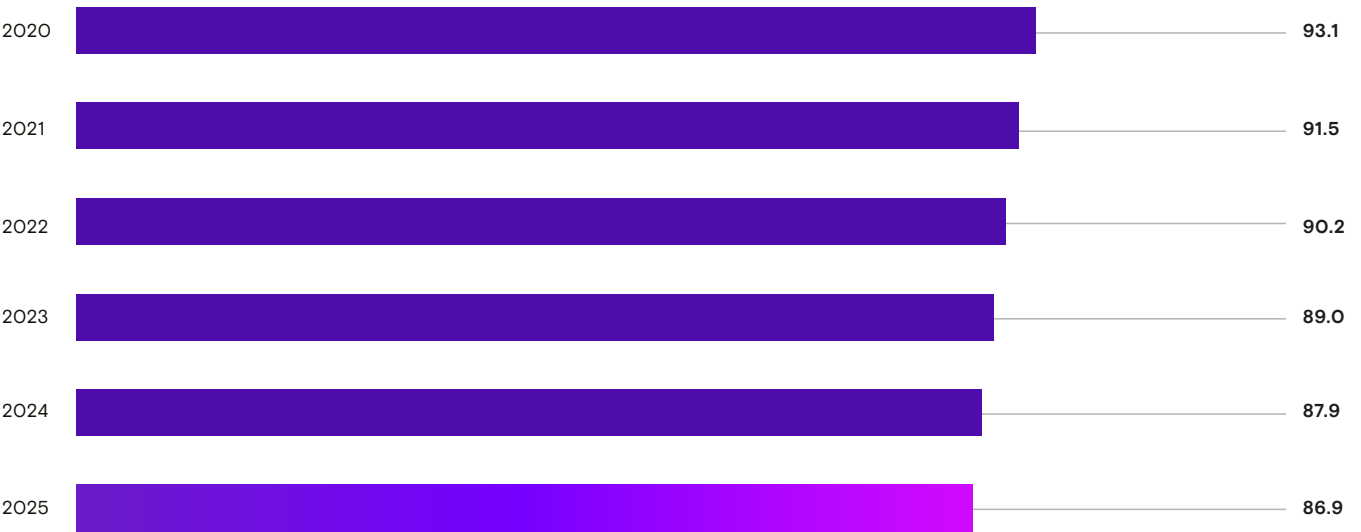
- Infrastructure market growth;
- Traditional B2O market decline.

The negative trend in the traditional B2O market is driven by a significant decline in the size of the interconnection and traffic transit services market which has historically accounted for almost half of the total market size.

The projected evolution of the infrastructure services market until 2025 does not imply a large-scale rollout of the 5G technology and a dramatic infrastructure expansion while requiring only a limited scope of preparations.

Therefore, we can point at changes in the usual structure of the B2O market.

Russian B2O market evolution in 2017–2019 and a run-rate forecast to 2025, bn RUB



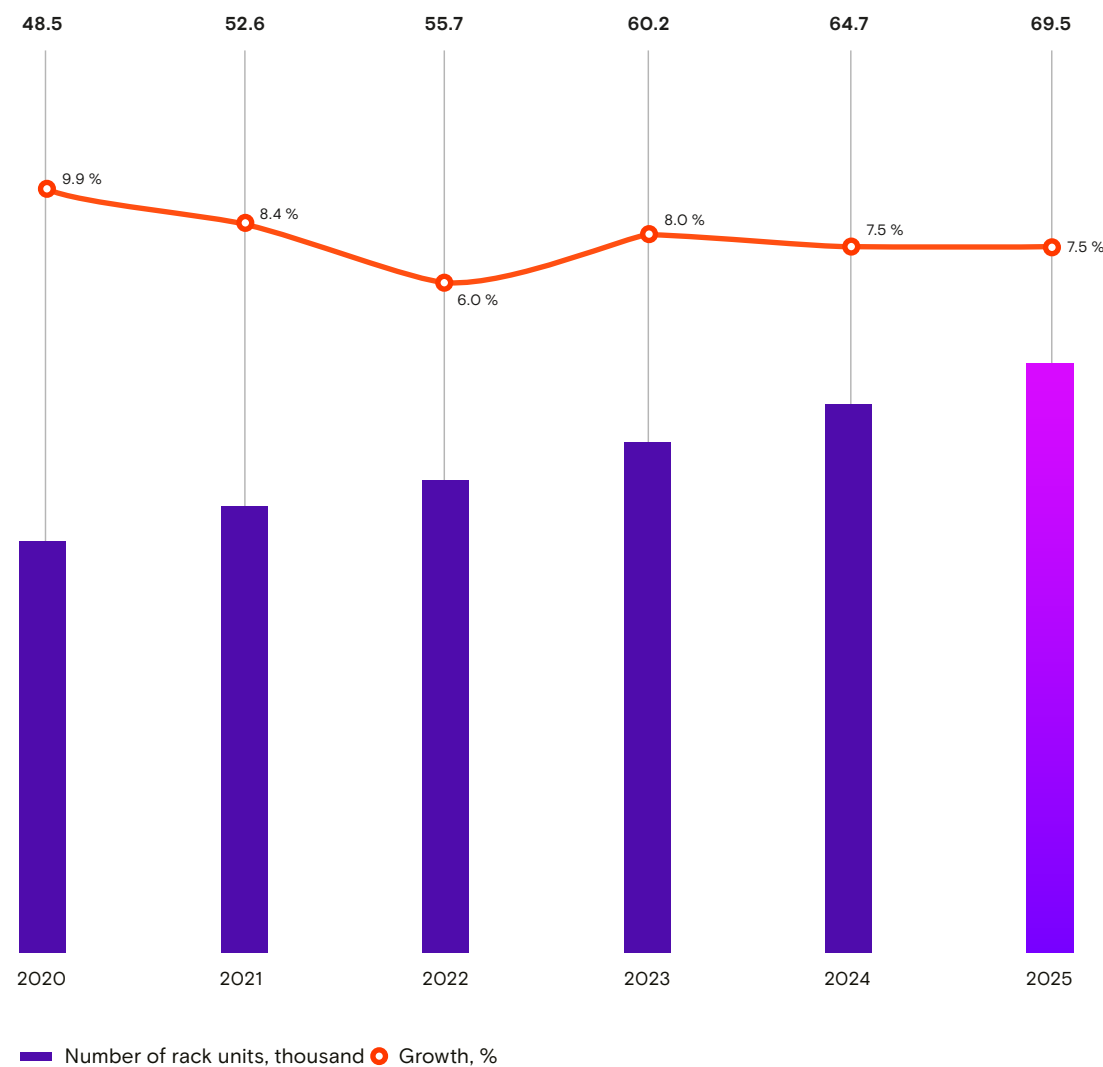
Source: J'son & Partners Consulting

¹ Application-to-Person SMS Messaging – the process of sending mobile messages from an application to a user's mobile phone.

Data centre and cloud solutions market

While in 2021 the COVID-19 pandemic was the key factor affecting the data centre market, in 2022 the segment's growth was dampened by the pressure of the sanctions on the Russian economy. Direct cooperation was virtually cut off between Russian and major international technology companies and key vendors and solution providers. At the same time, large Russian companies and government organisations stepped up their efforts to relocate their computing infrastructure to Russian data centres.

Russian commercial data centre market evolution forecast (base-case), 2020–2025



Source: iKS-Consulting

Data centres

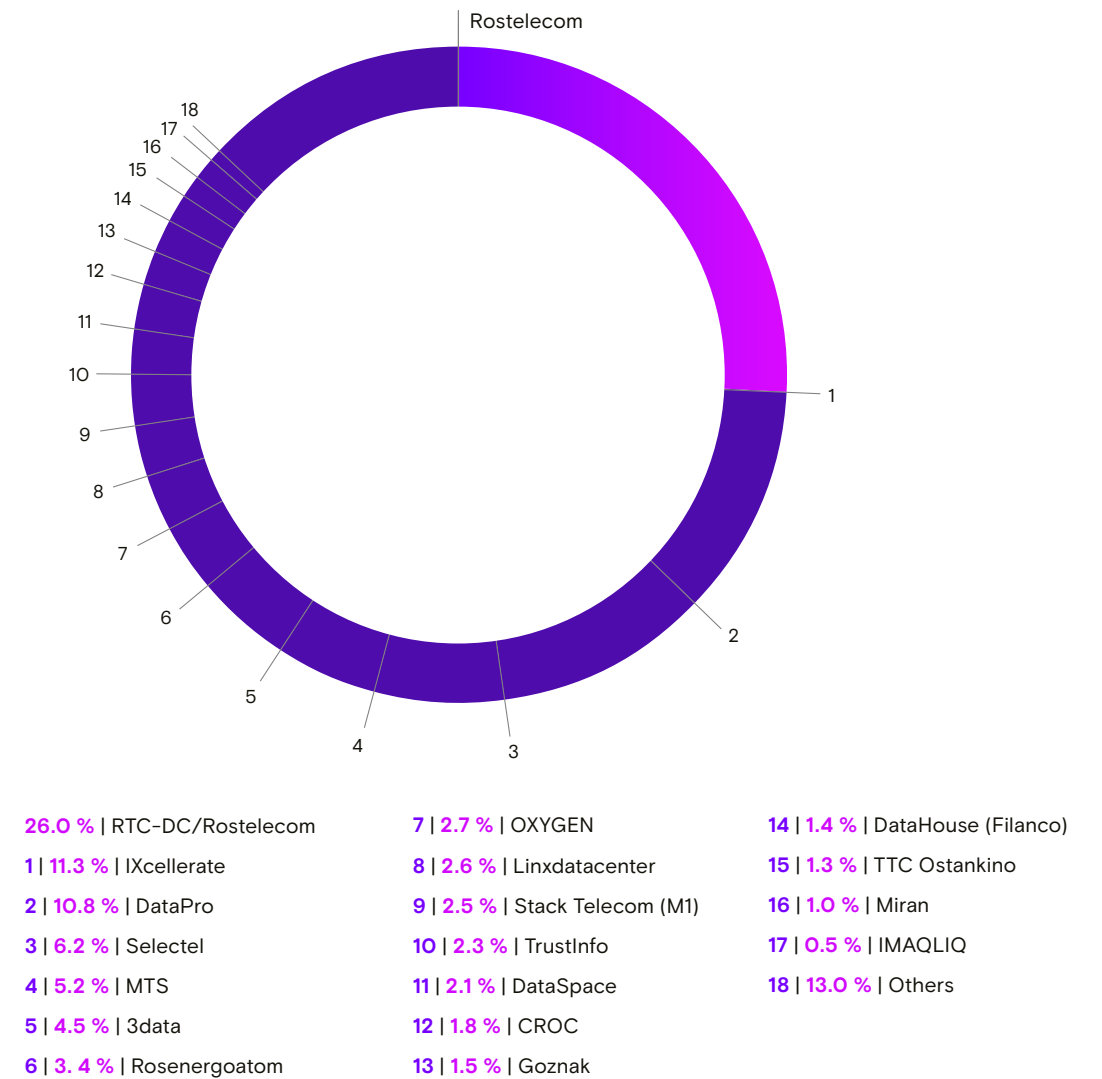
The two-year COVID-19 pandemic didn't cause a drop in the demand for commercial data centre services but actually triggered a growth in certain market segments due to the ubiquitous adoption of cloud services. However, the slowdown in the production of data centre equipment, the shortage of microchips which emerged back in 2021, the logistical issues with equipment delivery, and the rising global prices for materials, particularly metals, had a negative impact on new commercial data centre capacity additions. In 2021, multiple launches were postponed to a later date, and supply in the market grew by just 8.4 %. Technical issues and payment difficulties since February 2022 had a negative impact on new computing capacity additions. iKS-Consulting analysts are conservative about the market growth rates for the past year, with preliminary estimates showing the data centre fleet expanding by 6 % to 55.7 thousand rack units by 2022-end.

Key trends in 2022 according to iKS-Consulting:

- A number of vendors withdrawing from Russia
- New vendors emerging, or recent niche vendors scaling up
- Strengthening of Russian vendors and import substitution
- Changes in pricing policies in general and growing prices of mechanical equipment
- Changes in the terms of payment for, and delivery of, mechanical equipment
- Longer delivery times for mechanical equipment
- Uncertainty regarding service programmes and vendor inventories
- Narrower range of mechanical equipment for data centres
- Lack of verified cases and vendors' test beds in Russia
- Supplies via third parties and parallel imports.

Rostelecom remains the undisputed leader by number of rack units commissioned in 2022.

Top 18 players by number of rack units commissioned as at 2022-end



Source: iKS-Consulting

Cloud services

Sanctions imposed on Russia in general and on individual companies in particular were the critical factor shaping the market in 2022, the year characterised by a highly uncertain economic outlook, the emergence of new, highly unpredictable risks, and a major transformation of the market and the behaviours of service providers and consumers.

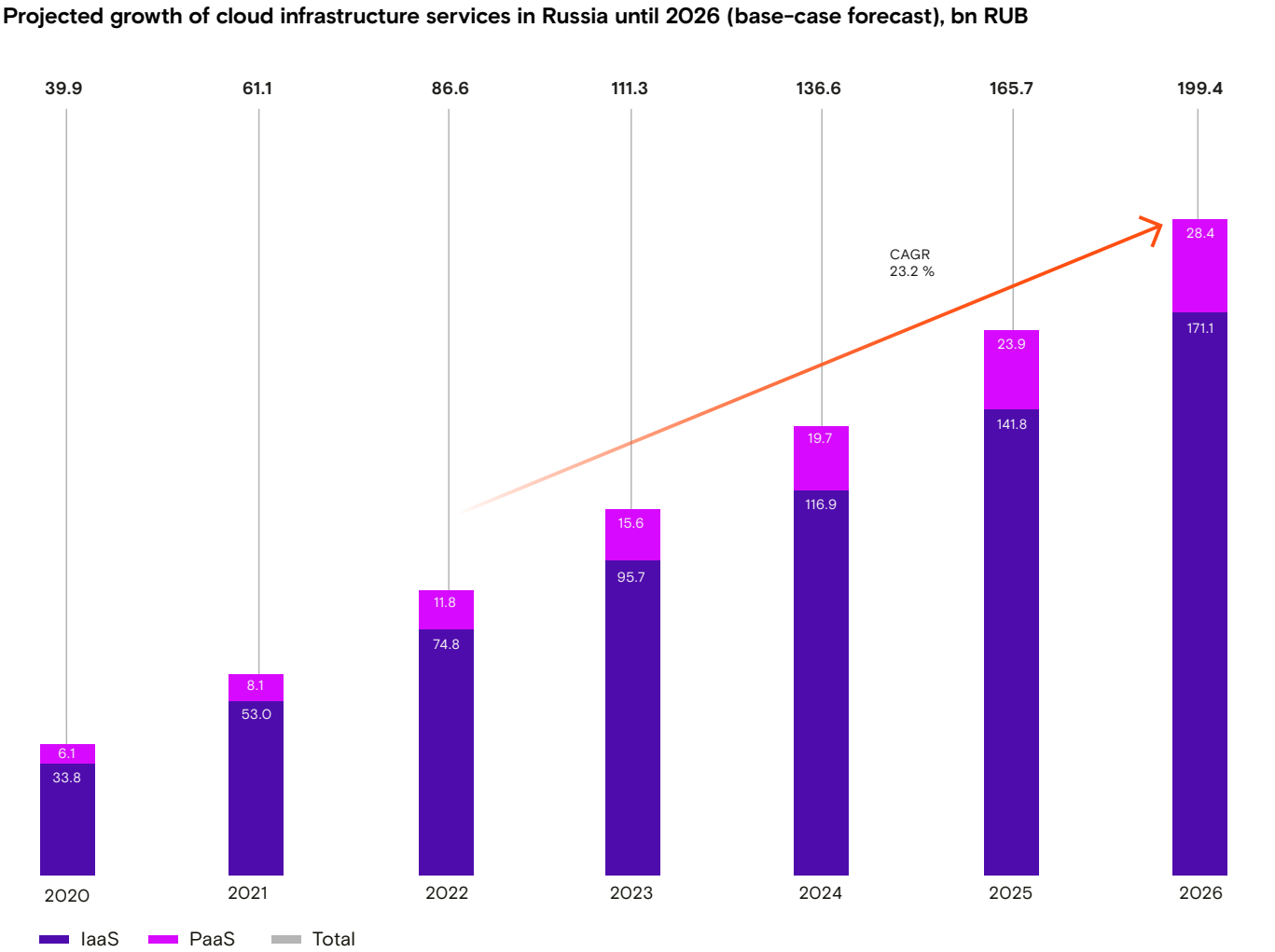
iKS-Consulting estimated the size of the Russian cloud infrastructure services market in 2021 at RUB 61.1 billion, implying a record growth of 53.2 % year-on-year. According to iKS-Consulting analysts, in 2022, the market reached RUB 86.6 billion a year-on-year growth of 41.6 % in local currency.

- Key cloud services market drivers:
- Increased penetration of cloud services
 - Growing trust in cloud services on the part of large businesses
 - Migration of a significant portion of users to Russian cloud services from foreign clouds as Western sanctions against Russia started to take effect in the spring of 2022
 - Limited investments in infrastructure, the criticality of replacing CAPEX with OPEX
 - Focus on optimising IT infrastructure costs shown by many companies
 - New entrants coming into the market and major providers pivoting towards cloud services
 - A range of government measures to protect the national market.

The cloud services market is experiencing a rapid growth. However, the supply-demand balance is yet to take shape, and potential customers are still somewhat cautious about

this class of services. Some segments (primarily SaaS) already demonstrate a sound penetration of cloud services, with a fortified demand from companies seeking to minimise budgets by avoiding the cost of maintaining IT infrastructure in-house and the need for large investments in purchasing their own servers and software.

We see continued consistent efforts to grow cloud-based public services and actively move federal and regional authorities to a single cloud platform. This migration includes the consideration of a number of initiatives aimed at encouraging agencies and government organisations to use cloud services, with organisations both taking commitments to drive the digital transformation of their operations and placing restrictions on the expansion of on-premise IT infrastructure. Massive adoption of cloud services in the B2G segment will boost the popularity of clouds in the B2B segment as well and should help maintain the growing momentum in the cloud market.



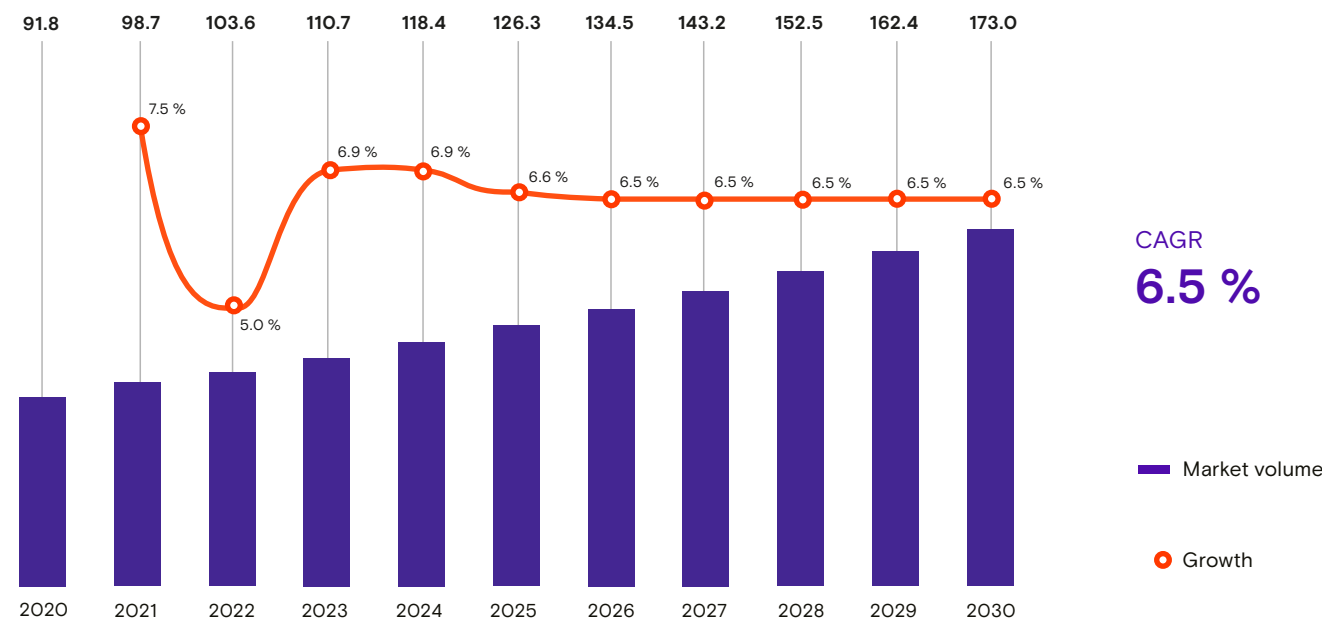
Source: iKS-Consulting



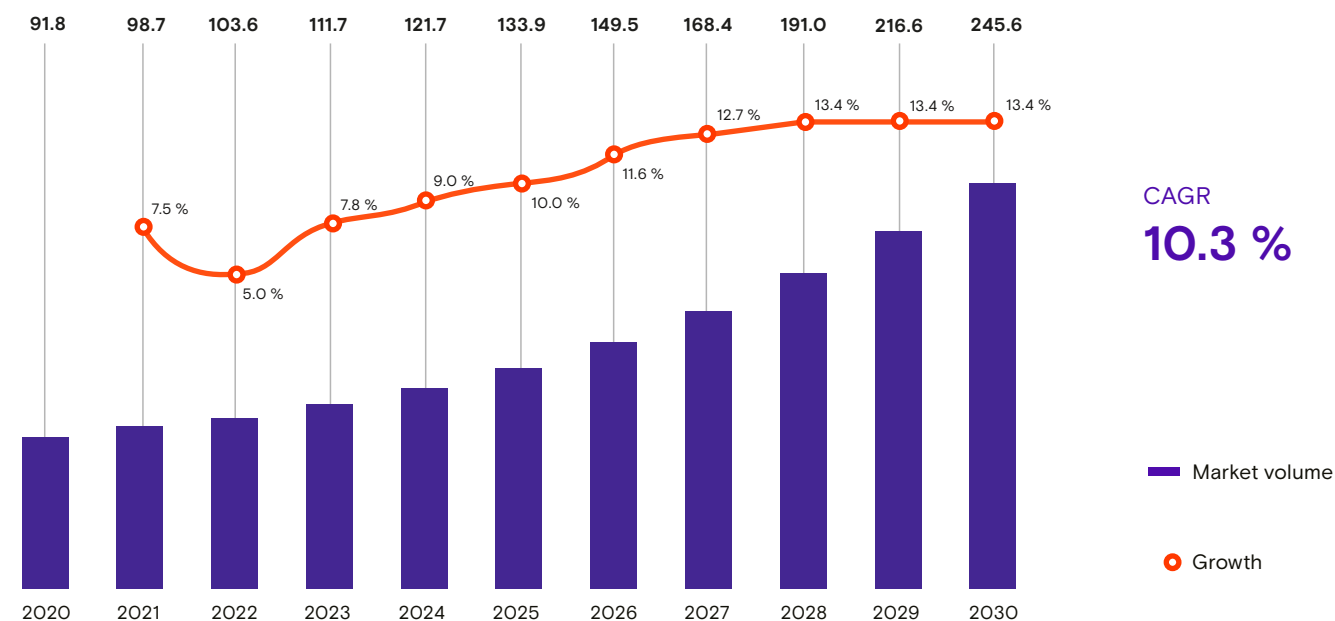
Cybersecurity market

In 2023, the Russian information security market is projected to reach RUB 104 billion. The market growth is expected to slow down mainly due to shrinking B2B budgets, posting a 5 % increase year-on-year.

Base-case growth forecast, bn RUB



Accelerated market growth, bn RUB



The Russian information security market can be broken down into the following segments: B2E (Business to Enterprise), accounting for 45 % of the market (RUB 46.4 billion), B2G – 27 % (RUB 27.5 billion), B2B – 23 % (RUB 23.8 billion), and B2C/SOHO – 6 % (RUB 5.9 billion). The B2G segment demonstrated stable growth of about 10 % year to year, mostly (~43 %) attributable to spending by federal executive authorities on their own security.

This growth is expected to continue and remain the key driver of the information security market in Russia. The government's efforts to encourage businesses and government institutions and agencies to strengthen cybersecurity for their infrastructures were a key driver behind the market growth in 2022.

Cybersecurity market growth drivers

- A manifold increase in cybersecurity threats. Multiple scenarios that were considered hypothetical in the past have become a reality – businesses are forced to shore up their defences
- Regulatory changes. The government has adopted regulations requiring businesses and government institutions and agencies to enhance cybersecurity, primarily Executive Order of the Russian President No. 250 dated 1st May 2022, Executive Order of the Russian President No. 166 dated 30th March 2022 and a number of other regulations

- The shortage of relevant specialists, along with many technology companies exiting Russia, and the number of attacks increasing, forces Russian organisations to look for service contractors who could take on the task of dramatically enhancing cybersecurity and constantly maintaining the high level of cyber defences
- Favourable tax policy for IT companies
- Import substitution. With most foreign vendors of data protection solutions exiting the Russian market, the demand for alternative solutions, including Russian ones, has grown rapidly.

Threats (risks)

- The medium and small business segment has cut its costs markedly
- Significant outflow/shortage of relevant talent/specialists
- Limited use of global cloud services due to the sanctions risk, regulations on personal data protection, and import substitution policies
- The cost (purchase, operation) of foreign information protection solutions accounted for a significant portion of cybersecurity costs. Russian solutions are not available in all segments, and they are often cheaper than their Western counterparts. As a result, companies do not purchase updates to foreign solutions (because they are not available) and are reluctant to purchase Russian solutions if they do not meet their needs, which led to an actual cost reduction in 2022 and an overall slowdown in market growth.

Key future players in the information security market

B2C

- | | |
|---|---|
| 1 Insourcers and carve-outs from state-owned corporations | 2 Vendors offering their solutions as a service |
| 3 Telecoms already focused on information security services | 4 Internet giants and large-scale ecosystems |

B2B B2G

- | | |
|--|---|
| 1 Internet giants with segment-specific promotion experience, capable of offering information security services to complement their core offerings | 2 Telecoms |
| | 3 Vendors offering their solutions as a service |
| | 4 Fintech companies |

Source: Gartner

2.6. Operating results

Key achievements and leadership in the key markets in 2022

Rostelecom maintained a positive momentum on its key operational metrics in 2022.

Guided by its updated strategy until 2025, Rostelecom secured leadership across the key markets in 2022 in line with the Company's strategic priorities. Over 2022, the Company expanded the number of service users in key customer segments and managed to boost revenues from innovative digital clusters, primarily from platform solutions for digital public services, cloud services, and data centre-based services, as well as from other digital products.

The Company's mobile business continued to outpace the market while showing a solid growth in the sales of its converged offers.

During 2022, Rostelecom's B2O segment posted a revenue growth thanks to a wider fibre coverage and a sustained number of mobile operators' base stations serviced by the Company.

Key achievements in the major segments and clusters in 2022

Retail customers (B2C)

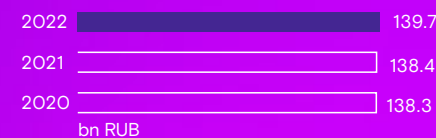
+8.3 %

Growth in fibre broadband revenue

>4.8 million

Wink's active subscriber base (+57 % year-on-year)

+1 % Growth in revenue



Business/government customers (B2B/B2G)

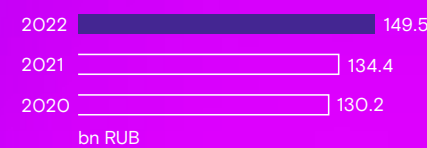
+13 %

Hike in Virtual PBX subscribers

+10 %

Broadband revenue growth

+11 % Growth in revenue



Services for operators (B2O)

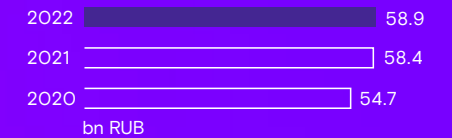
+26 thousand km

Increase in fibre coverage under the O2O¹ project

+10 %

Boost in revenue from the O2O project¹

+1 % Growth in revenue



Mobile business

61 %

CLS² subscriber penetration of the subscriber base

+5 %

Mobile ARPU growth to RUB 395

+6 % Mobile business hike



Data Centres and Cloud Services cluster

>15 thousand

Total racks at 2022-end (+10% year-on-year)

x3³

Hike in the number of hosted private cloud customers⁴

+14 % cluster growth



Digital Region cluster

>1,000

Traffic enforcement cameras installed (5,500 in total)

8,000

CCTV cameras connected during the year (380 thousand in total)

+10 % cluster growth



Information Security cluster

+47 %

Revenue growth from the JSOC service⁵

+19 %

Growth in recurring revenue from proprietary products

+13 % cluster growth



¹ Operator to operator.

² Core Live Subs – the targeted top segment of active data users that generate the most profit.

³ For a specialised solution: a private cloud for the public sector.

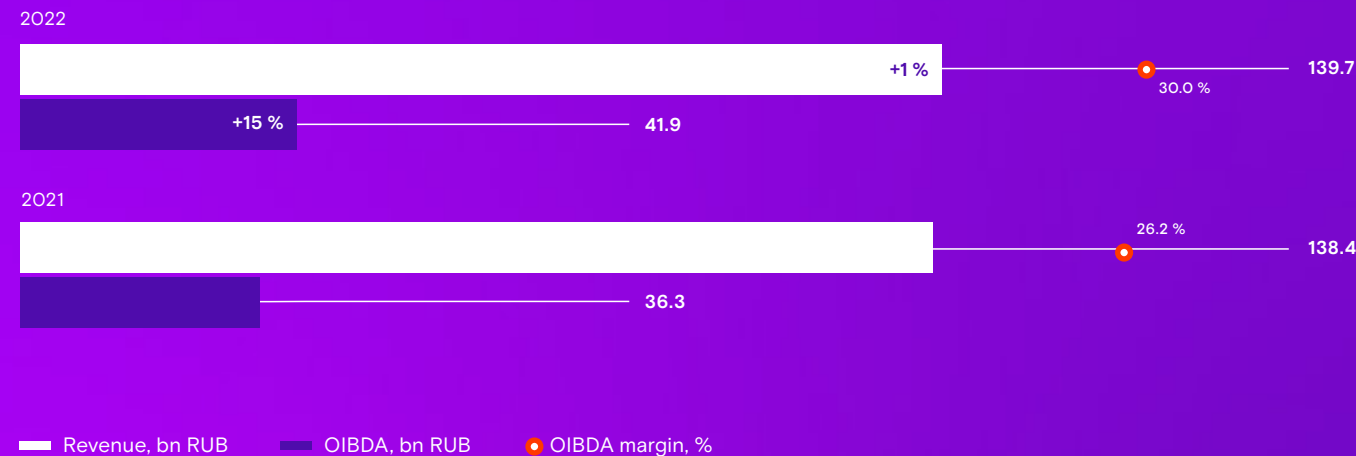
⁴ A private cloud is the opposite of a public cloud, where a pool of physical resources (a physical server) is leased to one tenant or organisation only.

⁵ Commercial security operations centre.

Residential segment (B2C)

B2C: steady development...

KEY FINANCIAL INDICATORS OF THE SEGMENT¹



+5 %

fibre broadband subscriber base growth

4.8

million Wink's active subscriber base

8 %

rise in fibre broadband revenue

x2

rise in service revenue from Wink

...with a larger role of value added services (VAS) and digital services

+116 %
year-on-year

Growth in service revenue from the Cloud Video Surveillance and Smart Home solutions

+13 %
year-on-year

Hike in VAS revenue to RUB 8.7 billion

+40 %
year-on-year

Converged service revenue

65 %

The share of core business and digital services in revenue

¹ Year-on-year growth for 2022 is shown unless stated otherwise. Under the segment- and cluster-based model.

Customer service excellence

Top service for our subscribers

Improved customer care and better service quality led to a boost in the NPS of Rostelecom's key services (broadband fibre up 5 p.p. and TV fibre up 3 p.p.) and a lower subscriber churn, including in broadband down 15% year-on-year and in pay TV down 11% year-on-year.

The year of 2022 saw a rapid development of speech analytics, including for the automatic customer service quality control of all customer-facing teams. When an employee or a customer shows a change in tone or cues of conflict, the dialogue is automatically flagged for human review, enabling faster elimination of communication failures and refining of business processes.

Enhancement in customer service:

- The proportion of customer calls handled by IVR¹ grew 3 p.p. to 31%, mainly due to the adoption of the best practices for service delivery and IVR scripts as well as advanced service functionality in local IVR systems. Over 500 business processes were automated by launching new interactive scripts and an updated knowledge management system, reducing human operator call time by 14 %
- The number of calls to the call centre was down 12 % on the back of better alignment of the IVR and OCA² services, the use of notifications, and the proactive resolution of the issues that urge customers to call, leading to a 9 % reduction in the total call centre expenditures
- Automated handling of over a million queries by a chatbot; the number of manual operations down 38 thousand every month
- Productivity of the backlog management team bettered by 25 % year-on-year
- OCA penetration grew 2.6 p.p. year-on-year to 36.4 %
- The call centre service level rose by 4 p.p. to 61%.

Ameliorated customer experience and the introduction of advanced digital practices in customer service led to a 20 % reduction in the overall customer service costs in the retail segment.

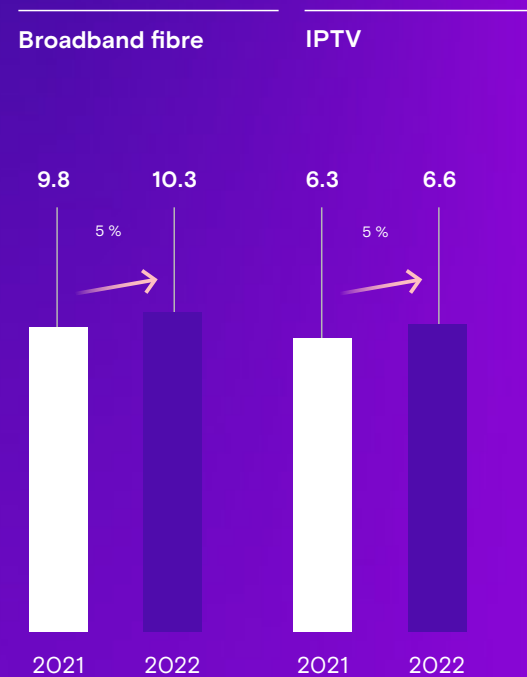
The highlights of 2022 in customer service included further progress on the Moving-In project providing a seamless experience to relocating customers wishing to keep the same telecom services at their new home. Service relocation was provided to 218 thousand subscribers in 2022. The Online Moving-In digital channel continues to benefit customers wishing to apply for the relocation service, which requires just completing a form on the product's webpage. The Company then contacts the subscriber and helps them with moving their internet connection, IPTV, and home phone to a new location. The users of this communication channel totalled 68 thousand in 2022, up 4 % year-on-year.

In the course of 2022, Rostelecom was also forging ahead with integrating payment services into its products. Rostelecom Moscow scaled the Faster Payments System (FPS) to customer accounts (web and mobile applications) while also raising awareness of the service among customers and optimising payment scenarios. As of the end of 2022, 51 % of the retail customers, on average, used the FPS to pay for the Company's services.

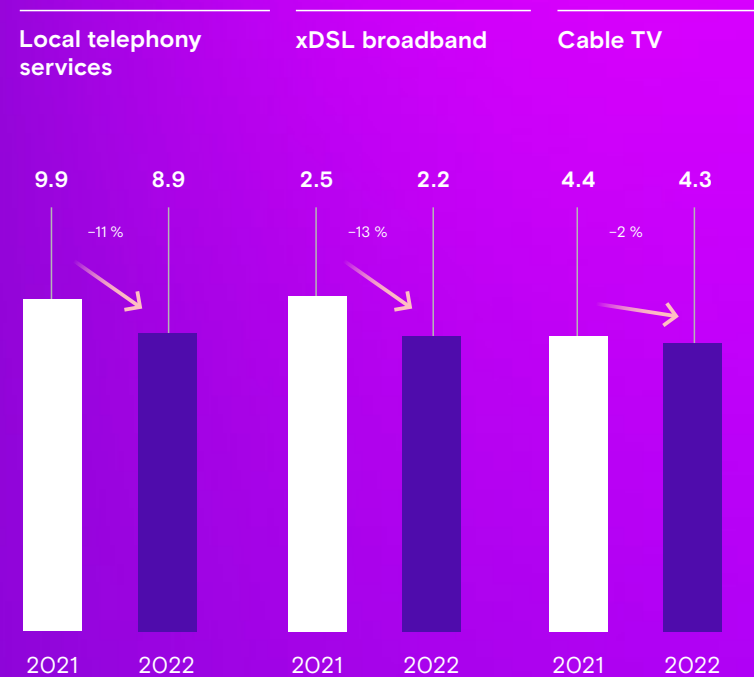
¹ Interactive voice response system – a system to route calls in a call centre or PBX using pre-recorded voice messages and a dual-tone multi-frequency (DTMF) interface to engage callers.
² Online customer account.

B2C customer base, million subscribers

FIBRE-OPTIC SERVICES

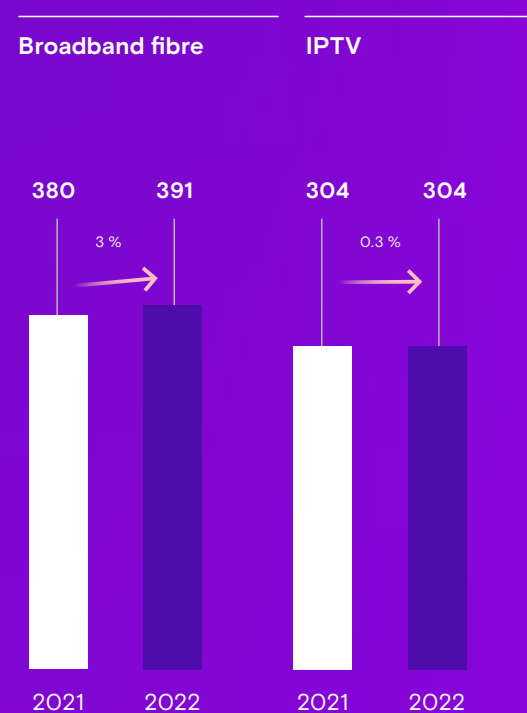


TRADITIONAL SERVICES

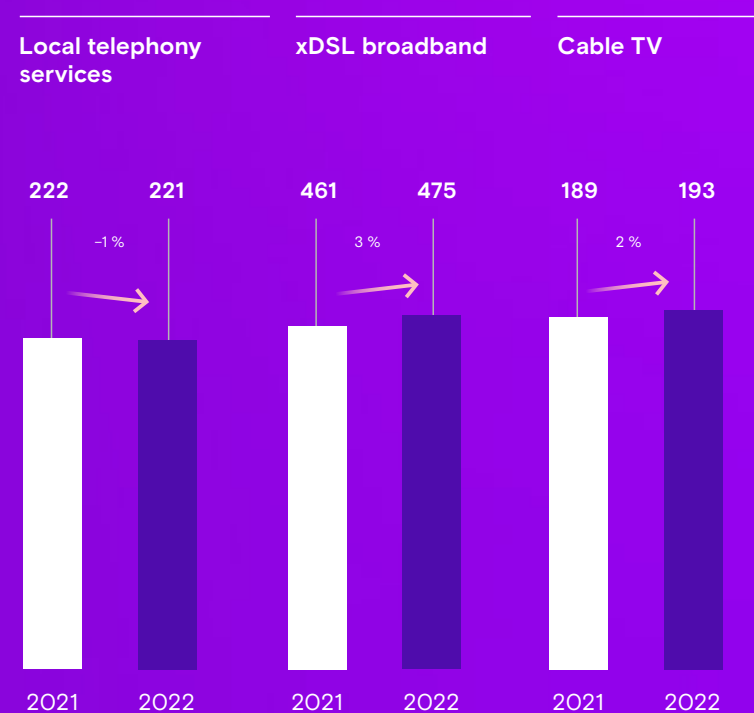


B2C ARPU, RUB

FIBRE-OPTIC SERVICES

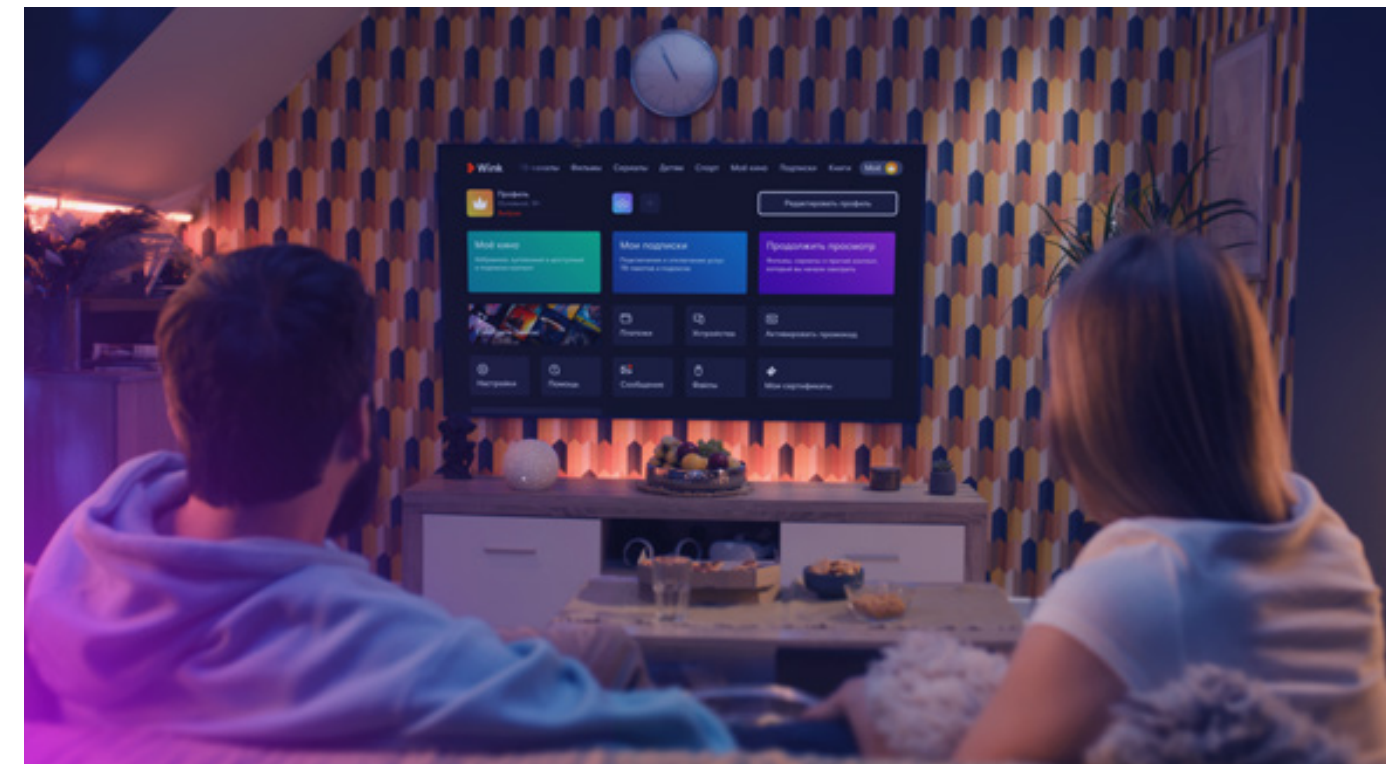


TRADITIONAL SERVICES



Basic connectivity services

The anchor services of broadband Internet access and pay TV continue to make a significant contribution to the Company's revenue growth. Despite the progressive saturation of markets, Rostelecom managed to build up its customer base and revenue streams in these segments.



Over all of 2022, the broadband subscriber base grew 1.6 % to 12.5 million, outpaced by the growth of fibre users. The fibre subscriber base expanded to 10.3 million users, or 5.2 % year-on-year.

The Company's fibre broadband revenue growth is more significant than that of the wider market: 8.3 % for Rostelecom versus the 4 % market average. The steady upward momentum in the fibre broadband market share (1 p.p. in 2022) is driven by a number of tailwinds:

- Rostelecom's ARPU is much higher than the market average, going up by 3 % in 2022
- Fibre broadband accounts for over 50 % of the subscriber base growth, consolidating leadership in the segment
- The Company leads the market with the lowest fibre broadband churn for a second year in a row.

Rostelecom demonstrated a sound upward trend in the mobile segment. The key drivers were upgraded quality of the subscriber base and convergence-driven subscriber growth as evidenced by:

- a 33 % year-on-year increase in the FMC subscriber base
- a 40 % year-on-year hike in converged service revenue
- a 2.3 p.p. year-on-year rise in the FMC penetration of the broadband base.

The FVNO² project was rolled out across the footprint of Rostelecom's mobile operator in 2022, providing a full-fledged converged proposition for end users.

The number of pay TV subscribers reached 11 million, boosted by a 4.7 % growth of IPTV subscribers to 6.6 million.

Local, intra-zone, long-distance domestic and international fixed-line services remain Rostelecom's traditional segment. There was, however, a decline in local telephony revenue in 2022 due to subscriber churn driven by growth in VoIP products and solutions in line with the global trend.

¹ Market data estimates by TMT Consulting.
² Fixed Virtual Network Operator.

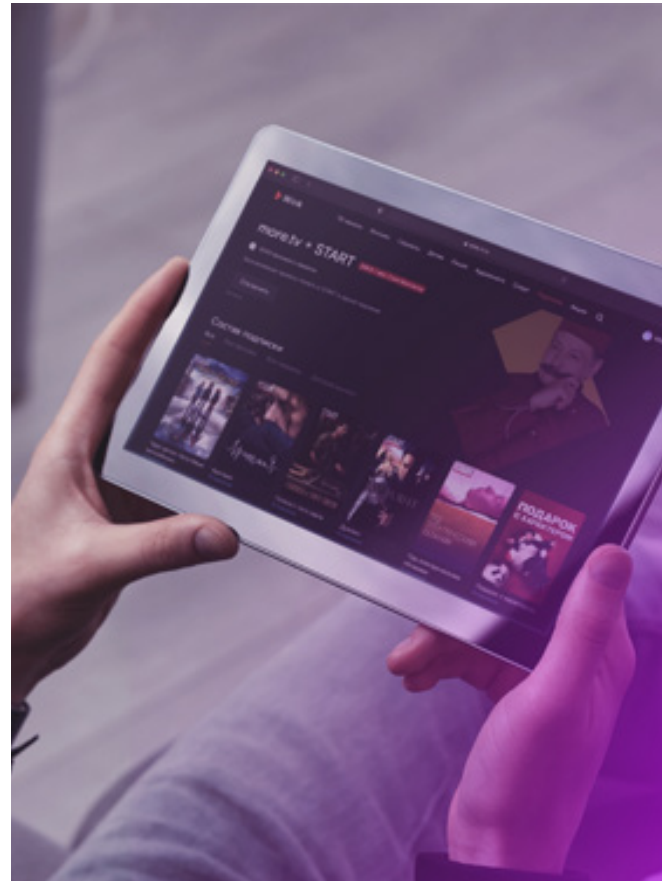
Development of digital and promising products

Wink video service

According to the research firm GfK, Wink is Russia's second largest online video streaming service by paid subscriptions. The number of Wink's OTT active users grew 57 % year-on-year (+1.74 million) to over 4.8 million. The service's paying audience more than doubled. In 2022, the Company maintained a focus on the product adoption, entering a new market in Armenia's OTT segment and adding Wink to all bundles offered by its mobile operator (Movie Tariff). Rostelecom also advanced other initiatives, including its 5-in-1 campaign, which made available content of five streaming service providers. Thanks to a strategic partnership with VTB, it is now possible to pay for any Wink content with the bank's loyalty points.

The Company also made considerable progress on bolstering customer service and user satisfaction.

The number of fully satisfied Wink users (giving a score of 10 out of 10) increased by 67 %. NPS of the online video streaming service reached 41 points in the first half of 2022, up 35 % year-on-year.



Warranty Plus

The Warranty Plus service (extended warranty) widened the penetration of the user base of the Home Internet service by 23 % year-on-year, with the revenue up 46.3 % year-on-year.

Lyceum online educational platform

The Lyceum online educational platform's accomplishments in 2022:

- Integration into the mobile operator's billing platform with a monthly fee: subscribers can now take up Lyceum from their accounts at a special price
- Integration of the Lyceum subscription into the Mixx multi-subscription platform
- A career guidance section was added to the platform, offering newly developed vocational testing functionality and new career guidance courses
- Development and launch of gamification systems on the platform: quests, points for completed lessons, tests, and other activities on the platform, etc.

Antivirus

The Company retained its leadership in the antivirus product penetration of the Home Internet user base. New partner solutions introduced in 2022 and rebundled into more customer-friendly options boosted margins by 5 p.p. year-on-year to 72 %.

Gaming Services

The following features were added to the Gaming Services product at the igrovoy.rt.ru platform in 2022: options to connect Lesta Games, VK Play, 4game, GFN Cloud Gaming, and VK Play Cloud as well as a subscription to Rostelecom Books from LitRes.

The exclusive GFN Cloud Gaming daily payment plan was also launched. Tournaments held jointly with Lesta Games have ramped up the core audience awareness of the marketed gaming services.

Smart Speaker

The distribution channel mix for Smart Speakers was substantially expanded, accompanied by the launch of new promotional mechanics and the rollout of speaker sales to other segments and regions. Maintaining the momentum from the previous year, over 50 % of the subscribers who bought the smart speaker activated the Wink voice control feature.

The year of 2022 saw a new voice functionality added to Marusya, Wink's integrated voice assistant, a voice control feature made available with a wider range of devices and launched for Smart TV and Android devices as well as a number of integration improvements enabling better interfaces between the smart speaker and Rostelecom's services.

Rostelecom Key

Over 20 tweaks were made to Key to perfect customer experience in 2022, pushing the service's NPS up 3 p.p. to 48 %. The Key's active audience reached 198 thousand, up 87 % year-on-year.

As of the end of 2022, Key was installed in more than 3,300 apartment buildings (410 thousand households), with its door phones at more than 9,000 entrances.

Cloud Video Surveillance

The NPS of Video Surveillance and Smart Home grew 3 p.p. year-on-year to 51 % in the fourth quarter of 2022. The Video Surveillance service is part of the Smart Home ecosystem designed to provide security and home automation. A customer can install and activate any number of smart cameras, receive alerts when a built-in motion sensor is triggered or a camera is obscured, watch, and save specific periods of video archive using a mobile app or their online customer account from anywhere in the world. A cloud-based video storage and processing platform allows archiving videos for a period of 7 to 30 days.

Cumulatively, the Company has sold over 820 thousand CCTV cameras.

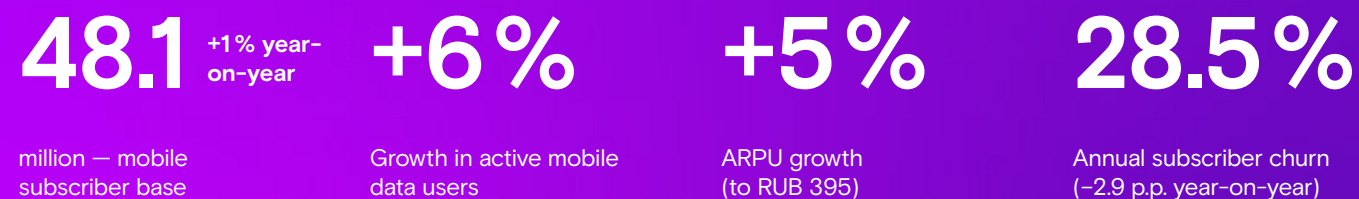
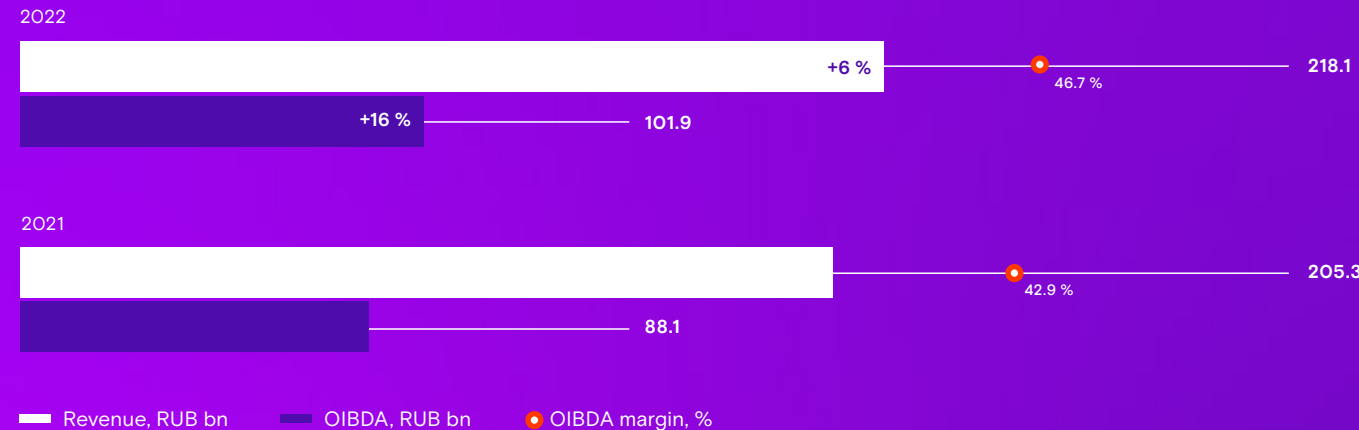
In the fourth quarter of 2022, the active user base of Video Surveillance grew 13 % year-on-year.

In the course of 2022, the service revenue surged by 116 % year-on-year, driven by robust customer demand for CCTV analytics, monitoring and record storage services. Strong customer loyalty to cloud video surveillance services is evidenced by a steady increase in the proportion of users opting to pay for the service after the free trial period in the fourth quarter of 2022 (up 10 % year-on-year).



Mobile business highlights

MOBILE DATA REMAINS A KEY DRIVER OF REVENUE GROWTH



During the year of 2022, Rostelecom's mobile operator continued to deliver on its Other Rules business strategy focused on meeting existing and emerging customer needs. The operator offered subscribers the most relevant services and digital products while making the most of its technological capabilities to bring up the quality of services and the customer experience. The operator's unique products remain driven by financial success and integrity combined with a focus on customers to help them maintain their digital lifestyle.

Prompted by the external upheavals of 2022, the operator maintained its focus on bettering the quality of connections by growing its Core Live Subs (CLS), previously identified as a core segment. The segment comprises active data users that generate the most profit. Growing the proportion of such customers in the subscriber base will be the key driver of business growth in the coming years. The mobile operator delivered against its CLS subscriber target as their penetration topped 61% in 2022, achieving a handsome increase in ARPU.

A step change in the customer base growth came on the back of focused efforts targeting high-margin and corporate segments. The B2P¹ revenue accounted for 7% of the company's total revenue in 2022. As Rostelecom and its mobile operator developed the segments, their sales teams successfully joined forces to drive customer acquisition. Fixed-line products such as 8800, Virtual PBX, and others in the operator's portfolio of services had a strong take-up.

The mobile operator remains the undisputed leader of the industry by the NPS metric, staying substantially ahead of its nearest competitor. The operator remained the market leader by key marketing metrics: relevance, consideration², and VfM.³ VfM leadership indicates that customers still perceive the operator as an attractive service provider.

Key business results

Our mobile business' faster-than-market topline growth is driven by its differentiation strategy, growing customer loyalty, and a high quality of services.

OTHER RULES PRODUCT DEVELOPMENT

Subscribers can additionally:

- use services via the Mixx subscription platform at attractive prices
- swap minutes for a maximum discount on Xiaomi smartphones
- open access to their data bundle to other users subscribed to the Shared Internet service
- swap minutes for unlimited data to access popular platforms (VK, Odnoklassniki, TikTok, Zvooq, and Twitch)
- get a double data bundle every three months indefinitely
- use a home Internet plan in all regions of operation

TECHNICAL DEVELOPMENT

Over 2022, the mobile operator:

- installed more than 655 base stations in small communities with populations between 100 and 500 people as part of the Bridging the Digital Divide 2.0 project
- raised the total number of base stations using any technology by 5.4 %
- deployed a communications system in the tunnels of the Saint Petersburg Metro on its flagship ADAS system
- launched a commercial network in the Khabarovsk Region

NEW CONNECTIONS AND CHURN REDUCTION

Services made available in 2022:

- Shopping in the operator's retail stores using the Faster Payments System (FPS)
- Swapping minutes for a discount on VK Kapsula or VK Kapsula Mini smart speakers in partnership with VK and Wink
- Leasing portable chargers at any retail store
- Swapping available minutes for smart devices and smartphones

¹ Business to Professional Consumers – provision of corporate communications services to small and medium-sized enterprises, as opposed to the B2B segment focused on large businesses.

² The metric describes subscribers' willingness to connect to the network.

³ Value for Money – value to money ratio used as an important criterion for evaluating different formats of project implementation. The concept helps to identify the cooperation format delivering the greatest benefit at the lowest cost.



Unique products for the global telecom industry

As part of the Other Rules platform, the mobile operator continued to offer its subscribers innovative and unparalleled products. The company expanded options to swap minutes for useful services or for discounts that customers could use when purchasing fitness services or smart devices. The operator also accommodated its customers' growing demand for data for popular services: now, minutes can be swapped for unlimited data in VKontakte, Odnoklassniki, Zvooq, and on the Twitch gaming platform. The operator also rolled out its FMC solution combining mobile services, home Internet, and digital TV into a single plan to all regions of operation.

The launch of the new Mixx multi-subscription platform was a genuine breakthrough for the industry. The platform offers a substantial data, music and movie bundle, discounts on Xiaomi devices, food delivery, and car sharing services. Later in the year, the mobile operator further enhanced this offering by enabling customers to build their own Mixx subscription bundle by leveraging a user-friendly builder to select and pay only for the services they need. Builders are widely used by the operator and can also be used by customers to make up their own roaming bundle tailored to their specific needs. The product offer is generated based on the subscriber's consumption profile and travel itinerary.

During the year, the operator launched promotions to improve the customer experience of using existing services. The mobile operator doubled the data bundle for new and existing subscribers, with customers receiving a double data bundle every three months, subject to timely payment for the plan and renewed indefinitely.

Maintaining the technical service quality despite external headwinds

After many key equipment suppliers left the Russian market in 2022 and cut deliveries under existing contracts, the operator focused on finding alternative suppliers to build its telecommunications networks, including via forward contracts with Russian manufacturers of base station equipment. In building its network infrastructure, the operator pursues an integrated development strategy with targeted improvements in coverage across regions while also adding new capacity to accommodate data growth.

Currently, the operator's 4G networks cover 97.8 %, 3G networks – 94.4 %, and 2G networks – 97.6 % of the population across its regions of operation.

In the course of 2022, the operator hiked the number of all its base stations by 5.4 %. The regions that hosted most new base stations of the operator included Moscow and the Moscow Region, the Leningrad Region and Saint Petersburg, the Perm Region, and the Irkutsk and Sverdlovsk Regions. The total number of base stations in the Moscow region grew by 3.7 % while the number of LTE stations rose 4.7 %

Subscriber equipment and sales of subscriber devices

Over the year of 2022, suppressed by the overall economic environment, sales of smartphones and other cell phones fell by 22 % in physical terms and by 27 % in value terms. However, the decline in the sales of new devices did not have any critical impact on the structure of the operator's subscriber base.

Device-wise, the mobile operator's subscriber base is mostly driven by the users of 4G smartphones. This was primarily due to promotional activities launched by all market players to boost the sales of LTE smartphones. By leveraging direct partnerships built over the previous years with leaders of the subscriber

equipment industry and focusing on ambitious and growing Chinese brands, the operator was able to ensure a slower-than-market drop in sales in 2022.

The company actively engages subscriber device vendors and key technology solution providers in testing and pre-launch campaigns for new devices and applies various promotional mechanics to drive sales with key suppliers. As a result of direct partnerships with vendors, the latest network features can now be set up in subscriber equipment before their commercial launch, making sure that technologies such as VoLTE and eSIM work correctly.

The advances in identification and self-registration technologies prompt the further introduction of new SIM card-based technology solutions, including virtual solutions. The number of eSIM activations in the operator's network almost doubled in 2022. New connections accounted for the largest share of eSIM activations at 62 % of the total. Penetration of devices supporting this technology grew 44 % among the operator's customers.

Engineering projects to extend capacity and coverage in regions

Over the course of 2022, bundled data experienced a hike of 19.7 % year-on-year, requiring the operator to fully use its available spectrum portfolio and prioritise investment in capacity construction. The mobile operator heavily invested in expanding its telecommunications networks to increase coverage across its footprint.

In 2022, the operator finished the construction of a telecommunications network and launched commercial operations in the Khabarovsk Region, completing the supply chain in the Russian Far East and providing high-quality communications and high-speed mobile data to strategically important regions in the east of Russia.

During the year of 2022, the operator continued its involvement in the Bridging the Digital Divide 2.0 national project, installing 655 base stations in small communities with populations between 100 and 500 people over the year. In addition, as part of its long-term development programme, the operator provided broadband access to 250 small communities with populations between 500 and 2,000 people.

During the year, the operator forged ahead with the expansion of its telecommunications networks in the Moscow Metro. The operator's network is currently available along more than 520 km of the Moscow Metro lines. The company provides tunnel coverage between stations on the Koltsevaya, Sokolnicheskaya, Zamoskvoretskaya, Serpukhovsko-Timiryazevskaya, Nekrasovskaya, Big Circle Line, Arbatsko-Pokrovskaya, Tagansko-Krasnopresnenskaya, and Kalininskaya lines. One of the top priorities for 2022 was providing

subscribers choosing to travel by the Big Circle Line with a stable coverage: during the year, all commissioned sections of the line received high-quality coverage by the operator.

During 2022, the company saw an increase in the number of its 4G base stations in Saint Petersburg by 12 %. In August 2022, Rostelecom's mobile operator demonstrated the fastest mobile data speeds in Saint Petersburg in DMTel tests. The company's technical service deployed a telecom system in the tunnels of the Saint Petersburg Metro on its flagship ADAS system, which provides top service quality despite the metro's complex architectural profile and high train speeds.

In all of 2022, the mobile operator was strongly focused on the technical advancement of its network across vital transport and infrastructure facilities in Russian regions. One such major project was providing coverage in the road tunnel system of Sochi. The operator completed a project commissioned by UMMC Group to provide coverage and high-speed Internet access at five open-pit coal mines at the Kuznetsky coal basin. Additionally, during forest fires in the Ryazan Region in August 2022, the operator provided connectivity for mobile response centres of Russia's EMERCOM and firefighters in hard-to-access areas. To do this, the company installed two mobile base stations and provided inter-operator roaming to enable subscribers of all operators to connect to their respective networks.

Maintaining traffic and new retail collaborations

Offline retail remains a premium sales channel for the operator. In the year of 2022, the company continued its projects to widen footfall across its retail stores. Over the year, the company was involved in several collaborations to promote digital lifestyle among users and pursue the concept of the retail network as a multi-purpose hub.

- **Repurchasing used phones at stores.** In order to support responsible consumption, the mobile operator launched outlets within its retail network to repurchase used phones. The operator's customers can swap their smartphones or tablets for cash paid to their bank cards.
- **Smartphone protection.** At the operator's stores, customers can request a protective film to be applied to any device regardless of its model. The operator's retail stores are now able to make a tailored screen or body protector for devices using special equipment. The protective film is printed out on a plotter to preset dimensions.
- **New sales areas at stores.** The company expanded the functionality of its stores to add counters with confectionery products and beverages. The operator is pushing the concept of a multi-purpose store offering customers both telecom and non-telecom services. A joint venture between the operator and ARena Space, a chain of VR amusement parks, was the market's first partnership between a mobile business and a VR entertainment industry player. The

project's digital space offers exclusive virtual and augmented reality attractions.

- **Contactless payments via the Fast Payments System.** The operator introduced an option for shopping at its stores using the Faster Payments System (FPS): the customer just needs to scan a QR code. The solution is supported by Invoice, a technical integrator, while the operator's partners do not need to install special software to accept payments via the FPS.
- **Swapping available minutes for smart devices and smartphones.** In partnership with VK and Wink, the operator offered customers the opportunity to swap their minutes for discounts on VK Kapsula or VK Kapsula Mini smart speakers with the Marusya voice assistant and a Wink+ next-generation set-top box. The operator also offered even more attractive terms for swapping minutes for discounts on the purchase of Xiaomi smartphones.
- **Rental of power banks.** Rostelecom's mobile operator invited its customers to rent portable chargers and made the service free for subscribers of the Black and Premium tariffs in Moscow and Saint Petersburg. Customers can now rent a power bank in any branded store participating in the project and return it to the nearest store of the operator or its partner. Stations with external batteries will soon be offered at the operator's stores across the country.

Big data: revenue growth, new business launches

During 2022, the operator's big data business pushed up its revenue from external monetisation by 19 %, with key revenue growth drivers including analytical solutions for the advertising market and the Antifraud products business line spun off by the company in 2021.

19 %

INCREASE IN THE INCOME FROM BIG DATA
THROUGH EXTERNAL MONETISATION

Amid the declining demand for lending services and, as a result, for big data products in the banking sector, the operator managed to stabilise its revenue from the sale of products for the financial technology segment through lead generation projects for commercial clients.

Last year, the company successfully expanded its existing big data storage and processing cluster based on the RT.DataLake solution. The total capacity of the newly added Hadoop cluster of RT.DataLake was 2.4 PB.

The cluster's deployment fostered the total useful capacity of the company's proprietary big data platform by 40 % and honed its performance in machine learning calculations.



Supporting customers' lifestyles

In year of 2022, the mobile operator continued to deliver on its lifestyle enabler strategy: not limiting itself to the role of a mobile service provider, the company goes beyond telecommunications and pivots its operations around supporting the needs and lifestyles of its customers. To implement these approaches, the operator relies on partnerships with market leaders in other industries. These projects sustain the operator's performance on image attributes, including higher scores on the consideration metric, on which it also leads the industry.

In early 2022, the company invited winter sports fans to the Rosa Khutor Ski Resort while it was hosting the Rosafest x Gorilla Energy extreme sports festival where the operator constructed a snow park with figures for stunts.

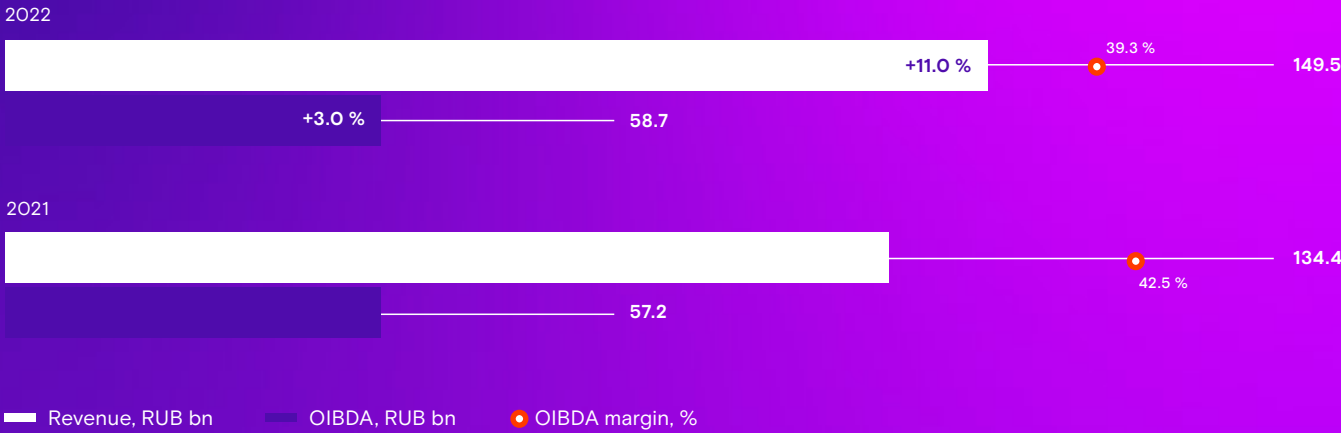
In the summer of 2022, the company organised online parks, drive-in cinemas spaces, and art spaces in nine Russian cities, from Vladivostok to Rostov-on-Don. The online parks combined co-working spaces, a movie theatre as well as musical, educational, and entertainment events, all on one site.

In autumn 2022, the operator relaunched the popular Mondays project across all its operating regions. Subscribers now have access to free coffee, discounts on theatre, circus, and concert tickets, taxi rides, supermarket shopping, petrol, and online courses as well as free access to movie and book catalogues. The project's partners included Vkusno i Tochka, Kassir.ru, Yandex.Fuel, Yandex Go, Wink, Perekrestok, Lenta, LitRes, and Skillbox.

Moreover, in 2022, the company partnered with the Theatre on Bronnaya, offering its customers a 20 % discount off tickets for all stage productions of the theatre.

To meet the demand from the eco-friendly audience, the mobile operator continued to carry out its Pereplavka project to encourage users to dispose of their mobile devices properly and create a waste collection and recycling infrastructure. To this end, the operator has installed hundreds of special boxes for collecting gadgets in stores across 145 Russian cities. Since the project's launch, the company has sent over 17 thousand collected devices weighing 1.5 tonnes in total for recycling.

Business/government customer segment (B2B/B2G)



+11 %

revenue growth in the B2B/B2G segment

+10 %

broadband revenue growth

Nº1

No. 1 in the market by the revenue and subscriber base

x2.5

growth in the cloud-based authorisation service

Wi-Fi

continued leadership by the number of serviced access points

+70 %

year-on-year revenue hike from voice assistants

Virtual PBX

No. 1 in the market by the number of customers

x2

growth in the number of cameras connected to the cloud platform

Video surveillance

continued leadership in cloud video surveillance

Connectivity services

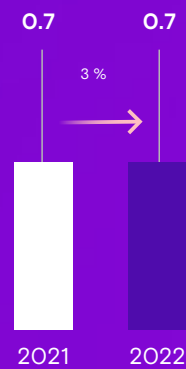
Customer base in the corporate and government segments, million subscribers

FIBRE-OPTIC SERVICES

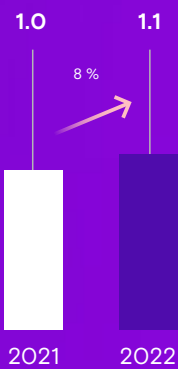
TRADITIONAL SERVICES

INTERNET ACCESS

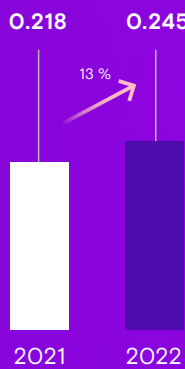
fibre broadband



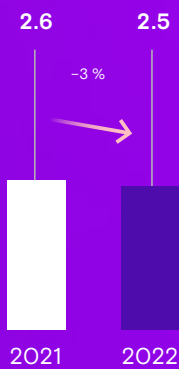
fibre broadband + VPN



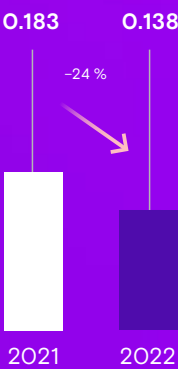
VIRTUAL PBX



LOCAL TELEPHONY SERVICES



XDSL BROADBAND



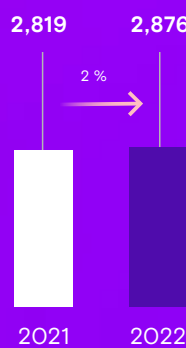
ARPU in the corporate and government segments, RUB

FIBRE-OPTIC SERVICES

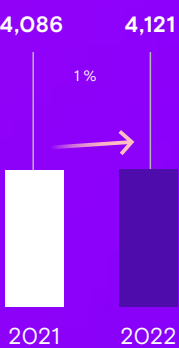
TRADITIONAL SERVICES

INTERNET ACCESS

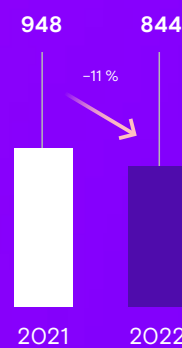
fibre broadband



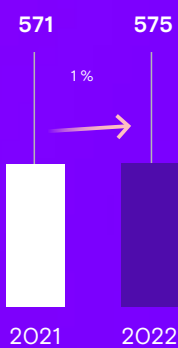
fibre broadband + VPN



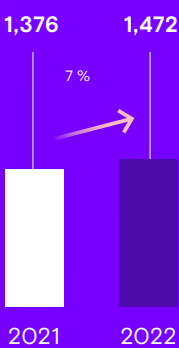
VIRTUAL PBX



LOCAL TELEPHONY SERVICES



XDSL BROADBAND



Customer service excellence

The Company strives to constantly refine the quality of service for business and government customers.

To this end, Rostelecom launched a 24/7 technical support hotline for businesses from all over the country in 2022. For all major client companies, the Company completed a seamless transition to a single service number. The technical support employees were specially trained to a single standard. Rostelecom thus created a one-stop shop platform to provide its customers with technical support.



Basic connectivity services

The anchor services, such as broadband Internet access, VPN and video surveillance, make a paramount contribution to the Company's overall revenue growth. Despite the progressive saturation of markets, Rostelecom managed to build up its customer base and revenue streams in these segments.

In particular, the number of subscribers connected to fibre broadband + VPN services in the corporate and government segments increased to 1.1 million in 2022, up 8 % year-on-year. ARPU was up by 1% to RUB 4,121. The growth in B2B/B2G subscribers connected to fibre broadband + VPN services was driven by higher demand from the public and private sectors for more advanced Internet access technologies. The new solutions

enabled government customers to more effectively carry out their projects that required broader Internet coverage and connecting different remote regions of Russia to the operator's network.

Steady growth in anchor services in 2022, RUB bn

Fixed-line revenue

+10% year-on-year



Revenue from VPN

+12% year-on-year



Revenue from video surveillance

+17% year-on-year



Developing the range of connectivity services

520

Wi-Fi access points were installed at Razumovsky Saratov State Medical University by Rostelecom

Wi-Fi

Rostelecom continues to actively enhance Wi-Fi 2.0, its proprietary authorisation platform, providing the Company with a foothold to enter the PaaS market. The multi-vendor solution enables running a service upon an existing wireless network or third-party channels, which spares Rostelecom the need to invest in building last-mile infrastructure and installing equipment to launch the service.

Within this platform, Rostelecom developed Light Wi-Fi, a new service enabling customers to set up two independent Wi-Fi networks, a public and a private one for employees to access company devices and network storages. To take up the service, no dedicated access points are needed: the customer's existing Wi-Fi router will suffice.

During 2022, the Company provided Wi-Fi Internet access at a number of major events.

- For the Eastern Economic Forum, Wi-Fi access was provided using the Wi-Fi 2.0 platform running upon the existing network of the event venue, the Far Eastern Federal University. The platform and service proved highly reliable: no authorisation or network connection failure was reported during the days of the event.
- At Kazan Expo, the Company installed more than 300 Wi-Fi hotspots across the exhibition centre to provide high-speed Internet, enabling online broadcasting, interactive TV, and IP telephony.
- At Razumovsky Saratov State Medical University, Rostelecom installed 520 Wi-Fi access points, making the university's network the largest in the region.

The product upgrades in 2022 included seamless authorisation via a customer account, a redesign of the theme settings to simplify the authorisation portal page customisation to the customer's taste, authorisation support through a Yandex account, and authorisation using a foreign phone number.

Wi-Fi for Business is a popular service which includes setting up a telecommunications infrastructure, providing access to a digital platform with data monitoring and configuring user authorisation. The customer can also set up two access networks: a private password-protected one and a public network, with secure authorisation via a text message, a call from a 8-800 number or the Public Services Portal.

Virtual PBX

During 2022, Rostelecom introduced additional options based on its Virtual PBX service, including connection of mobile numbers to Virtual PBX. The new features enable virtual telephony service customers to call from, and receive calls to, mobile numbers. For calls from mobile numbers, all the cloud solution features are also available, including call recording, speech analytics, CRM integration, statistics, and dashboards. The new service will augment the effectiveness of communications and help businesses always stay in touch with their customers and partners, whether using landline or mobile numbers.

Karusel is Rostelecom's new service which can automatically substitute landline and mobile numbers for outgoing calls. The service also increases the number of targeted calls with robocalls across a customer base of any size, which makes the solution popular in the banking sector, utilities, and other service sectors.

Another option introduced in the reporting year was Call Tracking. Rostelecom customers can now manage the performance of their advertising campaigns by taking up the Call Tracking service in the customer account of the Virtual PBX cloud service. As a digital marketing tool, Call Tracking helps businesses identify the most successful promotion channels and optimally allocate the advertising budget.

Innovative services



Voice assistant

In the Irkutsk Region, the Company completed the deployment of a solution which uses the AI-driven Voice Assistant service to automate the handling of citizens' calls to number 122. Patients can now request a house call, make an appointment, or find out whether their medical test results are ready – all via the single

call centre at 122. In contrast to voice response, a voice assistant handles over 80 % of the calls, passing on just 20 % of them to a human operator. Thanks to this solution, healthcare facilities are now able to handle more requests from citizens during peak illness periods.

Print service

In the year of 2022, the Company launched Rostelecom Print Service, based on the Rostelecom SKIT multifunctional software platform and included in the Unified Register of Russian Programmes for Electronic Computers and Databases. The software solution is designed for companies operating a large fleet of printing equipment and looking to optimise consumables. The service allows users to monitor printer consumables online and receive alerts when cartridge levels are low, which helps optimise printing costs and prevent possible data leaks. Developed in-house, the system can be adjusted or adapted to third-party solutions to meet customer requirements.

Videoconferencing

Rostelecom launched Web-Videoconferencing, a new cloud-based service, providing a secure videoconferencing platform with a user-friendly interface to businesses of all sizes. Based entirely on Russian solutions, the service uses the Company's own cloud capacity and provides a secure environment for communication. The product targets organisations that use remote communications, from small and medium-sized enterprises to large corporations. The best choice for SMEs is the standard functionality version, while large companies or organisations may wish to opt for a Personal Video Server with advanced features.

Major projects

Rostelecom's Single Data Network has supported the digital transformation journey of the Russian State Courier Service

Rostelecom created a single data network and provided secure Internet access for the Russian State Courier Service. The reliable IT infrastructure connected 84 regional offices of the Service. The project was executed on the Company's own secure infrastructure.

Rostelecom's video surveillance system at the Unified State Examination 2022 provided over 3.5 million hours of broadcasting

Rostelecom provided video surveillance for the Unified State Examination, held in 85 regions of Russia from 26th May to 2nd July 2022. The Company installed over 132 thousand cameras which ensured uninterrupted online broadcasting of the early and primary exams.

Digital Education project

As part of the Digital Education project under the Digital Economy national programme, Rostelecom provided schools with access to wireless broadband Internet and installed video surveillance systems on school premises. By bringing new technological solutions to schools, Rostelecom opens up new learning opportunities driven by advanced technology, unlocks better security in schools, and provides students with equal access to education regardless of where they live.



Services for operators (B2O)

B2O – STEADY DEMAND FOR WHOLESALE SERVICES AND EXPANSION OF THE O2O BUSINESS



Infrastructure Operator to Operator project

Over the course of 2022, Infrastructure Operator to Operator (O2O), one of Rostelecom's priority projects, generated over RUB 3.1 billion in revenue, up 10 % year-on-year. The growth was primarily driven by the expansion of FOCL coverage (+13.6 % year-on-year, or +26 thousand km).

During the year of 2022, the project margins reached 27.4 %, exceeding its target for the year. Since its start in 2017, the project's CAGR has stood at 50.7 %.

+10% year-on-year growth in revenue from the O2O project

+26 thousand km increase in the total length of fibre lines



Expanding transit backbone infrastructure

Throughout 2022, the Company continued to further relationships with national and international telecom operators and deploy effective cooperation formats to provide services to both Rostelecom subscribers and customers of operators connected to its networks.

Rostelecom connects telecom operators' networks to its own backbone infrastructure in all regions at the local, zonal, and domestic and international long-distance levels, thus creating a unified national telecommunications network and providing access to communications services to its own customers and the connected operators' customers ranging from households to large corporations in any community across Russia. When subscribers of local telecom networks make international and domestic long-distance, intra-zone, or local calls, Rostelecom and regional operators exchange services to initiate and terminate telephone connections on intra-zone and local levels.

Rostelecom provides carrier-grade services using its own backhaul network and IP protocol: dedicated channels, virtual private networks, transit of Internet traffic, leases of integrated resources, etc.

International infrastructure projects

Several major international infrastructure projects were completed in 2022:

- A new Russia-Kazakhstan cross-border link (Ozinki, Saratov Region) and a 2x100-Gb gateway to the TNS Plus¹ network
- Land link between Russia and Finland
- Upgrade of Rostelecom's backhaul network as well as the Azerbaijan-Russia cross-border link to provide transit channels and IP transit services to customers in the Caucasus and the Middle East
- Construction of a new DWDM system was completed to foster the Rostelecom network's connectivity between data centres in Moscow for the benefit of international customers
- Upgrade of Rostelecom's network across the 10x10-Gb Knyaze-Volkonskoye-Vladivostok and Nakhodka-Vladivostok sections to provide services between Vladivostok and the China-Russia and Japan-Russia cross-border links
- Connection of the Akamai content delivery network to Rostelecom's network to provide IP transit services.

¹ TNS Plus is an international backbone operator founded in 1994 in Kazakhstan; for more details, see <https://tnsplus.kz/ru/about/>.

Advanced cooperation with national and foreign partners

Rostelecom is consistently expanding and strengthening cooperation with national and foreign partners.

Throughout all of 2022, as part of its cooperation with national carriers, Rostelecom:

- entered into contracts with ER-Telecom, MTS, TransTeleCom, Garant-Park-Internet, and Dozor Teleport to provide 6,145 channels to a number of social infrastructure facilities
- concluded a two-year contract with MegaFon for FOCL maintenance and emergency repair in 55 regions
- provided 10-Gbps communication channels between Saint Petersburg and Kaliningrad using Rostelecom's submarine FOCL for TransTeleCom, VimpelCom, MegaFon, and MTS
- provided 1-Gbps communication channels along the Khabarovsk-Anadyr backbone network section for leading mobile operators
- provided channels on the routes Yekaterinburg-Nizhny Novgorod, Barnaul-Chelyabinsk, Moscow-Saint Petersburg, Bryansk-Moscow, Kazan-Samara, and Moscow-Samara for ER-Telecom under the Spectrum Lease project
- upgraded the backhaul network with a total extension capacity of 200 Gbps between Saint Petersburg and Kaliningrad to provide redundancy for four operators in Kaliningrad
- signed an agreement with MTS to enable invoice payments without supporting documents under 54 existing lease contracts for the Company's infrastructure. Under the agreement, invoices will be paid automatically without waiting for corrective documents, which will greatly accelerate payments by the operator and minimise the accumulation of accounts receivable.

In all of 2022, as part of its cooperation with international operators, Rostelecom:

- provided channels under a long-term lease for Iranian operator TIC and Chinese operators China Unicom and China Telecom
- provided IP-transit for operators Indigo, China Telecom, Alfa Telecom, Telegraph42, and TIC
- provided L2 VPN,¹ IPL² and colo³ services as well as backbone lines and IP-transit for Kyrgyztelecom, Aknet, Akamai, TATA, Colt, China Unicom, China Mobile, CITIC, Beltelecom, Telekom Srbija, and TIC
- completed the construction and configuration of the Akamai clusters on Rostelecom's network, with all nodes in Akamai CDN up and running
- renewed contracts for telecom services with operators from Hong Kong, Turkmenistan, Azerbaijan, Uzbekistan, Singapore, and Denmark.

Another milestone B2O accomplishment in 2022 was Rostelecom's successful bid for a major five-year contract with FGC UES to provide satellite communication channels.

¹ Provision of a physical line or provision of a layer 2 (L2) channel are common terms used to describe an operator's service of providing a dedicated cable (copper or fibre) or radio channel between offices and data centre sites.

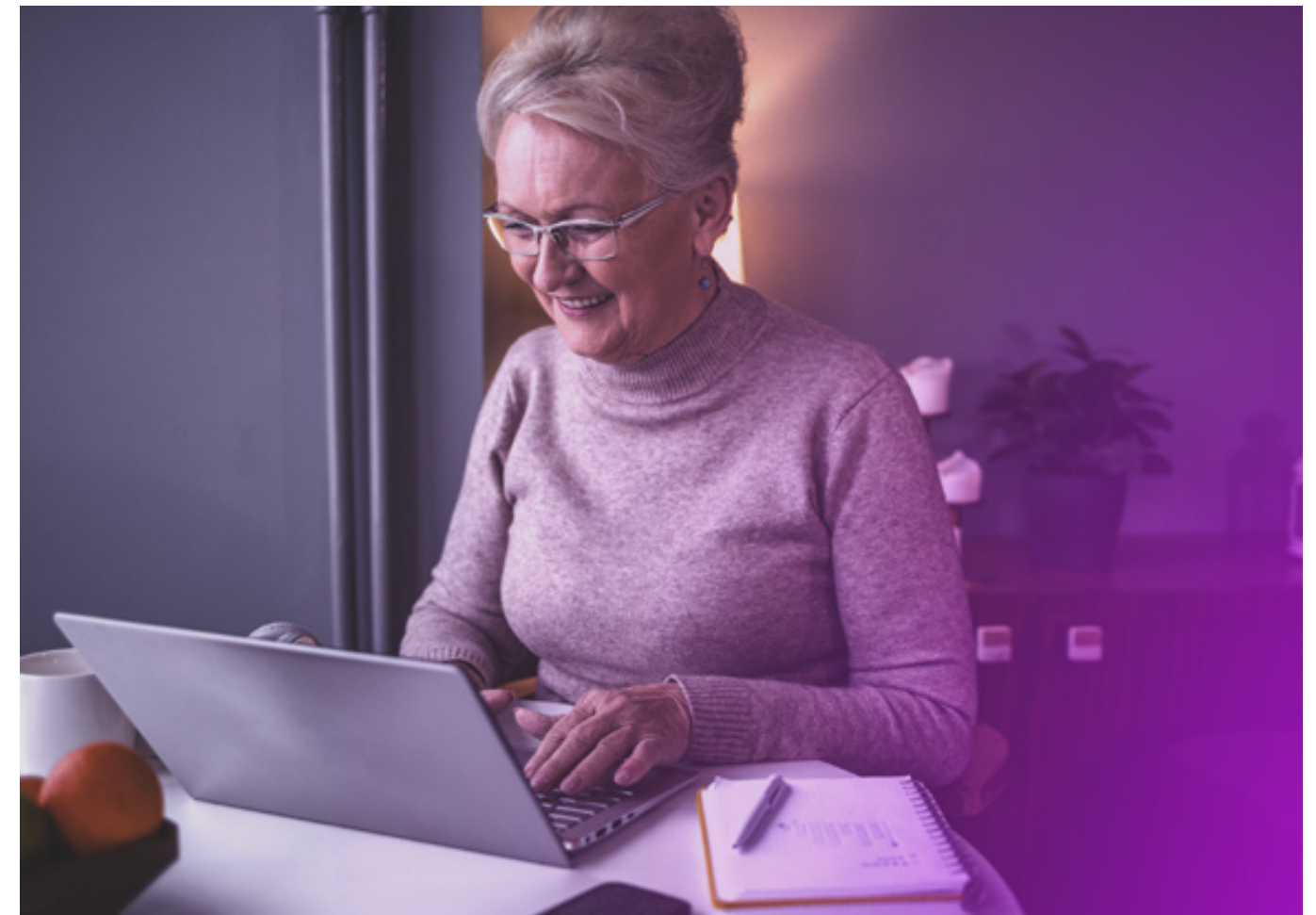
² International Private Line, also known as IPLC (International Private Leased Circuit), clear channel or IBS (International Bandwidth Service). IPLC connects major national and international organisations with a direct link to their global offices for end-to-end connectivity.

³ Colo (colocation) is a service for placing customer equipment in a data centre of the hosting provider and connecting it to high-speed communications channels.

Development of new service businesses

Over the course of 2022, Rostelecom was forging ahead with new service development. The Company successfully completed an IP transit project and the Internet project for the international Internet infrastructure company G-Core, the online video streaming services Ivi and Okko, and the Digital Education project in Khabarovsk.

Under the Bridging the Digital Divide (BDD) federal programme, the Company launched a dedicated portal <https://ucn.rt.ru/utsn-objects>, where a telecom operator can apply for access to Rostelecom's resources across the facilities within the BDD project.

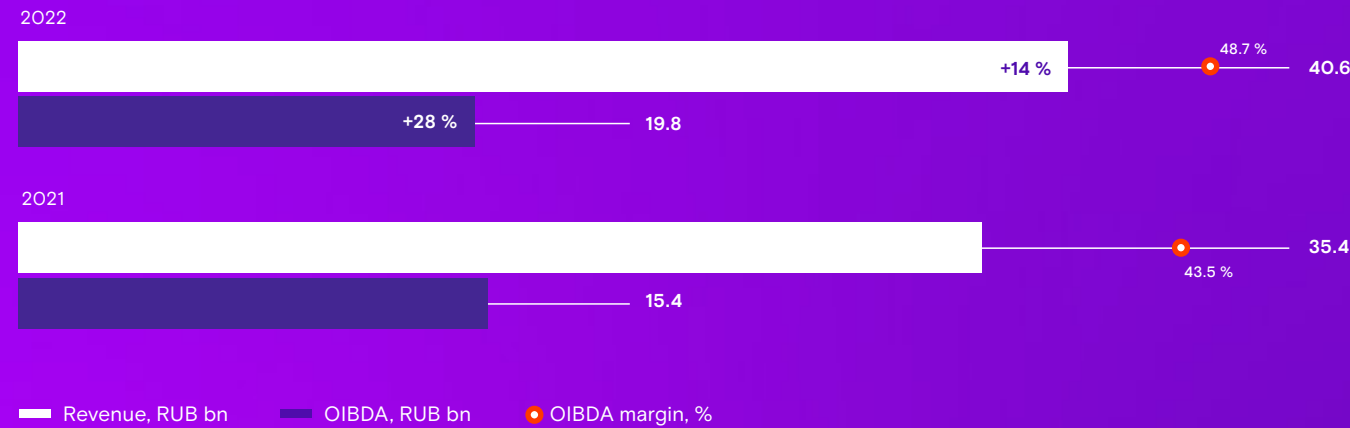


A new GOST-compliant encryption service was introduced in the B2O product portfolio in 2022. The service helps operators comply with applicable laws. The service is designed for customers whose users include government agencies, data controllers, the power industry, critical information infrastructure, the financial sector, or healthcare facilities. The transmission of data by such users must use GOST-compliant encryption algorithms.

Also in reporting year, a Black and White List Management system designed to block fraudulent traffic was put into commercial operation. This automated solution reduced the time required to block numbering capacity and enabled the sharing of consolidated information on blocked capacity in a single space.

Data Centres and Cloud Services cluster

KEY FINANCIAL METRICS OF THE DATA CENTRES AND CLOUD SERVICES CLUSTER



x3.7

growth in private cloud revenue¹

Nº1

player in the IaaS market (25 %) and the data centre market (26 %)

Data centre network

Rostelecom remains the undisputed leader in the commercial data centre market. In 2022, the total rack capacity across the owned data centres rose by more than 1,300, or more than 10 %, exceeding 15 thousand racks by the year-end, a threefold lead over the nearest competitor.

Reinforcing its long-term leadership in the data centre market, Rostelecom completed, among other projects, the second Moscow-Udomlya FOCL, which practically eliminated the latency issue and opened up prospects for evolving it into a full-scale hub to host the IT infrastructure of both public and major business customers, with a potential capacity expansion from the current 1,600 racks to 4,000 racks.

Over the year of 2022, the Company closed a deal for a long-term lease of the newly-built facilities of the Medvedkovo Data Centre, with 5,000 racks to be commissioned in 2023 and potential capacity additions of 30 %, which boosted technical capabilities amid the reasonably expected issues with the supplies of certified engineering equipment.

Cloud-based IaaS services

The Company's leadership strategy provides for a continued accelerated technological development and a focus on new, highly competitive, and high-margin niches.

By consistently expanding its range of services and enhancing its proprietary products, Rostelecom was able to maintain its leadership in Russia's IaaS market with a 25 % market share in 2022¹.

The Company continued actively ramping up in the cloud service segment, including the implementation of complex projects. During the year of 2022, the revenue from cloud services rose by about 40 %, becoming the principal driver behind the overall revenue growth in the cluster.

In the course of 2022, the Company focused on developing and promoting the private cloud service², which tripled the number of the service customers. Strong demand for this service supported the expansion of the private cloud infrastructure and functionality:

- The number of private cloud racks saw a rise of 25 %
- Access zones for external users of the private clouds of pilot projects and commercial hosting customers were expanded almost threefold.

The Company's efforts to boost the public cloud segment in 2022 focused on cementing the reliability and information security of solutions, expanding the use of import substitution solutions, and adding new features to the proprietary cloud platform management system.

Throughout the year of 2022, Rostelecom was steadily enlarging its presence across all cloud service market segments, including PaaS and SaaS. One of the Company's key accomplishments was ranking third³ among DBaaS (Database as a Service) providers.

In the course of 2022, the sales of mailboxes offered by CommuniGate Pro, a Russian e-mail solution, exceeded

10 thousand, making revenue skyrocket from this service almost 13 times. On the back of increased demand for Russian solutions, the Cloud Disk service showed a rapid growth, with revenue doubling in the reporting year and the amount of storage space sold exceeding 100 TB.

Rostelecom's subsidiary established as a centre for devising cloud-based IT systems, confirmed its leadership potential in cloud solutions, winning the TAdviser IT PRIZE 2022 as the IT company of the year. The reporting year saw two successful launches:

- BASIS.vCore, a type-1 hypervisor
- BASIS.Storage Security, a solution ensuring data integrity in managing data storage systems.

Four leading universities in Russia launched the DevOps programme using BASIS products in 2022, enrolling 2,200 students to date.

The programme for building a pipeline of highly skilled IT talent under the Digital Economy of Russia national project (Education and Science area) became the Project of the Year according to Global CIO.

The NGENIX platform continued to grow apace, with 44 product updates on the platform in 2022 (up 57 % year-on-year) and revenue from accounts with NGENIX services tripling over the year. The company opened two new distributed cloud platform nodes in Armenia. NGENIX's total revenue growth was 35 %, driven by new B2E accounts and advances in information security services.

Connectivity

Rostelecom offers its customers optimised routes for IP traffic, shorter network routes between servers, and faster service performance.

During the year of 2022, a Rostelecom subsidiary operating the oldest and largest traffic exchange network in Russia and the CIS brought new promising services to the market – peer-to-peer network security group service (BANK-IX) and secure DNS (Anycast DNS). In addition to a traffic exchange network, the company also offers its customers a multi-service platform,

with a wide range of services such as network connectivity, delivering multimedia traffic and TV signals, hosting equipment in the company's owned data centres, and DNS cloud administration. All these services run on a distributed network, which guarantees not only high service quality but also the best possible data protection from external interference.

The company deploys advanced technologies to streamline the digital transformation journeys for our partner businesses and ensure the best protection

¹ A specialised solution: a private cloud for the public sector.

¹ Source: iKS-Consulting, 2022 forecast.

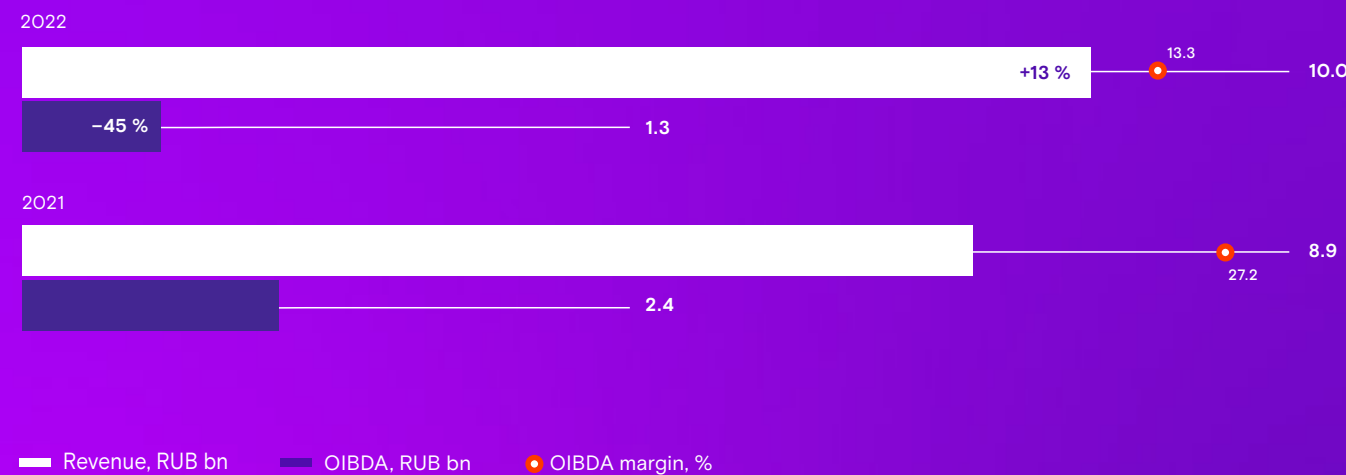
² A private cloud is the opposite of a public cloud, where a pool of physical resources (a physical server) is leased to one tenant or organisation only.

³ CNews' ranking of DBaaS providers.

Information Security cluster

Rostelecom's information security cluster is focused on three business areas: the provision of commercial cybersecurity services, proprietary technology development, and system integration in cyber defence.

KEY FINANCIAL HIGHLIGHTS OF THE CLUSTER,¹ RUB BN



Key proprietary products

Solar JSOC

Cyber attack response services

Solar Dozor

Data leak prevention

Solar NGFW

Firewall for comprehensive corporate network protection

Solar MSS

Cloud-based information security infrastructure

Solar webProxy

Web resource access control and web traffic protection

Solar addVisor

Labour productivity improvement and organisational development

Solar inRights

Centralised IT system user rights management

Solar appScreener

Application security analysis

¹ Year-on-year growth for 2022 is shown unless stated otherwise. Under the segment- and cluster-based model.

47 %

Consolidated revenue growth from the JSOC service

19 %

growth in recurring revenue from proprietary products

Rostelecom retained its leadership in the information security services market, implementing projects such as the National CyberRange, Russia's largest cyber attack monitoring and response centre, and the cyber attack early warning system.

The cluster manages an investment portfolio worth more than RUB 20 billion, allocated to develop proprietary technologies and expand the cluster's share in the information security market by acquiring high-potential companies and solutions.

Flagship cybersecurity products

Projects based on Rostelecom's proprietary technologies delivered a total revenue hike of 19% in 2022, led by the Solar JSOC cyberthreat monitoring and response centre with a revenue increase of 47%.

In 2022, the total number of **Solar JSOC** customers boomed by over 40%.

Over 2022, the **Solar JSOC** service was further refined to improve user experience: clients can now access data on monitored infrastructure, running scenarios and other details of interaction with Solar JSOC in their accounts anytime, which makes for a more transparent operation of the service and faster incident analysis by specialists.

Throughout 2022, Rostelecom separated the **Emergency Response** product in its response service portfolio into a separate service. A request form filled in on the **Solar JSOC** site is processed within just 30 minutes, and the service is delivered on the same day, with due consideration of the incident severity. The 24/7 service is provided by experts of the Solar JSOC CERT Incident Response and Forensic Team.

Rostelecom's subsidiary focused on developing cybersecurity services, providing robust cyber defences for the communication channels and online resources of the 2022 Eastern Economic Forum. The project leveraged the WAF and Anti-DDoS services of the **Solar MSS** platform. The cyber defences were designed to protect the forum's infrastructure from DDoS attacks up to 5 Tbps as well as from attacks against websites up to 10 thousand requests per second (RPS)¹.

Rostelecom experts protected a total of eight online resources hosted in a Saint Petersburg data centre and an infrastructure built specifically for the event in Vladivostok, which included another seven websites.

Over the course of 2022, Rostelecom migrated the clients of its **Unified Threat Management (UTM)** service that were previously connected to a foreign technology solution to technologies offered by the Russian technology provider UserGate. In the year of 2022, within the **Solar MSS** ecosystem, the Company launched the first Russian vulnerability management service. The solution is provided from Rostelecom's National Cloud Platform.

In the course of 2022, **Solar Dozor** proved its effectiveness in enabling protection against leaks of confidential information – trade secrets, R&D results, engineering and design documentation, etc. The Solar Dozor DLP system

New cybersecurity projects launched in 2022

Solar MSS

The first Russian vulnerability management service within the ecosystem

DLP

A new service to ensure regulatory compliance of data leak protection systems at Russian companies

was deployed at Sberbank as well as at Rostec and Achim Development, a gas production company. The project at Sberbank proved to be the largest nationwide: **Solar Dozor** protects the information assets of all of the bank's units across Russia and monitors over 250 thousand workstations. In 2022, the system was also piloted at Rosatom Corporate Academy.

Also during the year, NFC, a leading Russian private rolling stock operator, successfully piloted **Solar addVisor**, a data collection and analytics system, to bolster labour productivity and support its organisational development. Following the pilot, the system was scaled across the entire company.

Other projects completed in 2022 include the implementation of the Solar appScreener static code analyser at the Samolet Group of Companies, the Blood Centre of the Federal Biomedical Agency, the HOST Group, MANGO OFFICE, and the Moscow Aviation Institute. The product continues to enjoy a strong take-up on the international market: a number of projects were completed in 2022 to deploy the Solar appScreener code analyser in Kazakhstan and Uzbekistan.

¹ RPS – requests per second.

System integration and the National CyberRange

The Company began providing 24/7 support for the Garda BD database protection system offered by the Russian developer Garda Technologies

A centre of excellence for the product was set up within the Solar Integration business, whose experts carry out complex projects to create cybersecurity systems. A wider range of database protection services powered by Garda BD is now available to the company's customers. The services include not only the solution integration into infrastructure but also warranty and post-warranty technical support, analytical support as well as monitoring and incident response.

The National CyberRange also hosted a major "Cyber Battle", which was joined by cyber incident response teams (CIRTs) of major companies, leading banks, government agencies as well as students of relevant programmes and experts on the information security market. The attackers and defenders fought for control over an IT infrastructure for about eight hours. A total of 18 teams from the IT, banking, oil and gas, and power industries competed in the cyber exercise.

The year of 2022 also saw student cybersecurity olympiads at the National CyberRange as well as a hackathon at the Bonch-Bruевич Saint Petersburg State University of Telecommunications (SPbSUT). The finals of the National Technology Olympiad in information security for school students from year eight to year eleven were held for the first time ever.

29 %

REPORTED GROWTH FOR
THE INTEGRATION BUSINESS LINE

Solar Integration, Rostelecom's system integration business, is actively building partnerships with cybersecurity market players. The company won the highest status in the new Positive Technologies partner programme, confirmed its Gold vendor partner status with UserGate and was recognised by Security Code as its best partner in 2021. Over 2022, the company opened three new National CyberRange core centres in Saint Petersburg, Samara and Orenburg. At these new training sites, students and IT professionals practice repelling realistic cyber attacks without endangering their organisations' infrastructure.

A project to enhance the banking segment infrastructure of the National CyberRange was completed in 2022, designed to offer training on practical skills in protecting financial institutions against cyber attacks. A software product developed by the Russian company Diasoft was selected as the tool to implement the new functionality.

An international cyber exercise in the prevention of emergencies resulting from hacker attacks was held on the National CyberRange platform for the first time in Russia in 2022. Teams from six countries participated in the large-scale exercise which took place as part of the St. Petersburg International Economic Forum. It was hosted jointly with Russia's Ministry of Digital Development, Communications and Mass Media and supported by the Office of the Russian Security Council.

60

STUDENTS ENROLLED ON THE SUMMER
CYBERSECURITY SCHOOL

The Sirius federal territory was the venue of two training programmes using the facilities of the National CyberRange. A crash course of the joint Fintech Hub of the Bank of Russia and Rostelecom focused on protecting bank infrastructure from cyberthreats. The second programme was developed jointly by Rostelecom and Sirius University for technical students. About 60 students from universities across different Russian regions enrolled on the Summer Cybersecurity School at Sirius.



Social projects

The Russian Ministry of Digital Development, Communications and Mass Media, Saint Petersburg State University of Telecommunications, Rostelecom, and Dialog Regions launched an all-Russian cyber hygiene programme. Its goal is to raise awareness of cybersecurity issues and educate the public on safe Internet practices. The three-year programme will be implemented under the Information Security federal project, which is part of the Digital Economy national programme. The year of 2022, the first year of the programme, saw the launch of six special projects to raise user awareness of cyberthreats and safeguards against malicious users. The projects focus on phone scams, cyberbullying, safety rules for gamers as well as

for kids and teenagers wishing to be popular bloggers, simple use of complex passwords, and the basics of digital wellbeing.

The Public Services Portal now features a new section on cybersecurity rules set up under the all-Russian cyber hygiene programme. The Cybersecurity is Easy! section offers the portal users a test of their ability to recognise common online scams and protect their data. Furthermore, the Ministry of Digital Development, Communications and Mass Media and Rostelecom produced a series of articles with useful tips and recommendations on protection against different types of threats.

Digital Region cluster

In year of 2022, the Company made sound progress on its key product segments to deploy digital solutions across Russian regions. The cluster’s revenue grew by 10 % to RUB 25.9 billion.



Comprehensive upgrade of Moscow’s public safety system

In the year of 2022, Rostelecom signed three contracts to upgrade Moscow’s video surveillance system for RUB 11 billion.

Under these contracts, the Company will upgrade the city’s video surveillance system within the next few years, including CCTV systems at house entrances, in courtyards and in crowded places. Advanced multifunctional CCTV solutions deployed under this project will improve the city’s public safety levels

Expansion of Saint Petersburg’s urban video surveillance system

In the reporting year, Rostelecom continued expanding Saint Petersburg’s video surveillance system, signing two contracts for a total of RUB 5.6 billion. Apart from installing CCTV cameras, the Company also provides their subsequent maintenance while offering continuous video streaming to a data processing and storage centre. The Government of Saint Petersburg plans to install over 150 thousand cameras in the city by 2025.

Video surveillance

Throughout all of 2022, Rostelecom added two new Russian regions to its footprint, with its Video Surveillance service currently covering 41 regions of Russia. Two major investment projects were launched in Moscow and Saint Petersburg in 2022.

More than 8,000 new cameras were connected as part of the Video Surveillance project in 2022, bringing the total number of video surveillance cameras in operation to 380 thousand. The Company installed video analytics software in Perm, Bryansk and Izhevsk to implement AI-enabled intelligent processing of data from video surveillance cameras.

Projects in traffic enforcement and weight and dimension compliance systems

Throughout the course of 2022, Rostelecom’s photo and video enforcement services were extended to cover 60 regions of Russia. In the reporting year, 1,106 new cameras were installed, bringing the total to 5,480 by the year-end.

The weight and dimension compliance service became available in 34 regions of Russia, with 22 new stations built in the reporting year to bring the total number of weigh stations in operation to 163.

Energy efficiency

During all of 2022, the Company installed over 10 thousand smart electricity meters in 20 Russian regions, including 9,000 meters under a project to implement PJSC Rosseti Centre’s smart electricity metering and remote data collection system. To date, these services are provided by Rostelecom in 38 regions of Russia.

Safe City

In the reporting year, Rostelecom continued developing new and leveraging existing applications of the Safe City hardware/ software solution. In three Russian regions, the Company integrated automated systems of special, emergency and incident response teams with the System 112.

The functionality for monitoring and predicting threats that may entail chain reactions was expanded using a system managing multiple linkages between objects and risks. The solution was tested by the Ministry of the Russian Federation for Civil Defence, Emergencies and Elimination of Consequences of Natural Disasters (EMERCOM).

During the year, Rostelecom presented a platform for environmental monitoring and safety control of industrial enterprises as well as regions and cities, capable of combining solutions from different vendors.

This solution is a universal tool for monitoring environmental safety to make day-to-day life more comfortable: its features include collecting and analysing data on the state of the environment (air, water and soil quality, background radiation, etc.), fire and flood alarms, forecasting, and environmental change modelling. A key advantage of the system is that it collects all environmental metrics for an area and automatically generates a list of risk mitigation prompts and actions.

Rostelecom’s product was piloted in two regions, and the Company also integrated the platform with external environmental and chemical monitoring systems as well as with relevant equipment.

Intelligent transport systems

In the year of 2022, new AI-based technical solutions were deployed across 10 Russian regions.

- They include a vehicle detector, which recognises, classifies and counts vehicles as well as recognises license plate numbers. The device’s operation is based on neural network algorithms. A total 735 such detectors were installed in 2022.
- Sintez traffic controllers recognise and register vehicles and establish the parameters of traffic flows on the roads. In 2022, 805 such controllers were installed.

Development of the Energy Efficiency geographic information system (for the Russian Ministry of Economic Development)

Pursuant to Resolutions of the Russian Government No. 3623-p and No. 3624-p dated 26 November 2022, Rostelecom was appointed as the sole contractor to create a greenhouse gas emissions register. In December 2022, the Russian Ministry of Economic Development and Rostelecom signed a public contract to develop a greenhouse gas emissions register before 2023-end. The federal greenhouse gas emissions register will accumulate data derived from carbon reports by users of natural resources, reports of regulated organisations on their GHG emissions as well as information on GHG emission reduction targets. The system, among other things, will interface with the Register of Carbon Units.

Digital Health cluster

MAJOR FEDERAL PROJECTS TO CREATE A SINGLE DIGITAL ENVIRONMENT



FBMA

FEDERAL
BIOMEDICAL
AGENCY



USHIS

UNIFIED STATE
HEALTHCARE
INFORMATION SYSTEM



DIGITAL HEALTH PRODUCTS OF ROSTELECOM

1

UDP. Medical information systems

5

UDP. Laboratory information systems

2

UDP. Emergency medical care

6

B2B/B2G medical checkups

3

UDP. Telemedicine

7

UDP. Radiology information system

4

UDP. E-Prescription

8

UDP. Voice Assistant 122

Digital transformation of the healthcare system on a national level

Over 2022, Rostelecom continued to execute its strategy of the digital transformation of the healthcare system, which aims to establish the Company's leadership in the Russian market for digital health services.

Rostelecom's Health products are featured across 49 Russian regions and include medical and laboratory information management systems, a unified radiology information system, a central archive of medical images, an integrated emergency medical care information system, and a platform for telemedicine consultations and for the remote monitoring of patients with chronic diseases.

Pursuant to Directive of the Russian Government No. 2779-r dated 26th September 2022, Rostelecom was designated as the single source supplier of goods, works, and services procured by the Federal Fund for Mandatory Medical Insurance to upgrade the state information system for compulsory health insurance as part of the Unified State Healthcare Information System (USHIS) until 31st December 2023.

In 2022, under public contracts for the development of the state information system for compulsory health insurance, the Company launched and will further enhance compulsory health insurance services such as Digital Health Profile, Services for Information Support for Insured Persons, the Unified Federal Register of Insured Persons, and the Personalised Registration of Medical Care Provided via the Unified Portal of State and Municipal Services, and Compulsory Health Insurance Information Forms and Data Protocols.

Pursuant to Directives of the Russian Government No. 2957-r dated 10th October 2021 and No. 1298-r dated 25th May 2022, Rostelecom's subsidiary developing digital health services was designated as the single source supplier of goods, works, and services for the creation, development, upgrade, and operation of the Unified State Healthcare Information System (USHIS) and the centralised subsystems of the Federal Biomedical Agency (FBMA of Russia) until 31st December 2022.

In the course of 2022, Rostelecom, represented by its subsidiary, teamed up with the FMBA of Russia to create a federal register of bone marrow and hematopoietic stem cell donors, which was subsequently made available to the general public via the Unified Portal of State and Municipal Services. With the launch of the service in October 2022, over 9,000 people registered via the Unified Portal of State and Municipal Services, with the service subsequently continuing to run in a normal operating mode.

Throughout 2022, a new service, Data Mart, was launched for citizens to simplify the process of medical appointment booking via the Unified Portal of State and Municipal Services. Currently,

the functionality of Data Marts operating in 20 Russian regions includes making an appointment through a doctor referral, issuing a single outpatient form, and registering for regular medical check-ups.

49

REGIONS OF THE RUSSIAN FEDERATION WERE COVERED BY ROSTELECOM PRODUCTS IN THE SPHERE OF MEDICINE

The Company developed a technology solution to localise the International Statistical Classification of Diseases and Related Health Problems, 11th revision (ICD-11¹) in Russia and to build a service structure for rolling out ICD-11 across the healthcare system.

In the year of 2022, the Company set up the Centre of Excellence for Performance against Federal Metrics by Russian Regions. During the year, all regions where Rostelecom is present posted an increase in performance. In particular, five regions made it to the top 25 in Russia's regional healthcare digital maturity ranking (the Yamal-Nenets Autonomous Region, Penza, Kirov, and the Republics of Dagestan and Sakha (Yakutia)).

¹ ICD stands for International Classification of Diseases.

Regional projects



UDP. Medical information systems

Since 2019, Rostelecom has been engaged in the support, development, and upgrade of medical information systems across 32 Russian regions.

Over the year of 2022, a new service was launched within the Prevention – a vertically integrated medical information system (VIMIS) as part of the federal project, Creation of a Single Digital Healthcare Environment Based on the Unified State Healthcare Information System. The service consolidates, on a

nationwide level, data on the capacities and staff composition of healthcare organisations that provide vaccinations, preventive medical examinations, regular medical check-ups, and follow-up medical care, and offer other services in line with the guidelines of the Russian Ministry of Health.

UDP. Telemedicine

At the end of 2022, Rostelecom telemedicine services were successfully delivered in 16 regions of Russia. Consultations were provided by 293 healthcare facilities and by more than 5,000 doctors.

As part of the telemedicine service, the Company launched a subscription service for the subscribers of Rostelecom's mobile operator, offering telemedicine services, discounts on tests, and remote health checks for chronic patients.

In the course of 2022, remote patient health monitoring programmes were introduced in two Russian regions, with pilot projects launched in another six regions. The service monitors the patient's health condition based on the data transmitted and categorises patients into groups. In emergencies, patients are contacted by admitting physicians within 15 minutes. In case of a minor illness, the information is transmitted to the attending physician. Thanks to the service, people see healthcare specialists before their health is critically affected while patients more strictly adhere to prescribed therapies.

UDP. E-Prescription

In the year of 2022, the Company deployed an electronic prescription module in seven Russian regions to automate the process from writing a prescription at a healthcare institution subject to pharmacy stock levels for federal and regional beneficiary categories to issuing medicines.

UDP. Emergency medical care

In the year of 2022, the Company deployed its Call Card Structured Electronic Medical Document (SEMD) module in five Russian regions for the coordination and information system of the unified dispatch centre. The module supports generating, viewing, and signing with an electronic signature, and transferring data packets to the USHIS register of electronic medical documents.

In the reporting year, Rostelecom introduced a new mobile manager app in the Moscow and Vladimir Regions, which interfaces with the back-end of the coordination and information system of the unified dispatch centre and provides the user with statistical and operational data on the monitored units of emergency medical care organisations.

100

THOUSAND CONSULTATIONS
WERE GIVEN VIA THE TELEMEDICINE
SERVICES OF ROSTELECOM

UDP. Radiology information system

Over the course of 2022, Rostelecom completed a project to expand the radiology system functionality in the Republic of Udmurtia.

All ECG machines in the region were integrated into a single digital network, and a functionality for automatic ECG interpretation was added. This Rostelecom solution accelerates the time a doctor needs to analyse and prepare a medical assessment report, which is of particular relevance at departments that do not have certain specialists.

In the year of 2022, we launched an archiving module in the Perm Region and the Moscow Region to streamline the storage of medical examination data in the PACS¹ systems and create external image archives based on parameters set in the system

¹ Picture archiving and communication system – a system for image transfer and archiving, which involves the creation of special remote archives, where a very large archive can exist for a long time in hot mode and be quickly available for searching and viewing the required information.

Public sector digital services and products

E-government

Rostelecom develops and operates the e-government infrastructure providing citizens and organisations with digital access to public services. Key IT systems of the e-government infrastructure maintained by Rostelecom include:

- Unified Portal of State and Municipal Services (Public Services Portal)
- Unified System of Interdepartmental Electronic Cooperation
- Unified Identification and Authentication System.

Pursuant to directives of the Russian Government, starting from 2009, Rostelecom has been the single source supplier of goods, works, and services procured by the Ministry of Digital Development, Communications and Mass Media for its project to develop and operate the e-government infrastructure.

The year of 2022 saw a continued growth in the use of the e-government infrastructure systems by individuals and organisations receiving e-services. With a total of over 1,670 million visits in 2022, the Public Services Portal now has more than 9.5 million daily users. Over 100 million people were registered with the portal as of the end of 2022. In total, more than 429 million service requests were submitted, and more than 500 million queries were handled by the portal's digital assistant Robot Max in 2022.

In April 2022, Rostelecom launched an updated version of its mobile app for the Public Services Portal. The new app, available for both Android and iOS users, features a brand-new design, the digital assistant Robot Max, and major enhancements to its key functionality.

From July 2022, the Public Services Portal offers electronic Fan Cards, part of the Fan Identification System (within the e-government infrastructure) used to facilitate the identification and authentication of individuals attending official sporting events. At 2022-end, over 300 thousand people were issued Fan Cards, and the identification system went live at five stadiums of the Russian Premier League.

In September 2022, the My School information system was piloted in 15 Russian regions. The system provides a single point of access to educational services and digital learning materials for students, parents, and teachers, and comprises an electronic diary, a library of learning materials, Russian E-school, and a learning and communication platform. Plans are in place to connect all Russian schools to the system in 2023.

In December 2022, the Company launched a service for the registration of a lump-sum payment for families with children and pregnant women on the Public Services Portal. The applicant can submit a single application via the service for several eligible allowances at once.

The following benefits are covered in the lump-sum payment:

1. Allowance for enrolling for care in early pregnancy
2. Payments for the first, third, and subsequent children until the age of 3
3. Payments for children aged between 3 and 7
4. Allowance for children aged between 8 and 17.

120+

**PUBLIC SERVICES WERE DIGITISED
USING A NEW TOOL – A VISUAL
CONSTRUCTOR OF SERVICES**

During 2022, Rostelecom introduced the Visual Service Builder, a coding-free solution designed to help government agencies launch their own services on the Public Services Portal. The builder enables the much easier and faster launch of services on the portal. At 2022-end, the builder was used by more than 60 federal agencies and organisations and 30 regional government agencies, with over 120 services digitised with this tool.

In 2022, the Company further developed and bettered the functionality of the Public Services Portal-related mobile apps. The Yandex Pay and SberPay payment options were added to the apps. The Gosuslugi Auto mobile app now offers the Europrotocol Online service across Russia, whereby drivers can complete road accident reports without traffic police officers. Gosuslugi Auto features a service enabling drivers to present their driving license in a digital format (as a QR code). The Gosuslugi Culture mobile app can now be used to buy movie tickets. Other new features of the mobile apps include filling in applications and signing contracts at the Public Services Portal to buy and sell vehicles, signing contracts for paid education using the Online University Enrolment service, and filing for divorce.

In view of the new rules for working with foreign software vendors introduced in 2022, Rostelecom took a number of steps to ramp up information security within the e-government infrastructure, accelerating the transition to open source software in development and operations, and continuing the optimisation of the microservice architecture.

Ecosystem of digital public products

At the end of 2021, Rostelecom consolidated capabilities in key public administration areas, such as finance and procurement, property and asset management, public services (the automation of the Multifunctional Public Service Centre activities), social care, and employment, within a recently acquired subsidiary.

The deal expanded Rostelecom's product line within its ecosystem of digital public products, extended the offerings of the Public Sector Digital Services and Products cluster to new segments of the public administration, and enabled the implementation of relevant projects of any complexity.

The following projects were advanced in 2022:

- **Social Treasury.** The creation of a unified digital platform for social care services to consolidate and normalise historical data; the launch of data marts of the National Data Management System (NDMS) for 12 types of data
- **Social Insurance Fund.** Maintenance for the Fund's existing IT systems; the conversion of electronic sick notes and the benefits system into the format used by the Social Treasury

- **Labour and Employment.** Development of Jobs in Russia Unified Digital Platform of the Ministry of Labour and Social Protection; the nationwide launch of the Public Employment Service 2.0; integration with the NDMS
- **Federal Service for State Registration, Cadastre, and Cartography.** Development of the Unified Digital Platform of the National Spatial Data System; the creation of an integrated information protection subsystem for the platform
- **Russian Ministry of Digital Development, Communications, and Mass Media.** The development of the Unified Information Platform of the NDMS
- **NDMS data marts.** Data marts were developed for the Russian Ministry of Internal Affairs (for the Gosuslugi Auto app), the Ministry of Finance, the Federal Treasury, the Federal State Statistics Service, the Pension Fund, the Ministry of Digital Development, Communications and Mass Media, the Federal Forestry Agency, the Federal Service for the Supervision of Education and Science, and Russian Railways.

In all federal projects, Rostelecom provides customers with a comprehensive solution including the design of business processes transformed in line with the new digital approach, drafting required laws and regulations, application software, hardware and software infrastructure (including in the unified national cloud platform), information security, channel infrastructure, and integration with the e-government infrastructure.

Unified Biometric System

In line with Federal Law No. 149-FZ on Information, Information Technology and Information Protection, dated 27th July 2006, the Unified Biometric System (UBS) created by Rostelecom has been in operation in Russia since 2018.

The system was granted a national status in late 2021. In December 2022, Executive Order of the Russian President No. 693 dated 30th September 2022 transferred the system to the Centre for Biometric Technologies (CBT). CBT, which will further develop biometric technologies in Russia, was incorporated by Rostelecom (49%), the Russian Federation represented by the Federal Agency for State Property Management (26%), and the Bank of Russia (25%).

Pursuant to Resolution of the Russian Government No. 2326 dated 16th December 2022, the Centre for Biometric Technologies was designated as the operator of the unified personal data information system designed to process personal biometric data, including biometric data collection, storage, verification, and indication to what degree the sampled biometric data match the stored template data for an individual.

Rostelecom's long-standing efforts to develop the UBS greatly contributed to bolstering the availability and quality of public and commercial electronic services provided to Russian citizens: the Company developed and implemented biometric services in banking, education, courts, notarial services, transport, and information security.

Throughout 2022, all UBS operations were financed by the government. Efforts to further improve the service usability in 2022 also included a UBS mobile app development and testing of a mechanism whereby citizens will be able to complete the registration with the service on their own.

2.7. Priority projects

Rostelecom’s strategic priority is to advance the digital economy, supplying state-of-the-art solutions for digitising public administration processes and providing services to the public and businesses across various sectors.

Major nationwide infrastructure projects are central to building a digital economy. Rostelecom is fully committed to these vital projects of national significance. Each such project makes a difference for millions of people and is a milestone in the transition towards a common digital space.

In 2022, Rostelecom moved on to be actively involved in projects aiming to build and ramp up Russia’s digital economy as part of the Digital Economy of the Russian Federation national programme (the “national programme”) approved by the Russian Government in 2018. In particular, during the year, the Company explicitly focused on activities under federal projects such as Information Infrastructure and Internet Access through Satellite Development, which make part of the national programme.

Priorities in partnering with government customers

Delivering infrastructure and providing communication channels

- Expanding the coverage of the core communications infrastructure
- Enhancing communications channels
- Advancing the digital ID and UBS technology and infrastructure

Significant projects and programmes

- Implementing national communications infrastructure initiatives (Digital Economy, Bridging the Digital Divide, connection of social infrastructure facilities)

Digitising key processes

- Enabling operations of public authorities (E-Government infrastructure, Digital Region)
- Enabling communication of people and businesses with the government (single digital profile, expansion of the Public Services Portal functionality)

In order to carry out federal projects, Rostelecom relies on its own backbone data network, cloud infrastructure, and integrated IT solutions, including those created in Russia. All projects are aligned with the strategy adopted by the Company and support the long-term goals of Rostelecom and all its stakeholders.

Activities of the Centre of Excellence under the Information Infrastructure federal project

The Centre of Excellence within the national programme’s Information Infrastructure federal project (the “Centre of Excellence”), set up at Rostelecom, continued to operate throughout 2022. Along with Rostelecom employees, over 150 experts representing the leading Russian organisations, including major telecom operators, banks, and data centre operators, as well as federal executive authorities and state-owned corporations, actively participated in the activities of the Centre of Excellence.

In 2022, the Centre of Excellence collaborated with members of the themed working groups for communications networks, data centres, and digital platforms to review 68 requests to change the project charters of the Information Infrastructure and Internet Access through Satellite Development federal projects, prepare eight opinions, and take part in six meetings of the Information Infrastructure working group.

In addition, specialists at the Centre of Excellence prepared and elaborated their proposals to improve Russia’s performance in international digital economy rankings, to organise initiatives to deliver 10-Gbps+ Internet speeds to residential estates, and took part in updating the Modern and Promising Mobile Networks roadmap and establishing a working group of Radio Research and Development Institute (NIIR) for drafting regulations related to the development of Internet of Things technologies.

Bridging the Digital Divide

Rostelecom is a universal service provider and has a universal service obligation under the Federal Law On Communications with regard to the following types of services:

- mobile radio telephony services
- data transmission and the provision of Internet access via access points
- telephony services via payphones.

To provide mobile radio telephony services, the Company is implementing the second phase of its project to bridge the digital divide, under which base stations are installed in communities with populations between 100 and 500 people to provide GSM voice services and LTE data services. Base stations are connected to the network via fibre links.

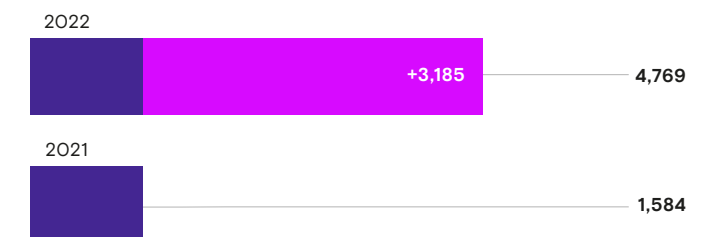
Over the year of 2022, Rostelecom started to provide mobile radio telephony services in 655 communities, fulfilling its obligations under the contract with the Russian Ministry of Digital Development, Communications and Mass Media in time and in full.

At the same time, during the year, the Company provided mobile radio telephony services in 1,201 communities where mobile radio telephony networks had been deployed in previous years. As of 2022-end, the number of active subscribers in these communities totalled 120 thousand people.

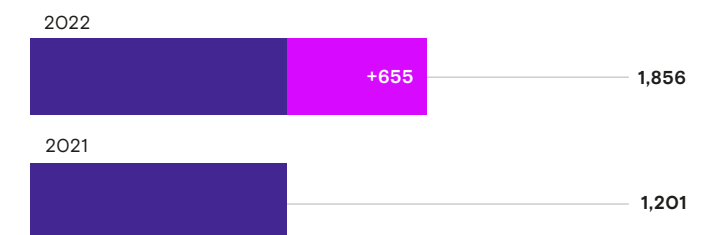
Over the course of 2022, data services and Internet access were enabled through 13,912 access points connected to the communications network via 122 thousand km of fibre. The communications infrastructure was built under the first phase of the Bridging the Digital Divide project earlier.

Telephony services were provided in 2022 using 35,661 payphones. All types of connections, except for international, are free of charge for the users according to the Company’s decision.

Optical fiber communication lines for the BDD 2.0 project, cumulative total, km



Base stations for the BDD 2.0 project, cumulative total, units



Modern and Promising Mobile Networks

Throughout 2022, the Company finalised and approved the charter of the roadmap for developing the Modern and Promising Mobile Networks high-tech segment until 2030.

In 2022, the Russian Government and the industry players signed an agreement of intent to develop high-tech projects under the Modern and Promising Mobile Networks roadmap (the “MPMN Agreement”).

Over all of 2022, Rostelecom carried out the following activities under the MPMN Agreement:

- Prepared proposals for a white paper on promoting the Modern and Promising Mobile Networks high-tech segment
- Entered into a forward contract with PROTEI R&D Centre for the supply of solutions for 4G/LTE mobile radio telephony backbone networks. The solutions will be delivered and rolled out in four phases from 2025 to 2027
- Entered into a forward contract for the delivery of products for 4G/LTE mobile radio telephony backbone networks. The products will be delivered and rolled out in phases in cooperation with a developer of software for base stations. The Company has prepared a development plan until 2028. By 2025-end, the Company is planning to supply at least 250 base stations included in the unified register of Russian radio electronic products, subject to the list approved by the Russian Ministry of Digital Development, Communications and Mass Medialopment, Communications and Mass Media
- The Company entered into a forward contract for the supply of equipment from the relevant product line with product shipments expected to start in 2025.

In accordance with Instruction No. MM-P10-10127 of the Prime Minister of the Russian Federation Mikhail Mishustin, dated 16th June 2022, industrial competence centres (ICCs) were set up in order to bring together digital leaders among industry players for the subsequent selection and implementation of import substitution projects. Once reviewed and approved, projects for the Mobile Communications ICC are included in the MPMN roadmap.

In addition, the Russian Government built a mechanism to support particularly significant projects using the resources of the Russian Information Technology Development Foundation. The Mobile Communications ICC's site was used to develop a project designed to finalise and implement a 4G core network, which was recognised by the Presidium of the Government Commission on Digital Development and the Use of Information Technologies to Improve the Quality of Life and Business Environment as particularly significant and

1

bn rub

worth of the grant for the development and implementation of the Cores of the 4G Mobile Network Project

successfully passed the competitive selection of the Russian Information Technology Development Foundation. The project will be carried out by Rostelecom and the solution's developer, PROTEI R&D Centre. The grant allocated to the project totalled RUB 1 billion.

Key focus areas of the MPMN roadmap in 2023 will include its monitoring and update as well as ensuring the preparation of proposals for a white paper on promoting the Modern and Promising Mobile Networks high-tech segment.

New communication internet technologies

As part of the Digital Technologies federal project carried out under the national programme since 2021, Russia takes steps to support the development of new communication Internet technologies (NCIT).

Rostelecom is involved in the NCIT development under an agreement of intent signed with the Russian Government in 2020 and renewed in December 2022.

This agreement is primarily realised using the roadmap for the New Communication Internet Technologies high-tech segment as approved by the Government Commission on Digital Development and the Use of Information Technologies to Improve the Quality of Life and Business Environment¹. In December 2022, the NCIT roadmap was updated along with the agreement.

NCIT includes communications, leisure, and gaming services as well as technologies and solutions that support the further development of these services (search and recommendation, intelligent content generation and adaptation, generated content recognition, and virtual and augmented reality technologies and products as well as related solutions).

The roadmap envisages the devising and applying of such technologies and solutions through a range of measures of financial and non-financial support for NCIT-enabled projects and products.

During 2022, Rostelecom representatives were thoroughly engaged in the work of expert and thematic NCIT commissions at the Russian Information Technology Development Foundation and of the panel of expert judges at the Foundation for Assistance to Small Innovative Enterprises in Science and Technology (FASIE).

Throughout all of 2022, the free accelerator programme of the Internet Initiatives Development Fund for IT entrepreneurs completed NCIT projects and focused on the Russian market. The programme was developed with the support of Rostelecom and the Russian Ministry of Digital Development, Communications, and Mass Media. In the reporting year, three NCIT project competitions were held for participation in accelerator programmes, and three accelerator programmes were completed, involving Rostelecom representatives as external experts and members of the contest's jury panel.

Rostelecom is committed to enhancing its proprietary NCIT products and services, such as the Wink video service,



the game market, and Rostelecom Lyceum online service, while also developing its own CDN network.

During all the year of 2022, Rostelecom also provided regular expert advice and coordination for engagements between the NCIT roadmap stakeholders.

Proposals for upgrading the operating environment for IT companies pivoted around NCIT projects in Russia were also prepared and submitted to the Russian Ministry of Digital Development, Communications and Mass Media.

¹ Minutes No. 25 dated 23 July 2021.

2.8. Improving operational efficiency

Rostelecom maintains its efforts to better internal efficiency as part of its strategic priorities relying on Rostelecom’s Production System (RPS) and ameliorations to its real estate portfolio as key performance enhancement tools.

Bolstering Rostelecom’s performance

414.7 RUB m

Economic impact in 2022

Operational excellence programme

Rostelecom’s production system

Project

Federal RPS projects, local RPS projects, and best practices

Description

Business process improvement projects, regional initiatives, and solutions to optimise processes and shrink costs

Rostelecom’s production system in figures

Training and development¹

40

thousand employees finished basic RPS training

>6,400

specialists and managers were trained in RPS tools

>1,100

RPS project members were certified for RPS technology knowledge

Ideas Portal

523

employee ideas were submitted in 2022

158

ideas were implemented, including 12 that delivered an economic benefit of over RUB 19 million

30 %

of the ideas submitted were put into action as of 2022-end

Best Practice Portal

46

solutions were posted on the portal in 2022

108

times the posted solutions were deployed and used

¹ Cumulatively.

Paperless Office

The project aims to create a working environment in which the use of paper is eliminated or minimised. The Paperless Office project will help simplify and accelerate document flow, deliver cost savings on paper, consumables, and maintenance, and contribute to environmental protection.

The project targets a seven-fold reduction in the levels of paper use and paper document flow costs at Rostelecom by the end of 2023 from a 2021 baseline.

In year of 2022, the Company brought its paper use down by 55 % year-on-year, from 213 million sheets to 97 million sheets. The share of electronic document flow at the Company grew from 73 % to 80 %.

Over the course of all 2022, we transferred our internal accounting documents to electronic document management, launched a service to issue enhanced qualified electronic signatures for signing HR documents, modified the process of contracting with agents through an offer and the use of a simple electronic signature by the agent, developed a full cycle of electronic document package processing enabled by 1C as well as adopted regular management procedures to reduce the amount of printouts and increase the penetration of electronic document management.



Rostelecom’s production system

Rostelecom’s production system (RPS) is an essential lever to drive our operational efficiency and business profitability without leveraging additional resources.

During the reporting year, four federal RPS projects were continued: Paperless Office, Automation of B2B Sales and Connections Programme, Agile Business Process Development, and Design and Construction of Access Networks. Work also began on the Analysis and Optimisation of the Investment Support Business Process at the B2C Business Intelligence Units initiative.

The total economic benefits of the solutions carried out through our RPS projects and local initiatives totalled RUB 414.7 million.

Automation of B2B Sales and Connections Programme

The programme aims to:

- reduce the connection time to networks to three days
- lower user time on information systems by 60 %
- ramp up sales of new products in B2B (SME) by 10 %.

Diagnostics and timing of the end-to-end business process of selling and connecting the Virtual PBX services were carried out in 2022. The key results of the programme:

- stabilisation and realisation of the basic process of selling and connecting the Broadband and Video Surveillance services in four macroregions (Centre, Volga, South, and Ural)
- adoption of electronic contracts in the B2B segment across all regions (Centre, Volga, South, Urals, Far East, Siberia, and North-West)
- development, stabilisation, and execution of an automated connection to the Virtual PBX service.

The economic benefit from the programme was RUB 104.2 million in 2022, including a hike in revenue by RUB 57.2 million and RUB 47 million in cost savings (OPEX, payroll).

Agile Business Process Development

The project aims to accelerate data services provided to telecom operators by designing simplified processes for different types of data transfer services. The service order's details and parameters are taken into account when processing specific orders.

During the year of 2022, Rostelecom introduced a simplified business process for the L2 VPN¹ service for requests to change data speeds up to 300 Mbps (up to 100 Mbps in some regions).

The adoption of an automated tool to check technical feasibility accelerated the service delivery process from seven days to just one day while reducing the order backlog.

Design and construction of access networks

The project aims to compose a business process to plan and construct access networks, unlocking the opportunity to cut down Rostelecom's infrastructure construction costs and timelines for the benefit of the B2C and B2B segments without compromising quality.

The project was completed in 2022, leading to a threefold reduction in infrastructure construction time thanks to the improved quality of forecasting as well as to the migration of the full cycle of mass segment project design to Hermes² and the introduction of SLA³ for each phase.

The setup of a "hot" B2C warehouse enabled prompt construction and eliminated the risk of delays in the delivery of frequently used equipment. The "hot" warehouses created and stocked up in December 2021 supported continuous construction in 2022 despite the challenging economic environment. Up to 90 % of mass segment construction projects in 2022 were delivered using equipment and materials purchased in previous years.

Specific construction costs per household declined from RUB 4,100 to RUB 3,700.

90 %

OF THE MASS SEGMENT CONSTRUCTION PROJECTS IN 2022 WAS IMPLEMENTED USING PREVIOUSLY PURCHASED EQUIPMENT AND MATERIALS

Analysis and Optimisation of the Investment Support Business Process at the B2C Business Intelligence Units

The project aims to lower the investment support costs of the business intelligence departments at the Company's regional branches and reallocate the freed-up resources to support management decision-making in the B2C segment. Labour costs are reduced by eliminating time losses, identifying and clearing overlapping activities within the process, and transferring non-core responsibilities to centres of excellence. Project completion date: the first quarter of 2023.

In the course of 2022, a process diagnostic was run in eight pilot branches, resulting in the following boosts in individual areas:

- updates were made to information systems used in the inventory management of line sections and the Hermes system
- a single facility was set up to collect centralised reporting forms for business intelligence units
- the process of informing commercial units about construction project completion dates was streamlined to accelerate the sale of services.

¹ Second level service.

² Hermes automated enterprise management system is an information system to support construction investment projects from initiation to completion.

³ Service Level Agreement – an external document signed between the customer and the service provider, which outlines the parameters of the service to be provided.

Real estate portfolio management

During the year, Rostelecom continued to optimise its real estate portfolio to maximise profit and maintain an optimal level of real estate ownership.

4%

(279 thousand sq. m) reduction of the real estate portfolio area in 2022



Revenues from the management of real estate in 2022¹

5,116 m RUB

Sales

3,366 m RUB

Rental

¹ Excluding VAT (rental and sale of real estate).

2.9. Financial results

Key financial highlights

Over the course of 2022, Rostelecom paid particular attention to building operational resilience in a new economic environment.

The main challenge for the management team in the near future remains the same: to adapt to the changing market conditions, in particular, in terms of selecting investment projects and finding new sources of business growth.

The Company continued to consolidate its leadership in key markets and develop priority business areas, delivering robust growth across key financial metrics.

The Company's revenue for 2022 was up 8 % year-on-year to RUB 627.1 billion.

OIBDA grew by 15 % year-on-year to RUB 251.4 billion, and the OIBDA margin was 40.1% in 2022, up 2.4 p.p. year-on-year.

Rostelecom's net profit in 2022 increased by 11 % to RUB 35.2 billion.

The Company continued to implement priority investment projects, having stayed within the target corridor for the CAPEX/revenue ratio. During 2022, Rostelecom's CAPEX,¹ decreased by 21 % to RUB 116.9 billion and amounted to 18.6% of revenues, primarily due to changes in the equipment delivery dates and, consequently, the dates of payment under supply contracts.

Free cash flow for 2022 hiked by 39 % to RUB 45.2 billion.

Net debt², including lease liabilities (LL) fell by 1% over the year to RUB 502.0 billion. The Company's net debt (including LL)/OIBDA LTM ratio dropped from 2.3x to 2.0x.

The key contribution to the revenue growth in 2022 came from digital clusters and the promotion of end-to-end digital products in the B2B/B2G segment as well as the mobile business and pay TV services.

¹ Here and below, capital expenditure ("CAPEX") is calculated based on the Statement of Cash Flows as cash paid for purchased property, plant and equipment, and intangible assets.

² Here and below, net debt is calculated as long-term and short-term loans and borrowings (a) plus long-term and short-term lease liabilities (LL), (b) less cash and cash equivalents, and (c) less other financial assets.

2022 financial highlights

Metric	2022	2021	Change 2022/2021
Revenue, RUB m	627,055	580,092	8.0 %
OIBDA, RUB m	251,443	218,814	15.0 %
% of revenue	40.1%	37.7 %	2.4 p.p.
Operating profit, RUB m	96,216	73,707	31.0 %
% of revenue	15.3 %	12.7	2.6 p.p.
Net profit, RUB m	35,211	31,832	11.0 %
% of revenue	5.6 %	5.5 %	0.1 p.p.
CAPEX, RUB m	116,881	147,840	(21%)
% of revenue	18.6 %	25.5 %	(6.9 p.p.)
Net debt (including LL), RUB m	502,007	505,197	(1%)
Net debt (including LL)/OIBDA	2.0x	2.3x	–
Free cash flow, RUB m	45,161	32,499	12,662

2022 financial highlights

Revenue, RUB m

627,055

for 2022



Operating expenses, RUB m

530,839

for 2022



Net profit, RUB m,
and net profit margin, %

35,211

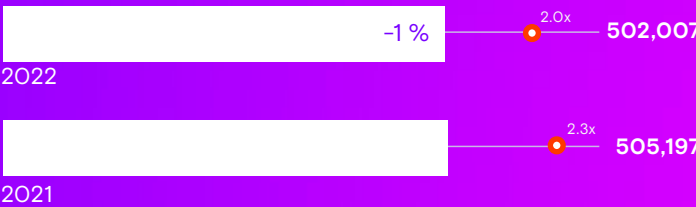
for 2022



Net debt (including LL), RUB m,
and net debt (including LL)/OIBDA

502,007

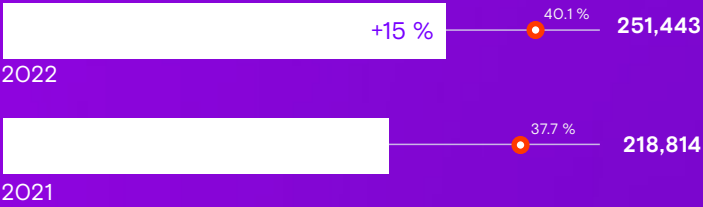
for 2022



OIBDA, RUB m, and OIBDA margin, %

251,443

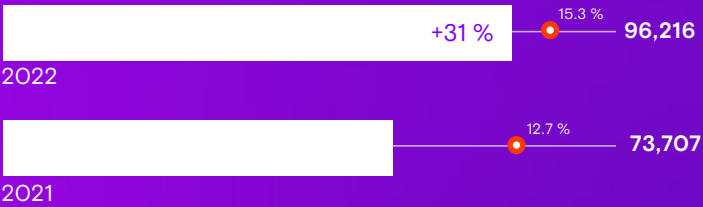
for 2022



Operating profit, RUB m

96,216

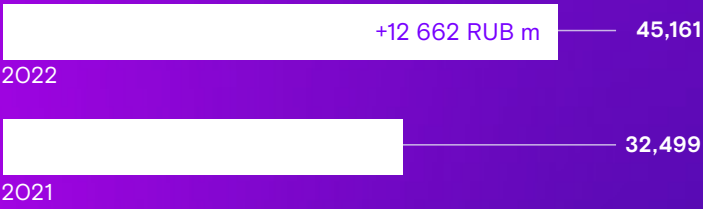
for 2022



Free cash flow, RUB m

45,161

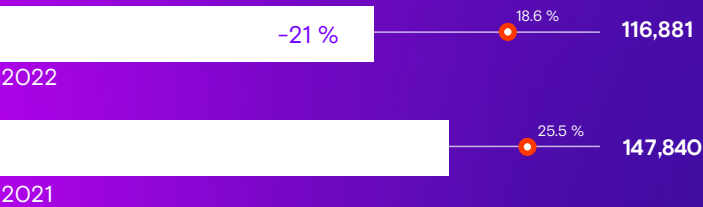
for 2022



CAPEX, RUB m

116,881

for 2022



8%

revenue growth
compared to 2021,
up to RUB 627.1 billion

Revenue mix

- The revenue increase was driven by:
- a 38 % increase in revenue from digital services through the development of platform solutions for the government and the promotion of Digital Region projects as well as information security services and cloud solutions
 - a 7 % increase in mobile revenue due to a higher volume of mobile data consumption and standard voice services
 - an 18 % increase in revenue from VPN services through tariff indexation and contracts with large customers.

Revenue by segment and cluster, RUB m

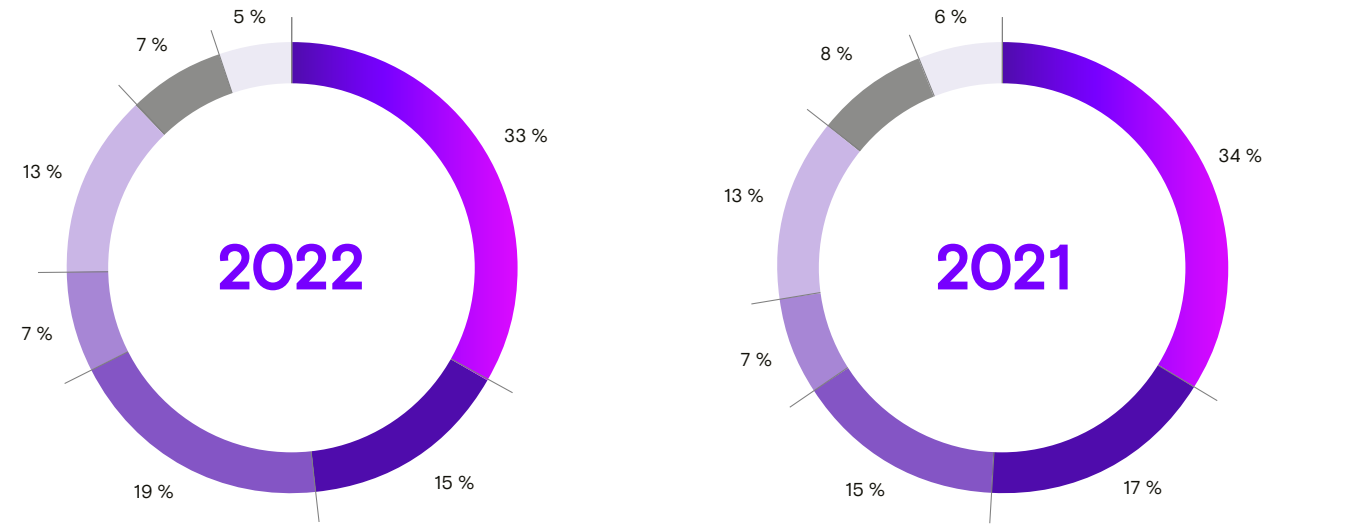
Metric	2022	2021	Change 2022/2021
Segments	348,041	331,217	5 %
B2C ¹	139,672	138,439	1 %
B2B/B2G ²	149,492	134,396	11 %
B2O ³	58,877	58,382	1 %
Digital clusters	113,619	89,993	26 %
Data centres and cloud services	40,583	35,448	14 %
Digital region	25,945	23,602	10 %
Information security	9,999	8,856	13 %
Others	37,092	22,087	68 %
Mobile business	218,135	205,283	6 %
Others	14,598	14,869	(2 %)
Eliminations and adjustments	(67,338)	(61,270)	–
Total	627,055	580,092	8 %

¹ Retail customers.
² Business customers and public sector.
³ Operators.

Revenue by type of service, RUB m

Type of service	2022	2021	Change 2022/2021
Mobile services	208,304	194,345	7 %
Fixed broadband	96,930	99,947	(3 %)
Digital services	122,065	88,399	38 %
TV	41,959	39,913	5 %
Wholesale services	80,519	74,075	9 %
Telephony	44,628	48,862	(9 %)
Other services	32,650	34,551	(5 %)
Total	627,055	580,092	8 %

Revenue structure, %



31%

increase in Rostelecom's operating profit in 2022 to RUB 96.2 billion

Operating profit analysis

- The dynamics of this indicator was driven by:
- a 8 % revenue growth (of RUB 47.0 billion)
 - a 10 % increase (of RUB 14.2 billion) in personnel costs, including due to a headcount hike in digital clusters
 - a 6 % growth (of RUB 9 billion) in depreciation charges and impairment loss on non-current assets due to factors including higher depreciation charges associated with new properties, plants, and equipment, and intangible assets and leases as well as due to the impairment of a number of intangible assets
 - a RUB 4.9 billion change in the impairment loss on financial assets measured at an amortised cost driven by, among other factors, the reversal of provisions due to the new calculation model applied to the 2021 data
 - a 4 % decrease (of RUB 3.7 billion) in the cost of interconnection and traffic transit services, including due to changes in the financial terms of channel distribution and retransmission as well as a decrease in the use of SMS content.

Operating expenses breakdown, RUB m

Metric	2022	2021	Change 2022/2021
Personnel costs	(151,374)	(137,209)	10 %
Depreciation charges and impairment loss on non-current assets	(149,059)	(140,059)	6 %
Interconnection charges	(93,090)	(96,816)	(4 %)
Materials, utilities, repairs and maintenance	(44,758)	(43,426)	3 %
Gain on the disposal of properties, plants, and equipment, and intangible assets	7,450	9,051	(18 %)
Impairment loss on financial assets measured at an amortised cost	(6,811)	(1,911)	256 %
Other operating income	21,833	20,736	5 %
Other operating expenses	(115,030)	(116,751)	(1%)
Total	(530,839)	(506,385)	5 %

15%

OIBDA increased for 2022, up to RUB 251.4 billion

OIBDA

Changes in OIBDA were triggered by revenue growth and the above-mentioned factors affecting operating expenses. The OIBDA margin for 12M 2022 increased by 2.4 p.p. year-on-year to 40.1%. The main contributors to the OIBDA growth in 2022 were the mobile business and the retail segment as well as the Company's digital clusters.

OIBDA by segment and cluster, RUB m

Metric	2022	2021	Change 2022/2021
Segments	118,163	111,344	6 %
B2C	41,939	36,321	15 %
B2B/B2G	58,748	57,185	3 %
B2O	17,476	17,838	(2 %)
Digital clusters	29,862	24,260	23 %
Data centres and cloud services	19,774	15,418	28 %
Digital region	6,176	5,199	19 %
Information security	1,327	2,412	(45 %)
Others	2,585	1,231	110 %
Mobile business	101,903	88,088	16 %
Others	7,160	2,542	182 %
Eliminations and adjustments	(5,645)	(7,420)	–
Total	251,443	218,814	15 %

OIBDA calculation, RUB m

Metric	2022	2021	Change 2022/2021
Operating profit	96,216	73,707	31 %
Add: depreciation	(149,059)	(140,059)	6 %
Add: non-cash expense under the long-term incentive programme	(4,949)	(3,744)	32 %
Add: expense under the private pension fund programme	(1,219)	(1,304)	(7 %)
OIBDA	251,443	218,814	15 %
OIBDA, % of revenue	40.1%	37.7 %	2.4 p.p.

Net profit analysis for 2022

45.3

RUB billion
Profit before tax

+11%

Year-on-year growth
for 2022

Changes in profit before
tax were mainly due to a rise
in finance costs in 2022

10.1

RUB billion
Income tax

+12%

Year-on-year growth
for 2022

Changes in tax for the reporting
year were due to change
in profit before tax

35.2

RUB billion
Net profit

+11%

Year-on-year growth
for 2022

Free cash flow

45.2

RUB billion
Free cash flow

+39%

Year-on-year growth
for 2022

The positive trend in free cash flow
was attributable to the lower intensity
of the capital investment programme
across key strategic projects.

Debt

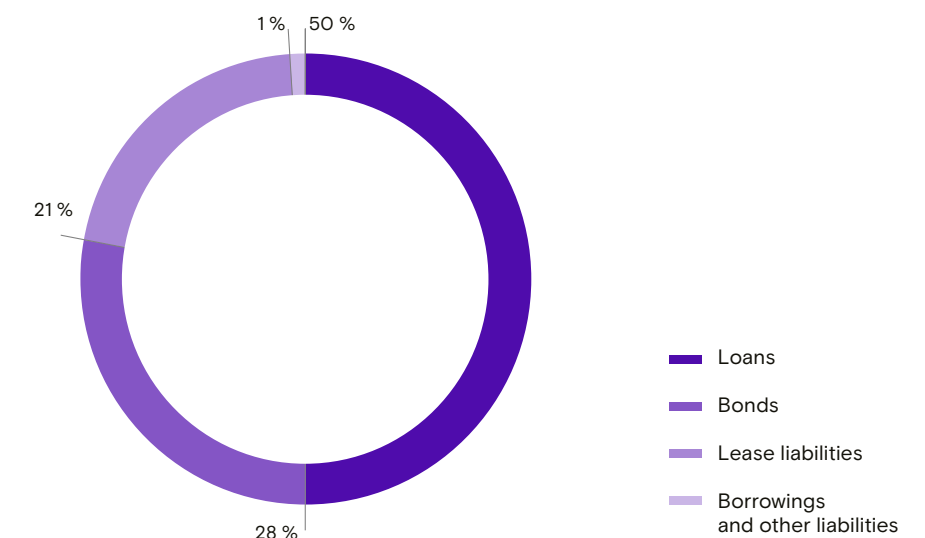
570

RUB billion
Total debt of Rostelecom
(including JSC)

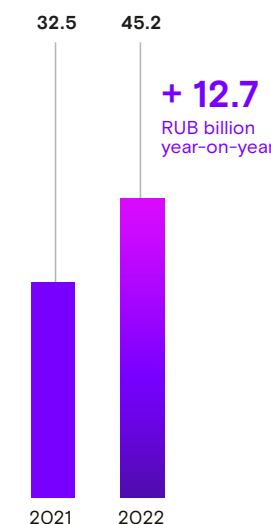
As of 31st December 2022, Rostelecom's
total debt (including LL) remained virtually
unchanged at RUB 570 billion, with rouble-
denominated liabilities accounting for 100 %
of the total.

The Group's net debt (including LL) as of 31st December 2022 dipped
by 1% compared to the beginning of the year, totalling RUB 502 billion.
The Company's net debt (including LL)/OIBDA LTM¹ ratio decreased from
2.3x to 2.0x during 2022.

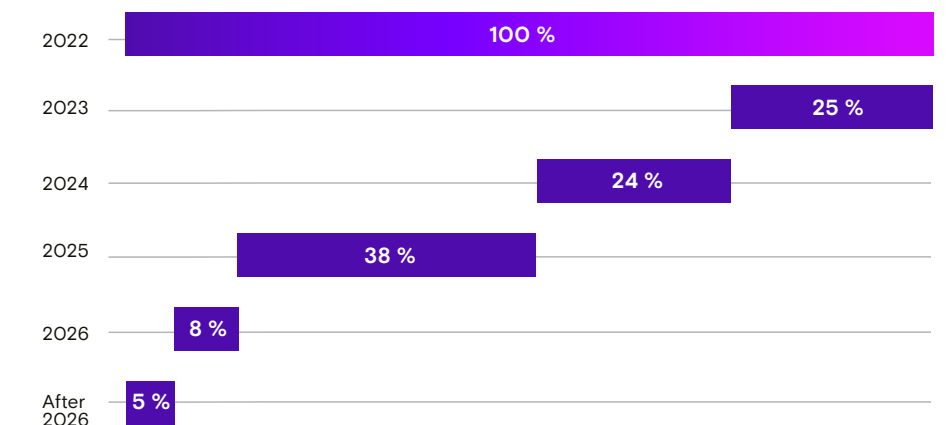
Debt by type of liabilities



Free cash flow, RUB bn



Loans and borrowings maturity



¹ Last 12 months.

2.10. Capital investment and infrastructure development

Rostelecom strives to take up a smart approach to investment, which involves transition to a less capital-intensive growth model in traditional businesses and a focus on larger investment in the development of the fastest-growing products.

Core investment areas of Rostelecom, % of total capital investment

Investment area	2020	2021	2022	2023F ¹	Major projects
Network infrastructure (backbone and regional network segments)	15	17	16	12	Expansion of IP/MPLS networks, construction of FOCLs
Mobile network infrastructure	25	25	15	19	Development and upgrades of mobile networks, improvement of service quality, expansion of service offerings, regulatory compliance, and enhancement of IT infrastructure, billing and a monobrand sales channel
IT infrastructure	7	8	10	11	IT development and deployment, IT equipment replacement
Other (compliance, etc.)	13	9	11	19	Regulatory compliance, development of socially significant services (biometrics, trusted mobile environment, etc.)
B2C (SAC ² , installations, etc.)	18	14	18	16	Service development, enhancing service levels, construction of communications networks for residential customers
B2B/B2G (last mile, etc.)	13	12	11	6	Service development, enhancing service levels, construction of communications networks for business and government customers
B2O (network equipment for projects)	2	2	3	1	Service development, retrofitting the backbone network
Digital clusters	8	13	16	16	Data centres and cloud services, industry-specific services, e-services for state agencies, and cybersecurity solutions
Actual/planned capital investment (CAPEX) (according to the cash flow statement), RUB m	135,987	147,840	116,881	151,000–162,000	



Russia's largest and growing fibre network

1.3

MILLION KM
OF FIBRE

77

THOUSAND KM OF FIBRE
LAID OVER THE YEAR

Projects to upgrade and expand the existing network infrastructure

- Core network development projects (expansion of IP/MPLS networks, construction of FOCLs)
- Network operation projects (TOP 100 programme, development of access networks, Reduction of Cable Infrastructure Accident Rates and Emergency Repair programme).

Rostelecom provides transmission services for any data format via cable, radio relay or satellite systems.

Our digital network is based on the DWDM³ and IP/MPLS technologies and covers virtually all of Russia.

¹ In December 2022, Rostelecom's Board of Directors approved the Company's 2023 budget, including the capital investment programme.

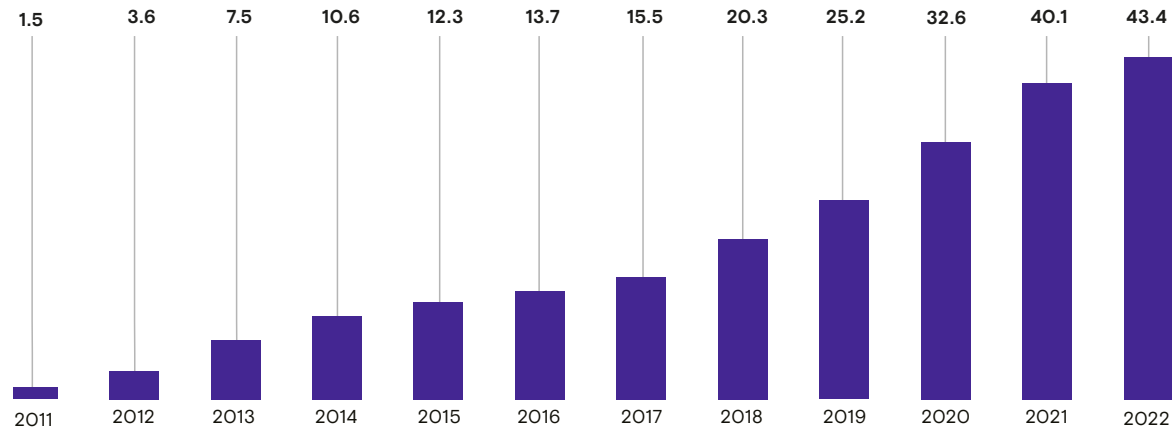
² Subscriber Acquisition Costs.

³ Dense Wavelength Division Multiplexing – advanced technology for carrying multiple optical channels on the same fibre.

Data network

In 2022, we continued expanding our IP/MPLS backbone network, increasing its capacity by 3,300 Gbps to 43.4 Tbps.

IP/MPLS backbone network capacity, Tbps



Submarine cables

Submarine cables provide connectivity between Russia and other markets as well as between hard-to-reach regions of the country.

Over the year of 2022, Rostelecom completed the construction of the submarine fibre-optic communication line (SFOCL) Petropavlovsk-Kamchatsky-Anadyr as part of the Connection of the Chukotka Autonomous Region to the Unified Telecommunications Network of the Russian Federation federal initiative. The completed SFOCL has a total length of 2,173 km. The initial capacity of the new DWDM systems is 100 Gbps, expandable to 8 Tbps. The new SFOCL will provide the region with access to all services without relying on landlines laid through other countries.

In addition, over 2022, the Company expanded the 1,109 km Baltic submarine communication line providing uninterrupted access to Russia's unified telecommunications network for consumers in the Kaliningrad Region.

Satellite communications

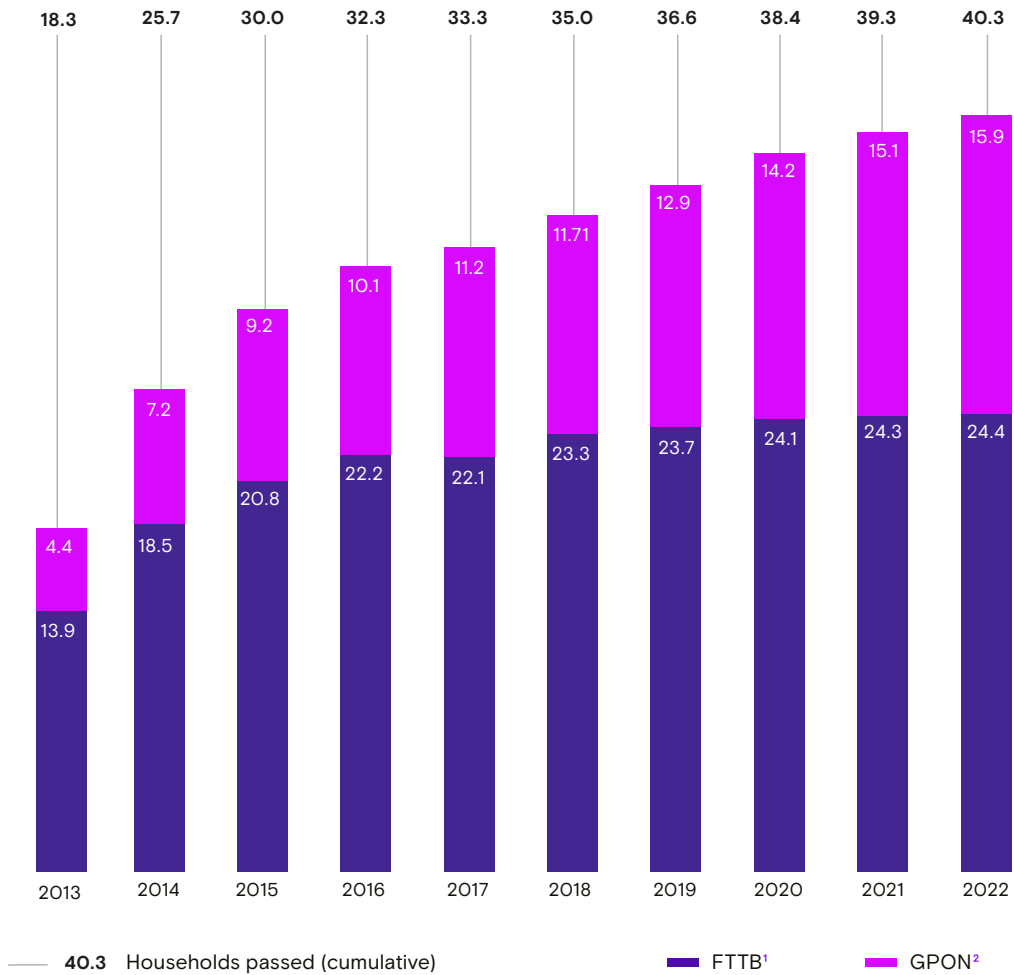
Rostelecom's backbone satellite network complements its terrestrial digital network by connecting hard-to-reach locations with no access to land fibre. In a number of areas, satellite communications also serve to back up to land infrastructure.

The current utilisation of our satellite communications network in areas along our backbone lines has been gradually decreasing as we continue commissioning submarine fibre to connect Magadan, Petropavlovsk-Kamchatsky, Kuril Islands (Iturup, Kunashir and Shikotan) as well as Anadyr.

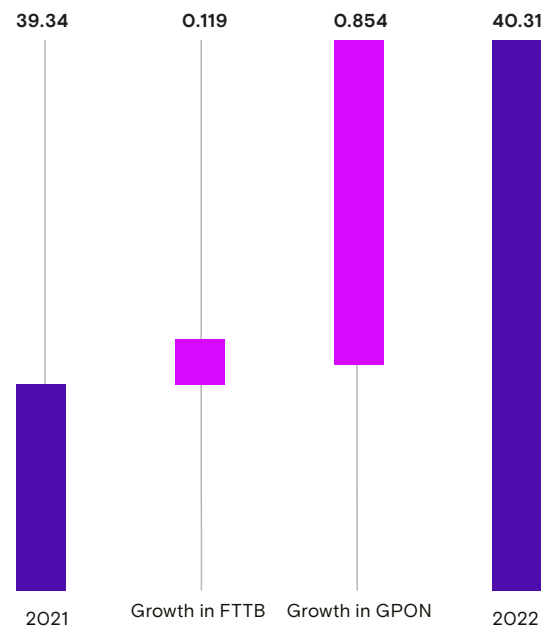
Access networks

In 2022, Rostelecom carried on to upgrade its access networks to provide customers with high-quality digital services through advanced fibre technology.

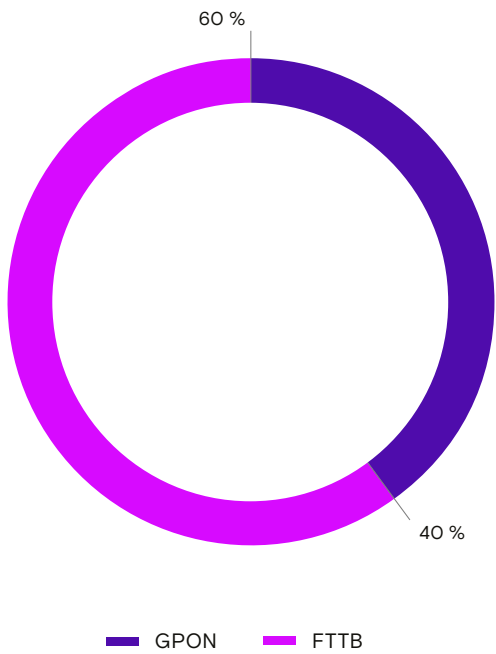
Household coverage by technology, million households



Household coverage, million households

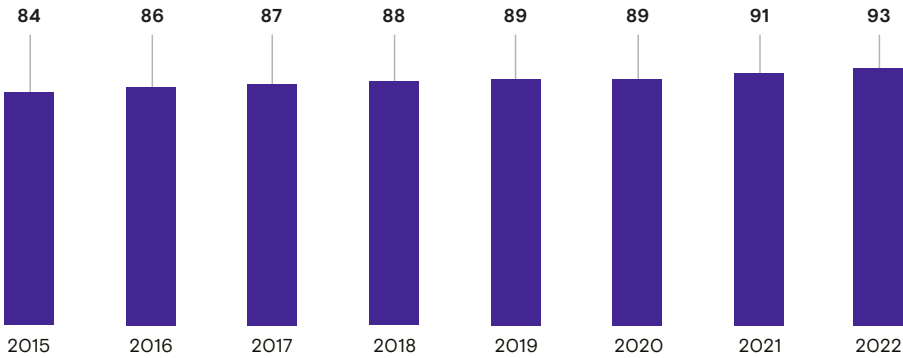


Households by access technology as at 1 January 2023



¹ Fiber-to-Building.
² Gigabyte Passive Optical Network.

Local telephone network digitisation, %



During all of 2022, Rostelecom also continued its MOST programme to release redundant property, designed to upgrade our last mile infrastructure through replacing copper networks with fibre access solutions. The project maximises our disposal proceeds while cutting operating expenses on network infrastructure maintenance through releasing redundant property and reducing property maintenance costs. Under the programme, in the reporting year, Rostelecom completed 110 projects, installed 854 telecom access nodes, and migrated over 400 thousand telephone ports to VoIP.

Developing the TV content exchange network

In 2022, the first phase of the TV content exchange network was built and launched for our anchor customer, the Russian Television and Radio Broadcasting Company (RTR). This is an overlay network, with its first construction phase comprising 78 Rostelecom sites, 19 RTR sites, and 104 DWDM transmission links. As a result of the project, 19 regional RTR studios have been connected to the TV content exchange network.

Further development of this network will enable major federal players abandon the satellite channel for TV content exchange between each other, which will better the quality and reliability of the exchanged TV content delivery by national TV channels as part of regional broadcasting.

Projects to develop mobile business

- Projects to improve service quality and foster the mobile network
- Upgrades to voice switching nodes
- Law Enforcement Support System¹ (regulatory requirements)
- IT infrastructure and billing development
- Development of a monobrand sales channel

Rostelecom’s efforts to hone its mobile network in 2022 were focused on maintaining and improving the quality of services across its operating regions. The Company also launched its network in the Khabarovsk Region and made further progress on existing projects such as bridging the digital divide, deploying the communications network across small communities as well as making targeted upgrades in coverage across its regions of operation.

During the year, the Company hiked the number of its base stations of any technology by 5.4 %, with the regions hosting most new base stations comprising Moscow and the Moscow Region, the Leningrad Region, the Perm Territory as well as the Irkutsk and Sverdlovsk Regions. In 2022, 4G coverage across our footprint reached 97.76 %, 3G 94.43 % and 2G 97.62 % of the population.

Although foreign hardware and software vendors withdrew from Russia in 2022, our investment in IT infrastructure and the update of billing systems helped us maintain the quality of service for internal and external customers as well as introduce a number of business functionalities, including the nationwide launch of FMC sales, the creation of a platform to manage partner services and subscriptions (Mixx, LitRes, Doctis, gfn.ru), and the launch of personalised roaming offers.

Projects to develop the IT infrastructure

- Rollout and development of a CRM system in the B2C segment
- BASIS programme

Over 2022, we continued our efforts to bolster the efficiency of information systems and speed up interaction across all business units. The Company paid particular attention to further developing integration services to shrink time-to-market for new products, platforms, and services, and was actively involved in creating and deploying Russian alternatives to imported products.

In the reporting year, Rostelecom’s subsidiary established as a centre for developing cloud-based IT systems created a joint venture, Cloud Platform (under the BASIS brand). The reporting year saw two successful product launches: BASIS.vCore and BASIS.Storage Security. Four leading universities in Russia launched an educational programme using BASIS products.



- The Sparta unified network development planning platform

Throughout all of 2022, we continued to further develop the platform by standardising the IP/ MPLS network planning features across all regional branches, integrating it with third-party systems and information sources and accumulating historical network data on link utilisation and device connectivity.

At the same time, the Company started working on visualising the backhaul network topology, the routes of planned and existing channels set up using DWDM equipment as well as the technical parameters of network elements, with relevant reports.

Other infrastructure projects, compliance

- Approval management system (Ecosystem)
- Innovative Laboratory information system
- Data Science office projects
- Product and service showcase
- Execution of the Yarovaya package and Law Enforcement Support System requirements

19

regional RTR studios have been connected to the TV content exchange network

>97 %

4G coverage across the regions of operation

¹ Law Enforcement Support System (SORM) is a complex of technical means and measures designed to support law enforcement intelligence in telephony, mobile, wireless and radio communications networks.

Projects to develop the B2C segment

- **Gaming platform**
- **Wink**
- **Smart Home**

The following features were added to the Gaming Services product at the igrovoy.rt.ru platform in 2022: options to connect new gaming services and subscriptions for Rostelecom Books from LitRes.

Over all of 2022, Rostelecom continued to further mature its interactive TV infrastructure, including upgrading IPTV and OTT platforms, enhancing the Wink video service and introducing other new products. The Company installed 48 new servers and 22 new infrastructure switches for the Wink platform. The upgrades of the interactive TV infrastructure completed during the year enabled us to support the deployment of new functionality and raise our subscriber base while preventing service failures.

During the year, Rostelecom rapidly upgraded the server hardware on the most heavily-used nodes of the Freeview and VoD services, enhancing their efficiency and reliability. The cumulative peak traffic for these services reached 3.2 Tbps during peak hours.

OTT broadcasting was implemented on 24 HD TV channels in the HEVC format to advance the quality and streamline TV traffic. The Company also upgraded its IPTV channel multiplexing system with a planned total peak capacity of 70 Gbps. Pursuant to Federal Law No. 257-FZ, on Motorways and Road Activities in the Russian Federation, and on Amending Certain Legislative Acts of the Russian Federation, dated 8th November 2007, and in order to boost subscriber loyalty, Rostelecom set up the reception of an additional 40 regional TV channels.

In 2022, Rostelecom provided post-warranty service and technical support for all manufacturers of IPTV and OTT platform infrastructure equipment, including vendors that ceased operations in Russia.

As part of complying with the requirements of the Russian Government's resolution to inform the public about civil defence activities and emergency situations, we developed the necessary tools and defined the business process for the centralised notification of Wink subscribers by units responsible for monitoring and technical day-to-day management of communications networks. The service is slated to come on-stream in the first half of 2023.

Over the year of 2022, Wink began broadcasting in Armenia, supported by the GNC Alfa operator.

In 2022, Rostelecom also invested in the design and enhancement of Smart Home services. Modern digital solutions introduced in new-build projects as well as in the secondary housing market improve the quality of life, convenience and safety for residents while facilitating the property management process and improving economic efficiency for management companies. As a co-founder of the Smart Block of Flats autonomous non-profit organisation under the Ministry of Digital Development, Communications and Mass Media, the Ministry of Industry and Trade, and the Ministry of Construction, Housing and Utilities, Rostelecom is involved in developing standards and regulations governing the digitalisation of housing and public utilities as well as smart blocks of flats.

Projects to develop the B2B/B2G segment

- **The segment's products** (expanding the coverage of the Virtual PBX, Federal Wi-Fi, and Video Surveillance services)
- **The segment's IT projects** (Automation of B2B Sales, the Connections Programme, and B2G Recontracting)
- **Setting up communications services for business and government customers**

Over all the reporting year, Rostelecom introduced additional options based on its Virtual PBX service, including the connection of mobile numbers to Virtual PBX. The new features enable virtual telephony service customers to call from, and receive calls to, mobile numbers.

Rostelecom continues to actively enhance Wi-Fi 2.0, its proprietary authorisation platform, providing the Company with a foothold to enter the PaaS market. The multi-vendor solution enables building the service upon an existing wireless network

and third-party channels, which allows Rostelecom to avoid investing in building the last-mile infrastructure and skip the equipment deployment stage in order to kick off providing the service.

Within this platform, Rostelecom developed Light Wi-Fi, a new service enabling customers to set up two independent Wi-Fi networks, a public and a private ones for employees to access company devices and network storages. To take up the service, no dedicated access points are needed: the customer's existing Wi-Fi router will suffice.

The Video Surveillance service is part of the Smart Home ecosystem designed to provide security and home automation. Cumulatively, the Company has sold over 820 thousand CCTV cameras.

Projects to develop the B2O segment



- **Infrastructure Operator to Operators (O2O) project**
- **Retrofitting Rostelecom's backbone network for international operators**
- **TEA NEXT Europe–Russia–Asia**

In year of 2022, as part of the O2O project, the Company continued to provide a range of services for the development and maintenance of infrastructure used by third-party telecom operators. THE portfolio of O2O project income-generating contracts grew by 10 % to more than 500 unique contracts.

Over the reporting year of 2022, as part of developing international services in Russia, Rostelecom commenced the TEA NEXT project, which involves the construction of new cable lines from the Russian border with Latvia to the Russian border with China and Mongolia. The 96-fibre FOCL's length totalled 7,693 km.

The first stage of the FOCL construction from the Latvian border to Torzhok, totalling 564 km, was completed in 2022.

The Company also signed contracts providing for the turnkey implementation of the following project phases:

- The second stage of the FOCL Moscow–Torzhok–Saint Petersburg, measuring 800 km
- The third stage of the FOCL Torzhok–Kryakhta, spanning 6,300 km

10 %

INCREASE IN THE PORTFOLIO
OF THE O2O PROJECT CONTRACTS

¹ H.265, or HEVC, is a video compression format that uses more effective algorithms than H.264/MPEG-4 AVC.

Projects to develop digital clusters



- Expanding the range of services under existing projects
- Construction of new data centres
- Bettering the reliability of information systems within the E-Government infrastructure
- Development of the Digital Region cluster infrastructure

Over 2022, the Company carried on to actively construct fast-growing digital clusters and deploy advanced technologies to facilitate business and government digitalisation.

During the year, Rostelecom implemented a project to improve the reliability of the E-Government infrastructure information systems, significantly boosting the system's performance and operability: the system architecture was refined, reducing the risk of critical incidents and, accordingly, cutting downtime for all resources.

Throughout 2022, as a result of our data centre expansion efforts, total rack capacity across owned data centres rose by more than 1,300 rack spaces, or more than 10 %. The total

capacity of the Company's data centres exceeded 15 thousand rack spaces by the year-end, a threefold lead over the nearest competitor.

Reinforcing its long-term leadership in the data centre market, Rostelecom completed, among other projects, the second Moscow-Udomlya FOCL, which practically eliminated the latency issue and opened up prospects for evolving it into a full-scale hub to host IT infrastructure of both public and major business customers, with a potential capacity expansion from the current 1,600 rack spaces to 4,000 rack spaces.

In the year of 2022, the Company forged ahead with projects to roll out digital solutions across Russian regions. As part of the Digital Region initiative, Rostelecom installed 1,106 new traffic enforcement cameras, 22 weigh stations, and over 10 thousand smart electricity meters. In addition, comprehensive upgrade and expansion projects were completed for Moscow's and Saint Petersburg's urban video surveillance systems, with energy efficiency projects realised in 20 regions.

2.11. Risk management system

Rostelecom’s risk management system (RMS) enables risk modelling, assessment, and mitigation. The system fully complies with the requirements of domestic and international regulators. The Company makes sure its risk management system is in line with best practices by regularly updating its internal documents. The key focus areas of the system development are further automation and digitisation.

Rostelecom’s risk management system enables effective management decisions in situations involving risks and uncertainties as well as helps identify opportunities supporting the Company’s strategic goals.

Rostelecom’s risk management is guided by the following internal documents:

- PJSC Rostelecom’s Charter
- Risk Management Policy
- Regulations on the Board of Directors
- Regulations on the Audit Committee of the Board of Directors
- Regulations on the Integrated Risk Management System
- Regulations on the Risk Management Committee of the Management Board
- Risk Management Procedure.

Risk management is based on a system of concise and measurable corporate goals set by the Board and the management. The Board of Directors approves Rostelecom’s Risk Management Programme every year and arranges to monitor its execution on a quarterly basis. As part of the Risk Management Programme, the Risk Management Committee of the Management Board reviews quarterly progress reports on risk management and relevant matters and then approves risk management initiatives.

The Risk Management Programme includes:

- simulation modelling of actual/plan variance ranges for business plan items
- a list of strategic and corporate risks and corresponding potential risk scenarios
- key strategic and corporate risk indicators and thresholds
- strategic and corporate risk management activities.

At least once a year, the Company’s internal audit function conducts an independent evaluation of the risk management system’s effectiveness and performance over the previous period.

In 2022, Rostelecom approved the target maturity level of its risk management system and assessed the current maturity level of its risk management using a model designed by the autonomous non-profit organisation of continuing professional education Institute for Strategic Risk Analysis in Decision Making (ISAR).

A self-assessment estimated the current level of maturity at 2.83 out of 3, with the following areas of improvement identified for the Company’s risk management system:

- Providing sufficient resources to manage risks (risk management budget commensurate with risk levels)
- Improving communication and consultation to maintain the risk management framework and facilitate effective risk management
- Developing risk management practices and boosting risk management awareness among key employees.

2.83

THE CURRENT LEVEL OF MATURITY
THROUGH A SELF-ASSESSMENT

The key risks in 2022 are still the risks of business continuity, components crunch, and import substitution due to continued sanctions imposed by the United States and the European Union against Russia and China.

To manage business continuity risks, Rostelecom set up a dedicated task force, approved a roadmap for the period from 2022 to 2023 and began developing methodologies to evaluate the importance of relevant products and the criticality of services and information systems.

With regards to the components crunch and import substitution, the Company focuses on the availability of core process equipment, stocks in “hot-standby” warehouses, parallel imports, and compliance with procurement quotas.

All these efforts help mitigate the impacts of the sanctions regimes.

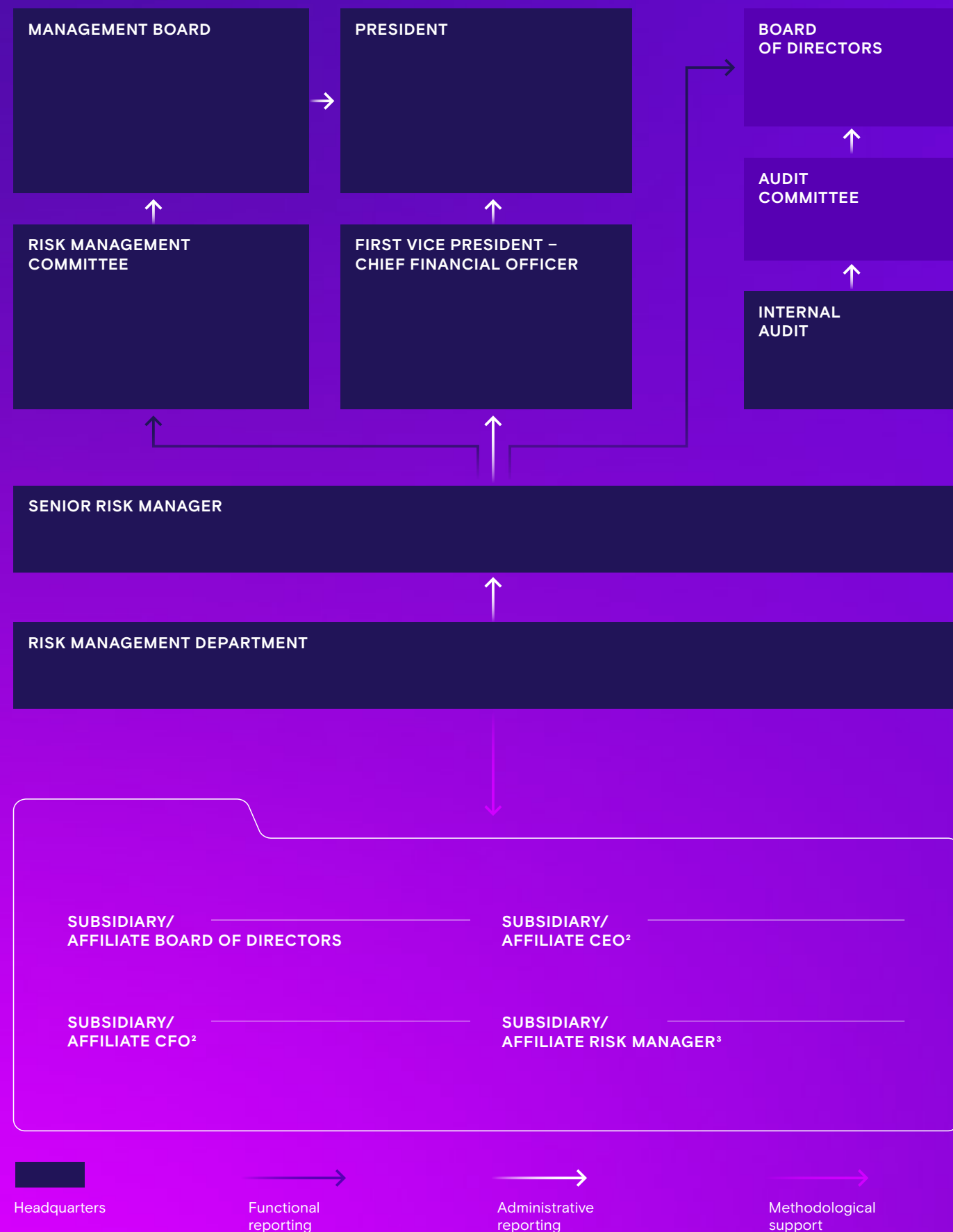
Over 2023, the Company plans to further develop its risk management system through the following activities:

- Enhancing compliance with Russian and global standards
- Advancing risk management performance and methods for integrating risk management tools into the Company’s operations
- Launching a video course on risk management, which is currently available to all employees via Rostelecom’s Corporate Online University, to raise awareness and ensure practical implementation of risk management measures
- Monitoring the RMS rollout across the subsidiaries and affiliates listed in Rostelecom President’s order
- Developing an operations-level risk dashboard for key risk owners.

Risk management actors

Actor	Roles and responsibilities
Board of Directors	Defines the operating principles and identifies improvement areas of the risk management system; carries out overall monitoring of risk management performance
Audit Committee	Oversees the operation of and identifies gaps in the risk management system; makes recommendations to the Board of Directors
The Company’s management	Manages key risks and regularly monitors the risk management system
Internal Audit and Internal Control units	Assess risk management performance and advise on improvements
Senior Risk Manager and Risk Management units	Build, monitor, and maintain the risk management system
Business units and employees	Manage risks within their areas of responsibility

Risk management interactions within Rostelecom Group¹



¹ The Company's management is involved in the activities of the Risk Management Committee as risk owners and risk mitigation owners. The Committee has 12 members. (President, First and Senior VPs, VPs, Senior Risk Manager, and non-voting Chief Auditor). The President of PJSC Rostelecom is the Committee Chairman.

² Subject to changes depending on the organisational structure of a specific subsidiary or affiliate.

³ If applicable.

Integration of risk management with the Company's cross-functional processes

Risk management is linked to strategic planning, budgeting, the implementation of investment projects and products, as well as other cross-functional processes at the Company.

Strategic planning

When developing strategic plans, risks affecting the achievement of strategic goals are identified and analysed, and simulation modelling is carried out.

Budgeting

Analysis and acknowledgement of risks associated with non-achievement of key financial KPIs, and their simulation modelling.

Investment planning for projects and products

Analysis and acknowledgement of project and product risks associated with non-achievement of target NPV and other indicators, and their simulation modelling followed by the development of risk mitigation measures.

Procurement procedures

Detailed review and acknowledgement of risks when selecting suppliers and contractors, followed by the monitoring of key indicators on an interactive dashboard.

Training

Training and upskilling programmes are run on a regular basis for employees involved in risk management. A link to the Fundamentals of Risk Management course, which is available to all Rostelecom employees, can be found at the web page of the Corporate Online University.

RISKS OF ROSTELECOM GROUP

Information is not disclosed in accordance with the Decree of the Government of the Russian Federation No. 1102 as of 4 July 2023.

Risk management activities

Rostelecom's Risk Management Committee reviews individual cases and approves measures and responses. The Senior Risk Manager oversees the implementation of the Committee's resolutions.

Measures to be taken are designed in line with the SMART¹ criteria

Responses are selected based on viability: implementation costs should not exceed the expected reduction of damage caused by a risk event.

Sustainability risk management

Apart from managing the above-mentioned risks, Rostelecom also considers sustainability risks.

HSE risks

To minimise these risks, Rostelecom approved an HSE and fire safety policy, which outlines the key objectives, principles, and focus areas to create safe working conditions, keep all employees safe and healthy, and ensure industrial, fire, and environmental safety.

Throughout 2022, Rostelecom continued its efforts to ensure the health and safety of employees. The Company provided them with personal protective equipment, regularly disinfected its operating facilities, and moved most office staff to work from home. These risks are monitored in line with the Company's business plan.

Anti-corruption risks

The Company includes corruption risk in the risk category that comprises risks of legal violations, fines, and financial or reputational losses. Rostelecom tracks indicators related to identified affiliate relationships, completion of anti-corruption training, and submission of declarations by employees in positions exposed to a higher corruption risk.

Risk of skilled personnel shortage

Potential brain drain from Russia will be the key risk factor in 2023. Rostelecom's HR strategy until 2025 focuses on building IT capabilities and boosting digital literacy. Training and upskilling certification under digital skills programmes was the relevant risk indicator tracked by the Company in 2022. This risk indicator will also be carried over to 2023.

¹ Specific, Measurable, Achievable, Relevant, and Time-bound.

2.12. ESG report: environmental, social, and governance factors

Our ESG priorities

Environment

- Effective environmental control and management system
- Energy efficiency
- Waste management
- Reducing emissions
- Responsible consumption

Social impact

- Employee training and development
- Ensuring workplace safety
- Supporting employees and increasing engagement
- Philanthropy
- Digital services for better quality of life

Governance

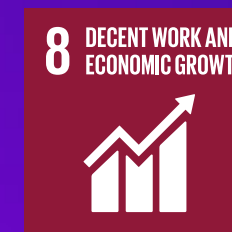
- High corporate governance standards
- Fair remuneration
- Shareholder rights
- Anti-corruption
- High procurement standards

Sustainable Development Goals

First priority goals



Goal 4
Ensure inclusive and equitable quality education and promote lifelong opportunities for all



Goal 8
Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all



Goal 9
Build a resilient infrastructure, promote inclusive and sustainable industrialisation, and foster innovation



Goal 10
Reduce inequality within and among countries



Goal 11
Make cities and communities inclusive, safe, resilient and sustainable

Second priority goals



Goal 12
Ensure sustainable consumption and production patterns



Goal 13
Climate action



Goal 15
Life on land



Goal 16
Promote peaceful and inclusive societies for sustainable development, provide access to justice for all, and build effective, accountable, and inclusive institutions at all levels



Goal 17
Strengthen the means of implementation and revitalise the global partnership for sustainable development

Sustainable Development Goals

Rostelecom strives to contribute towards the United Nations Sustainable Development Goals (UN SDGs) by integrating them into the management of the Company's operations and considering them when designing sustainability projects.

The Group is also guided by the best practices as well as the international regulations and standards, including the United Nations Global Compact and the Social Charter of Russian Business.

High sustainability and governance standards are central to Rostelecom's growth strategy and culture, and a key to long-term value creation.

The Group's sustainability activities aim to:

- ensure its involvement in Russia's digital economy projects
- implement the Digital Equality social programme
- protect employees and create comfortable working conditions
- offer customers enhanced innovative services
- support social, volunteering, and charitable projects
- train and provide career guidance for young people
- enhance technology to tackle environmental challenges
- retain maximum possible transparency amid severe turbulence.

Rostelecom has a dedicated ESG Information section on its website, highlighting the Company's key ESG metrics, documents, and policies. ESG presentations and ESG data summaries are also published under this section.

Indices and ratings



Rostelecom is included in the Sustainable Development Vector Index of the Russian Union of Industrialists and Entrepreneurs.



Rostelecom ranked 41st in the ESG ranking of the independent European rating agency RAEX-Europe. The agency's current ranking includes 160 Russian companies.



Rostelecom made it to the top of the Corporate Philanthropy Leaders rating (Group A) for its performance in 2022. The competition is held by the Donors Forum with the support of Russia's Federation Council, Ministry of Science and Higher Education, Ministry of Culture, Ministry of Economic Development, and RSPP among other partners. The Company won the Best Corporate Social Investment Programme in the Area in the Terms of Sustainability and Business Strategy category with its Digital Region 2021–2023 programme to digitalise the economy and social sphere as well as public and municipal administration across the Russian regions



Rostelecom's ABC of the Internet project became the champion at the World Summit on the Information Society Prizes 2023 in the AL C4 category: Capacity Building (Action Line C4 Capacity Building)

Environmental protection



Rostelecom undertakes a responsible approach to environmental conservation.

The Company manages its environmental impacts across three areas:

- Its own environmental impact
- Digital environmental management solutions for third parties
- Promoting a culture of responsible consumption across society.

Environmental protection and safety management

Rostelecom's environmental protection activities and environmental safety efforts are part of the Group's wider occupational health and safety agenda.

Rostelecom's environmental protection management is driven by:

- Environmental Policy
- HSE and Fire Safety Policy.

These policies were implemented across the Group subsidiaries and affiliates. Rostelecom's environmental management system fully complies with the governmental regulations as well as the international best practice on the telecommunications market.

During 2022, Rostelecom's environmental management system was aligned with the two-tier governance model introduced a year earlier. The Company also successfully passed an external audit, with the certificate of conformity to GOST R ISO 14001-2016 being renewed until 2025.

Environmental operational control

Environmental operational control makes a significant contribution to the Company's environmental safety. The Regulations on Environmental Operational Control in place define the composition, structure, organisation, and operational procedure for the system.

629

FACILITIES WERE AUDITED IN THE REPORTING YEAR

In the reporting year, the Company completed 397 internal audits (295 on-site and 102 desk audits), with 629 facilities audited and 710 gaps identified and closed.

Rostelecom organises specialised training for employees responsible for coordinating the environmental safety management. Over the course of 2022, this training covered 93 such employees.

Total environmental expenditures and investments, RUB million

Focus area	2017	2018	2019	2020	2021	2022
Waste management	83.5	99.8	100.6	108.7	106.0	126.0
Soil, surface water, and groundwater pollution control	5.6	5.9	6.5	7.0	3.8	8.4
Air pollution control and climate change mitigation	2.4	5.8	5.7	9.8	8.4	7.6
Area improvements and urban greening	1.6	2.1	2.5	5.2	2.9	2.8
Employee training	2.4	1.6	1.6	1.9	0.9	0.4
Payments to the state budget for environmental pollution	19.6	11.2	8.4	7.1	2.6	3.3
Other focus areas	30.4	33.1	37.0	34.5	39.2	26.0
Total environmental expenditures	145.5	159.5	162.4	174.0	163.9	174.5

Waste management

Sustainable waste management is essential for Rostelecom. The Company aims to reduce waste generation and build up the proportion of waste sent for recycling. More than 99 % of the Company's waste is low-hazard and almost non-hazardous (categories 4 and 5). The Company transfers all waste containing useful components and which is suitable for processing and reuse to specialised organisations. Hazardous waste is handed over to specialised organisations for neutralisation.

Throughout the course of 2022, the total mass of waste generated by Rostelecom multiplied by 8.1% from 2021, including Hazard Category 5 general office waste handed over for landfilling by 25 %, Hazard Category 5 construction waste by 100 %, and Hazard Category 5 wood waste handed over for landfilling and recycling by 50 %.

Waste generation by hazard category¹, tonnes

Hazard categories	2019	2020	2021	2022
1	40.05	35.43	25.06	15.64
2	15.77	21.22	64.67	2.52
3	33.4	26.38	23.53	23.75
4	21,502	21,281	26,353	25,855
5	12,524	10,474	6,843	10,117
Total	34,115	31,838	33,310	36,014

Since 2018, we have been reducing the amount of Hazard Category 1 waste by cutting the number of fluorescent mercury-containing lamps in use. Over 2022, Rostelecom decided to completely abandon the use of mercury-containing lamps. Used fluorescent lamps will be replaced with LED lamps of the same size.

¹ The indicators presented in the table include data for PJSC Rostelecom and the Group's most significant subsidiaries and affiliates.

Green Office

Rostelecom adheres to the Green Office principles:

- Utilising automated power and water meters
- Executing separate waste collection
- Employing environmentally safe consumables
- Using electronic document management and videoconferencing solutions

The amount of paper waste across the Company was reduced in the reporting period as a result of extensive workflow digitisation and reduced paper consumption.

Responsible consumption

2,053

tonnes of waste were handed over for recycling in 2022, including:

564.4

tonnes of wood waste

196.8

tonnes of paper

115.3

tonnes of car tyres and inner tubes

86.1

tonnes of scrap metal

34.15

tonnes of office equipment

14.65

tonnes of waste oil

13.18

tonnes of glass

11.9

tonnes of cardboard

2.8

tonnes of aluminium scrap

1.8

tonnes of plastic

1.18

tonnes of used batteries

0.8

tonnes of batteries

0.1

tonnes of copper and copper alloy scrap

Rostelecom offers its customers a service to monitor waste container sites. This solution enables the monitoring of waste sites and the detection of unauthorised waste sites.

Key environmental indicators¹

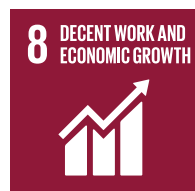
	Unit	2018	2019	2020	2021	2022
Greenhouse gas emissions (GHG)						
Direct GHG emissions (Scope 1)	t of CO ₂ equivalent	181,429	184,436	180,943	173,249	158,823
Indirect GHG emissions (Scope 2)	t of CO ₂ equivalent	973,255	1,473,334	1,338,665	1,462,888	1,419,476
Total GHG emissions (Scope 1 & 2)	t of CO ₂ equivalent	1,154,684	1,657,770	1,519,598	1,636,137	1,578,299
Indirect GHG emissions (Scope 3)	t of CO ₂ equivalent	85,812	80,115	69,303	70,326	74,243
Fuel and energy consumption						
Electricity	thousand kWh	1,344,116	3,042,452	2,817,344	3,224,728	3,186,399
Heat	Gcal	1,298,568	1,234,700	1,006,877	1,052,086	971,937
Natural gas	thousand cu m	27,208	23,499	21,694	22,969	21,445
Liquefied gas	l	1,087,580	866,569	1,155,501	1,418,601	1,815,011
Coal	t	10,695	10,846	7,375	5,815	4,115
Firewood	cu m	9,238	7,367	6,100	6,077	4,456
Fuel briquettes (pellets)	t	503	231	260	291	331
Diesel fuel	l	7,956,848	8,279,680	7,895,918	7,768,314	6,949,544
Gasoline	l	28,644,554	37,758,724	37,584,170	37,175,201	33,801,282
Renewable energy (combustion of biomass)	kWh	24,197	18,558	15,662	15,745	12,054
Electricity consumption	thousand kW per sq. m of the total area	0.166	0.343	0.325	0.366	0.384
Heat consumption	Gcal/sq. m	0.160	0.139	0.117	0.119	0.117

¹ The indicators shown in the table for 2016–2018 refer to PJSC Rostelecom; those for 2019 and 2020 additionally include the most significant subsidiaries and affiliates of the Group. Water and heat consumption data do not include figures for the mobile subsidiary.

	Unit	2018	2019	2020	2021	2022
Total energy consumption by data centres	thousand kWh	238,869	282,544	310,017	391,935	387,968
Average power usage effectiveness at data centres	PUE ¹	1.86	1.67	1.76	1.544	1.66
Water consumption						
Total water withdrawal	million cu m	2.496	2.368	1.824	1.938	1.685
Groundwater	million cu m	0.230	0.206	0.175	0.168	0.141
Municipal or other water utilities	million cu m	2.267	2.162	1.649	1.770	1.544
Waste management						
Total waste generated	t	34,109	34,114	31,838	33,310	36,014
Total waste landfilled	t	30,617	30,591	28,888	31,024	31,664
Total waste handed over to third parties for neutralisation or recycling	t	3,493	3,523	2,950	2,225	4,339
Total waste used for own purposes	t	272	205	72	60.5	11.22
Emissions of air pollutants						
Carbon dioxide	t	857	769	843	814	697
Nitrogen dioxide	t	131	141	217	214	185
Sulphur dioxide	t	116	103	101	96	78
Nitrogen oxide	t	23	24	38	37	35
Soot	t	179	160	164	181	164
Total	t	1,306	1,197	1,363	1,342	1,159

¹ Power Usage Effectiveness.

Social impact



Employees

Rostelecom is one of Russia's largest employers, with a total headcount of 119 thousand people across the Group as of 2022-end.

The Group's activities are based on our corporate values – adaptability, human touch, simplicity, and development. We respect our employees and their rights and comply with the Russian labour law and the labour standards set out in the International Bill of Human Rights, the ILO Declaration on Fundamental Principles and Rights at Work, and other international regulations.

Human capital development is one of the key pillars of Rostelecom's strategy. The average training time per Rostelecom employee was 32.2 hours in 2022. The number of active users of its online university reached 80 thousand.

In the course of 2022, Rostelecom's achievements in HR management were recognised with a number of awards and prizes:

- Platinum employer in Forbes' best Russian employers ranking
- 86th place in the overall ranking of FutureToday, which explores expectations of university students and graduates, and 39th in the Among the Target Audience category.

The Company's 2021–2025 Long-Term Development Programme has labour productivity index as a its key performance indicator¹, standing at 112 % in 2022.

In 2022, Rostelecom's labour costs rose by 12 % year-on-year to RUB 111.2 billion.

¹ Calculated in line with the Methodology for Calculating Labour Productivity Indicators of an Enterprise, Industry or a Constituent Entity of the Russian Federation (approved by Order No. 748 of the Russian Ministry of Economic Development dated 28 February 2018).

Employee support programmes

Rostelecom provides not only optimal working conditions but also social support for its people, with the following employee support mechanisms in place at the Company.

Collective bargaining agreements

PJSC Rostelecom's collective bargaining agreement covers all Company employees.

Our collective bargaining agreement for 2022–2023 sets out a flexible system of benefits and social guarantees. Employees are provided with benefits broken down into two groups: basic benefits and the Cafeteria Plan.

Basic benefits are made available to employees for certain life situations (childbirth, awards, etc.). The Cafeteria Plan is a set of social benefits and compensations for an employee to choose from in accordance with his or her needs and within the available money limit.

Corporate pension scheme

A total of 28,038 employees are members of our corporate pension scheme (44 % of eligible employees).

Voluntary health insurance (VHI) programme

The total number of people insured under the voluntary health insurance (VHI) programme at PJSC Rostelecom was 97,985 at the end of 2022, with the insurance coverage under the VHI contract totalling RUB 40 billion.

The insurance programme covers outpatient and inpatient treatment, dental and emergency medical services, and Telemedicine consultations.

The Housing Programme

As part of its social support for employees, the Company continues to operate the Housing Programme, through which 908 employees received interest-free loans or reimbursement of interest on mortgage loans taken by employees earlier, worth a total of RUB 218 million in 2022. A total of 8,507 employees received assistance worth a total of RUB 2.4 billion over the entire period of the Housing Programme.

Equal opportunities

The Group provides equal opportunities for different social groups: women and men, young people, and people with disabilities, and ensures equal pay for work of equal value.

At the beginning of 2022, for the third consecutive year, Rostelecom was included in the Bloomberg Gender-Equality Index 2022 covering 418 companies from 45 countries.

Employee training and development at PJSC Rostelecom¹

The Group established a system for employee professional development: training, self-fulfilment, and career growth. The Company's training system enables every employee to develop and fulfil their professional and personal potential by performing their tasks for the business.

Throughout the course of 2022, the Company continued to enhance its in-house employee training system. In particular, it improved the Corporate Online University platform and launched a number of federal-level projects for various audiences, from regional top management teams to technicians on the ground.

In 2022, 86 % of Rostelecom employees were covered by training. The Company invested RUB 456 million in employee training.

The average number of training hours per employee was 32.2 hours in 2022, with the total number of training hours standing at 2,596 thousand and the training costs per employee amounting to RUB 5,650.

Employee training at PJSC Rostelecom in 2019–2022

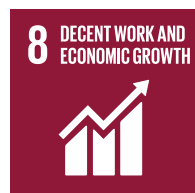
Metric	2019	2020	2021	2022
Employee training costs, m RUB	575	443	479	456
Annual training costs per employee, RUB thousand	5.5	5.0	5.5	5.65
The average number of training hours per employee	31.1	31.3	31.5	32.2

Rostelecom's Corporate Online University is the key training platform for employees. Over the course of 2022, Rostelecom added 180 new online courses and programmes to the platform's catalogue, with more than 900 courses now available to its employees. Over 75 % of the employee training requests are covered by the online university in-house.

¹ Information in the Employee Training and Development at PJSC Rostelecom section refers to PJSC Rostelecom only, excluding subsidiaries and affiliates.



Ensuring workplace safety



Rostelecom prioritises employee workplace safety. The Company invests in building a strong safety culture by creating safe and comfortable working conditions, encourages ownership of health and safety issues at work, delivers training, and adopts international best practices in occupational health.

Each of the Group subsidiaries and affiliates has its own internal standards on health and safety based on PJSC Rostelecom's similar regulations. Over the past three years, the Company has also been consistently implementing the principles of the global Vision Zero ambition to achieve a zero injury rate.

Approach to providing safe working conditions

The Occupational Health Department at PJSC Rostelecom's Headquarters is charged with the overall coordination of the occupational health management system (OHMS) activities. The Occupational Health and Industrial Safety Policy is implemented at regional branches, subsidiaries, and affiliates by health and safety functions and subdepartments responsible for ensuring legal compliance, injury prevention, and workplace safety culture.

Each Group subsidiary and affiliate has internal occupational health standards based on PJSC Rostelecom's standards.

Rostelecom set itself the following strategic occupational health objectives:

- Safeguard employee life and health at work, minimise work-related hazards, and prevent fatalities and disabling injuries
- Reduce the risk of work-related injuries, accidents, and incidents at hazardous facilities, and of fires
- Maintain a healthy environment for employees and the local communities over the long term
- Build a sound reputation as a social actor committed to providing safe working conditions and protecting the environment.

In 2022, the Occupational Health Department implemented two OHMS regulations in regional branches:

- Regulations on Organising Occupational Safety Training and On Testing the Knowledge of Occupational Safety Requirements at PJSC Rostelecom
- Regulations on the Procedure for Mandatory Preliminary and Periodic Medical Examinations of Employees at PJSC Rostelecom.

Introducing the Vision Zero concept

Rostelecom is deploying methods to identify and prevent systemic causes of risks and accidents. Since 2019, the Company has been implementing the principles of the Vision Zero concept across three focus areas: safety, occupational hygiene, and employee well-being at all levels of operations.

Throughout all of 2022, the Group maintained its particular focus on Vision Zero Golden Rule 1: "Take leadership – demonstrate commitment", ensuring safe working conditions across its facilities.

OHMS performance evaluation

At the level of the Group's business units, subsidiaries, and affiliates, OHMS performance is evaluated by the occupational health teams of the respective entities. The branches use a four-tiered control system to review the OHMS performance, whereby the dedicated commissions include Rostelecom managers and trade union representatives with due authority in health and safety matters. Furthermore, the Occupational Health Department of Rostelecom's Headquarters runs annual inspections of regional branches to look into OHS practices.

In the course of 2022, the Occupational Health Department completed 65 inspections of the OHMS, identifying over 100 gaps. For each of the identified gaps, corrective actions were developed to address them.

All 65 branches were audited in 2022 using the four-tiered control system. The most frequently identified gaps included flaws in document management, workplace maintenance, and mandatory employee training. The inspection results helped Rostelecom to further improve its OHMS performance.

Occupational health management by contractors

Rostelecom applies the same OHS rules and standards to all workers. Some of its works are contracted out. The following documents of PJSC Rostelecom apply to contractor employees and seconded staff:

- Instruction on the Procedure for the Admission of Third-Party Specialists and Seconded Staff of Rostelecom to Work at Rostelecom Facilities
- Methodology to Verify Compliance with the Occupational Safety Requirements for the Admission of Third-Party Employees and Seconded Staff of Rostelecom to Work at Rostelecom Facilities.

Workplace injury prevention

Rostelecom creates safe and comfortable work conditions. The Company conducts relevant training, medical examinations, workplace assessments, and other activities every year to ensure the safety of employees doing hazardous work, including the installation, operation, and maintenance of towers and base stations.

During 2022, Rostelecom spent RUB 624 million to purchase personal protective equipment. The decline in occupational health costs was due to the abatement of the COVID-19 pandemic and lower incidence rates.

Spending on occupational health at Rostelecom Group, m RUB

	2020	2021	2022
Spending on occupational health	1,864.5	1,589.6	934.5

Occupational health training

Rostelecom makes constant efforts to improve employee knowledge and skills in occupational health and safety.

The year of 2022 saw branch managers and specialists take occupational health training on the role and responsibility of managers in occupational safety as well as on safe work organisation and on occupational risk management.

Employees involved in tower installation and maintenance did mandatory training in electrical safety and safe work at height and also learned first-aid methods, the procedure for safe work in enclosed or confined spaces, key occupational health requirements, and rules for using personal protective equipment.

>60

THOUSAND ROSTELECOM EMPLOYEES
WERE TRAINED IN OCCUPATIONAL
HEALTH DURING 2022

Rate of work-related injuries

The rate of work-related injuries at Rostelecom stood at 0.31 in 2022. The total number of accidents dropped by 15 % year-on-year, reflecting the active promotion of a safety culture at the workplace and the adoption of best practice in this area.

During the year, there were 30 work-related injuries, down 15 % from 2021 (35 injuries).

The year of 2022 witnessed one fatal accident to an employee who fell from a standing height. The most common causes of injuries were falls from ladders, including stepladders, falls from poles and from standing height. In 2022, the Company investigated all employee injuries, identified their causes, and defined corrective actions.

Key social indicators, 2018–2022¹

	Unit	2018	2019	2020	2021	2022
Average headcount ²						
Group	people	128,584	135,178	136,679	126,812	118,989
PJSC Rostelecom	people	107,984	105,754	105,450	95,150	84,520
Consolidated subsidiaries and affiliates	people	20,600	29,424	31,229	31,662	34,469
Payments to employees						
Wages, salaries, other benefits, and payroll taxes	m RUB	97,350	119,822	136,389	137,209	151,374
Salary expenses	bn RUB	69.8	85.0	98.6	99.5	111.2
Share-based remuneration	m RUB	3,162	3,449	3,641	3,247	4,447
Social taxes	m RUB	19,866	23,708	26,411	25,751	26,887
Gain/(loss) on defined benefit plans	m RUB	(198)	1,273	1,074	1,202	1,073
Other personnel costs	m RUB	4,708	6,373	6,708	7,486	7,810
Average salary	RUB thousand per year	492.9	542	657	804.3	997.1
Additional indicators for employees						
Headcount at the end of the reporting period (including employees on parental leave, and excluding part-time employees and employees under independent contractor agreements), including:	people	138,230	149,065	146,801	129,773	122,751
part-time employees	people, end of period	14,774	16,291	13,612 ³	13,447 ³	10,986
temporary employees (on fixed-term contracts)	people, end of period	11,520	12,084	12,840 ³	11,082 ³	4,651
employees under independent contractor agreements	people, end of period	12,200	27,723	47,301 ³	42,556 ³	43,592
Change in the workforce						
Terminated employees	people	22,154	20,850	20,940 ³	12,471	18,907
Employee turnover	%	17.6	15.7	16.4 ³	20.8 ³	16.4
New hires	people	32,265	37,109	28,090 ³	24,202 ³	23,611
of them women	people	17,069	16,171	12,792	10,866	9,537
Proportion of women among new hires	%	52.9	43.6	41.5	44.9	40.4

¹ The 2018–2022 indicators presented in the table, unless otherwise specified, include data for PJSC Rostelecom and the Group's most significant subsidiaries and affiliates. Headcount-wise, this perimeter covers 98 % of the entire Group.

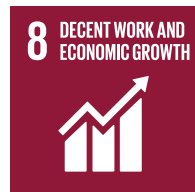
² The calculation method has been changed.

³ As of the end of the reporting period.

	Unit	2018	2019	2020	2021	2022
Equality						
Number of female employees	thousand people, end of period	60.1	65.5	62.3	54.4	47.2
Proportion of female employees	%	44	44	42	44	39
Proportion of women in management positions	%	29	30	32	35	34
Gender wage gap (based on total income)	%	20.2	18.2	17.2	25.1	24.1
Employees with disabilities	people, end of period	1,698	1,684	1,145	1,232	1,102
Proportion of employees with disabilities	%	1.2	1.3	0.9	1.0	0.9
Rate of work-related injuries ¹						
Number of injuries	people	55	47	40	35	30
including fatalities	people	1	3	0	3	1
Number of accidents	incidents	71	95	40	35	30
Rate of work-related injuries per 1,000 employees	incidents	0.51	0.44	0.38	0.33	0.31
Lost time accident days	days	2,145	2,199	2,094	3,251	2,711
Additional indicators						
Coverage perimeter for additional indicators by average headcount percentage	%	98	98	98	98	98
Philanthropy						
Member fees, charitable giving, payments to trade unions	m RUB	767	874	951	992	1,167
including charity expenses	m RUB	192	201	211	177	275

¹ Data for PJSC Rostelecom only.

Society



Rostelecom creates a significant social impact. The Group runs social projects, promotes digital equality, and provides affordable communications services in cities and the remotest and smallest communities. Through our projects, we address complex social challenges.

Digital equality

The Digital Equality integrated social programme is a sustainability initiative run at a federal level to better the quality of life for Russian citizens by bridging digital divides and making communications services more accessible and affordable for socially vulnerable groups.

In the year of 2022, projects under the programme were aimed at ameliorating the computer literacy of senior citizens, bridging the digital divide in society and encouraging interest in IT among young users as their potential future career, providing remote learning and socialisation for children deprived of parental care, supporting social entrepreneurship, and building a safe Internet environment.

ABC of the Internet, a joint project with the Social Fund of Russia. The project offers senior citizens and disabled people materials and equipment to train in computer, smartphone, and Internet skills as well as the basics of cybersecurity. After taking this training, pensioners will be able to make appointments with doctors, pay their bills, make arrangements for trips to relatives, and communicate with their families and friends without leaving their home. A total of 48,872 people were trained under the ABC of the Internet computer literacy project in 2022.

GROWTH, a joint project with the GROWTH autonomous non-profit organisation. The project promotes development, education, socialisation, and employment among children in orphanages and foster homes, including graduates, as well as children deprived of parental care. In 2022, under the project, Rostelecom provided access to quality tailored education over the Internet for 375 children from 40 child care institutions.

Learn the Internet – Manage It!, a joint project with the Coordination Centre for TLD .RU/.PФ. Its main purpose is bridging the digital divide in Russian society by improving digital literacy among young users and encouraging their interest in IT professions. School and university students can become advanced Internet users and foster safe Internet surfing skills. The project is organised as a gaming portal: training is delivered through arcade games, situation puzzles, crosswords, jigsaw puzzles, and quizzes. In 2022, around 10 thousand school and university students under 18 participated in the online championship.

Social Impact Award (SIA), an international programme supporting young social entrepreneurs. Together with Impact Hub Moscow, Rostelecom selects the winners of the Russian stage of the competition. For the 10th year in a row, Rostelecom announced a special category within the contest – Internet for a Better World. The category covers the authors of the projects that use Internet technology to create a product or a key tool to promote their ideas. In 2022, a total of 191 applications was submitted, with 20 projects from 16 Russian cities making it to the finals. The finalists joined a 3-month business incubation programme.



Promoting cybersecurity

During the year of 2021, Rostelecom co-founded the Alliance for the Protection of Children in the Digital Environment.

Its mission is to promote a safe online environment for children, where they can communicate, learn, and discover new opportunities and entertainment.

To devise self-regulation mechanisms and promote social responsibility principles, the Alliance for the Protection of Children in the Digital Environment published the Digital Ethics of Childhood Charter. The document contains values and rules of conduct to bring together the public, the government, and the professional community and coordinate their efforts to ensure a beneficial and safe digital environment for children.

Over the course of 2022, Rostelecom and its partners conducted a study of technologies to protect children on the Internet, which identified the key risks for children on the Internet, highlighted the main technology solutions to mitigate them and presented recommendations to the key stakeholders involved in upbringing children.

In 2022, Rostelecom also issued A Beautiful, Dangerous, Cybersecure World, a book with helpful cybersecurity tips for children and parents. The book is distributed through the Company's branches and online. In addition, Rostelecom units hold dedicated events to promote cybersecurity across their regions of operation.

Philanthropy and volunteering

Rostelecom launches and supports environmental, educational, sports, and cultural initiatives that aim to benefit the residents of our regions of operation.

The key areas of focus in 2022 were promotion of sports, fundraising to treat children with rare diseases, the social adaptation of children from orphanages, and support for corporate volunteer projects.

Throughout 2022, Rostelecom delivered 244 social-impact projects, including 121 educational projects. Charity expenses in the reporting period totalled RUB 275 million.

Rostelecom encourages the volunteer initiatives of its employees and holds a volunteer project competition to promote the best of them. The competition methodology allows the expert panel to select priority projects related to education, health, sports, care, the environment, or spiritual heritage, while a systematic approach enables tracking each project's performance and adjusting their dynamics accordingly. The winners are awarded project grants. Between 2018 and 2022, about 540 employees submitted more than 175 applications to enter the competition, with 48 volunteering projects named winners.

I Run and Help, a national charitable sports project. The project's purpose is to collect donations for the Life Line Charity Foundation to treat children with rare diseases. Every 100 thousand km run cumulatively by its employees is converted by Rostelecom into RUB 1 million, which is then donated to the foundation. Since its inception, the project has raised RUB 11 million for children's endoprosthesis operations.

Polden (Midday), an educational project for children from orphanages. Rostelecom and the Social Development Foundation Polden (Midday) have been running an interactive educational programme for children in orphanages and foster homes, providing early career guidance and social adaption. Other play-based learning programmes in place are Golden Age (the school curriculum), Digital Equality and Life Trajectory.

In 2013–2022, a total of 706 educational activities involved more than 410 children from 12 orphanages, and 15 gaming modules were developed.

400

projects were supported by the Towards Change Foundation

Charity projects by Rostelecom's mobile operator

Rostelecom's mobile business focuses its charity efforts on supporting social entrepreneurship. The Company has been providing financial, organisational, and consulting support to the Navstrech Peremenam (Towards Change) charitable foundation since 2012.

The Company and the foundation's priority joint project is the Towards Impact Start-Ups business incubator. Over the 10 years of its operation, the foundation has supported more than 400 projects, including 86 under the incubator programme.

In 2022, 76 Group employees from 29 regions processed the entries in the contest, and 10 heads of business units assisted social project leaders as mentors or consultants.

In addition, Rostelecom's mobile operator is running the Pereplavka (Melting) project, an environmental initiative to collect used mobile phones for recycling. Launched in 2019, the project has accepted a total of about 22 thousand devices for recycling in 64 regions of Russia.

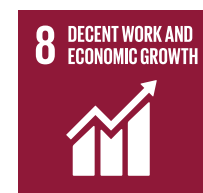
132

video surveillance cameras were installed for the Unified State Exam

Business projects with social impact

Rostelecom makes a positive impact on society not only through its dedicated projects and charitable programmes but also in the course of its normal core operating activities.

During 2022, the Company provided data services for previously connected social infrastructure facilities and continued installing 2G/4G base stations under the second phase of the Bridging the Digital Divide project (BDD 2.0).



122

thousand km of fibre installed under the first phase of the Bridging the Digital Divide project

Infrastructure

Another substantial focus area is the Bridging the Digital Divide project, which aims at bringing affordable telecom services to people in remote areas.

Over 2022, Rostelecom started to provide mobile radio telephony services in 655 communities. Data services and Internet access were enabled through 13,912 access points connected to the communications network via 122 thousand km of fibre installed under the first phase of the Bridging the Digital Divide project earlier.

For more details on the Bridging the Digital Divide project initiatives and the connection of social infrastructure facilities, see the Key Strategic Projects section of this Annual Report.

100

thousand consultations were given within the telemedicine programme

Digital services

Rostelecom is digitising a wide range of services, making them more accessible for people and providing easy solutions to a range of problems and tasks

- Obtaining public services via digital channels is easy with the Company's Public Services Portal (developed as part of the E-Government project). The portal allows citizens to get the necessary certificates and documents from authorities, book appointments, pay utility bills, etc. – all from the comfort of their own homes. At 2022-end, the Public Services Portal had over 100 million users
- At the end of 2022, Rostelecom telemedicine services were successfully delivered in 16 regions of Russia. Over the same period, 293 healthcare facilities and more than 5,000 doctors provided over 100 thousand consultations in total
- Throughout 2022, Rostelecom connected more than 8,000 new cameras under the Digital Region / Smart City project, bringing the total number of video surveillance cameras in operation to 380 thousand. The Company's traffic enforcement services were extended to cover 60 regions of Russia. In the reporting year, over a thousand new cameras were installed, bringing the total to 5,500 by the year-end
- The weight and dimension compliance service is now available in 34 regions of Russia; with 22 new stations built in the reporting year to bring the total number of weigh stations in operation to 163.

For more details on these projects, see the Operating Review section of this Annual Report.

Corporate governance: anti-corruption and procurement



Rostelecom has a robust corporate governance system and develops it in line with the Russian laws and the international best practice. For more details on the Company's governing bodies, see the Corporate Governance section of this Annual Report.

Compliance and anti-corruption efforts

Rostelecom is committed to the principles of openness, transparency, and integrity. The Company and all its employees are required to comply with the anti-corruption laws as well as the principles of ethical business conduct.

Key regulations on anti-corruption compliance procedures:

- Anti-corruption Policy¹;
- Code of Ethics²;
- Code of Supplier Business Ethics
- Regulations on the Conflict of Interest Management
- Regulations on Giving and Receiving Gifts
- Regulations on Donations and Charitable Giving
- Regulations on Receiving and Processing Reports Received via Feedback Channels.

The procedures ensuring compliance with the anti-corruption laws are set out in the Company's business process regulations.

Similar documents and compliance processes are implemented at subsidiaries and affiliates in which PJSC Rostelecom's effective interest is above 50 %.

Key anti-corruption focus areas in 2022³:

- Employee training
- Feedback channels
- Management of conflicts of interest
- Subsidiary relations.

No confirmed cases of corruption or bribery were reported across the Group in 2022.

Council for Business Transparency

Rostelecom cooperates with the government and non-governmental organisations on anti-corruption and has a Council for Business Transparency in place, which had two meetings in 2022.

The Council includes representatives of the Russian Ministry of Digital Development, Communications and Mass Media, the Chamber of Commerce and Industry, electronic trading platforms as well as members of the media and anti-corruption non-governmental organisations. The Council reviews matters related to the implementation of anti-corruption measures and procurement transparency as well as statistics on received reports, including those on suspected corruption.

Asset Protection Department (compliance)

Key roles

- Updating corporate culture in terms of preventing and combating corruption, preventing embezzlement and conflicts of interest, and compliance with ethical standards
- Analysing and monitoring the activities of the Company and its subsidiaries and affiliates related to asset protection
- Maintaining a whistleblowing hotline and an anti-corruption portal.

Key 2022 results

- For the third year in a row, Rostelecom topped the national Anti-corruption Ranking of Russian Business, receiving the highest rating class, A1, from RSPP experts
- The Company's 2022 compliance programme was developed and implemented
- A number of internal documents were updated, including:
 - PJSC Rostelecom's Regulations on the Conflict of Interest Management
 - Rostelecom Group's Regulations on Receiving and Processing Reports Received via Feedback Channels
 - PJSC Rostelecom's Regulations on Giving and Receiving Gifts
 - PJSC Rostelecom's Procedure for Reporting Cases When an Employee Is Incited to Commit Corruption Offences, and for Reviewing Such Reports
 - PJSC Rostelecom's Procedure for Organising and Conducting Training on Preventing Corruption
 - Procedure Rules on the Anti-corruption Business Process
- The conflict of interest provisions were updated in the Regulations on the Board of Directors, the Regulations on the Audit Commission, and the Regulations on the President
- A total of 132 internal documents, contracts, agreements, and administrative documents passed an anti-corruption review and was approved
- Compliance training was successfully taken by more than 8,000 employees
- Anti-corruption programmes were further rolled out at the Group's new subsidiaries and affiliates (15 companies) in which Rostelecom's cumulative interest is above 50 %. Regular support was provided to the subsidiaries and affiliates that adopted an anti-corruption programme earlier (more than 80 companies).

Dedicated officers responsible for countering money laundering, the financing of terrorism, and the financing of the proliferation of weapons of mass destruction

Key roles

Mitigating the risk of the Company being involved in money laundering and the financing of terrorism

Key 2022 results

In 2022, following the remote monitoring of the internal control system for countering money laundering, the financing of terrorism, and the financing of the proliferation of weapons of mass destruction, the Federal Financial Monitoring Service (Rosfinmonitoring) and the Federal Service for Supervision of Communications, Information Technology and Mass Media (Roskomnadzor) assigned PJSC Rostelecom the lowest, "green" level of risk of being involved in money laundering and the financing of terrorism. Based on that score, Roskomnadzor didn't include Rostelecom in its annual inspection schedule, which substantially reduces the risk of regulatory penalties in 2023.

Interactions with counterparties

The Company is committed to engaging only those counterparties that demonstrate legal compliance and adhere to anti-corruption laws. To develop the business relations with counterparties supporting Rostelecom's Anti-corruption Policy and demonstrating zero tolerance for corruption, the Company approved its Code of Supplier Business Ethics and an anti-corruption clause that allow the Company and its subsidiaries to terminate a contract when the counterparty was found to have breached the commitment to refrain from any actions prohibited by anti-corruption laws. The clause is included in all expenditure contracts exceeding RUB 500 thousand.

To raise the awareness of business partners about anti-corruption legal requirements and Rostelecom's ethical standards, the Company developed an interactive distance learning course for contractors and suppliers, to be launched in 2023.

¹ For more details on Rostelecom's Anti-corruption Policy, see the Company's website at www.company.rt.ru/en/ir/corporate_governance/docs/.

² For more details on Rostelecom's Code of Ethics, see the Company's website at www.company.rt.ru/en/ir/corporate_governance/docs/.

³ For more details on Rostelecom's other anti-corruption focus areas, see Appendix 2, Governing and Control Bodies, to this Annual Report.

¹ rspp.ru/upload/content/99b/6vyf82hv6o5kx7yzgf4a6z7htr82towc/ltogovyy-doklad-2022.pdf.

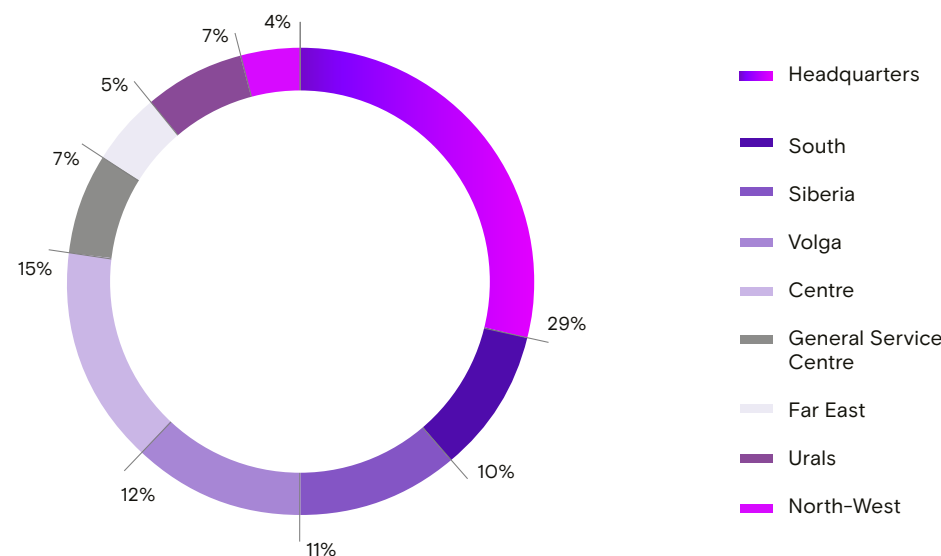
Employee training

All Rostelecom employees are made aware of the anti-corruption policies and procedures when they are hired. When anti-corruption procedures are amended, the updated documents are sent out to all employees who have workstations with access to the Company's electronic document management system.

Rostelecom holds regular anti-corruption trainings for its employees. All new employees who have a workstation take a mandatory online induction course on the key principles set out in the Code of Ethics.

Over the year of 2022, more than 7,500 employees took online training on the Code of Ethics and about 4,500 – on anti-corruption measures.

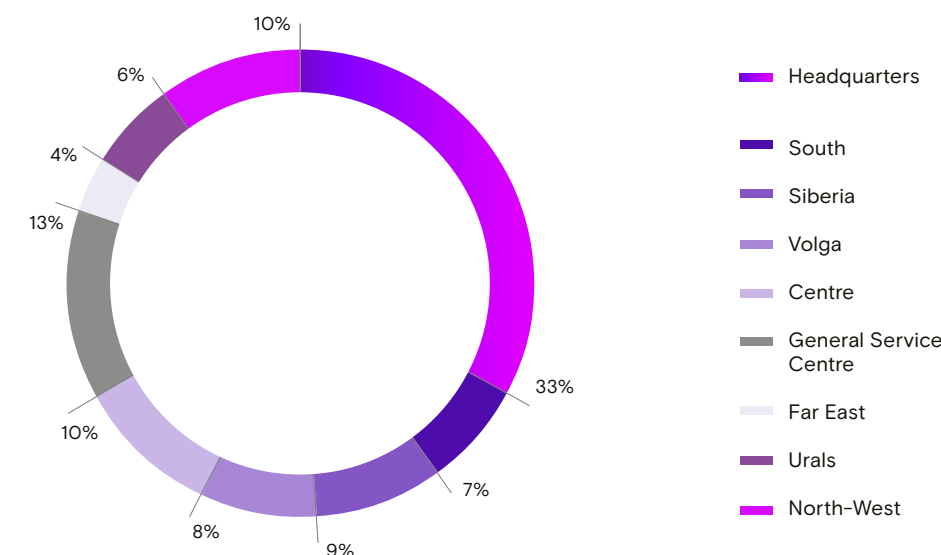
Employees who took the Code of Ethics online course in 2022, by Company unit, %



Every subsidiary and affiliate of the Group builds its own anti-corruption training processes based on the materials provided by the Company.

A Corruption Prevention course (both classroom and online versions) has been developed for Rostelecom employees in positions exposed to an increased corruption risk.

Employees who took the Preventing and Combating Corruption online course in 2022, by Company unit, %



Feedback channels for reporting violations of the Anti-corruption Policy and the Code of Ethics:

Anti-corruption portal (in Russian):
www.nocorruption.rt.ru

Whistleblowing hotline:
8 800 181 1811

Ethics Hotline:
ethics@rostelecom.ru

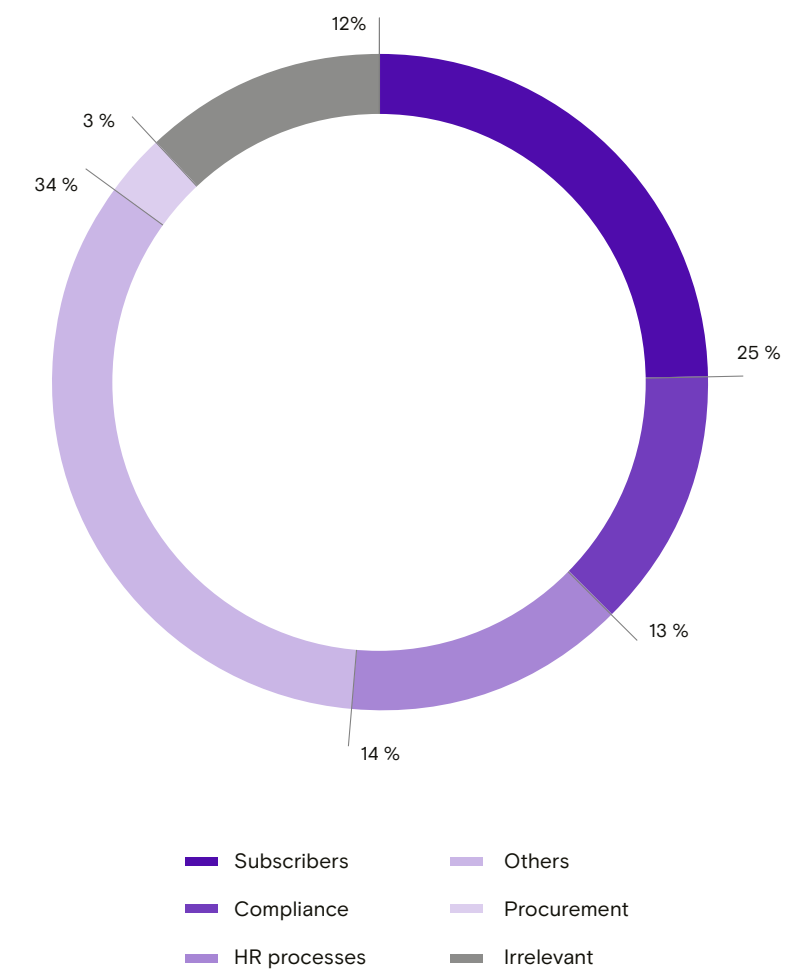
Feedback channels

In line with Rostelecom's existing strategy of digital coverage of anti-corruption efforts, a dedicated anti-corruption portal (www.nocorruption.rt.ru, in Russian). is in place and is constantly evolving. The portal comprises Rostelecom's anti-corruption internal regulations, compliance tests for employees and suppliers, materials on preventing and combating corruption, and information on all feedback channels that can be used to report instances of corruption.

Since 2020, the reports received via Rostelecom's whistleblowing hotline and anti-corruption portal have been recorded, processed, and addressed automatically by the Reports module of the Compliance Control system. The system uploads reports received via the feedback channels, enables users to track response deadlines and provide timely feedback to whistleblowers, monitor the performance of the units responsible for handling reports, and generate reports.

In order to protect anonymous whistleblowers, the anti-corruption portal's functionality enables reporting without revealing the whistleblower's name and e-mail. Whistleblowers can receive feedback from the compliance team on the status or outcome of their report using the PIN generated by the system when the report is recorded.

Topics of reports received via the whistleblowing hotline and anti-corruption portal in 2022, %



Conflict of interest management

Since 2018, Rostelecom has used an automated Compliance Control system to resolve conflicts of interest.

Rostelecom employees with a conflict of interest as well as employees in positions exposed to an increased corruption risk regularly complete electronic declarations. Using pre-determined criteria, the system automatically identifies employees who should submit declarations and monitors the timely completion of declarations by these employees, thus eliminating the human factor from mandatory disclosures.

In the year of 2022, we continued addressing the risk of employees not filing a declaration or having affiliation with business partners. This risk is included in Rostelecom's Risk Management Programme.

Structuring anti-corruption efforts at PJSC Rostelecom's subsidiaries and affiliates

In 2022, Rostelecom continued to roll out anti-corruption programmes at new subsidiaries and affiliates (15 companies) in which the Company's cumulative interest is above 50 %. For these subsidiaries and affiliates, Rostelecom develops roadmaps for rolling out anti-corruption programmes, including:

- adjustments to Rostelecom's standard anti-corruption regulations
- assessment of corruption risks
- implementation of controls
- management of conflicts of interest
- anti-corruption training
- handling reports received via feedback channels.

The expenditure contracts signed by the subsidiaries and affiliates also contain an anti-corruption clause, which allows them to terminate a contract when the counterparty was found to have breached the commitment to refrain from any actions prohibited by anti-corruption laws.

Measures to counter the legalisation of proceeds of crime, the financing of terrorism, and the financing of the proliferation of weapons of mass destruction



PJSC Rostelecom fully implements internal controls to counter the legalisation (laundering) of proceeds of crime, the financing of terrorism, and the financing of the proliferation of weapons of mass destruction.

The year of 2022 saw significant legislative changes aimed at improving the system of countermeasures, taking into account the risk-based approach. In particular, telecom operators are now required to monitor financial transactions (receipts or payments) of non-profit organisations regardless of the

amount, the return of advances over RUB 100 thousand, and transactions by persons on Rosfinmonitoring's lists.

Rostelecom developed measures to support the daily monitoring of potentially suspicious financial transactions by subscribers and to identify transactions subject to mandatory monitoring. The Company is streamlining and automating the procedures to control user identification, assess subscriber-related risks, identify transactions subject to monitoring, and submit mandatory reports to Rosfinmonitoring.

Supply chain management

Rostelecom treats its suppliers responsibly and integrates the best practice in sustainability into its supply chain.

The Group selects suppliers that honour their commitments and operate in good faith, honestly, and transparently.

Rostelecom considers supply chain management an integral part of business development and tracks its products and services throughout their entire life cycle. The Company finds new ways to develop its supply systems, improve its economic performance, and meet growing stakeholder expectations.

Rostelecom's logistics and procurement strategy is focused on honing operational efficiency and service level. We robotise operations, outsourcing non-core activities, and manage our staff effectively while automating internal processes.

Procurement activities at Rostelecom are governed by:

- Federal Law No. 223-FZ On Procurement of Goods, Works and Services by Certain Types of Legal Entities, dated 18th July 2011 (as amended and supplemented)
- PJSC Rostelecom's Regulations on Procurement
- PJSC Rostelecom's Code of Supplier Business Ethics.

During 2022, Rostelecom faced unprecedented sanctions pressure. Nevertheless, the Company managed to quickly mitigate the risks by stocking up on necessary components and identifying and signing up new suppliers, primarily from Russia.

Despite the restrictions, Rostelecom continued to transform and develop its procurement. In the reporting year, the Company completed the transition of its functional procurement vertical from a decentralised management model to a centralised one, introducing category management in procurement and transferring it to centres of excellence.

564

RUB BILLION – THE TOTAL COST OF PRODUCTS AND SERVICES PROCURED BY THE GROUP

Over 2022, the Group worked with 41,325 counterparties. The total cost of products and services procured by the Group was RUB 564 billion.

Rostelecom provides support to small and medium-sized enterprises (SMEs). In particular, the Company has an SME Partnership Programme in place.

The aggregate value of contracts signed by PJSC Rostelecom¹ with SMEs in 2022 amounted to RUB 145 billion, with the share of such contracts at 55 %.

145

RUB BILLION – THE AGGREGATE VALUE OF CONTRACTS SIGNED WITH SMES

¹ Excluding subsidiaries and affiliates. The indicator takes into account the exemptions under Resolution of the Russian Government No. 1352 On Specifics of Participation of Small and Medium-Sized Enterprises in the Procurement of Goods, Works and Services by Certain Types of Legal Entities, dated 11 December 2014.

03 CORPORATE GOVERNANCE



3.1 Corporate Governance

Sound governance enables accurately defining the Company's goals and the means to achieve them as well as ensuring that shareholders have effective control over the Company's business. Rostelecom's corporate governance system meets the best international and Russian practice standards. The three-tier governance model provides the three lines of defence to ensure the safety and effective use of funds provided by shareholders. Moreover, this model is aimed at reducing risks that cannot be assessed by investors.

Principle

- Balance between the interests of shareholders, management, and stakeholders
- Equal treatment of all shareholders and protection of their rights
- Accountability of the Board of Directors, the President, and the Management Board to shareholders
- Informational and financial transparency.

Priority

- Focus on stakeholder interests and relations
- Compliance with the business conduct and ethics
- Timely and accurate disclosures
- Corporate social responsibility.

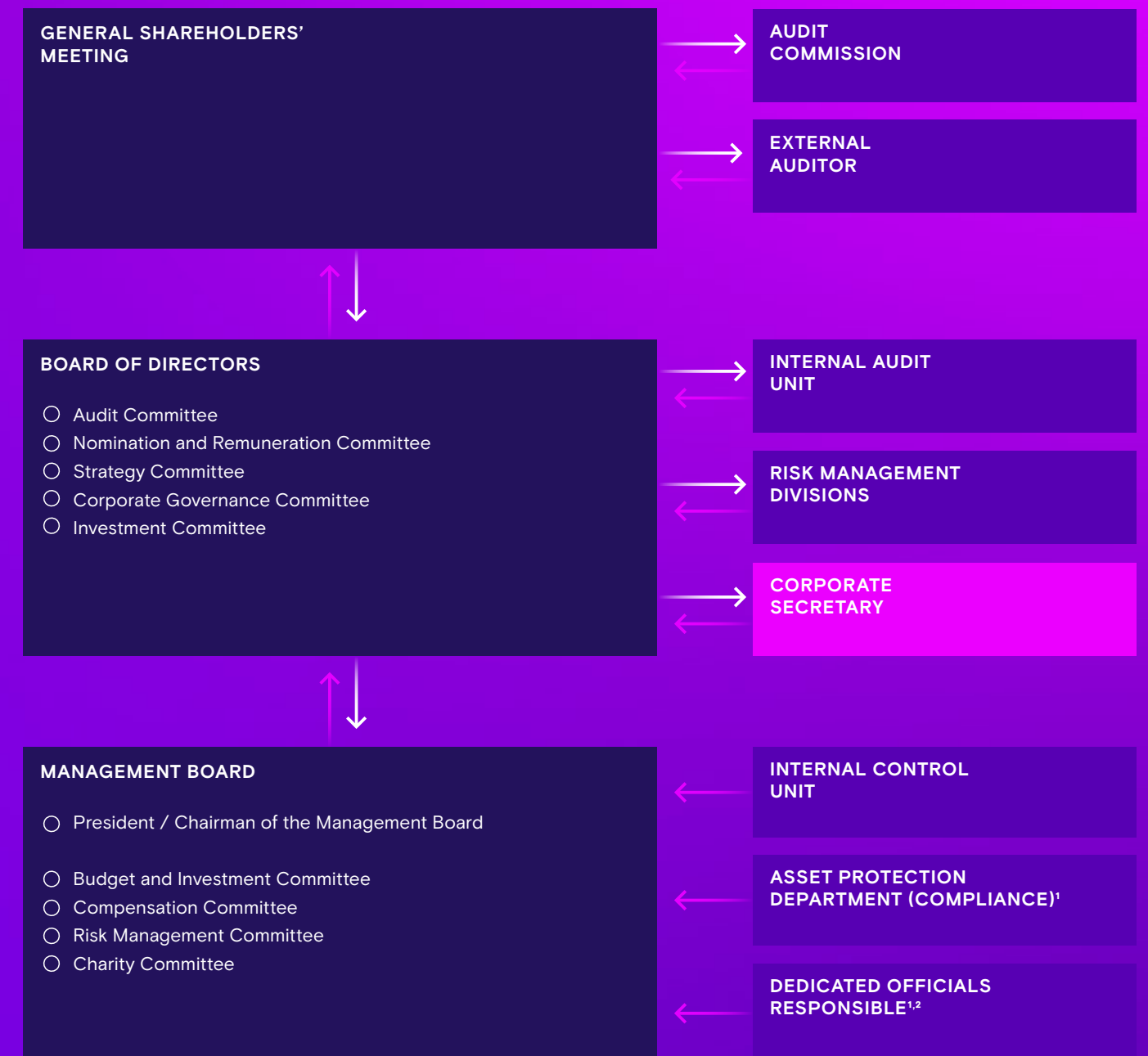
Enhancement focus

- Continuous advancement of internal controls and audit
- Continuous improvement of corporate governance practices
- Development of electronic services that enable shareholders to exercise their rights productively
- Upgrade of the IT system that automates the Management Board and committees' processes.

PJSC Rostelecom's corporate governance structure

In accordance with its Charter, Rostelecom is governed by:

- the General Shareholders' Meeting (GSM)
- the Board of Directors (elected by the General Shareholders' Meeting to guide the Company's strategic management)
- the President and the Management Board (appointed by the Board of Directors to manage the Company's day-to-day operations).



¹ For more details, see the Corporate Governance: Anti-corruption and Procurement section.

² Dedicated officials responsible for countering money laundering, the financing of terrorism, and the financing of the proliferation of weapons of mass destruction.

Key policies

PJSC Rostelecom has in place 22 policies and internal regulations governing its corporate governance system. In 2022 and early 2023, 11 of them were revised.

Key corporate governance policies of PJSC Rostelecom¹

Document	Last effective date
Charter	30th June 2022
Regulations on the General Shareholders' Meeting	30th June 2022
Regulations on the Audit Commission	30th June 2022
Regulations on the Board of Directors	30th June 2022
Regulations on the President	30th June 2022
Regulations on the Management Board	30th June 2022
Corporate Governance Code	27th December 2007
Code of Ethics	15th October 2019
Anti-corruption Policy	6th December 2019
Internal Audit Policy	26th April 2019
Regulations on Internal Audit	23rd December 2022
Regulations on Addressing Reports Submitted via the Ethics Hotline	29th June 2020
Risk Management Policy	25th June 2021
Regulations on the Integrated Risk Management System	19th April 2022
Internal Control Management Policy	23rd September 2022
Procedure for Implementing, Maintaining and Developing the Internal Control System	26th December 2022
Environmental Policy	2nd April 2019
Information Disclosure Policy	30th September 2015
Dividend Policy	19th April 2021
Policy of Access to Insider Information	31st January 2023
Regulations on Receiving, Reviewing, and Retaining Complaints and Claims Related to Accounting, the Accounting Internal Control Procedures, Fraud, Audit Examinations, and the Code of Ethics Compliance	2nd October 2008
Regulations on the Corporate Secretary and the Corporate Secretary's Office	13th September 2019

¹ The documents can be found on the company's website: www.company.ru/en/ir/corporate_governance/docs/.

Management of subsidiaries and affiliates



Rostelecom Group comprises PJSC Rostelecom, its subsidiaries, and affiliates. As of 31st December 2022, the Group included 217 subsidiaries and affiliates¹.

The Company views its subsidiaries and affiliates as a major growth point for its business, building digital clusters for new strategic initiatives, which comprise several subsidiaries or affiliates operating in interrelated areas. The year of 2022 saw the Data Centres, Cloud Services, and Information Security clusters fully take shape. The Company continued its efforts to build the Digital Region, Public Sector Digital Services and Products, and Digital Healthcare clusters as well as streamline its group ownership structure and update its corporate documents. Rostelecom interacts with the parent company of each cluster, which is responsible for engaging with, and managing, other companies within the business segment. Rostelecom retains its Group-wide supervisory and monitoring function.

Approaches to corporate governance based on the interest in subsidiaries and affiliates

Minority interest	Interest <50 %	Interest >50 %
Participation in general shareholders' meetings, protection of Rostelecom rights as a shareholder	Governance aligned with the shareholders' agreement in place to ensure: <ul style="list-style-type: none">• nominations by Rostelecom for top management positions• participation in the proceedings of the Board of Directors and control bodies• outsourcing of support functions (as agreed with the partner).	Integration into Rostelecom's corporate governance framework and culture, including: <ul style="list-style-type: none">• building a unified corporate governance model for subsidiaries and affiliates• appointing sole executive bodies and most representatives in the subsidiaries' and affiliates' collective governing and control bodies• a unified financial planning and treasury system• outsourcing of support functions• a unified approach to business standards and key internal regulations.

¹ See the full list in Appendix 5, Information on Rostelecom's Participations in Business Entities and Non-Profit Organisations, to this Annual Report: https://www.company.ru/ir/agm/files/2022/Appendix_5_to_annual_report_2022_rus.pdf.

Governance principles at the subsidiaries and affiliates

Proportionality and transparency

Governance tools should be appropriate to the scale and objectives of the subsidiaries and affiliates and should be straightforward and understandable to employees.

Consistency and holistic approach

Governance tools at the subsidiaries and affiliates should allow the use of systems analysis and synthesis in every decision made by the management and should cover all aspects of the subsidiary's or affiliate's activities. Relations within the Group should be built on the principles of mutually beneficial cooperation.

Efficiency and effectiveness

Unprofitable subsidiaries and affiliates are liquidated, or measures are undertaken to boost their performance. Governance tools should be easy to integrate into the existing information systems. Information flows should meet the principle of minimal sufficiency.

Compliance

Governance tools and decisions should comply with the laws of Russia and other countries where the subsidiary or affiliate operates. Particular attention should be paid to compliance with anti-corruption laws.

Collective decision-making and sole responsibility of the leadership

Rostelecom participates in the appointment of CEOs and board members at the subsidiaries and affiliates. The company divisions provide analytical support to Rostelecom-nominated elected board members at the subsidiaries and affiliates.

Motivation to achieve goals and objectives

Managers and employees across subsidiaries and affiliates should be motivated by incentives for achieving targets set for their respective subsidiaries and affiliates. Incentives for Rostelecom employees responsible for the subsidiaries and affiliates should factor in the achievement of strategic goals set for the respective subsidiaries and affiliates.

Priority of governance functions over the structure for newly-established subsidiaries or affiliates and priority of structure over governance functions in the existing subsidiaries and affiliates

When establishing or acquiring companies, Rostelecom introduces governance and control systems across its subsidiaries and affiliates as quickly as possible. As these institutions are formed, the entire governance framework and the structure of the subsidiaries and affiliates are optimised.

Delegation of powers, centralisation and decentralisation of leadership functions, limitation of authority, and performance accountability for heads of subsidiaries and affiliates

The heads of the subsidiaries and affiliates are responsible and accountable for the operations of their respective subsidiary or affiliate. The constituent documents of the subsidiaries and affiliates set transaction limits beyond which heads of entities may not enter into transactions independently or dispose of, or encumber, property of their respective subsidiaries and affiliates.

Feedback

We leverage feedback from our subsidiaries and affiliates to better related governance and control tools.

Creating a corporate collaboration environment

Development and implementation of methodologies and procedures governing the coordination of information and material flows in relation with the subsidiaries and affiliates.

Participation of Rostelecom's Board of Directors and Management Board in the management of subsidiaries and affiliates

Rostelecom's Board of Directors determines the Company's position on:

- the participation and termination of Rostelecom's participation in other business entities (except where such participation terminates following the entity's liquidation or reorganisation by the decision of its management body or a court)
- changing Rostelecom's ownership interest in a business entity (except where such ownership changes follow the entity's liquidation or reorganisation by the decision of its management body or a court)
- the matters reviewed by the subsidiaries' and affiliates' governing bodies with regard to acquiring shares (interests) in other business entities, including upon their establishment, where the price of the transaction equals or exceeds 15% of the book value of the assets held by such a subsidiary or an affiliate determined by reference to its accounting (financial) statements as of the most recent reporting date, except where the price of the transaction does not exceed 0.5% of the book value of Rostelecom's assets determined by reference to its accounting (financial) statements as of the most recent reporting date
- the matters reviewed by the subsidiaries' and affiliates' governing bodies with regard to the acquisition or disposal of Rostelecom shares held by them.

Rostelecom's Management Board determines the Company's position on:

- the proposals to change the nominal value of the interest, the number and the nominal value of the shares held by Rostelecom in a business entity, where such a change is effected without changing the size of Rostelecom's ownership interest in the business entity
- the matters put forward to vote and concerning the jurisdiction of the general meeting of the participants of a business entity where Rostelecom holds an ownership interest, the proposals to terminate Rostelecom's participation in the entity, change the size of its ownership interest, its nominal value, the number and the nominal value of the shares held by Rostelecom
- the matters referred to the jurisdiction of the subsidiaries' and affiliates' general meetings of the participants (the supreme governing bodies of the business entities with a different legal structure) where Rostelecom acts as the sole participant.

Forming boards of directors at subsidiariesand affiliates

Candidates to the boards of directors of the subsidiaries and affiliates are selected based on the principles of overall competence, balance of skills and experience, succession planning, and compliance with legal requirements.

Key improvements in 2022

Over 2022, the Company advanced its service offered to shareholders calling on the dedicated hotline at 8 800 100 1666. The process was successfully scripted, which improved the quality of advice. On top of this, an IVR platform was implemented to quickly process incoming calls without involving an operator and effectively route internal calls and calls addressed to VTB Registrar.

¹ Interactive Voice Response.
² Affirmed in February 2022.

Corporate governance level

Corporate governance rating assigned by the Russian Institute of Directors²: 7++ – advanced corporate governance practice.

7++

Compliance with the Corporate Governance Code¹

Code section	Full compliance					Partial compliance					Non-compliance					Total number of principles under each section of the Code
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022	
Rights and equal opportunities for shareholders in exercising their rights	12	12	13	13	13	1	1	-	-	-	-	-	-	-	-	13
Board of Directors	32	32	32	32	32	4	4	4	4	4	-	-	-	-	-	36
Corporate Secretary	2	2	2	2	1	-	-	-	-	-	-	-	-	-	1	2
Remuneration system for Board members, executive bodies and other key executives	8	8	8	9	9	2	2	2	1	1	-	-	-	-	-	10
Risk management and internal control system	6	6	6	6	6	-	-	-	-	-	-	-	-	-	-	6
Company disclosures and information policy	6	6	7	6	4	1	1	-	1	3	-	-	-	-	-	7
Material corporate actions	3	3	4	4	4	2	2	1	1	1	-	-	-	-	-	5
Total	69	69	72	72	69	10	10	7	7	9	-	-	-	-	1	79

Improvement plans

Rostelecom will continue to update its corporate governance system. In particular, plans for 2023 include further development and expansion of the digital services and the remote communication channels for shareholders to facilitate their access to rights, subject to all applicable legal requirements.

¹ For 2018–2020 – based on the methodology recommended by the Bank of Russia's Letter No. IN-06-52/8 dated 17 February 2016, and for 2021–2022 – by Letter No. IN-06-28/102 dated 27 December 2016. For more details, see Appendix 1, Report on Compliance with the Corporate Governance Code Recommended by the Bank of Russia, to this Annual Report: www.company.rt.ru/ir/agm/files/2022/Appendix_1_to_annual_report_2022_eng.pdf.

3.2. Governing bodies

General Shareholders' Meeting

The General Shareholders' Meeting (GSM) is the Company's supreme governing body. Its proceedings are regulated by the Russian laws, Rostelecom's Charter¹ and the Regulations on the General Shareholders' Meeting².

Throughout 2022, Rostelecom's Annual General Shareholders' Meeting³ was held on 30th June with no Extraordinary General Shareholders' Meetings taking place during the period.

Number of participants in Annual General Shareholders' Meetings

	AGSM ⁴ 2020	AGSM 2021	AGSM 2022
Paper ballots	9	10	7
E-proxy voting (ISO – via a depository)	42	35	13
E-voting system by VTB Registrar ⁵	1,848	1,928	1,938
E-voting system by NSD ⁶	162	279	411
Total	2,061	2,252	2,369

¹ New version No. 22 was approved by the Company's AGSM on 30 June 2022 (Minutes No. 1 dated 1 July 2022). The full text of the new version is available at: www.company.rt.ru/en/ir/corporate_governance/docs/.

² New version No. 12 was approved by the Company's AGSM on 30 June 2022 (Minutes No. 1 dated 1 July 2022). The full text of the new version is available at: www.company.rt.ru/en/ir/corporate_governance/docs/.

³ The Voting Report dated 1 July 2022 is available at: www.company.rt.ru/en/ir/agm/events/gosa/detail/2022/.

⁴ Annual General Shareholders' Meeting.

⁵ pos.vtbreg.ru.

⁶ www.e-vote.ru.

Board of Directors

The Board of Directors is a collective governing body responsible for the Company's development strategy and general management. The powers of the Board are detailed in the Charter and the Regulations on the Board of Directors¹.

Evaluation of the Board of Directors' performance²

In early 2022, VTB Registrar, an independent consultancy, evaluated the overall performance of the Board of Directors for the year 2021 as well as the performance of its committees and each Board member, including the Board Chairman. The weighted average score of the Board of Directors was 5 out of 5. The consultancy noted the balanced composition of the Board and the sound performance of the Board and its committees.

Based on the evaluation results, it was recommended to additionally focus on import substitution and cybersecurity issues as well as the risk management system as a whole.

In February 2023, the Board conducted its self-evaluation for the year 2022 as well as the performance evaluation of its committees and individual Board members, including the Board Chairman. Based on the results of the individual evaluation and following the analysis of the Board members' performance against all applicable criteria, all of them scored the maximum number of points.

The Board of Directors recommended that the Company maintain its traditional quality and a high level of corporate, strategic, and operational management amidst economic uncertainty and a sanctions pressure, including the continued practice of appointing a sufficient number of independent directors to ensure a balanced composition of the Board of Directors to take into account the interests of all groups of the Company's shareholders.

The Board of Directors also recommended that the Company explore the advisability of further strengthening its market positions in the key growth areas set out in the Company's strategy for 2021–2025, including through M&A.

Induction of Board members

The onboarding system and the induction programmes are an vital part of the Board's effective performance.

As part of the onboarding procedures, new members of Rostelecom's Board of Directors are invited to read all of the Company's internal regulations governing the proceedings of the Board and meet the members of the Management Board as well as the internal and external auditors.

At the first meeting of the new Board of Directors, the President briefs the new Board members on Rostelecom's strategy and business as well as on key projects implemented by the Company or scheduled for the coming corporate year.

Requirements for nominees to the Board of Directors

When selecting nominees to the Board of Directors, Rostelecom is guided by the Russian and international corporate governance standards. The Company strives to compose the Board of Directors in such a way that it is able to make fair and independent judgements and adopt all appropriate corporate resolutions in a timely and effective manner.

Board nominees must have an impeccable business and personal reputation as well as the professional qualifications necessary for the efficient decision-making by the Board and must not raise any doubt as to whether they will act in the interests of the Company and its shareholders.

A conflict of interest gives a well-founded reason to doubt that the nominee will remain objective and unbiased, acting in the best interests of the Company, and it is therefore not advisable to nominate to the Board of Directors anyone who holds an interest in, sits on the executive bodies of, or is employed by Rostelecom's competitors.

Independent directors are enabled to influence decisions made by the Board. The Company aims for at least one third of the Board to be made up of independent directors.

Independent directors make a positive contribution to shaping objective assessments when the Board of Directors makes decisions on all matters within its remit, thus ensuring the balancing of the interests of all Rostelecom shareholders.

Key objectives of the Board of Directors

- Set and advance the business objectives and strategic goals of the Company
- Protect the rights and legitimate interests of shareholders
- Ensure the integrity, reliability, and fairness of public information about the Company

Key principles of the Board of Directors



Make decisions based on reliable information on the Company's operations.



Ensure the Company's commitment to the long-term interests of its shareholders and receipt by shareholders of all relevant information about the Company's operations.



Balance the interests of various groups of shareholders and make the most objective and well-balanced decisions for the benefit of all shareholders.



Interpret any ambiguities in any laws and regulations in favour of the enhancement of the rights and legitimate interests of shareholders.

11

directors elected annually

54.7

years average age of a Board member¹

6.1

years average tenure of a Board member

¹ New version No. 17 was approved by the Company's AGSM on 30 June 2022 (Minutes No. 1 dated 1 July 2022). The full text of the new version is available at: www.company.ru/en/ir/corporate_governance/docs/.

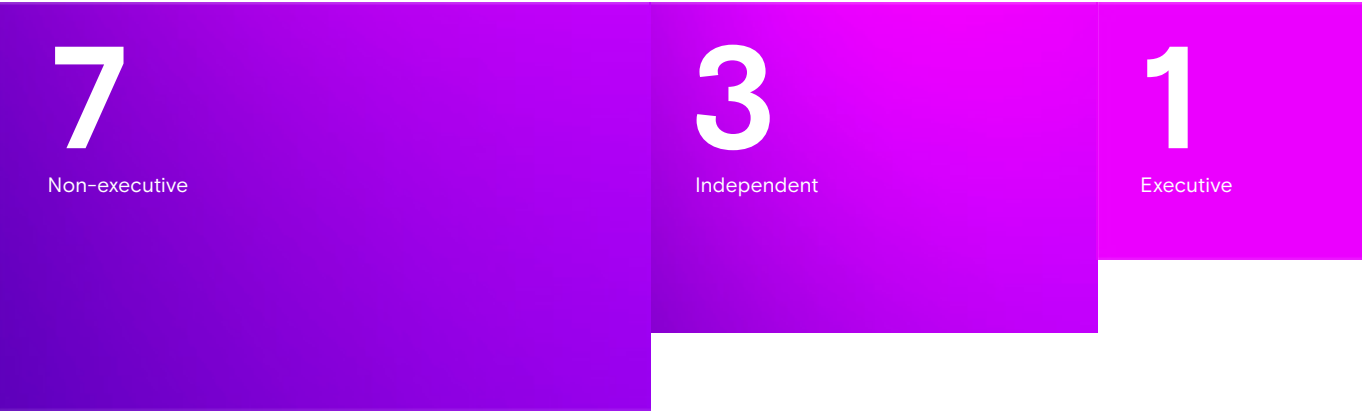
² For more details on the performance evaluation of the Board of Directors, see Appendix 2, Governance and Control Bodies, to this Annual Report at: www.company.ru/ir/agm/files/2022/Appendix_2_to_annual_report_2022_rus.pdf.

¹ Average age and tenure of Board members are as at 31 December 2022.

Composition of the Board of Directors

Information is not disclosed in accordance with the Decree of the Government of the Russian Federation No. 1102 as of 4 July 2023.

Director independence



Qualifications of the Board of Directors

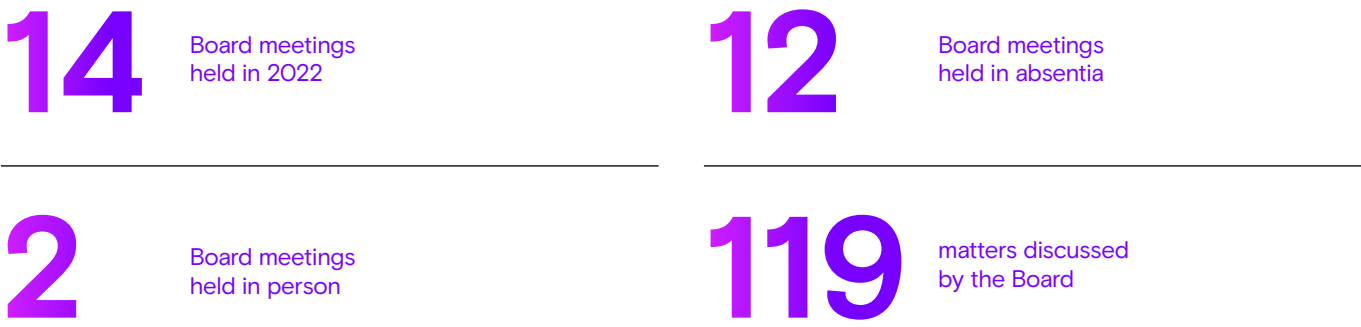
Qualifications of the Board of Directors' members

Name	Economics and finance	Strategy	Corporate Governance	Tele-communications	Risk management
Sergey B. Ivanov	V	V	V	V	V
Kirill A. Dmitriev	V	V	V		V
Anton A. Zlatopolsky	V	V	V	V	
Andrey L. Kostin	V	V	V		V
Mikhail E. Oseevsky	V	V	V	V	
Vadim V. Semenov	V	V	V	V	V
Anton A. Ustinov	V	V	V		V
Nikolay V. Tsekhomsky	V	V	V	V	V
Dmitry N. Chernyshenko	V	V	V	V	V
Elena V. Shmeleva	V	V	V		V
Alexey A. Yakovitsky	V	V	V	V	V
Total	11	11	11	7	9

The liability of the Company's directors was insured for EUR 25 million, with an additional insurance coverage of EUR 920 thousand for each independent director (EUR 4.6 million in total).

No conflicts of interest involving members of the Board of Directors were identified in 2022. Board members fill in quarterly questionnaires listing all potential factors that may contribute to a conflict of interest.

Board of Directors' and its committees' performance report in 2022



Board members' attendance at the Board and its committee meetings

Board of Directors in office during 2022

Information is not disclosed in accordance with the Decree of the Government of the Russian Federation No. 1102 as of 4 July 2023.

Matters discussed by the Board of Directors

Topic	Number of matters discussed
Audit, risk management, and internal control	7
Matters of General Shareholders' Meetings	20
Organising the proceedings of the Board of Directors and its committees	11
Approval of interested party transactions	16
Approval of transactions regulated by the Charter	15
Strategy and development	12
Management of non-core assets	13
HR management	15
Approval of internal documents	5
Miscellaneous	5

Total matters discussed119

Key results

Key 2022 results	Plans for 2023
<ul style="list-style-type: none">• Ongoing monitoring of the implementation of the corporate strategy and the strategic projects:<ul style="list-style-type: none">– import substitution– cybersecurity– development of the Data Centres and Cloud Services strategic business line– biometrics• Continuous monitoring of technological and business resilience as well as tracking of key performance indicators (KPIs) set by the Board of Directors amidst the sanctions pressure.	<ul style="list-style-type: none">• Reviewing the need to update the Company's key documents (strategy, long-term development programme, digital transformation programme, KPIs), taking into account macroeconomic changes and the political situation• Developing the new Long-Term Incentive and Retention Programme for Key Employees• Focus on maintaining high standards of corporate governance• Focus on fortifying the existing strategic advantages, including through M&A.

Board committees' performance in 2022

5 meetings held in the reporting year in absentia

14 matters discussed

Audit Committee¹

The Audit Committee is responsible for discussing the following matters:

- financial statements
- internal and external audit
- countering employee and third-party misconduct
- compliance with the Code of Ethics
- risk management.

2 meetings held in the reporting year, 1 of them in person

11 matters discussed

Nomination and Remuneration Committee²

The Nomination and Remuneration Committee is responsible for discussing the following matters:

- development, review, and implementation of the Remuneration Policy
- performance evaluation of the Company's executive bodies and other key executives
- early termination of employment contracts with members of the Company's executive bodies and other key executives
- recommendations to the Board of Directors regarding the Corporate Secretary
- disclosure of the remuneration policies and practices and the management's shareholding in the Annual Report
- qualifications and responsibilities of the Board members, membership enhancement priorities, and the selection of new candidates
- appointment of the members of the Management Board, including the Chairman, and determining the terms of their employment contracts.

2 meetings held in the reporting year, 1 of them in person

3 matters discussed

Strategy Committee³

The Strategy Committee is responsible for discussing the following matters:

- strategic goals and strategy implementation
- priority areas and progress on strategic plans
- distribution of profits, including dividends
- the Company's performance and growth prospects over the longer term
- relations with the entities where the Company holds interest, including disposal thereof
- trading Company securities
- financial and business evaluation models
- reorganisation and liquidation of the Company and its controlled entities
- using reserve and other funds
- major and interested party transactions.

1 meeting held in the reporting year in absentia

7 matters discussed

Corporate Governance Committee⁴

The Corporate Governance Committee is responsible for discussing the following matters:

- preparing for and holding the Annual and Extraordinary General Shareholders' Meetings
- approaches to disclosures and rules for handling non-public information
- drafting amendments to and approving new versions of regulations on the Company's governing bodies
- settling corporate conflicts
- verifying compliance with the international standards and requirements of stock exchanges
- approving the Company's registrar and the terms of the agreement concluded with it.

¹ New version No. 4 of the Regulations on the Audit Committee of PJSC Rostelecom's Board of Directors was approved by the Board of Directors on 6 August 2020 (Minutes No. 24 dated 6 August 2020). The full text of the document is available at: www.company.rt.ru/en/ir/corporate_governance/docs/Regulations_Audit_Committee_ver4.pdf.

² New version No. 4 of the Regulations on the Nomination and Remuneration Committee of PJSC Rostelecom's Board of Directors was approved by the Board of Directors on 6 August 2020 (Minutes No. 24 dated 6 August 2020). The full text of the document is available at: www.company.rt.ru/en/ir/corporate_governance/docs/Regulations_NomRem_Committee_ver4.pdf.

³ New version No. 4 of the Regulations on the Strategy Committee of PJSC Rostelecom's Board of Directors was approved by the Board of Directors on 6 August 2020 (Minutes No. 24 dated 6 August 2020). The full text of the document is available at: www.company.rt.ru/en/ir/corporate_governance/docs/Regulations_Strategy_Committee_ver4.pdf.

⁴ New version No. 5 of the Regulations on the Corporate Governance Committee of PJSC Rostelecom's Board of Directors was approved by the Board of Directors on 6 August 2020 (Minutes No. 24 dated 6 August 2020). The full text of the document is available at: www.company.rt.ru/en/ir/corporate_governance/docs/Regulations_CG_Committee_ver5.pdf.

Key matters discussed by committees in 2022

Audit Committee

- Recommendations to the Board of Directors regarding the Company's auditor
- RAS and IFRS reports
- Paying bonuses to the Senior Auditor and the Senior Risk Manager
- Internal Audit Unit performance reports and plans, including the recognition of the risk management and internal control system as generally effective, except for areas where certain observations or gaps were identified to require specific corrective action
- Regulations on Internal Audit
- Risk Management Programme for 2022
- Risk management outcomes.

Nomination and Remuneration Committee

- 2021 KPI Progress Report
- Implementation procedure for the second cycle of the Long-Term Incentive Programme for 2020–2022
- Regulations on the Establishment and Application of Key Performance Indicators to Determine the Annual Bonus Payable to the President of PJSC Rostelecom
- Determination of the term of office and the number of members of Rostelecom's Management Board and appointment of its members
- Determining whether the Board nominees meet the independence criteria
- Paying bonuses to the President, the Corporate Secretary, and the Senior Auditor.

Strategy Committee

- Recommendations to the General Shareholders' Meeting on the distribution of net profit and payment of a final dividend for 2021
- Business plan for 2023.

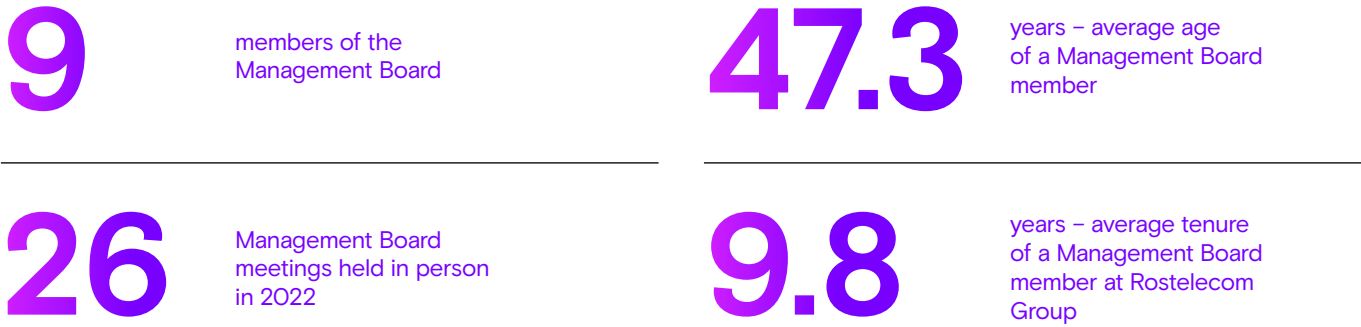
Corporate Governance Committee

- Information Policy Compliance Report
- Inclusion of the following items in the agenda of the 2021 Annual General Shareholders' Meeting: Approving Rostelecom's Charter, Version No. 22; Approving the Regulations on the General Shareholders' Meeting of PJSC Rostelecom, Version No. 12; Approving the Regulations on the Board of Directors of PJSC Rostelecom, Version No. 17; Approving the Regulations on the President of PJSC Rostelecom, Version No. 6; Approving the Regulations on the Management Board of PJSC Rostelecom, Version No. 8; Approving the Regulations on the Audit Commission of PJSC Rostelecom, Version No. 6.

Corporate Secretary

The Corporate Secretary facilitates the coordination between the Company and its shareholders and assists the Company's governing bodies in corporate governance. The Corporate Secretary is elected by the Board of Directors and reports to the Board of Directors.

President and Management Board¹



Information is not disclosed in accordance with the Decree of the Government of the Russian Federation No. 1102 as of 4 July 2023.

Management Board's performance report

Key matters discussed by the Management Board

Operations and operational excellence	<ul style="list-style-type: none">• The 2022 business plan performance reports and drafting the 2023 business plan• Enhancing the corporate project management• Streamlining the procurement procedures• Streamlining the relations with subsidiaries and affiliates• The Company's digital transformation• Monitoring the progress of key strategic projects:<ul style="list-style-type: none">– Bridging the Digital Divide– Providing Internet Access for Hospitals and Out-Patient Clinics– Arranging for Video Surveillance and Ensuring the Operation of the Broadcasting Portal during the Elections in Russia– Digital transformation of the public administration.• Changing the Company's branch structure and optimising employee performance in a remote-working environment.
The Company's growth	<ul style="list-style-type: none">• Strategies to be pursued by the business segments and key subsidiaries• Building the target IT architecture and transforming the telecom networks• Developing digital services in healthcare.
Risk management	<ul style="list-style-type: none">• Progress in the Risk Management Programme.
Evolving corporate governance standards	<ul style="list-style-type: none">• Developing and approving the Risk Management Programme• The Company's internal control development concept.
Preparing materials and matters referred to the Board of Directors	<ul style="list-style-type: none">• Preliminary review of the interested party transactions.
Social responsibility	<ul style="list-style-type: none">• Charity and sponsorship initiatives.

Management Board members' attendance at meetings

Information is not disclosed in accordance with the Decree of the Government of the Russian Federation No. 1102 as of 4 July 2023.

Management Board committees' performance report

To improve the performance of the Management Board, the Company has in place four committees.

Budget and Investment Committee

Committee functions

The Budget and Investment Committee facilitates the linkages between, and the alignment of, the budget and investment processes, monitors their progress and makes relevant proposals to the Management Board.

Key 2022 results

- Reviewed and assessed the Company's investment projects and programmes for 2022 and 2023, made go/no-go decisions
- Reviewed the 2022 budgets of the business units and branches as part of preparing the Company's draft consolidated budget for 2023
- Monitored the performance of the 2022 investment plan.

Plans for 2023

- Reviewing and assessing the Company's investment projects and programmes
- Reviewing the budgets of the business units and branches as part of preparing the Company's draft consolidated budget
- Monitoring the performance of the investment plan.

32 meetings held in the reporting year, 19 of them in person

77 matters discussed

Compensation Committee

Committee functions

The Compensation Committee is responsible for discussing the following matters:

- Headcount increases and sources of financing
- One-off bonuses to employees
- Covering elective surgery costs for Company employees
- Changing the incentive system
- Determining the terms of the Company's Housing Programme, NPF¹.

Key 2022 results

- Determined the terms of the Company's Housing Programme
- Made a decision to cover elective surgery costs for Company employees
- Decided to award bonuses to employees
- Took a decision on headcount increases and the sources of financing
- Approved the allocation of defined contributions for the employees of Rostelecom's Corporate Centre and an information technologies subsidiary, pursuant to the Private Pension Insurance Programme
- Approved the incentive system for auditors
- Approved an addendum to the memorandum on the approach to financial incentives for employees of Rostelecom's Property Management Department
- Made decisions regarding corporate titles.

Plans for 2023

To discuss the following matters:

- Changes to the incentive system of the Company's business units
- Approval of the 2022 reserves
- Bonus payments to employees
- The Housing Programme
- Allocation of defined contributions for the employees of Rostelecom's Corporate Centre, pursuant to the Private Pension Insurance Programme
- Headcount increases and the sources of financing
- Covering employees' medical treatment costs.

29 meetings held in the reporting year, 25 of them in person

103 matters discussed

¹ A private pension fund.

4 meetings held in the reporting year, 2 of them in person

8 matters discussed

Risk Management Committee

Committee functions

The Risk Management Committee coordinates the evolution of the risk management system (RMS) and ensures effective risk management at all levels to support balanced business decisions.

Key 2022 results

- Approved the Risk Management Programme
- Discussed the risk management matters to be further submitted to the President, the Management Board, the Board of Directors, and the Board's Audit Committee
- Issued relevant instructions to the RMS participants and approved risk management measures
- Regularly supervised the risk management procedures for all risks and at all organisational levels
- Monitored the mitigation measures and changes in the key risk indicators.

Plans for 2023

- Enhancing the risk management processes: identifying and assessing risks, developing risk management measures, RMS supervising and monitoring.

12 in-absentia meetings held in the reporting year

31 matters discussed

Charity Committee

Committee functions

The key objectives of the Charity Committee are to review donation requests from individuals or legal entities and advise the Company's governing bodies on charitable spending.

Key 2022 results

- Recommended a donation of RUB 218 million to support projects in education, care, spiritual heritage, environment, and sports.

Plans for 2023

- Developing recommendations for charitable spending in 2023.

3.3. Control bodies¹

Audit Commission

Key function

Control over the financial and business operations in the periods between general shareholders' meetings

Key 2022 results

- In early 2023, the Commission conducted an audit of the Company's financial and business operations for the year 2022 using the methods of an overall and random inspection of individual transactions, including the Annual Report and the annual accounting (financial) statements².
- In the course of 2022, the Company's business underwent an audit in the following areas:
 - assessment of the financial and business performance, analysis of the remuneration system, including a KPI review
 - the Company's legal compliance in its core financial and business operations
 - analysis of the ICS, RMS, and the internal audit system, the budget and investment plan execution, and the effectiveness of the disposition and divestiture of the Company's non-core assets
 - analysis of the Company's real estate management programme, including the transactional mechanics in 2022, and the effectiveness of the equity investment management
 - execution of the instructions of the President of the Russian Federation and the Government of the Russian Federation as well as the recommendations of the Audit Commission resulting from the 2022 audit.

Internal Audit Unit

Key functions

- Internal audit based on a risk-oriented approach and the best practices
- Independent assistance in improving the RMS, ICS, and the corporate governance system
- Ensuring the proper operation of the Ethics Hotline.

Key 2022 results

- Fully and timely executed the working plan for the Internal Audit Unit with a meaningful economic effect. Formulated an independent opinion on the reliability and effectiveness of the RMS, ICS, and the corporate governance system. Provided recommendations on improving process efficiency, generating additional income and cost savings, as well as independent and objective assurances and consultations aimed to enhance Rostelecom's performance and support the achievement of its goals. The Internal Audit Unit actively employs the best practices, including data analytics, big data tools, and dashboard-based continuous monitoring procedures, as well as participates in strategic corporate initiatives
- Certain subsidiaries receive internal audit consultations to ameliorate the ICS and risk management effectiveness while ensuring compliance with the principles of independence and fairness.

¹ For more details on the performance of control bodies, see Appendix 2, Governance and Control Bodies, to this Annual Report at: www.company.rt.ru/ir/agm/files/2022/Appendix_2_to_annual_report_2022_rus.pdf.
² The Audit Commission issued an unqualified positive opinion and confirmed the accuracy of the data contained in the Rostelecom 2022 Annual Report and its annual accounting (financial) statements.

Risk Management divisions

Key function

Building, monitoring, and maintaining the risk management system

Key 2022 results

- the following steps as part of wider measures to better the management process:
 - regarding sanctions risks, including enabling a visual representation of operational data
 - regarding business continuity in terms of implementing a cross-functional process
- Monitored the implementation of the Risk Management Programme for 2022
- Provided methodological support to the subsidiaries and affiliates in monitoring their risk management programmes
- Executed measures under the plan resulting from the audit that assessed the risk management performance and the performance of the internal control and corporate governance systems.

Internal Control Unit

Key function

Assisting management in building an effective internal control system (ICS)

Key 2022 results

- Updated the ICS development strategy and prepared roadmaps for ICS improvement at the subsidiaries and affiliates
- Together with the owners of the business processes, analysed key risks, and implemented measures to bolster the ICS effectiveness
- Prepared a training course to augment the risk management and internal control skills of the Company's key employees
- Updated the ICS methodology in line with the best practices
- The high maturity level of the Company's ICS has been independently confirmed by an internal audit as well as by the Federal Tax Service as part of a horizontal monitoring procedure.

External audit

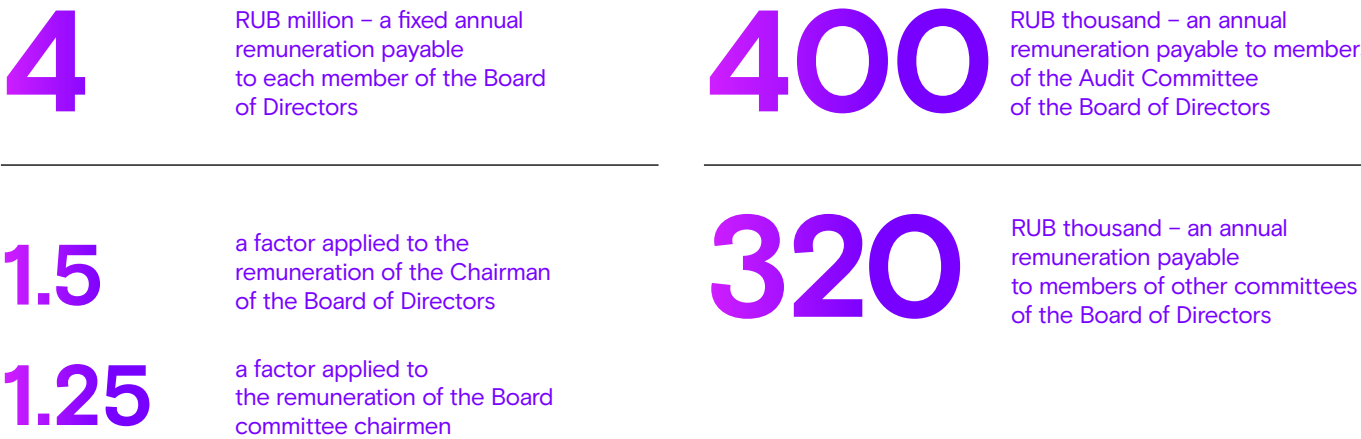
We annually engage an external auditor for an independent assessment of the accuracy of the Company's financial statements.

In 2022, following a public tender, the Annual General Shareholders' Meeting¹ selected Centre for Audit Technologies and Solutions – Audit Services to act as Rostelecom's auditor (the "Auditor") in respect of RAS and IFRS reporting for 2H 2022 and 1H 2023, with the total fee for the assessment of both RAS and IFRS financial statements to equal RUB 84.3 million (inclusive of VAT)².

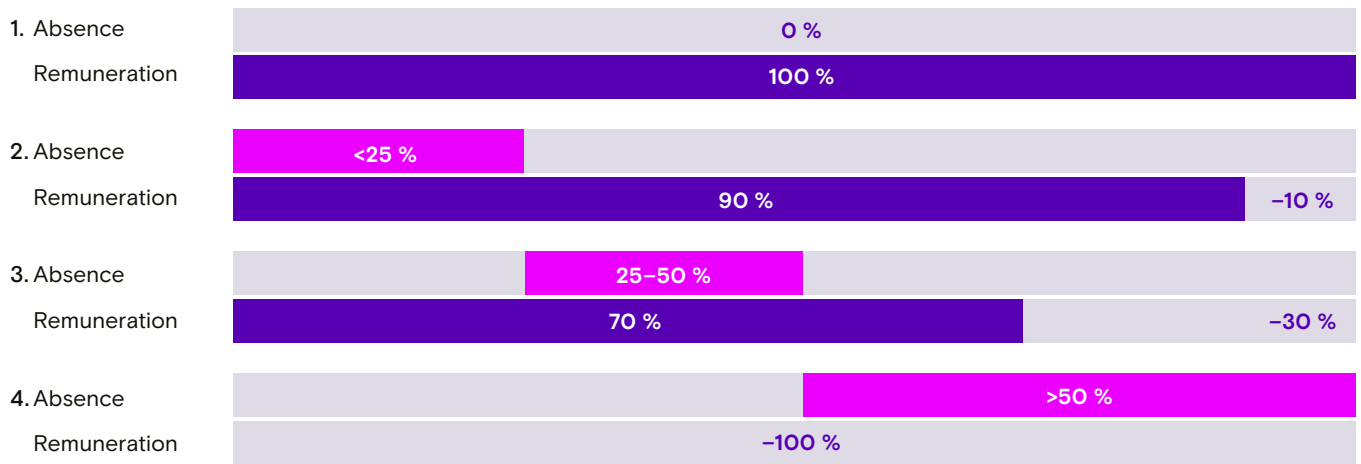
The auditor confirmed the accuracy of the 2022 financial statements.

3.4. Remuneration

Board of Directors¹



Reduced remuneration due to absence from meetings held in person or in absentia



Remuneration paid to the Board of Directors², m RUB

In 2022, no members of the Board of Directors received any reimbursements, other payments, or loans (facilities).

In 2022, no members of the Board of Directors not employed by the Company participated in the Long-Term Incentive Programme for Company Employees.

No annual remuneration is paid to the members of the Board of Directors holding public offices or employed by the Company, or who waived their remuneration.

Information is not disclosed in accordance with the Decree of the Government of the Russian Federation No. 1102 as of 4 July 2023.

¹ Minutes No. 1 dated 1 July 2022.

² For more details on the auditor's fee and the auditor selection procedure, see Appendix 2, Governance and Control Bodies, to this Annual Report at: www.company.ru/ir/agm/files/2022/Appendix_2_to_annual_report_2022_rus.pdf.

¹ Remuneration of the Board of Directors is determined in line with the Regulations on the Board of Directors.

² Payable to a member of the Board of Directors not later than one month after the Annual General Shareholders' Meeting for the year when he/she was elected to the Board of Directors.

Individual payments to members of the Board of Directors in office from 28th June 2021 to 30th June 2022, RUB

Information is not disclosed in accordance with the Decree of the Government of the Russian Federation No. 1102 as of 4 July 2023.

Components comprising remuneration payable to the President and members of the Management Board

	Salary	Short-term incentives	Long-term incentives
Type of remuneration	Basic salary	Annual bonus	Long-Term Incentive Programme
Objective	Attract and retain professional managers by offering competitive salaries	Achieve annual business KPIs	Achieve long-term KPIs: Net Profit, FCF ¹ , ROIC ²
Target ratio of remuneration components	50 %	50 %	The multi-year programme is based on a share matching plan and offers shares as remuneration

Payments to the Management Board and the highest paid employees in 2022, RUB

Information is not disclosed in accordance with the Decree of the Government of the Russian Federation No. 1102 as of 4 July 2023.

President and Management Board

The President's compensation package is determined in his contract approved by the Board of Directors.

Furthermore, in line with the Board of Directors' resolution, the President's pay may include an annual bonus for faithful discharge of his duties and performance according to the budget targets.

Payments to the Management Board members are made on the basis of the employment contracts signed with each employee. No special remuneration is payable to Management Board members for serving on the Management Board.

Severance is paid to the President and the Management Board members upon the termination of their employment with the Company in line with the Labour Code of the Russian Federation. The severance pay does not exceed the employee's triple average monthly earnings.

¹ Chairman of the Board of Directors.
² Rostelecom employee.
³ Public officer.

Remuneration paid to the Management Board, m RUB

Information is not disclosed in accordance with the Decree of the Government of the Russian Federation No. 1102 as of 4 July 2023.

Audit Commission

800

RUB thousand – an annual remuneration payable to members of the Audit Commission

1.1

a factor applied to the remuneration of the Secretary of the Audit Commission

1.3

a factor applied to the remuneration of the Chairman of the Audit Commission

Payments to members of the Audit Commission in 2022, RUB

Information is not disclosed in accordance with the Decree of the Government of the Russian Federation No. 1102 as of 4 July 2023.

Incentive programmes

Rostelecom has in place a number of incentive policies and regulations for its employees.

The Company regularly participates in salary and HR policy reviews. Remuneration and financial incentives for Rostelecom employees are on par with the market.

Rostelecom does not offer non-financial remuneration except for the Long-Term Incentive Programme. Local remuneration systems, including incentive systems, are adapted at the Company's subsidiaries and affiliates to stay in line with the current approaches to remuneration management at Rostelecom.

Severance may be paid to Company employees upon negotiated employment termination. The severance pay may not exceed the employee's triple average monthly earnings.



Long-term incentives

Rostelecom’s Long-Term Incentive Programme (the “Programme”) was approved by the Board of Directors and is based on a share matching plan. The Programme is open to employees in grades 6 to 11 if they choose to use a portion of their variable remuneration to buy Rostelecom securities. In this case, the employee is entitled to additional remuneration in the form of Rostelecom shares depending on his or her position, amount of investment, and individual and corporate performance.

The Programme provides for three cycles to be launched annually (in 2020, 2021, and 2022), with the implementation of each cycle during the year following the respective cycle. The maximum shareholding held by Programme participants will not exceed 6% of the Company’s charter capital or 6.38% of its ordinary shares. The maximum shareholding held by Programme participants in each cycle is limited to 2% of the Company’s charter capital or 2.13% of its ordinary shares.

The Programme is based on both individual performance and the achievement of Company-wide KPIs applicable to the Programme: FCF, Net Profit and ROIC.

The Programme is run via RTC–Razvitie, a closed-end fund.

Short-term incentives

The Company has a regular bonus scheme for employees. Rostelecom is working to improve the employee incentive system in line with its business needs.

In 2022, the targeted incentive schemes and KPIs for the B2C, B2B, and B2O segments as well as the Technical Infrastructure Unit were centralised and updated. Additional financial incentive programmes were also developed and implemented to further better employee performance in order to meet specific business objectives.

Quarterly assessments of in-house services represent another employee incentive tool used by Rostelecom. Such assessments advance cross-functional collaboration. Their results are used to enhance in-house services.

System of KPIs

Key performance indicators are set for employees based on their position and scope of responsibility/influence. Bonuses paid to employees depend on the achievement of corporate, business, and individual targets.

Expenses on the Long-Term Incentive Programme included in the Statement of Profit or Loss¹, m RUB

President’s KPI, %

Information is not disclosed in accordance with the Decree of the Government of the Russian Federation No. 1102 as of 4 July 2023.

KPIs of Management Board members (excluding the President), %

Information is not disclosed in accordance with the Decree of the Government of the Russian Federation No. 1102 as of 4 July 2023.

3.5. Information disclosure

Aiming to enhance its investments and maintain a trust-based dialogue with its stakeholders, Rostelecom discloses information in line with²:

- the requirements of the Russian laws
- the requirements of the resolutions of the Russian Government
- the requirements of the Bank of Russia’s regulations
- the Listing Rules of PJSC Moscow Exchange
- the basic principles of disclosure and the provision of information by public joint stock companies as recommended by the Corporate Governance Code
- the Company’s internal documents.

The Board of Directors establishes the rules of, and approaches to, disclosures, which are formalised in Rostelecom’s Information Disclosure Policy.

Key objectives of the Information Disclosure Policy are to:

- enhance openness and build trust
- improve transparency
- ascertain the Company’s disclosure framework.

Key principles of the Policy are:

- timely, consistent and prompt provision of information
- accessibility, objectivity, completeness, accuracy, and comparability of disclosed information
- equal rights of all stakeholders to obtain information in compliance with all applicable laws, standards and regulations
- information disclosure regardless of specific individual or group interests
- reasonable balance between the Company’s transparency and protection of its business interests
- confidentiality of information that constitutes a state secret or a trade secret in accordance with the Company’s internal documents
- control over the use of insider information.

The Company discloses information on its official website company.rt.ru/en/ and on the corporate information disclosure website run by Interfax (in Russian) rostelecom.e-disclosure.ru.

¹ Wages, salaries, other benefits, and social taxes, including personal income tax.
² Total Shareholder Return.

¹ Management by Objectives, a process of aligning goals within an organisation so that management and employees share goals and understand their significance to the organisation.
² In 2022, the Company did not make a full disclosure pursuant to Resolution of the Russian Government No. 351 dated 12 March 2022.

3.6. Securities and shareholder and investor relations

Securities

Shares

Rostelecom's charter capital as at 31 December 2022:

8.73 RUB million

395 thousand shareholders,¹ including:

1,338 legal entities 393,706 individuals

3,282,997,929 ordinary shares

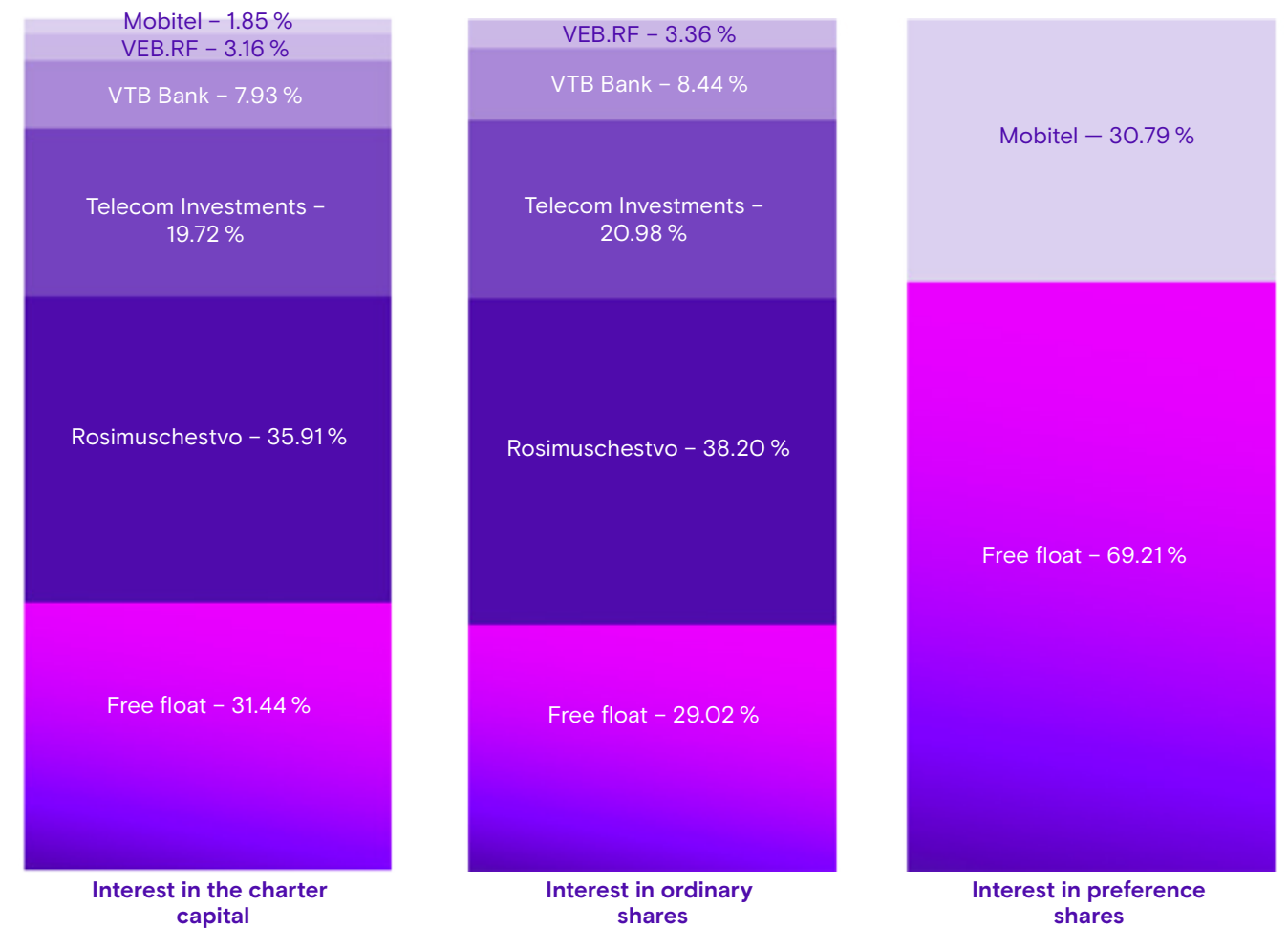
209,565,147 preference shares

Rostelecom ordinary and preference shares (tickers RTKM and RTKMP) are admitted to the first level quotation list of the Moscow Exchange and to the non-quotation section of the SPB Exchange's list.



¹ Including disclosure of shareholders whose shares are held by nominee holders.

Shareholding structure as at 31 December 2022



Bonds

In 2022, Rostelecom placed four issues of exchange-traded bonds:

- In May, Rostelecom placed 11.75% fixed-rate four-year exchange-traded bonds worth RUB 5 billion
- In June, Rostelecom placed 10.20% fixed-rate three-year exchange-traded bonds worth RUB 15 billion
- In August, Rostelecom placed 8.75% fixed-rate 42 month exchange-traded bonds worth RUB 15 billion
- In December, Rostelecom placed 8.85% fixed-rate 43 month exchange-traded bonds worth RUB 10 billion.

The proceeds were used to refinance the Company's existing debt and did not change its overall leverage.

153.29

RUB BILLION – OR 34.1 % OF THE DEBT PORTFOLIO – THE TOTAL VALUE OF THE COMPANY'S OUTSTANDING BONDS, AS OF 31ST DECEMBER 2022

Outstanding exchange-traded bonds as at 31 December 2022

Series	Offering date	Issue size, RUB	Number of outstanding bonds	Maturity date
BO-01	29th May 2015	5,000,000,000	862,810	16th May 2025
001P-01R	22nd September 2016	15,000,000,000	8,016,404	10th September 2026
001P-02R	26th April 2017	10,000,000,000	4,030,694	14th April 2027
001P-03R	21st November 2017	10,000,000,000	10,000,000	9th November 2027
001P-04R	16th March 2018	10,000,000,000	10,000,000	3rd March 2028
001P-05R	3rd April 2019	15,000,000,000	380,973	21st March 2029
001P-06R	9th December 2022	10,000,000,000	10,000,000	5th September 2025
002P-01R	5th December 2019	10,000,000,000	10,000,000	27th November 2025
002P-03R	18th February 2020	15,000,000,000	15,000,000	14th February 2023
002P-02R	19th February 2020	15,000,000,000	15,000,000	10th February 2027
002P-04R	24th April 2020	10,000,000,000	10,000,000	21st April 2023
002P-05R	14th October 2020	10,000,000,000	10,000,000	8th October 2025
002P-06R	23rd July 2021	15,000,000,000	15,000,000	17th July 2026
002P-07R	13th May 2022	5,000,000,000	5,000,000	8th May 2026
002P-08R	15th June 2022	15,000,000,000	15,000,000	11th June 2025
002P-09R	4th August 2022	15,000,000,000	15,000,000	29th January 2026

Dividends

On 30th June 2022, the Annual General Shareholders’ Meeting took a decision to pay a final dividend for FY2021 amounting to a total of RUB 15,926,088 thousand. Dividends on ordinary and preference shares accounted for RUB 4.56

per share. The dividends were paid out of the net profit; the amount paid to the federal budget was RUB 5,719,104 thousand, with no outstanding dividends payable to the federal budget.



Historical dividend payout

Dividends for	Dividend per ordinary/preference share, RUB	Total accrued, RUB thousand	Total paid prior to 2022, RUB thousand	Total paid during 2022, RUB thousand	Total paid by end of 2022	
					RUB thousand	%
2021	4.56/4.56	15,926,088	–	15,624,438	15,624,438	98.11
2020	5/5	17,462,815	17,352,408	5,089	17,357,497	99.40
2019	5/5	17,462,815	17,359,548	2,103	17,361,651	99.42
2018	2.50/2.50	6,961,200	6,912,716	327	6,913,043	99.31
9M 2018	2.50/2.50	6,961,200	6,912,802	–182 ¹	6,912,620	99.30

Credit ratings

As of the end of 2022, the Analytical Credit Rating Agency (ACRA) left Rostelecom’s rating unchanged, while National Credit Ratings (NCR) upgraded the issuer’s credit rating to AAA.ru with a stable outlook.

Rostelecom’s credit ratings as at 31st December 2022

ACRA		Stable outlook Affirmed on 31st May 2022
NCR		Stable outlook Affirmed on 27th May 2022

¹ The amount is negative due to the return in 2022 of the dividends paid twice at the end of 2021.

04 ADDITIONAL INFORMATION



4.1. Glossary

Term	Meaning
4G	The fourth generation of mobile technology with advanced requirements. 4G usually includes a family of advanced technologies enabling bandwidths of over 100 Mbps
5G	The fifth generation of mobile technology achieving higher bandwidths than 4G, driving greater mobile availability, extremely reliable large-scale networking of devices, lower latencies, bandwidths of 1 Gbps–2 Gbps and lower energy consumption by batteries. 5G adoption will drive the expansion of the Internet of Things
A2P SMS (Application-to-Person SMS Messaging)	The process of sending mobile messages from an application to a user's mobile phone
AC	Audit Committee
ACRA	Analytical Credit Rating Agency
AGSM	Annual General Shareholders' Meeting
ARPU	Average revenue per user (average revenue per unit)
B2B	Business-to-business
B2C	Business-to-consumer
B2E (Business-to-Enterprises)	Services to major corporations from among the top 200 Russian businesses
B2G	Business-to-government
B2O	Business-to-operator
B2P (Business-to-Professional Consumers)	Services to small and medium-sized enterprises
BDD	Bridging the Digital Divide national programme
Big data	Large amounts of varied structured and unstructured data efficiently processed by horizontally scaled software tools
Broadband	Broadband services
CAGR	Compound average growth rate
CAPEX	Capital expenditures for acquiring or upgrading non-current assets
CCTV	Closed-circuit television, also known as video surveillance
CDN (Content Delivery Network)	A large online network of servers geographically distributed across several data centres to serve content to end users with high availability and high performance
CEO	Chief Executive Officer

Term	Meaning
CFO	Chief Financial Officer
CGC	Corporate Governance Committee
CIRT	Cyber incident response team
Cloud services	A model for enabling on-demand network access to a shared pool of configurable computing resources
CRM	Customer relations management software
Data centre	Data processing centre
DBaaS (Database as a Service)	A cloud-based approach to storing and managing structured data
DDoS (Distributed Denial of Service)	An attempt to make an online service unavailable by overwhelming it with traffic from multiple sources
Digital Economy	The Digital Economy of the Russian Federation programme approved by the Russian Government's Decree dated 28 July 2017
DLP	Data leak protection
DTMF (Dual-Tone Multi-Frequency)	A dual-tone multi-frequency interface
DWDM	Dense wavelength division multiplexing
EBITDA	Earnings before interest, taxes, depreciation, and amortisation (an evaluation metric, also known as pre-tax profit)
EEF	Eastern Economic Forum
EGSM	Extraordinary General Shareholders' Meeting
eNPS (Employee Net Promoter Score)	A method to measure employee loyalty
ESG	Environmental, social and governance
FCF	Free cash flow
FMC (Fixed Mobile Convergence)	A technological solution at the junction of different types of communications networks (fixed and mobile), which allows to create a single network of office and mobile phones with a common short numbering plan. The technology makes it possible to call directly by short internal numbers to employees from offices in different regions of the country or the world without using a real office PBX
FOCL	Fibre-optic communication line
FPS	Faster Payments System
FTTB/FTTx (Fibre-to-Building)	Broadband network architecture using optical fibre to provide all or part of the local loop used for last mile telecommunications

Term	Meaning
FVNO	Fixed virtual network operator
GHG	Greenhouse gases
GPON (Gigabyte Passive Optical Network)	A cost-efficient broadband technology
GSM	General Shareholders' Meeting
HR	Human resources
HSE	Health, Safety and Environment
IaaS (Infrastructure as a Service)	A cloud computing service model where subscribers can access fundamental information technology resources – virtual servers with a given computing power, operating system and network access
IBS	International Bandwidth Service
ICC	Industrial competence centre
ICS	Internal control system
ID	Identity document
IFRS	International Financial Reporting Standards
ILO	International Labour Organisation
IoT (Internet of Things)	The internet-based interconnection of devices embedded in everyday objects enabling them to send and receive data
IP	Internet Protocol
IP/MPLS (Multiprotocol Label Switching)	A routing technique in high-performance telecommunications networks that directs data from one node to the next based on short path labels rather than long network addresses, thus avoiding complex lookups in a routing table
IPL	International Private Line
IPLC	International Private Leased Circuit
IPTV	A system through which television services are delivered using the internet protocol suite over a packet-switched network such as a LAN or the internet
Issuer	An entity or an individual issuing securities to support and finance their business
IT	Information technology
IVR (Interactive voice response)	A technology that allows telephone users to interact with a computer-operated telephone system
KPI	Key performance indicator
Last mile	Final leg of the telecommunications networks that deliver telecommunications services to retail end users

Term	Meaning
LL	Lease liabilities
LTM	Last 12 months
M&A	Mergers and acquisitions
M2M (Machine-to-Machine)	Direct communication between devices
MBO	Management by objectives
NCIT	New communication internet technologies
NDMS	National Data Management System
NPS (Net Promoter Score)	An index reflecting consumer loyalty to a product or company (likelihood to recommend) and used to gauge repurchase intent
NPV	Net present value
NRC	Nomination and Remuneration Committee
O2O	Rostelecom's project, Operator to Operators, aimed to offer network infrastructure support, operation and development services to other operators
OCA	Online customer account
OHMS	Occupational health management system
OHS	Occupational health and safety
OIBDA	Operating income before depreciation and amortisation (an evaluation metric)
OPEX	Operating expenses to keep business running
OS	Ordinary share
OTT (Over the Top)	Delivery of video signals from a content provider directly to a user's device over the internet bypassing an operator
PaaS (Platform as a Service)	A cloud computing model where users can access and use information technology platforms
Pay TV	Subscription-based television services provided by both analogue and digital cable and satellite television as well as via digital terrestrial and internet television
PBX	Private branch exchange
PRS	Requests per second
QR code	Quick response code, a type of matrix barcode
RAS	Russian Accounting Standards
RMS	Risk management system
ROIC	Return on invested capital

Term	Meaning
RPS	Rostelecom's production system
RSPP	Russian Union of Industrialists and Entrepreneurs
SaaS (Software as a Service)	A cloud computing service model where subscribers are provided with ready-to-use provider-managed software
SAC	Subscriber Acquisition Costs
SC	Strategy Committee
SEMD	Structured electronic medical document
SFOCL	Submarine fibre-optic communication line
SIA (Social Impact Award)	An international programme supporting young social entrepreneurs
SLA	Service Level Agreement
SMART	Specific, Measurable, Achievable, Relevant, and Time-bound
Smart Home	A high-tech solution for integrating diverse household systems under artificial intelligence control
Smart TV	An advanced television set with integrated internet and digital interactive feature
SME	Small and medium-sized enterprises
SMP	Share matching plan
Subscriber	An individual or an entity with a valid contract who has used any service entailing data traffic, a subscription fee or a service charge in the past six months
TEA	Transit Europe-Asia terrestrial cable system
TSR	Total shareholder return
UBS	Unified Biometric System
UDP	Unified digital platform
USHIS	Unified State Healthcare Information System
VAS	Value-added services
VAT	Value-added tax
VfM	Value for money
VHI	Voluntary health insurance
VIMIS	Vertically integrated medical information system
VK	VKontakte social media platform

Term	Meaning
VoD (Video on Demand)	A technology enabling customers to select and view content any time they need. VoD is often delivered to television sets and desktops over IPTV
VoLTE (Voice over LTE)	Voice calls over a 4G LTE network
VP	Vice President
VPN / IP VPN (Virtual Private Network)	A virtual private network for expanding a dedicated network through a public network (the internet), enabling desktops to send and receive data via a shared or public network as if the desktop was directly connected to the private network, while taking advantage of the public network functionality, security policy and management capabilities
WAF	Web application firewall
Wi-Fi	Wireless local area networking (WLAN) of devices

4.2. Contact details

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Legal entity registration details Certificate of entry into the Unified States Registry of Legal Entities of an entity registered before 1st July 2002 (OGRN 1027700198767) series 77 No. 004891969 dated 9th September 2002 WhatsApp and Telegram: +7 991 100 1666	<div> WhatsApp</div> <div> Telegram</div>
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