Digital Ecosystem of the Future Economy
Dear friends,

Rostelecom is an established industry leader and Russia’s largest provider of digital services and solutions covering millions of households, social welfare organisations, and public and private entities.

Our 2018 Sustainability Report outlines our strategic sustainable development initiatives and key events and priorities, including volunteering and charitable projects.

The nationwide programme, Digital Equality, remains the key sustainability initiative of Rostelecom. The programme improves the quality of life for millions of Russian citizens by bridging digital divides and ensuring accessibility of communications services, first and foremost, for underprivileged and vulnerable groups such as senior citizens, children in orphanages, children in needy families, and children with special needs.

In 2018, we launched our new five-year strategy, focused on transforming Rostelecom into a digital company while remaining a key participant in the Digital Economy of the Russian Federation programme and implementing nationwide technological and IT projects to further consolidate our status as a digital partner of choice for households, business, and government customers.

Rebranding was a logical evolution of our transformation, which has reinforced the new image of Rostelecom as a digital leader in the Russian market that remains open to feedback and proposals from any stakeholder. People, society, and their aspiration for improvement and building a fundamentally better life remain at the heart of our brand’s mission.

During the year, Rostelecom significantly reinforced its position in innovative solutions for e-government systems, cyber security, data centres, cloud computing, biometrics, healthcare, education, and utilities.

We do not simply create products and services, we provide a safe and comfortable environment for denizens of the digital age, create new experiences, open opportunities for quality education and healthcare, help businesses grow, and help the government reach out to the people.

Rostelecom incorporates the United Nations Sustainable Development Goals (UN SDGs) into its operations in respect of environmental, social, and economic matters while applying regional, national, and global lenses. Our projects target various age groups, promote digital skills for employment and everyday life, encourage innovation to drive the digital economy, and develop digital healthcare while providing ultra-high-speed access to advanced, secure infrastructure and encouraging global communication between business and society – all with a strong focus on cyber security.

In 2018, we connected over one million new apartments and private houses to digitally empower Russian citizens so they could get the most from all the latest digital advances.

The nationwide project for bridging the digital divide, exclusively operated by Rostelecom, focuses on connecting small rural communities (with 250 to 500 residents) via modern high-speed communication lines. Russia is home to about 14 thousand of these communities, which consist of several million people altogether. The project enables people to access high-quality digital services wherever they may live.

Pursuant to an instruction of the Russian President, Rostelecom constructed a submarine fibre-optic cable link to the Kuril Islands in 2018, with residents of three islands, Iturup, Kunashir, and Shikotan, now able to use high-quality digital services.
From 2017 to 2018, Rostelecom connected 9,000 healthcare centres, providing them with access to advanced telemedicine technology.

We continued to ensure cyber security for business, retail, and government customers. Rostelecom’s cyber security centres provide 24/7 online monitoring, instantly responding to threats and attacks as they emerge. Rostelecom strengthened its position in the cyber security segment in 2018 thanks to the professionals at Rostelecom–Solar and the launch of the Unified Cyber Security Platform during the year.

Rostelecom’s team, counting 129 thousand people, is central to driving our digital transformation and achieving our goals. We value every employee, encouraging them to grow professionally and build their digital skills, which is key to Rostelecom’s success. We build a positive working environment for our employees from the moment they begin their very first day at work with us. To further empower our employees, we offer a mentoring programme and have set up the Corporate Online University and Knowledge Management Department, with a mission to create a positive environment for continuous employee development across all functions and roles.

Rostelecom has in place the Long-Term Incentive Programme for 2020–2022 and a collective bargaining agreement outlining the benefits and social guarantees offered to employees. Our employees actively participate in volunteering and charitable initiatives, with as many as 3,500 Rostelecom employees regularly involved in volunteering projects.

On behalf of the Company, I would like to thank all contributors to Rostelecom’s sustainability programmes and projects in 2018. Strong collaboration and co-creation are key to improving the quality of life for all Russian citizens and embracing the new digital future.

Mikhail Oseevsky,
President of PJSC Rostelecom
Rostelecom ensures the smooth operation of the e-government infrastructure providing citizens with digital access to public services.

With Rostelecom launching a back-up data centre in 2018, the system has become even more reliable. The back-up data centre will ensure the uninterrupted operation of the infrastructure in the event of incidents in the Federal Data Centre.

The e-government services are rapidly gaining traction, with the number of public services (e-government) portal users growing to 86 million in 2018, the number of visits up by 30% year-on-year, and the volume of payments reaching RUB 52.6 billion.
Business Model

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PJSC Rostelecom is a key player in the market for digital services and solutions, operating across all segments of the industry. Millions of Russian households use Rostelecom’s services. We lead the Russian broadband and Pay TV market, with more than 13 million broadband subscribers and 10.2 million Pay TV users, including over 5.2 million households subscribed to a unique nationwide product, Interactive (Interactive IP TV) (up 8% year-on-year).

Stable financial position

FitchRatings
«BBB–»

Standard & Poor’s
«BB+»

Analytical Credit Rating Agency (ACRA)
«AA (RU)»
The Group’s revenue for FY2018 was RUB 320.2 billion (up 5% year-on-year), with OIBDA at RUB 100.9 billion (up 4%), and net profit at RUB 15.0 billion (up 7%).

In the telecommunications market, Rostelecom is a reliable partner for Russian government authorities and corporate users at all levels.

PJSC ROSTELECOM’S CONTRIBUTION TO SOCIETY

<table>
<thead>
<tr>
<th>Stakeholder group</th>
<th>Engagement</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
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</thead>
<tbody>
<tr>
<td>Shareholders</td>
<td>Dividend payments, RUB m</td>
<td>15,000</td>
<td>14,050</td>
<td>6,961</td>
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<tr>
<td></td>
<td>Total headcount, thousand</td>
<td>143</td>
<td>134</td>
<td>129</td>
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<tr>
<td></td>
<td>Salary expenses, RUB m</td>
<td>66,018</td>
<td>67,238</td>
<td>69,812</td>
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<tr>
<td></td>
<td>Investment in training, RUB m</td>
<td>453</td>
<td>464</td>
<td>454</td>
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<tr>
<td>Employees</td>
<td>Contributions to Telecom–Soyuz and Alliance private pension funds, RUB m</td>
<td>704</td>
<td>164</td>
<td>757</td>
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<tr>
<td></td>
<td>Health and safety expenses, RUB m</td>
<td>551</td>
<td>641</td>
<td>698</td>
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<tr>
<td>Government</td>
<td>Income tax, RUB m</td>
<td>4,692</td>
<td>4,856</td>
<td>4,427</td>
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<tr>
<td></td>
<td>Other taxes, RUB m</td>
<td>5,079</td>
<td>4,661</td>
<td>5,747</td>
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<tr>
<td>Society</td>
<td>Member fees, charity contribution, payments to labour units, RUB m</td>
<td>660</td>
<td>697</td>
<td>767</td>
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<tr>
<td>Environment</td>
<td>Environmental expenditure, RUB m</td>
<td>129</td>
<td>105</td>
<td>112</td>
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<tr>
<td></td>
<td>Other environmental expenditures, RUB m</td>
<td>7</td>
<td>21</td>
<td>48</td>
</tr>
</tbody>
</table>

1. Data for PJSC Rostelecom.
2. Data for PJSC Rostelecom.

The Company is a recognised technology leader offering innovative solutions for e-government systems, cloud computing, healthcare, education, security, and utilities.

Rostelecom’s stable financial position is confirmed by the following credit ratings: “BBB-” from Fitch Ratings, “BB+” from Standard & Poor’s, as well as “AA(RU)” assigned by the Analytical Credit Rating Agency (ACRA).

By consistently paying all applicable taxes, PJSC Rostelecom makes a substantial contribution to the country’s economy. Our tax reporting is transparent and can serve as a model for other corporate taxpayers. Rostelecom’s income tax and other taxes for 2018 totaled RUB 10,174 million, up by RUB 557 million year-on-year.

With a headcount of 128,600 employees, PJSC Rostelecom remains one of Russia’s largest employers.

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Company Profile

Rostelecom is Russia's largest provider of digital services and solutions

Rostelecom comprises seven macroregional branches (MRFs) and several dozen subsidiaries and affiliates engaged in providing services across Russia.

Macroregional branches
Volga
Far East
North-West
Siberia
Ural
Centre
South

Major subsidiaries and affiliates
PJSC Bashinformsvyaz
LLC Data Storage Centre (SafeData)
JSC RTComm.RU
PJSC Central Telegraph
JSC Macomnet
JSC Severen-Telecom
LLC Rostelecom Retail Systems
CJSC GNC-ALFA
JSC Globus-Telecom
JSC MTs NTT
LLC Morton Telecom
LLC Tvingo Telecom

Major joint ventures
Tele2 Russia (LLC T2 RTK Holding)
JSC Digital Television
Macroregional branches

55% revenue from content and digital services

20.3 Tbps backbone network capacity

320.2 RUB billion revenue

128.6 ths people headcount

100.9 RUB billion OIBDA
Rostelecom’s 2018 highlights

**January**
- Rostelecom created the Geodata Information System (GIS) for the Arkhangelsk Region.
- Rostelecom signed an agreement with the Moscow Government on telemetry transmission from special vehicles.

**February**
- Rostelecom signed an agreement with TechnoServ Cloud on traffic monitoring and DDoS protection services.
- Rostelecom introduced the first beta version of the Unified Biometric System.
- Fitch affirmed Rostelecom’s investment grade rating of “BBB-” with a stable outlook.
- Rostelecom’s performance in 2017 placed the Company among the leaders of sustainable development indices compiled by the Russian Union of Industrialists and Entrepreneurs (RSPP) in line with global best practices, with support from the International Labour Organisation.

**March**
- Rostelecom invested in Sailfish, a mobile operating system developer.
- Rostelecom placed exchange bonds for RUB 10 billion at 7.15% p.a.
- Rostelecom named an official Regional Supporter of the 2018 FIFA World Cup.
- Rostelecom, Nokia, and the Skolkovo Foundation launched the first open pilot zone for the next-generation 5G network in Russia.
- Rostelecom provided video surveillance at Russia’s presidential election.

**April**
- Rostelecom doubled the capacity of its Transit Europe–Asia terrestrial cable system.
- Rostelecom’s Call Centre was certified to ISO 18295 customer service standard.

**May**
- 5G pilot zone opened in Innopolis.
- Rostelecom acquired 100% of Solar Security, a technological leader in target monitoring and information security management products and services.
- Rostelecom ranked among the Top 10 companies in the loyalty rating of major customers towards SMEs compiled by the Agency for Strategic Initiatives.

**June**
- ACRA affirmed the Company’s credit rating at “AA(RU)” with a stable outlook.

**July**
- Rostelecom launched its Unified Biometric System.

**August**
- Rostelecom launched the Videoserver cloud service.
Key events after the reporting period

**September**
- Rostelecom presented new digital services and its new brand.
- Rostelecom and Nokia established a joint venture to develop innovations.
- Rostelecom and Yandex launched a joint tariff with a 12 Tb cloud storage.
- Rostelecom, NAMI, and the Skolkovo Foundation launched a pilot zone for 5G-enabled unmanned vehicles.

**October**
- Rostelecom started to test quantum communications technology for its network.

**November**
- Rostelecom completed the design of a common corporate data network for the Russian Post, covering 37 thousand postal sites.
- Rostelecom announced the creation of the Unified Cyber Security Platform, with the first three services launched via the platform.

**December**
- Rostelecom received a certificate of the National Procurement Transparency Rating in the Guaranteed Transparency category.
- Rostelecom acquired LLC Start2Com, a leading developer of billing solutions.
- Rostelecom successfully completed the first stage of testing quantum communications equipment for its network.

**January**
- 25 January 2019 Rostelecom joined the national Smart City Centre of Excellence.

**February**
- 7 February 2019 – the Russian mobile operating system moved to the next stage of development and was rebranded as Aurora OS.
- 15 February 2019 – Rostelecom developed an off-the-shelf solution for secure biometric data collection

**March**
- 14 March 2019 Rostelecom and the Russian Union of Industrialists and Entrepreneurs held the second Digital Transformation Forum.
- 26 March 2019 Rostelecom placed exchange bonds for RUB 15 billion at 8.45% p.a.
Mikhail Oseevsky leads RSPP’s Committee on Digital Economy

In 2018, RSPP’s Committee on Digital Economy brought forward proposals amending 32 draft federal laws and resolutions of the Russian Government. Guidance on drafting regional digital transformation charters was provided to more than 30 Russian regions.

The Committee on Digital Economy of the Russian Union of Industrialists and Entrepreneurs (the “Committee”) first met on 20 December 2017, chaired by Rostelecom’s President, Mikhail Oseevsky. The Committee’s work plan for 2018 was presented and discussed during the meeting.

The new Committee primarily focused on working out a balanced common approach of the business community to digitalisation, primarily across traditional industries. Cross-cutting intersectoral priorities were identified, with the first practical steps taken to achieve them. RSPP’s Committee on Digital Economy became fully integrated into the management framework set up for the Digital Economy of the Russian Federation programme. The programme’s roadmaps included over 1,500 initiatives.

According to Mikhail Oseevsky, Chairman of RSPP’s Committee on Digital Economy, the Committee focuses on preparing proposals to encourage digital transformation across the real sector, including the mining, manufacturing, transport, logistics, agriculture, energy, and other industries. One such initiative is developing blueprints for building telecommunications networks and data storage and processing infrastructure to ultimately enhance the investment appeal of different industries.

In 2018, the Committee on Digital Economy brought together representatives of other related Committees and Commissions of RSPP and federal executive authorities to discuss and adopt consolidated decisions on a number of key matters such as:

Roadmaps

The programme’s roadmaps included over 1,500 initiatives.

The Committee’s mandate

In 2019, the Committee on Digital Economy will focus on supporting import substitution in the market for software applications and high-tech equipment that have a strategic importance for advancing the digital economy in Russia.
The Committee on Digital Economy of the Russian Federation is an all-volunteer body established within the Russian Union of Industrialists and Entrepreneurs in November 2017.

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- building a special Virtual Economic Zone as a tool to promote export-oriented data storage and processing and cloud services
- protecting critical information infrastructure
- implementing new investment projects.

Experts were actively engaged in improving digital economy regulation, with amendments proposed to 32 draft federal laws and resolutions of the Russian Government. Supported by PJSC Rostelecom, RSPP’s Committee on Digital Economy made extensive efforts at the regional level to involve Russian regions in the national digital agenda. The Committee also held a number of off-site meetings and digital transformation forums involving digital economy leaders, governors, and regional businesses in the Volga, Northwestern, Far Eastern, and Southern Federal Districts, with consultations and guidance provided to over 30 Russian regions on drafting regional digital transformation charters under the Digital Economy of the Russian Federation national programme and departmental projects.

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Company Profile

Business Model

RESOURCES

FINANCE

Revenue
RUB 320.2 billion

OIBDA
RUB 100.9 billion

CAPEX
RUB 73.2 billion

FCF
RUB 14.8 billion

INTELLECTUAL PROPERTY

Investment in new products
15% of CAPEX

EMPLOYEES

Total headcount
129 thousand people

BRAND AND REPUTATION

#1¹
- In top-of-mind awareness in broadband
- In top-of-mind awareness in Pay TV
- In Broad Content Offering category

ENVIRONMENT

Environmental expenditure
RUB 0.1 billion

ACHIEVEMENT OF STRATEGIC PRIORITIES

1. According to Brand Health Tracking (BHT) study by IRC.
**STAKEHOLDER VALUE**

**SHAREHOLDERS**
- Total dividends paid for 2017: RUB 14.1 billion
- Share price (as at 28/12/2018): RUB 72.3
  +13% year-on-year

**EMPLOYEES**
- Salary expenses: RUB 69.8 billion
- Investment in training: RUB 0.5 billion

**GOVERNMENT**
- Income tax: RUB 4.4 billion
- Other taxes: RUB 5.7 billion

**CUSTOMERS**
- Households, retail, business, and government customers, other operators
- Advanced, high-performance digital ecosystems covering a wide range of tasks

**SOCIETY**
- Member fees, charity contribution, payments to labour units: RUB 0.8 billion
- Reduced power consumption: 4%
- Reduced ground water consumption: 38%

**RESOURCES**

**STAKEHOLDER VALUE**

**OPERATIONAL EXCELLENCE**

**HUMAN CAPITAL DEVELOPMENT**

**TECHNOLOGY PLATFORM UPGRADE**

**DEVELOPMENT OF DIGITAL SERVICES AND CUSTOMER SERVICE ECOSYSTEMS**

**B2O**
- Voice and IP transit
- Line leases
- IP VPN
- Infrastructure maintenance services for mobile and fixed-line operators

**B2C**
- Smart home
- IPTV
- OTT video
- Games
- Antivirus
- Cloud software
- Online education
- Financial products
- Insurance
- Telemedicine
- Fixed-line
- Mobile
- Broadband
- MVNO
- Video surveillance

**B2B | B2G**
- Virtual PBX
- Data centre and cloud services
- Corporate TV
- Federal Wi-Fi
- Information security

**2018 results**
- Cost savings: RUB 3.3 billion
- Increase in labour productivity: 9%
- Higher backbone network capacity at 20.3 Tbps

**B2B | B2G**
- 55% of customers connected to fibre
- 1.0 million broadband and VPN subscribers
- 5.9 thousand racks in data centres
- 8.2 thousand communities connected under the BDD project
- 86 million public services (e-government) portal users
- 46% growth in revenue from Smart City projects in 2018

**B2C**
- 12.0 million broadband subscribers
- 5.2 million IPTV subscribers
- 0.8 million retail MVNO customers
- 35 million households connected to fibre

**B2O**
- Connectivity with more than 150 telecoms networks in 70 countries
- Partnerships with 600 national and international fixed-line and mobile operators
- 1 Tbps capacity growth for the Transit Europe – Asia cable system
Development Strategy

In 2018, Rostelecom launched its strategy for 2018–20221 aimed at transforming the Company from a telecoms operator into a digital partner for households, business, and government customers.

Our mission: Rostelecom is a digital partner for households, business, and government customers.

ROSTELECOM’S STRATEGIC PRIORITIES

until 2022

1. Approved by the Board of Directors on 14 March 2018, Minutes No 17.
Strategic objectives for 2018–2020

REVENUE

4%–5% accelerating CAGR

OIBDA MARGIN

>32%

CAPEX/REVENUE

down to 17%
(excluding government-sponsored programmes)

Long-Term Development Programme

In 2018, we continued implementing Rostelecom Group’s Long-Term Development Programme for 2017–2021, developed in accordance with the Russian Governmental directives and guidelines of the Russian Ministry of Economic Development and approved in December 2017. Along with the Long-Term Development Programme, the Board of Directors also approved Key Performance Indicators (KPIs) for 2017–2021.

The scope of the Long-Term Programme covers all activities of Rostelecom in consolidating its market position, driving infrastructure development, supporting innovation-driven growth, and improving business performance. Adequate investment, HR and management resources were allocated to support the activities set out in the Long-Term Programme. These activities are well balanced to reflect financing capabilities of the Company.


1. The Long-Term Development Programme and KPIs were approved by the Board of Directors on 29 December 2017; Minutes No. 13.

2. Actual performance against the KPI targets set in the 2018 Long-Term Development Programme is detailed in paragraph 7 of Appendix 4 Actual Results of Compliance with Instructions and Directives of the President of the Russian Federation and Instructions of the Government of the Russian Federation to this Annual Report.
Rostelecom has an efficient corporate governance framework in place, in line with Russian laws, the Rules of the Moscow Exchange, and best practices. We consistently enhance our corporate governance while ensuring protection of shareholder and other stakeholder rights.

**PJSC Rostelecom's corporate governance framework**

<table>
<thead>
<tr>
<th>Principles</th>
<th>Priorities</th>
<th>Enhancement focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance between the interests of shareholders, management and stakeholders</td>
<td>Focus on stakeholder interests and relations</td>
<td>Effective internal controls and audit</td>
</tr>
<tr>
<td>Equal treatment of all shareholders and protection of their rights</td>
<td>Compliance with business conduct and ethics</td>
<td>Continuous improvement of the corporate governance practice</td>
</tr>
<tr>
<td>Accountability of the Board of Directors, the President, and the Management Board to shareholders</td>
<td>Timely and accurate information disclosure</td>
<td>Electronic voting at General Shareholders’ Meetings</td>
</tr>
<tr>
<td>Informational and financial transparency</td>
<td>Corporate social responsibility</td>
<td>Introduction of an IT system to automate the Management Board’s and its Committees’ processes</td>
</tr>
</tbody>
</table>
PJSC Rostelecom's corporate governance structure

In accordance with the Charter, Rostelecom is governed by:
- the General Shareholders’ Meeting
- 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).

Key improvements in 2018

We particularly focused on the integration of the following advanced electronic solutions into shareholder relations:
- We arranged for the e-voting option at the Annual and Extraordinary General Shareholders’ Meetings for our shareholders
- We became the first issuer to provide its shareholders with electronic ballots on the public services (e-government) portal to vote at the Extraordinary General Shareholders’ Meeting
- JSC VTB Registrar, responsible for the register of our registered securities, arranged shareholder access to their online accounts where they can monitor their personal account data and vote at Rostelecom's General Shareholders’ Meetings
- We launched the Management Board portal for remote discussion and e-voting at the meetings of the Management Board and its Committees

1. For more details see Appendix 1 Report on Compliance with the Corporate Governance Code Recommended by the Bank of Russia to the Annual Report.
2. This service was available to shareholders who signed in to the online account on the public services portal and activated the online delivery of registered mail.
Corporate governance self-assessment results

Since 2015, Rostelecom has been self-assessing its corporate governance by benchmarking its standards against the key provisions of the Corporate Governance Code. In 2018, the assessment scored the company’s corporate governance at 93%, much higher than the minimum 65% requirement of the Federal Agency for State Property Management (Rosimushchestvo).

<table>
<thead>
<tr>
<th>CORPORATE GOVERNANCE LEVEL, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shareholder rights</td>
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<tr>
<td>Board of Directors</td>
</tr>
<tr>
<td>Executive management</td>
</tr>
<tr>
<td>Transparency and information disclosure</td>
</tr>
<tr>
<td>Risk management, internal control, and audit</td>
</tr>
<tr>
<td>Social responsibility, business ethics</td>
</tr>
<tr>
<td>Minimal requirement</td>
</tr>
</tbody>
</table>

Corporate governance rating

Corporate governance rating assigned by the Russian Institute of Directors (RID): 7++ (advanced corporate governance practice).

Plans to improve corporate governance

Rostelecom plans to further enhance its corporate governance. In particular, we plan to update our Charter in 2019. The amendments will allow us to send ballots for voting at general meetings to shareholders’ e-mails, which will notably speed up ballot delivery.

Governing bodies

General Shareholders’ Meeting

The General Shareholders’ Meeting is the company’s supreme governing body; its activities are regulated by Russian laws, Rostelecom’s Charter, and the Regulations on the General Shareholders’ Meeting.

In 2018, Rostelecom’s Annual General Shareholders’ Meeting was held on 18 June, and the Extraordinary General Shareholders’ Meeting was held on 24 December.

Board of Directors

The Board of Directors is a collective governing body responsible for the company’s growth strategy and general management. The powers of the Board are detailed in the Charter and the Regulations on the Board of Directors.

Assessment of the Board of Directors’ performance

In May 2019, the Board of Directors self-assessed its 2018 performance. The self-assessment comprised the overall assessment of the Board of Directors, the assessment of its Committees and each member of the Board in particular, including the Chairman.

In April 2019, an independent consultant, JSC VTB Registrar, assessed the overall performance of the Board of Directors, the performance of its Committees and each member of the Board, including the Chairman. The average score for the Board of Directors’ performance assessment was 4.96 out of 5.
Key functions and tasks of the Board of Directors

- Set up and advance business objectives and strategic goals of the Company
- Protect the rights and legitimate interests of shareholders
- Ensure 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 adherence to long-term interests of its shareholders and receipt by shareholders of all relevant information on the Company’s operations
- Balance the interests of various groups of shareholders and make most objective and well-balanced decisions for the benefit of all shareholders
- Interpret ambiguities in the rules of any laws and regulations in favour of enhancement of the rights and legitimate interests of shareholders

The Board of Directors is annually elected with 11 members.
The average age of the Board members is 50 years.
The average tenure of the Company’s directors is 4.3 years.
The Board of Directors has five Committees.

Membership of the Board of Directors

For detailed biographies of all members of the Board of Directors see Appendix 2 Governing and Control Bodies to PJSC Rostelecom’s Annual Report 2018 available at www.company.rt.ru.

Director Independence

Board of Directors’ and its Committees’ performance report for 2018

The Board of Directors held 27 meetings: 3 in person, 24 in absentia. 199 matters were discussed.

No conflicts of interest involving members of the Board of Directors were identified in 2018.

President and Management Board

The Management Board comprises 9 members, with the average age of 44.2 years.

In 2018, 21 Management Board meetings were held, including 20 in person and 1 in absentia.
The average tenure of the Management Board members is 5.3 years.

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1. For more details on voting of members of the Board of Directors and its Committees at the 2018 meetings held in person/in absentia, as well as on the matters discussed at the meetings of the Board of Directors and its Committees see Appendix 7 Information on Meetings of the Board of Directors and its Committees to the Annual Report.
## GOVERNING BODIES’ RESULTS AND PLANS

<table>
<thead>
<tr>
<th>Governing body</th>
<th>Key 2018 results</th>
<th>Plans for 2019</th>
</tr>
</thead>
</table>
| **Board of Directors**              | Approved the following documents:  
  > Updated PJSC Rostelecom’s Strategy 2022  
  > New Dividend Policy  
  
  Arranged for the first independent assessment of the Board of Directors’ performance.  
  
  Delivered on the 2018 tasks within the key strategic projects:  
  > Bridging the Digital Divide  
  > Arranging for Video Surveillance and Ensuring the Operation of the Broadcasting Portal during the Elections in Russia  
  > Providing Internet Access for Hospitals and Out-Patient Clinics  
  > Launching the Unified Biometric System  
  > Installing the Sakhalin–Kuril Islands Submarine FOCL  
  
  Monitoring the implementation of the overall strategy and strategic projects:  
  > Digital Economy of the Russian Federation national programme  
  > 5G deployment  
  > Data centre network expansion  
  > Cyber security provision  
  
  Approving the action plan for the Company’s migration to predominantly Russian software.  
  
  Updating the Programme for Disposal of Non-Core Assets.  
  
  Electing the Management Board                                                                                                                                                                                   |
| **Audit Committee**                 | 6 meetings (1 in person)  
  26 matters  
  
  Enhanced the Risk Management Programme.  
  
  Monitored the quality of internal controls and audit  
  
  Strengthening control over technology risks related to import substitution programmes                                                                                                                   |
| **Nomination and Remuneration**    | 5 meetings (2 in person)  
  16 matters  
  
  Developed the Long-Term Incentive Programme for 2020–2022  
  
  Monitoring the implementation of the Long-Term Incentive Programme.  
  
  Reviewing the existing approaches to, and policies on, the remuneration of members of the Board of Directors, executive bodies, and other key executives of the Company                                                                 |
| **Strategy Committee**              | 7 meetings (4 in person)  
  8 matters  
  
  Developed the updated Strategy 2022 and updated the Long-Term Development Programme accordingly.  
  
  Developed the new Dividend Policy.  
  
  Based on the recommendations of the Committee, the Company paid out interim dividends for 9M 2018 for the first time  
  
  Closer monitoring of M&A transactions, reviewing the efficiency of the acquired asset integration                                                                                                           |
| **Corporate Governance Committee** | 1 meeting in absentia  
  1 matter  
  
  Reviewed the compliance with the Company’s Information Policy  
  
  Monitoring of compliance with the Company’s Information Policy.  
  
  Enhancing corporate governance standards                                                                                                                                                                         |
| **Investment Committee**            | No meetings of the Committee were held in 2018                                                                                                                                                                      | —                                                                                                                                                                                                          |
Management Board’s performance report for 2018

The Company seeks to promote economic development of Russian regions by ensuring equal and transparent terms for its suppliers. The Company was commended for its contribution in this area. In 2018, Rostelecom received a certificate of the National Procurement Transparency Rating in the Guaranteed Transparency category.

Key agenda items

<table>
<thead>
<tr>
<th>Operations and operational excellence</th>
<th>Reports on budget performance and drafting the budget for 2018.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Enhancement of the corporate project management.</td>
</tr>
<tr>
<td></td>
<td>Implementation status and key priorities of Rostelecom’s production system.</td>
</tr>
<tr>
<td></td>
<td>Procurement optimisation.</td>
</tr>
<tr>
<td></td>
<td>Monitoring of the progress on key strategic projects:</td>
</tr>
<tr>
<td></td>
<td>&gt;&gt;&gt; Bridging the Digital Divide</td>
</tr>
<tr>
<td></td>
<td>&gt;&gt;&gt; Providing Internet Access for Hospitals and Out-Patient Clinics</td>
</tr>
<tr>
<td></td>
<td>&gt;&gt;&gt; Installing the Sakhalin–Kuril Islands Submarine FOCL</td>
</tr>
<tr>
<td></td>
<td>&gt;&gt;&gt; Arranging for Video Surveillance and Ensuring the Operation of the Broadcasting Portal during the Elections in Russia</td>
</tr>
<tr>
<td></td>
<td>&gt;&gt;&gt; Launching the Unified Biometric System</td>
</tr>
<tr>
<td></td>
<td>Decommissioning of analogue network equipment.</td>
</tr>
<tr>
<td>The Company’s growth</td>
<td>Strategy 2022.</td>
</tr>
<tr>
<td></td>
<td>Strategy of business segments and key subsidiaries.</td>
</tr>
<tr>
<td>Risk management</td>
<td>Target IT architecture development and transformational solutions for telecoms networks</td>
</tr>
<tr>
<td>Enhancement of corporate governance standards</td>
<td>Progress of the Risk Management Programme</td>
</tr>
<tr>
<td>Preparation of materials and matters referred to the Board of Directors</td>
<td>Development and approval of the Risk Management Programme. Internal control development concept</td>
</tr>
<tr>
<td>Social responsibility</td>
<td>Preview of related party transactions</td>
</tr>
<tr>
<td></td>
<td>Charity and sponsorship initiatives</td>
</tr>
</tbody>
</table>

No conflicts of interest involving members of the Management Board were identified in 2018.
## Control bodies

<table>
<thead>
<tr>
<th>Control body</th>
<th>Key roles</th>
<th>Key 2018 results</th>
</tr>
</thead>
</table>
| Internal Audit Unit          | › Internal audit based on a risk-oriented approach and best practices  
› Independent assistance in the enhancement of risk management, internal controls, and corporate governance  
› Ensuring efficient operation of the Ethics Hotline | › Executed the audit action plan, achieved economic benefit  
› Provided recommendations to increase risk manageability, and proposals to receive additional income and cut costs  
› Began implementing the continuous audit model developed earlier  
› Integrated IT solutions into audit |
| Risk Management divisions    | Building, monitoring, and maintaining the risk management system (RMS) | › Implemented projects to automate the RMS:  
› Online risk reports for managers  
› Risk indicator dashboard for business processes (pilot)  
› Initiated changes in the procurement management process following the RMS automation development projects  
› Adopted simulation in risk assessment  
› Included risk modelling and risk response measures verification procedure in the Regulations on the Corporate Project Management  
› Initiated the Single Point of Contact for Project Management to obtain information on the project management and product launch risks  
› Approved the Risk Management Programme  
› Approved the Action Plan to mitigate the risks of business interruption due to sanctions |
| Asset Protection Department  | › Corporate culture development in terms of anti-corruption, prevention of embezzlement and the conflict 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 hotline and an anti-corruption portal | › Launched an automated system to resolve conflicts of interest  
› Developed and implemented the Company’s 2018 compliance programme  
› Held in-person and remote compliance trainings  
› Introduced anti-corruption programmes at 30 subsidiaries and affiliates |
**Control body**

Dedicated officials responsible for the implementation of internal controls to counter money laundering, the financing of terrorism, and the financing of the proliferation of weapons of mass destruction

**Key roles**

- Protecting the Company from criminally obtained incomes
- Mitigating the risk of money laundering and the financing of terrorism
- Monitoring compliance with the requirements for subscriber identification
- Identifying and terminating criminal/dubious activities

**Key 2018 results**

- Appointed dedicated officials responsible for internal controls in all macroregional branches
- Created teams headed by security directors in all regional branches
- Appointed employees responsible for subscriber identification
- Automated subscriber inspection for invalidated passports and engagement in extremism and terrorism
- Assessed the risk of legalisation of criminally obtained incomes by customers
- Arranged for trainings on countering money laundering, the financing of terrorism, and the financing of the proliferation of weapons of mass destruction

<table>
<thead>
<tr>
<th>Internal Control Unit</th>
<th>Audit Commission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assisting the top management in building an efficient internal control system (ICS)</td>
<td>Monitoring financial and business operations between General Shareholders’ Meetings</td>
</tr>
<tr>
<td>Reviewed the ICS across the key processes and the Company’s macroregional branches to develop recommendations and take actions to enhance its efficiency</td>
<td>Audited the financial and business performance of the Company in 2018, including the annual report and annual accounting statements</td>
</tr>
</tbody>
</table>

**Conflict of interest management**

In June 2018, Rostelecom launched an automated system to resolve conflicts of interest. Any Rostelecom’s employee with a conflict of interest, as well as employees in positions exposed to a higher corruption risk regularly complete electronic declarations. Links to complete the declarations are sent automatically, thus excluding the human factor from mandatory disclosures.

For 2019, we have scheduled the integration of the conflict of interest management system with automated internal and external systems, as well as the expansion of the system’s functions.

**Anti-corruption efforts development at PJSC Rostelecom’s subsidiaries and affiliates**

In 2018, Rostelecom developed anti-corruption processes at 30 subsidiaries and affiliates in which it has an effective interest of over 50%.
Remuneration

BOARD OF DIRECTORS

Fixed annual remuneration payable to each member of the Board of Directors is RUB 4 million.

Annual remuneration payable to members of the Audit Committee of the Board of Directors is RUB 440,000.

Annual remuneration payable to members of other Committees of the Board of Directors is RUB 320,000.

Factor applied to the Chairman of the Board of Directors is 1.5.

Factor applied to the Board of Directors’ Committee Chairman is 1.25.

REDUCTION OF REMUNERATION DUE TO ABSENCE FROM MEETINGS HELD IN PERSON OR IN ABSENTIA, %

<table>
<thead>
<tr>
<th>Absence</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 50%</td>
<td>30</td>
</tr>
<tr>
<td>From 25% to 50%</td>
<td>10</td>
</tr>
<tr>
<td>Below 25%</td>
<td>0</td>
</tr>
</tbody>
</table>

REMUNERATION PAID TO THE BOARD OF DIRECTORS IN 2013–2018, RUB M

<table>
<thead>
<tr>
<th>Year</th>
<th>Remuneration</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012/2013</td>
<td>208.4</td>
</tr>
<tr>
<td>2013/2014</td>
<td>175</td>
</tr>
<tr>
<td>2014/2015</td>
<td>27.4</td>
</tr>
<tr>
<td>2015/2016</td>
<td>32.2</td>
</tr>
<tr>
<td>2016/2017</td>
<td>32.8</td>
</tr>
<tr>
<td>2017/2018</td>
<td>27.7</td>
</tr>
</tbody>
</table>

No reimbursement of expenses or other payments were made to members of the Board of Directors in 2018, no loans (credit facilities) were granted.

In 2018, members of the Board of Directors who were not employed by the Company did not participate in the long-term incentive programme for the Company’s management.

No annual remuneration is paid to the members of the Board of Directors holding public offices or employed by the Company, or to the members who renounced their remuneration.

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 good-faith performance of his duties and performance against budget targets.

No special remuneration is payable to Management Board members for serving on the Management Board.

Severance is paid upon termination of employment by 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. Paid to a member of the Board of Directors not later than one month after holding the Annual General Shareholders’ Meeting for the year when he/she was elected to the Board of Directors.
COMPONENTS OF REMUNERATION PAYABLE TO MEMBERS OF THE MANAGEMENT BOARD

<table>
<thead>
<tr>
<th>Type of remuneration</th>
<th>Objective</th>
<th>Salary</th>
<th>Short-term incentives</th>
<th>Long-term incentives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Basic salary</td>
<td>Attract and retain professional managers by offering competitive salaries</td>
<td>Annual bonus</td>
<td>Achieve annual business KPIs(^1)</td>
</tr>
<tr>
<td></td>
<td>Target ratio of remuneration components</td>
<td>50%</td>
<td>50%</td>
<td>The multi-year programme is based on a share matching plan and offers shares as remuneration</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Payment type</th>
<th>Payments to Management Board members</th>
<th>Payments to Top 5 highest paid employees (key executives)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary</td>
<td>241,829,207.98</td>
<td>153,998,454.25</td>
</tr>
<tr>
<td>Bonuses, including:</td>
<td>718,146,788.02</td>
<td>489,678,079.17</td>
</tr>
<tr>
<td>short-term incentives</td>
<td>146,698,529.02</td>
<td>101,808,137.17</td>
</tr>
<tr>
<td>long-term incentives</td>
<td>571,448,259.00</td>
<td>387,869,942.00</td>
</tr>
<tr>
<td>Fees</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Benefits</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Reimbursement of expenses</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Other</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Total</td>
<td>959,975,996.00</td>
<td>643,676,533.42</td>
</tr>
</tbody>
</table>

REMUNERATION PAID TO THE MANAGEMENT BOARD IN 2013–2018, EXCLUDING LONG-TERM INCENTIVES, RUB M

<table>
<thead>
<tr>
<th>Year</th>
<th>Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>601.8</td>
</tr>
<tr>
<td>2014</td>
<td>443.8</td>
</tr>
<tr>
<td>2015</td>
<td>392.2</td>
</tr>
<tr>
<td>2016</td>
<td>212.3</td>
</tr>
<tr>
<td>2017</td>
<td>251.7</td>
</tr>
<tr>
<td>2018</td>
<td>388.5</td>
</tr>
</tbody>
</table>

No loans (credit facilities) were granted by the Company to members of the Management Board.

The higher overall remuneration paid to the Management Board in 2018 was mainly driven by an increase in the Board’s size to nine people (until 16 May 2017, six people; until 27 October 2017, eight people; currently, nine people), and changes in the composition of the Board.

\(^1\) For more details see the Incentive Programmes section below.
Audit Commission

Annual remuneration payable to members of the Audit Commission is RUB 800,000

Factor applied to the Chairman of the Audit Commission is 1.3

Factor applied to the Secretary of the Audit Commission is 1.1

No annual remuneration is paid to the members of the Audit Commission holding public offices.

Information disclosure

Aiming to improve its investment appeal and maintain a trust-based dialogue with its stakeholders, Rostelecom discloses information in line with:

- Russian laws
- requirements and recommendations of the Bank of Russia
- requirements of the Moscow Exchange
- internal documents.

The Board of Directors establishes the rules of, and approaches to, disclosures, which are formalised in Rostelecom’s Regulations on the Information Disclosure Policy.

Key objectives of these Regulations are to:

- enhance openness and build trust
- improve transparency
- determine the Company’s disclosure framework.

Key principles of the information 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 and on the corporate information disclosure website run by Interfax.
The Company’s risk management framework emphasises effective management decision-making under uncertainties and related risks and capturing identified opportunities to achieve strategic goals.

Risk management is carried out in full compliance with international and national standards. The Company updates its risk management regulations as a part of business-as-usual.

Rostelecom’s key internal documents regulating risk management:
- Charter
- Risk Management Policy
- Regulations on the Board of Directors and 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, clear, and measurable corporate goals set by Rostelecom shareholders and management. Rostelecom approves its Risk Management Programme every year and monitors its execution on a quarterly basis.

RISK MANAGEMENT ACTORS

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

Rostelecom's risk management framework allows for effective modelling, assessment, and mitigation of risks that the Company is exposed to. The framework is structured in full compliance with the requirements of international and national regulatory bodies. To further enhance its reliability, Rostelecom implements projects aimed at automating risk management processes.

Risk Management Programme includes:
- a list of strategic risks, and strategic risk scenarios
- key strategic risk indicators and thresholds
- strategic risk management activities.

Operational risks are considered throughout our day-to-day operations and when developing new products and services. To ensure risk monitoring and rapid decision-making, Rostelecom develops and automates risk dashboards for business processes. In particular, Rostelecom developed an automated risk dashboard for procurement in 2018.

Quarterly progress reports on the Risk Management Programme and other relevant matters are reviewed at the meetings of the Management Board’s Risk Management Committee which approve follow-up risk management initiatives.
For more details on risks see PJSC Rostelecom’s Annual Report 2018 (Table 8. Risks and mitigation).

The risk map details the key risks Rostelecom is exposed to. Dots show the severity of potential impact and risk likelihood in 2018. Arrows show risk movement forecasts for 2019.

Critical risks may result in:
- failure to achieve KPI targets set in our Strategy and Long-Term Development Programme
- extended business interruptions
- significant downgrade of credit or corporate ratings
- negative publicity in national or international media.

Significant risks may result in:
- significant variance in key performance indicators
- short-term business interruptions
- downgrade of credit or corporate ratings
- negative publicity for the Company in regional or local media.

Moderate risks do not have a material impact on our financial and business performance; however, they need to be monitored to ensure timely detection of their potential growth in materiality.

Development of the risk management system in 2019 will prioritise:
- identifying risks and developing mitigating measures
- deploying advanced risk management solutions
- automating risk dashboards for business processes to enable prompt notification of management.

For more details on Rostelecom’s risk management framework, as well as the results of the analysis of the principal risks for 2018 see the Company’s Annual Report 2018 available at www.company.rt.ru/upload/protected/block/2a9/02-01_Annual_Report_2018_eng.pdf.

1. For more details on risks see PJSC Rostelecom’s Annual Report 2018 (Table 8. Risks and mitigation).
Supply Chain

Supply chain sustainability is the management of environmental, social, and economic impacts and the encouragement of good governance practices, throughout the lifecycles of goods and services.

Rostelecom’s suppliers are spread across all Russian regions. The Company purchases goods and services online with information on all procurements available at the Unified Procurement Information System’s website (zakupki.gov.ru), PJSC Rostelecom’s website (zakupki.rostelecom.ru), and websites of electronic marketplaces.

Rostelecom consistently enhances its procurement transparency and expands the range of procurement participants, also by engaging SMEs. In particular in 2018, Rostelecom minimised the number of required documents submitted with a tender application to streamline the tender application process for bidders. The Company has in place a procurement hotline and a rapid feedback loop. Rostelecom has a website section dedicated to procuring from, and providing support to, SMEs.
We have been running an ambitious procurement improvement programme since 2013 aimed at:
- enhancing procurement transparency
- clear division of procurement responsibilities between business units
- streamlining procurement-related business processes
- enhancing the transparency of tendering procedures
- optimizing the Company’s costs.

Rostelecom’s procurement policy is guided by the principles of transparency and engaging as many participants as possible. As a result of our successful process redesign, the average number of bidders in a procurement procedure was increased to 3.3 in 2018.

In 2018, Rostelecom topped the National Procurement Transparency Rating. Compliance with the high standards of transparency and value for money in procurement were the biggest factors affecting the ranking.

PJSC Rostelecom’s Code of Supplier Business Ethics requires that all supplier contracts contain an anti-corruption clause.

Promoting the national SME development policy

We have been actively promoting the national SME development policy by running PJSC Rostelecom’s SME Partnership Programme. For more details on how PJSC Rostelecom supports SMEs through its procurement practices see www.zakupki.rostelecom.ru/msb.

The approved SME Partnership Programme ensures that PJSC Rostelecom’s procurement process promotes the national SME development policy which, among other things, aims to:
- increase the share of SMEs in the total procurement by organisations
- increase the share of direct procurement from SMEs in the total procurement by organisations
- increase the share of procurement for innovative and/or high-tech products, research, development, and technological services from SMEs in the total procurement by organisations
- create a system to deploy and transfer new technical and technology solutions developed by SMEs, including those facilitating innovative development of an organisation and integrated into its business growth strategy
- cut costs and enhance technical and administrative processes of organisations.

Rostelecom and Joint Stock Company Russian Small and Medium Business Corporation have run a series of workshops for SMEs dedicated to participating in Rostelecom’s procurement process. The goal of the workshops is to communicate existing SME support programmes to small and medium-sized businesses and increase the share of SMEs in PJSC Rostelecom’s procurement. In 2018, a total of 37 workshops, attended by over 10 thousand SMEs, were held across all Russian federal districts. The procurement workshops continued in 2019 with 21 events held in Q1 2019 alone.

SMEs access to Rostelecom’s procurement

Rostelecom is focused on expanding the range of procurement participants, also by engaging SMEs. We have in place a dedicated procurement hotline and a rapid feedback loop. We also have a website section dedicated to procuring from, and providing support to, SMEs.

Procurement enhancement initiatives have helped Rostelecom to significantly increase the share of SMEs in its procurement and improve the respective value for money indicators.

In 2018, procurement contracts awarded to SMEs totalled RUB 108.7 billion, including RUB 33.7 billion under the special procurement contracts awarded to SMEs.

In 2018, 65% of Rostelecom’s procurement contracts were awarded to SMEs (59.1% in 2017), while the share of special procurement from SMEs stood at 20.5% of our total procurement (17.5% in 2017). Special procurement contracts are awarded to SMEs only and cover a limited range of products and services included into the Russian Classification of Products by Economic Activities (OKPD 2), registration code: OK 034-2014 (CPA 2008).
Business Ethics and Human Rights

Business ethics

PJSC Rostelecom strictly complies with all applicable laws, is guided by the principles of transparency and accountability, engages with external and internal stakeholders in an ethical manner, and is committed to fair business practices.

Rostelecom’s Code of Ethics conforms to the highest standards of business ethics and underpinned by its corporate values of expertise, responsibility, innovation, openness, and continuity. Rostelecom’s anti-corruption efforts are carried out under the applicable Russian laws, including Federal Law No. 273-FZ On Countering Corruption dated 25 December 2008.

Corruption threatens the rule of law and adversely affects the United Nations Sustainable Development Goals; hence, we pay special attention to countering corruption and bribery.

2018 highlights

We developed and approved the Corruption Risk Mitigation Programme for 2018 (the “Compliance Programme”)

Anti-corruption programmes were developed and rolled out at 30 subsidiaries and affiliates

480 employees of the Company and 420 employees of Rostelecom subsidiaries were trained on anti-corruption issues through distance or classroom learning

Amendments to the regulations introducing a list of measures to enhance the effectiveness of the national anti-corruption policy were drafted and submitted to the Russian Government

An anti-corruption event was held in December to mark the International Anti-Corruption Day
Code of Ethics

Legal compliance, integrity, openness, privacy, and engagement are the key principles of PJSC Rostelecom’s Code of Ethics.

Any employee of the Company can report violations of the Code of Ethics to a dedicated e-mail address: ethics@rostelecom.ru.

Rostelecom cooperates with the government to help justice and law-enforcement. The key elements of our Code of Ethics are:

- corporate transparency
- customer and partner confidence
- reputation of an open and reliable company providing high quality, affordable services.

Anti-Corruption Policy

Between 2014 and 2018, in-depth classroom training on preventing and countering corruption was provided to over 3,000 top and middle managers across all our operating regions.

Rostelecom has a zero tolerance approach to any manifestations of corruption, demonstrating commitment to high standards of business conduct and ethics in dealings with any and all stakeholders. Between 2014 and 2018, we developed a number of key documents covering corruption prevention (including the updated Code of Ethics, Anti-Corruption Policy, Regulations on the Conflict of Interest Management, Regulations on Giving and Receiving Gifts, Regulations on Charitable Donations and Assistance, etc.).

All Rostelecom's new hires working at computer workstations undergo a mandatory distance training on the key elements of the Code of Ethics within 30 days upon employment. Employees in positions exposed to corruption risk undergo additional classroom and online training on preventing corruption.

INDICATORS USED BY PJSC ROSTELECOM IN 2018 TO MEASURE ANTI-CORRUPTION AND ANTI-BRIBERY PERFORMANCE

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number and nature of confirmed incidents of corruption</td>
<td>0</td>
</tr>
<tr>
<td>Total number of incidents of bribery</td>
<td>0</td>
</tr>
<tr>
<td>Total number and percentage of operations assessed for risks related to corruption and significant risks identified through the risk assessment</td>
<td>n/a</td>
</tr>
<tr>
<td>Total number of confirmed incidents in which employees were dismissed or disciplined for corruption</td>
<td>0</td>
</tr>
<tr>
<td>Total number of confirmed incidents when contracts with business partners were terminated or not renewed due to violations related to corruption</td>
<td>0</td>
</tr>
<tr>
<td>Public legal cases regarding corruption brought against the organisation or its employees during the reporting period and the outcomes of such cases</td>
<td>0</td>
</tr>
<tr>
<td>Number of sentences passed for anti-corruption law violation and fine or penalty amounts</td>
<td>0</td>
</tr>
</tbody>
</table>
The percentage of employees that Rostelecom’s key anti-corruption policies and procedures have been communicated to is 100%. New employees sign a document confirming that they have read a set of documents upon employment (including the corporate Code of Ethics, Anti-Corruption Policy, etc.), while relevant regulations are communicated to existing employees via the Company’s electronic document flow.

The Company’s anti-corruption efforts are carried out under the applicable Russian laws, including Federal Law No. 273-FZ On Countering Corruption dated 25 December 2008.

In 2018, the Company developed and approved its Corruption Risk Mitigation Programme for 2018 (the Compliance Programme), defining the activities to prevent corruption, and minimise and/or mitigate the consequences arising from corruption.

Conflicts of interest management

In June 2018, Rostelecom launched an automated system to resolve conflicts of interest. Any Rostelecom employee with a conflict of interest, as well as employees in positions exposed to a higher corruption risk regularly complete electronic declarations. Using predetermined criteria, the system automatically identifies employees who should submit the declarations and monitors timely completion of declarations by these employees. Links to complete the declarations are sent automatically, thus excluding the human factor from mandatory disclosures.

The Octopus automation software helps identify affiliations between service providers. To minimise corruption risks in procurement (as part of monitoring the performance of PJSC Rostelecom’s agreements), an automated cost control system is being developed and integrated into business processes related to telecommunications service set-up projects.

Rostelecom implements effective measures to prevent corruption and fraud – we have in place a whistleblowing hotline (Hotline: +7 800 181 1811), as well as a dedicated anti-corruption portal www.nocorruption.rt.ru. The Company employees and suppliers can take special tests on the portal, as well as find anti-corruption documents. As part of our corruption prevention and asset protection efforts, we have extended the availability of the anti-corruption portal and whistleblowing hotline to Rostelecom subsidiaries.

In 2017–2018, PJSC Rostelecom and Joint Stock Company Russian Small and Medium Business Corporation held 54 educational workshops on the specifics of SME participation in procurement processes of major organisations, including the need for the Company’s counterparties and potential service providers in Russian regions to comply with anti-corruption laws and business ethics standards.
To foster business relations with counterparties supporting PJSC Rostelecom’s Anti-Corruption Policy and declaring zero tolerance for corruption, Rostelecom has in place its Code of Supplier Business Ethics and uses an anti-corruption clause allowing it to terminate a contract with a counterparty due to violations of the obligation to refrain from any actions prohibited by anti-corruption laws. The anti-corruption clause is included in Rostelecom’s every expenditure agreement worth over RUB 500,000.

In 2017–2018, to raise awareness of SMEs on the specifics of participation in procurement processes of major organisations, including the need to comply with anti-corruption laws and business ethics standards, PJSC Rostelecom and Joint Stock Company Russian Small and Medium Business Corporation (JSC RSMB Corporation) held 54 educational workshops for the Company’s counterparties and potential service providers in Russian regions. Saint Petersburg, Vladivostok, Yekaterinburg, Krasnodar, and other regional centres were among the major cities hosting our workshops.

The Anti-Corruption Policy came into force in 2014 and outlines basic principles and requirements for compliance with anti-corruption laws by all Rostelecom employees, top management, and members of the Management Board and the Audit Commission.

In 2018, 480 employees of the Company and 420 employees of Rostelecom subsidiaries were trained on anti-corruption issues (as per the requirements of anti-corruption laws) through distance or classroom learning.

The Company combines its anti-corruption efforts with cooperation with anti-corruption NGOs. Rostelecom has in place its Council for Business Transparency which comprises representatives of the Russian Ministry of Digital Development, Communications, and Mass Media, Chamber of Commerce and Industry, mass media, higher education institutions, and anti-corruption NGOs. In 2018, the Council held two meetings to review progress on anti-corruption measures, transparency and openness of the Company’s procurement processes, the statistics on reports in corporate feedback channels, etc.

Rostelecom is actively involved in the efforts to develop new and update existing anti-corruption laws. In 2018, amendments to the regulations introducing a list of measures to enhance the effectiveness of the national anti-corruption policy were drafted and submitted to the Russian Government.

Rostelecom joined the Anti-Corruption Charter of Russian Business in 2014. The Charter requires that the Company integrates anti-corruption programmes into its corporate policies and performs their monitoring and progress assessments; maintains robust financial control and makes public its anti-corruption measures; never seeks to gain undue advantages; makes bids transparently and competitively; cooperates with the government; helps justice and law-enforcement; and takes other measures.

The Company’s management is actively involved in promoting an ethos of zero tolerance for any forms and manifestations of corruption across all levels, role modelling the desired behaviours and setting the Tone from the Top. For example, Rostelecom’s Anti-Corruption Policy is prefaced by a personal letter from the Company’s President highlighting the importance of compliance with anti-corruption laws. In June 2017, the Company’s President Mikhail Oseevsky made an opening statement for the online broadcast of the corporate Compliance Day event, in which he underlined the top management’s commitment to zero tolerance for any manifestations of corruption and the importance of compliance with this principle for all Rostelecom employees. A video titled “Rostelecom against Corruption” has been posted on Rostelecom’s anti-corruption portal, featuring the Company’s top managers in a brief Q&A on the importance of anti-corruption and the ways to combat corruption they see as the most effective. The materials are available at www.nocorruption.old.rt.ru/?action=materials.video.

In 2019, in line with the Company’s strategy of digital transformation, we will focus on automation of compliance processes, including the development of the Compliance Control automated system to resolve conflicts of interest, and handle employee and third party enquiries.

To enhance the Tone at the Top, Rostelecom plans to establish the Institute of Regional Compliance Representatives in its regions of its operation.
Human rights

PJSC Rostelecom protects and respects human rights by assuming relevant obligations, assessing the Company’s risks and impacts, engaging with stakeholders, and communicating with its employees and contractors. Human rights monitoring and reporting are high on the Company’s list of priorities.

Rostelecom promotes human rights in its business relations with all business partners and encourages them to protect and respect human rights. Suppliers of PJSC Rostelecom are expected to share our corporate ethos, and their activities must comply with the relevant applicable laws. Only those suppliers who comply with the law, have zero tolerance for corruption, respect human rights, and promote employee health and safety can become our long-term partners.

Rostelecom is committed to ensuring adherence to human rights across all our units. To this end, we promote information sharing on human rights issues within the Company, develop procedures and training, and monitor and assess progress. All our employees and suppliers are required to complete trainings and a series of dedicated courses on human rights. Rostelecom discloses its progress on human rights as an integral part of its dialogue with stakeholder groups.

No risks for incidents of forced or compulsory labour and no infringements on the rights of indigenous and small-numbered peoples were identified in 2018. PJSC Rostelecom conducts its business in full compliance with the labour law of the Russian Federation. The Company does not use child labour.

Remuneration is determined in line with the applicable regulations covering the minimum wage, standard work hours, and overtime. The Company’s employees are free from harassment and illegal discrimination regardless of their race, skin colour, religion, ethnicity, gender, age, marital or any other status protected by law. Rostelecom supports the promotion of cultural, gender, and ethnic diversity. Mutual trust and respect are the foundation of our corporate culture. We provide equal opportunities to employees across all gender and age groups and prevent discrimination in management decision-making.

Rostelecom does not limit its employees’ right to form non-governmental organisations representing their interests. We recognise the employees’ right to form, join, or not to join such organisations without fear of consequences or penalties. PJSC Rostelecom signs a collective bargaining agreement to make sure relationships with employees are based on the principles of social partnership and protection of their social and labour interests.

The corporate Code of Ethics sets out the employees’ right to engage in any political, educational, charitable, or community activities provided that these activities do not impact the performance of their immediate jobs and do not contradict or harm PJSC Rostelecom’s interests.

Employees can report violations of the Company’s Code of Ethics to the corporate Hotline at ethics@rostelecom.ru.

We guarantee that the personal details of such employees and the reported information will be used confidentially, exclusively for the purpose of a follow-up investigation, and only by people directly involved in the investigation. PJSC Rostelecom guarantees that no retaliation will be attempted against persons reporting such violations in good faith. The Company prohibits its staff from prosecuting or putting pressure on employees reporting alleged violations of the Code of Ethics or involved in relevant investigations.
Rostelecom is the operator of choice for building the digital economy in Russia.

Wi-Fi access points with bandwidths of at least 10 Mbps were installed during 2018 in 8,000 communities with a population between 250 and 500 people.

Digital transformation of cities (smart city initiatives), data centre and cloud services, cyber security, digital government, big data analytics, artificial intelligence, Industrial IoT, and digital transformation of Russian industries will be our key innovation priorities in the coming years.
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Digital transformation of cities (smart city initiatives), data centre and cloud services, cyber security, digital government, big data analytics, artificial intelligence, Industrial IoT, and digital transformation of Russian industries will be our key innovation priorities in the coming years.
Rostelecom – a Partner Delivering Russia’s Digital Transformation Infrastructure

“Achieving digital maturity and fostering digital culture is a journey Russia has to take in the near future.”
— Mikhail Oseevsky, President of PJSC Rostelecom

PJSC Rostelecom is a major contributor to Russia’s social, environmental, cultural, and economic development. Our programmes are a natural continuation of the public policy and our corporate strategy of digitally transforming Russia’s regions.

PJSC Rostelecom’s resources serve as a technology platform driving the development of Russia’s digital economy and taking communication and cooperation between all sustainability stakeholders to a fundamentally new level.

The Company contributes to the sustainable development of Russian society in many areas – enabling initiatives in healthcare, education, equal access to public services, transport upgrades, energy development, agriculture, and natural disaster risk mitigation.

Rostelecom is a partner for the government in driving the implementation of the Digital Economy of the Russian Federation national programme. Business, expert communities, government, and civil society have been pooling their efforts to achieve the Programme’s goals by 2024 across five focus areas: regulation, education and talent pipeline, cyber security, enhancing R&D capabilities and building IT infrastructure.

The initiatives pursued by Rostelecom under the Digital Economy of the Russian Federation national programme also contribute to the United Nations Sustainable Development Goals. For more details see also the Investing in Society and Delivering High-Quality Services to Customers sections.

Our effective partnership with the government under the Digital Economy of the Russian Federation programme not only drives the achievement of our key objectives but also helps address the issues at the interface of our core focus areas. In particular, the Smart City project helps improve the quality of life for Russian citizens while building modern information infrastructure and boosting Russia’s overall economic potential.

Rostelecom facilitates Russia’s comprehensive integration into the global information society while focusing on building modern information and telecommunications infrastructure both at the regional and national levels. We have already started using FOCL to bring broadband services to healthcare centres across Russia and have been rolling out fibre-based broadband to schools and other community facilities within specific connectivity projects. Rostelecom makes full use of its R&D and production capabilities to deploy fibre across all Russian regions.

In 2018, the Company launched its new five-year strategy, focused on transformation into a key digital partner for households, business, and government customers. Rostelecom is evolving from a telecoms operator offering traditional services such as data transmission and storage, into a provider of an entire range of advanced digital services, while maintaining its focus on core infrastructure development.

Among other things, the Company’s strategy provides for changes in technical infrastructure, IT, HR, and other internal processes, including developing and supporting an advanced innovation management system. Successful implementation of the new strategy will allow us to automate, accelerate, and simplify connecting digital partner services, as well as expanding the offerings of our own digital services.

Strategic analysis suggests that digital transformation of cities (smart city initiatives), data centre and cloud services, cyber security, digital government, big data analytics, artificial intelligence, Industrial IoT, and digital transformation of Russian industries will be the key growth drivers for our business in the coming years.
PJSC Rostelecom’s programmes driving the delivery within specific focus areas of the Digital Economy of the Russian Federation National Programme

<table>
<thead>
<tr>
<th>PJSC Rostelecom’s programmes</th>
<th>Focus areas of the Digital Economy of the Russian Federation programme</th>
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</thead>
<tbody>
<tr>
<td>Long-Term Incentive Programme for 2020–2022</td>
<td><img src="image" alt="Regulation" /></td>
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<tr>
<td>Corruption Risk Mitigation Programme for 2018 (the “Compliance Programme”)</td>
<td><img src="image" alt="Talent pipeline and education" /></td>
</tr>
<tr>
<td>Anti-corruption programmes at 30 subsidiaries and affiliates</td>
<td><img src="image" alt="Enhancing R&amp;D capabilities and technology" /></td>
</tr>
<tr>
<td>Distance and classroom training on anti-corruption</td>
<td><img src="image" alt="Information infrastructure" /></td>
</tr>
<tr>
<td>Drafting and submitting to the Russian Government amendments to the regulations introducing a list of measures to enhance the effectiveness of the national anti-corruption policy</td>
<td><img src="image" alt="Information security" /></td>
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<tr>
<td>Basics of the Digital Economy project</td>
<td><img src="image" alt="Quality of life and work for Russian citizens" /></td>
</tr>
<tr>
<td>Ticket to the Future careers festival</td>
<td><img src="image" alt="Developing the national economy through information and telecommunications technology" /></td>
</tr>
<tr>
<td>Online Lectorium, a new educational project</td>
<td><img src="image" alt="Long-Term Incentive Programme for 2020–2022" /></td>
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<tr>
<td>Affordable supplementary education for children</td>
<td><img src="image" alt="Corruption Risk Mitigation Programme for 2018 (the “Compliance Programme”)" /></td>
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<tr>
<td>Rostelecom Lyceum project</td>
<td><img src="image" alt="Anti-corruption programmes at 30 subsidiaries and affiliates" /></td>
</tr>
<tr>
<td>Training under the Sberbank 2020 programme</td>
<td><img src="image" alt="Distance and classroom training on anti-corruption" /></td>
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<tr>
<td>Training under the New Rostelecom Leadership Development programme at the SKOLKOVO Moscow School of Management</td>
<td><img src="image" alt="Drafting and submitting to the Russian Government amendments to the regulations introducing a list of measures to enhance the effectiveness of the national anti-corruption policy" /></td>
</tr>
<tr>
<td>Arctic Young Engineers festival</td>
<td><img src="image" alt="Basics of the Digital Economy project" /></td>
</tr>
<tr>
<td>24th annual P.M Golubitsky Competition</td>
<td><img src="image" alt="Ticket to the Future careers festival" /></td>
</tr>
<tr>
<td>Rostelecom’s showcase zones across Quantorium technology parks for children</td>
<td><img src="image" alt="Online Lectorium, a new educational project" /></td>
</tr>
<tr>
<td>PJSC Rostelecom’s programmes</td>
<td>Focus areas of the Digital Economy of the Russian Federation programme</td>
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<td>---------------------------------------------------------------------------------------------</td>
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<tr>
<td>Cyberchallenge Competition (in cooperation with the Moscow Institute of Physics and Technology and Sirius Educational Centre)</td>
<td>Regulation</td>
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<tr>
<td>Series of workshops for parents under the Media Safety project</td>
<td>Talent pipeline and education</td>
</tr>
<tr>
<td>Crash course in information security (in cooperation with the Moscow Institute of Physics and Technology and Sirius Educational Centre)</td>
<td>Enhancing R&amp;D capabilities and technology</td>
</tr>
<tr>
<td>Offering Rostelecom customers antivirus software developed together with Doctor Web and Kaspersky Lab</td>
<td>Information infrastructure</td>
</tr>
<tr>
<td>Parental Control service</td>
<td>Information security</td>
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<tr>
<td>Participating in the nationwide Unified Online Safety Lesson</td>
<td>Quality of life and work for Russian citizens</td>
</tr>
<tr>
<td>Providing modern digital connectivity to healthcare institutions</td>
<td>Developing the national economy through information and telecommunication technology</td>
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<tr>
<td>Bridging the Digital Divide project</td>
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<tr>
<td>Integrated Identification and Authentication System</td>
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<tr>
<td>Unified Biometric System</td>
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<tr>
<td>Services for the Great Patriotic War (WWII) veterans</td>
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<tr>
<td>Watch the Exam – video surveillance during the Unified State Exam (USE)</td>
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<tr>
<td>E-Government project under the Electronic Russia federal targeted programme</td>
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<tr>
<td>RTHealth project</td>
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<tr>
<td>Smart City</td>
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</table>
Rostelecom’s Contribution to the United Nations Sustainable Development Goals

Rostelecom plays a key role in enabling Russia’s digital transformation, especially in terms of shaping the digital economy. We not only build infrastructure and develop advanced services in cities, we also bring them to rural and remote areas across Russia. By offering modern and popular services, Rostelecom opens up new opportunities for industries to improve productivity and for people to live a better life.

Over the past few years, Rostelecom has increasingly integrated the United Nations Sustainable Development Goals (UN SDGs) into the design of its sustainability projects and in the preparation of its annual reports. We seek to bring Rostelecom’s development strategy more in line with the UN SDGs in respect of environmental, social, and economic matters. We have integrated the United Nations Sustainable Development Goals into our corporate management by aligning the SDGs with our strategic goals, including at the national level.

Rostelecom develops fair, transparent and non-discriminatory ethics and anti-corruption policies while also ensuring personal data protection.

In 2018, the Company prioritised the list of UN SDGs to identify the areas where it could contribute the most: all SDGs were grouped into two priority categories (with the top priority SDGs falling into the first category: SDGs 9, 8, 4, 11, and 10).1

For more details on PJSC Rostelecom’s contribution to the United Nations Sustainable Development Goals see the Investing in Our People, Investing in Society, Fostering a Safe and Favourable Environment, and Delivering High-Quality Services to Customers sections of this Report.

In 2018, we refined our business goals and aligned them with the United Nations Sustainable Development Goals as reflected in Rostelecom’s updated Strategic Sustainable Development Matrix.

**UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS PRIORITISED BY ROSTELECOM**

<table>
<thead>
<tr>
<th>FIRST PRIORITY GOALS</th>
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<tbody>
<tr>
<td>Goal 9</td>
</tr>
<tr>
<td>Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation</td>
</tr>
<tr>
<td>Goal 8</td>
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<tr>
<td>Promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all</td>
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<td>Goal 4</td>
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<tr>
<td>Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all</td>
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<td>Goal 11</td>
</tr>
<tr>
<td>Make cities and human settlements inclusive, safe, resilient and sustainable</td>
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<tr>
<td>Goal 10</td>
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<tr>
<td>Reduce inequality within and among countries</td>
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<tr>
<th>SECOND PRIORITY GOALS</th>
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</thead>
<tbody>
<tr>
<td>Goal 17</td>
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<tr>
<td>Strengthen the means of implementation and revitalise the Global Partnership for Sustainable Development</td>
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<td>Goal 16</td>
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<tr>
<td>Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels</td>
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<tr>
<td>Goal 12</td>
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<tr>
<td>Ensure sustainable consumption and production patterns Goal 13</td>
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<tr>
<td>Take urgent action to combat climate change and its impacts</td>
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<tr>
<td>Goal 13</td>
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<tr>
<td>Take urgent action to combat climate change and its impacts</td>
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<tr>
<td>Goal 15</td>
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<tr>
<td>Protect, restore and promote sustainable use of terrestrial ecosystems</td>
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</tbody>
</table>

2. Ibid.
### Rostelecom’s Strategic Sustainable Development Matrix

<table>
<thead>
<tr>
<th>PJSC Rostelecom sustainable development goals</th>
<th>Development of product and service ecosystems around customers</th>
<th>Ensuring high standards of customer service</th>
<th>Developing and enhancing partner platforms</th>
<th>Scaling-up traditional business</th>
<th>IT landscape upgrade and centralisation</th>
<th>Expansion of fibre and upgrade of copper networks</th>
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<tbody>
<tr>
<td>Enable systematic development and deployment of digital technology</td>
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<td>Contribute to Russia’s transition to innovative development</td>
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<td>Become a technology leader in innovative solutions</td>
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<tr>
<td>Make telecommunications technology accessible and safe</td>
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<tr>
<td>Ensure high quality of customer service in line with the highest standards</td>
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<td>Conform to the highest standards of business ethics</td>
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<td>Reduce corruption and bribery</td>
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<tr>
<td>Improve the quality of life for Russian citizens by bridging digital divides and ensuring accessibility of communications services for all</td>
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<tr>
<td>Improve customer satisfaction</td>
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<tr>
<td>Contribute to ensuring equal access to education and improving the computer literacy of Russian citizens</td>
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<tr>
<td>Become an employer of choice attracting highly skilled talent</td>
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<td>Ensure a healthy and safe working environment</td>
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<tr>
<td>Contribute to making cities and settlements more inclusive, safe, and sustainable</td>
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<td>Reduce Rostelecom’s environmental footprint and preserve the environment for future generations</td>
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<tr>
<td>Reduce energy consumption and switch to green energy</td>
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**Codes:**
- 🍃 Profit
- 🍃 People
- 🍃 Planet
### Continued implementation of the operational efficiency programme

- 8, 9, 10, 11

### Improved decision-making and business processes

- 9, 10, 11, 17

### Real estate portfolio optimisation

- 8, 9

### Building digital skills and capabilities

- 10, 11

### Staff retraining and internal migration

- 8

### Adaptation of approaches to staff development and corporate culture improvements to meet digital company requirements

- 10

### United Nations Sustainable Development Goals

- 12, 13, 15

- 7, 12, 13, 15

- 4, 8

- 11
Investments in education and employment totalled RUB 496 million.

The Company’s newly established Knowledge Management Department started the transformation of employee training.

About 4,000 students underwent externships at Rostelecom.

Over 85 thousand senior citizens were trained.

Rostelecom deployed 722 km of fibre in the Amur Region, 575 km in the Khabarovsk Territory, and 435 km in the Primorye Territory.

Rostelecom and its subsidiaries and affiliates respect the freedom of association and the right to collective bargaining.

100% employees are covered by collective bargaining agreements.

The Company’s injury rate in 2018 was 0.27, down from 0.31 in 2017 and below the industry average of 0.36.

Rostelecom (including its subsidiaries and affiliates) spent RUB 193,320,180 on charitable purposes.

28,421 km of fibre constructed to bring connectivity to healthcare centres across Russia.

In April and May 2018, all Rostelecom subscribers who are the Great Patriotic War (WWII) veterans were granted 100 free minutes per month for intra-zone, long-distance, and international (within the CIS) calls.

Access to distance learning courses provided for 1,001 children with special needs (under the Distance Learning for Disabled Children project).

Assistance for a total of RUB 273 million provided under the Housing Programme to 1,001 employees.

Rostelecom has implemented various Smart City projects across 50 Russian regions to improve city management.

Rostelecom presented an integrated and automated IT platform integrating library and information centre resources.
1.1 tonnes of batteries collected by our employees. 270 tonnes of waste paper collected and handed over for recycling.

The eighth annual sustainability report published by the Company.

Carbon oxide emissions cut by 5.22% (under the Innovative Development Programme for 2016–2020).

The Green Office principles are implemented in operating office spaces:
- Reduced energy and water consumption
- Use of environmentally safe consumables
- Reduced paper use through electronic document flow
- Wider use of videoconferencing.

Rostelecom and the Ministry of Agriculture of the Samara Region signed an agreement to adopt UAV technology for high-definition low-altitude aerial photography.

Rostelecom’s video surveillance system helped prevent about 70 forest fires in the Perm Territory.

The Company has developed the Parental Control service, a reliable solution keeping children safe online.

A whistleblowing hotline and feedback forms are available at www.nocorruption.rt.ru.

The Company publishes the information on all material aspects of its business on the corporate website https://www.company.rt.ru/. In 2018, the number of the website’s visitors totalled 4.5 million users (compared to 3.4 million in 2017).

Wi-Fi access points with bandwidths of at least 10 Mbps installed in payphones of almost 8,200 communities with a population between 250 and 500 people.

The Company joined the Internet of Things Association (IOTAS).
Rostelecom’s salary expenses increased by 4% to RUB 69.8 billion in 2018.

Our employees use advanced digital services, including corporate mobile applications, when implementing business projects and resolving work-related issues.

Our comprehensive staff training system includes online services and is focused on digital skills.
Rostelecom's salary expenses increased by 4% to RUB 69.8 billion in 2018. Our employees use advanced digital services, including corporate mobile applications, when implementing business projects and resolving work-related issues. Our comprehensive staff training system includes online services and is focused on digital skills.
Our Approach

128,600 staff were employed by Rostelecom in 2018

RUB 69.8 billion – the Company’s salary expenses in 2018

41,779 employees were members of our corporate pension scheme in 2018

Improving staff skills and knowledge – from digital to teamwork skills – is key to achieving a company’s strategic goals and ensuring its sustainable growth. Rostelecom has been evolving its system for employee professional and personal development year over year to ensure agile responses to the challenges posed by globalisation. Exciting and ambitious projects, opportunities for professional development, fair and competitive remuneration, robust benefits, stability, and a corporate culture that unites employees – all contribute to more attractive working conditions and improved employee engagement.

In 2018, Rostelecom consistently executed its HR management strategy through 2022, which includes building digital skills and capabilities, engaging employees in strategic initiatives, new approaches to employee development, increasing labour productivity, and culture improvements.

A new service, Online Reception, was launched on our intranet portal in 2018 enabling all employees to put questions directly to a Rostelecom top manager (online).

Also, in 2018, the Company elaborated its system for achieving the objectives set out in its Sustainable Development Agenda 2030 to reflect HR management aspects. By doing this, the Company has confirmed its commitment to the United Nations Sustainable Development Goals (UN SDGs). As for specific business areas, PJSC Rostelecom makes consistent efforts to provide quality training and development programmes to its employees, thus contributing to their overall professional development. This is true for both internal employee training and cooperation with industry-specific educational institutions (SDG 4 and SDG 9). Rostelecom is also committed to reducing inequality, offering fair remuneration irrespective of gender. The effective operation of our whistleblowing hotline and Ethics Hotline helps foster a friendly atmosphere within the Company and guarantee access to justice (SDG 16). The Company also has a strong focus on specific health and safety programmes (SDG 8).

Cementing its reputation as one of Russia’s largest employers, in 2018, Rostelecom developed its Long-Term Incentive Programme for 2020–2022 which builds upon the existing Programme while keeping its basic principles and features unchanged. Both individual performance and achievement of corporate KPIs are thus taken into account.
PJSC ROSTELECOM’S CONTRIBUTION TO THE UN SDGS IN HR MANAGEMENT AND EMPLOYEE DEVELOPMENT

<table>
<thead>
<tr>
<th>Programmes</th>
<th>4</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>16</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Online Reception on the intranet portal</td>
<td>v</td>
<td>v</td>
<td>v</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Robotics and coding classes for employees’ children</td>
<td></td>
<td></td>
<td>v</td>
<td></td>
<td></td>
<td></td>
<td>v</td>
<td></td>
</tr>
<tr>
<td>3. Long-Term Incentive Programme</td>
<td></td>
<td>v</td>
<td></td>
<td>v</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. HR management strategy 2018–2022</td>
<td></td>
<td></td>
<td>v</td>
<td></td>
<td>v</td>
<td></td>
<td></td>
<td>v</td>
</tr>
<tr>
<td>5. Pension scheme of the subsidiary pension fund Alliance</td>
<td></td>
<td></td>
<td>v</td>
<td></td>
<td>v</td>
<td></td>
<td>v</td>
<td></td>
</tr>
<tr>
<td>6. Cafeteria Plan</td>
<td>v</td>
<td></td>
<td></td>
<td>v</td>
<td></td>
<td>v</td>
<td>v</td>
<td></td>
</tr>
<tr>
<td>7. Housing Programme</td>
<td></td>
<td></td>
<td>v</td>
<td>v</td>
<td></td>
<td>v</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Corporate esports tournament</td>
<td></td>
<td></td>
<td>v</td>
<td>v</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Ticket to the Future</td>
<td>v</td>
<td>v</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. ProfYESSiYa – the Territory of Choice</td>
<td>v</td>
<td>v</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Arctic Young Engineers</td>
<td>v</td>
<td>v</td>
<td></td>
<td>v</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. The P.M. Golubitsky Competition</td>
<td>v</td>
<td>v</td>
<td></td>
<td>v</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. The Cyberchallenge Competition</td>
<td>v</td>
<td>v</td>
<td></td>
<td>v</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Internship 365° programme</td>
<td></td>
<td></td>
<td>v</td>
<td>v</td>
<td></td>
<td></td>
<td>v</td>
<td></td>
</tr>
<tr>
<td>15. The Basics of the Digital Economy educational series</td>
<td>v</td>
<td></td>
<td>v</td>
<td>v</td>
<td></td>
<td></td>
<td>v</td>
<td>v</td>
</tr>
<tr>
<td>16. The New Rostelecom Leadership Development programme</td>
<td>v</td>
<td>v</td>
<td></td>
<td></td>
<td></td>
<td>v</td>
<td>v</td>
<td></td>
</tr>
<tr>
<td>17. The Online Lectorium educational project</td>
<td>v</td>
<td></td>
<td>v</td>
<td>v</td>
<td></td>
<td>v</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. The Development Environment digest newsletter</td>
<td>v</td>
<td>v</td>
<td>v</td>
<td></td>
<td>v</td>
<td>v</td>
<td></td>
<td>v</td>
</tr>
</tbody>
</table>

TOTAL NUMBER OF ROSTELECOM’S PERMANENT AND TEMPORARY EMPLOYEES IN THE VALUE CHAIN IN 2018

<table>
<thead>
<tr>
<th>Total number of permanent employees</th>
<th>Total number of temporary employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of permanent employees</td>
<td>Total number of temporary employees</td>
</tr>
<tr>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td>67,075</td>
<td>45,886</td>
</tr>
</tbody>
</table>

Rostelecom supports its employees’ families and seeks to considerably increase by 2030 the number of young and adult people with sought-after skills (including technical vocational skills) to improve their employment opportunities and help them get a decent job or engage in entrepreneurial activities. For instance, in 2018, the Company launched robotics and coding classes for its employees’ children in collaboration with League of Robots. The classes were taken by 950 children in 20 Russian cities.
Creating Attractive Working Conditions

RUB 69.8 billion
- the Company’s salary expenses in 2018

100%
of employees covered by annual performance assessments

Our HR management strategy helps attract and retain best talent, provide decent remuneration, recognise achievements, foster dialogue with management, and develop leadership skills in people. All these initiatives boost Rostelecom’s profile as the employer of choice, supporting its longer-term development goals.

Rostelecom Group’s salary expenses were increased from RUB 67.2 billion in 2017 to RUB 69.8 billion in 2018 (+4%), with the average monthly pay raised from RUB 44 thousand to RUB 47 thousand (+6%).

Rostelecom has zero tolerance for gender discrimination and discloses salary information across gender, also providing data on its ratio of basic salary and remuneration of women to men for each employee category. The Company is committed to further improving its gender equality practices.
SALARIES OF PJSC ROSTELECOM’S EMPLOYEES IN 2018, RUB THOUSAND

<table>
<thead>
<tr>
<th>Macroeconomy</th>
<th>Men</th>
<th>Women</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volga</td>
<td>431,796</td>
<td>404,269</td>
<td>413,619</td>
</tr>
<tr>
<td>Far East</td>
<td>652,461</td>
<td>621,924</td>
<td>633,060</td>
</tr>
<tr>
<td>North-West</td>
<td>542,601</td>
<td>525,112</td>
<td>531,922</td>
</tr>
<tr>
<td>Siberia</td>
<td>481,172</td>
<td>442,237</td>
<td>456,711</td>
</tr>
<tr>
<td>Ural</td>
<td>536,253</td>
<td>508,717</td>
<td>518,693</td>
</tr>
<tr>
<td>Centre</td>
<td>569,722</td>
<td>558,390</td>
<td>562,455</td>
</tr>
<tr>
<td>South</td>
<td>417,625</td>
<td>389,899</td>
<td>398,331</td>
</tr>
<tr>
<td>Total</td>
<td>506,790</td>
<td>483,110</td>
<td>491,953</td>
</tr>
</tbody>
</table>

RATIO OF BASIC SALARY AND REMUNERATION OF WOMEN TO MEN BY EMPLOYEE CATEGORY IN 2018

<table>
<thead>
<tr>
<th>Employee category</th>
<th>Basic salary ratio</th>
<th>Annual remuneration ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Women</td>
<td>Men</td>
</tr>
<tr>
<td>Managers</td>
<td>49%</td>
<td>51%</td>
</tr>
<tr>
<td>Specialists</td>
<td>45%</td>
<td>55%</td>
</tr>
<tr>
<td>Workers</td>
<td>46%</td>
<td>54%</td>
</tr>
<tr>
<td>Other employees</td>
<td>45%</td>
<td>55%</td>
</tr>
<tr>
<td>PJSC Rostelecom</td>
<td>47%</td>
<td>53%</td>
</tr>
</tbody>
</table>

Benefits

In 2018, the Company approved the Collective Bargaining Agreement of PJSC Rostelecom for 2019–2021. The document ensures continuity of the existing range of social benefits and compensations, and addresses the individual needs of each employee. The list of benefits offered by Rostelecom is divided into two groups: basic, or standard, benefits and the Cafeteria Plan. The basic benefits are provided to all employees. The Cafeteria Plan includes benefits matching employees’ individual needs. Employees are invited to choose from the list of benefits: financial assistance for holidays, gym memberships, coverage of education expenses, trips to health resorts, etc.

The list of benefits offered by Rostelecom is divided into two groups: basic, or standard, benefits and the Cafeteria Plan.

The Collective Bargaining Agreement covers all, i.e. 100%, of Rostelecom employees. The document includes a list of rights enjoyed by all of the Company’s employees.

1. Excluding the Headquarters.
Voluntary health insurance is yet another competitive advantage of PJSC Rostelecom as an employer. Employee housing support is an important social protection tool. Rostelecom successfully implemented its Housing Programme in 2015–2018. In 2018, in addition to the benefits outlined in the Collective Bargaining Agreement, the Company provided RUB 273 million in financial assistance to 1,001 employees (as interest-free loans or reimbursement of interest on mortgage loans taken by employees earlier). This reflects an increase of RUB 33 million from 2017.

A total of 20.1% of Rostelecom total employees (11,080 women and 14,811 men) have the right to retire in the next five or ten years. The Company enhances social protection of employees by offering them an opportunity to join its private pension fund programme. As at 31 December 2018, 41,779 employees were members of our new corporate pension scheme offered by the subsidiary pension fund Alliance – 46.2% of total employees eligible for the scheme (43% in 2017).

Rostelecom’s 2016–2018 Housing Programme in numbers:

3,040 employees received financial assistance from Rostelecom in 2016–2018:
- 1,051 in 2016
- 988 in 2017
- 1,001 in 2018

A total of RUB 853 million has been allocated for the programme since 2016:
- RUB 340 million in 2016
- RUB 240 million in 2017
- RUB 273 million in 2018

Key programme terms:
- 10 years – the maximum period of financial assistance
- RUB 1 million – the maximum loan amount or reimbursement of mortgage interest
- 12% – the maximum mortgage interest reimbursement rate

In 2019, the Company plans to provide assistance to 1,071 employees under the Housing Programme.

1. Multipliers can be used for areas with high housing prices.
### NUMBER OF EMPLOYEES IN 2018 WHO HAD THE RIGHT TO RETIRE IN THE NEXT FIVE OR TEN YEARS

<table>
<thead>
<tr>
<th>Region</th>
<th>Employee category</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volga</td>
<td>Other employees</td>
<td>11</td>
<td>1,008</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>117</td>
<td>219</td>
</tr>
<tr>
<td></td>
<td>Managers</td>
<td>100</td>
<td>1,037</td>
</tr>
<tr>
<td></td>
<td>Specialists</td>
<td>1,452</td>
<td>1,037</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>1,680</td>
<td>2,264</td>
</tr>
<tr>
<td>Far East</td>
<td>Other employees</td>
<td>3</td>
<td>510</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>81</td>
<td>127</td>
</tr>
<tr>
<td></td>
<td>Managers</td>
<td>98</td>
<td>462</td>
</tr>
<tr>
<td></td>
<td>Specialists</td>
<td>827</td>
<td>462</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>1,009</td>
<td>1,099</td>
</tr>
<tr>
<td>North-West</td>
<td>Other employees</td>
<td>6</td>
<td>715</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>132</td>
<td>103</td>
</tr>
<tr>
<td></td>
<td>Managers</td>
<td>85</td>
<td>233</td>
</tr>
<tr>
<td></td>
<td>Specialists</td>
<td>103</td>
<td>233</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>326</td>
<td>1,628</td>
</tr>
<tr>
<td>Siberia</td>
<td>Other employees</td>
<td>6</td>
<td>673</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>132</td>
<td>155</td>
</tr>
<tr>
<td></td>
<td>Managers</td>
<td>129</td>
<td>155</td>
</tr>
<tr>
<td></td>
<td>Specialists</td>
<td>1,430</td>
<td>844</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>1,627</td>
<td>1,750</td>
</tr>
<tr>
<td>Ural</td>
<td>Other employees</td>
<td>61</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>71</td>
<td>697</td>
</tr>
<tr>
<td></td>
<td>Managers</td>
<td>85</td>
<td>155</td>
</tr>
<tr>
<td></td>
<td>Specialists</td>
<td>1,227</td>
<td>741</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>1,444</td>
<td>1,594</td>
</tr>
<tr>
<td>Centre</td>
<td>Other employees</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>189</td>
<td>1,702</td>
</tr>
<tr>
<td></td>
<td>Managers</td>
<td>242</td>
<td>526</td>
</tr>
<tr>
<td></td>
<td>Specialists</td>
<td>2,986</td>
<td>1,876</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>3,425</td>
<td>4,105</td>
</tr>
<tr>
<td>South</td>
<td>Other employees</td>
<td>3</td>
<td>1174</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>138</td>
<td>164</td>
</tr>
<tr>
<td></td>
<td>Managers</td>
<td>84</td>
<td>164</td>
</tr>
<tr>
<td></td>
<td>Specialists</td>
<td>1,152</td>
<td>891</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>1,377</td>
<td>2,229</td>
</tr>
</tbody>
</table>
Employee Engagement

The Company and its subsidiaries and affiliates respect their employees’ freedom of association and the right to collective bargaining (for instance, the right to join a trade union). This approach is shared and supported by the Company’s suppliers. Rostelecom fully respects civil rights and freedoms.

Comprising a news section, up-to-date company information, and housekeeping matters, Rostelecom’s intranet portal is its main employee communication platform. Users of the internal social network can share files and create groups, adding new content and collaborating online. All users can also express their opinions by posting comments. We run portal-based surveys, both regular (weekly surveys on issues of current importance to the Company or an employee group are posted on the main page) and as requested by different functions (for instance, a survey on employee training). Also in 2018, Rostelecom launched Online Reception, a new service enabling all employees to put questions directly online to a Rostelecom top manager.

In 2018, 69% of our employees used the portal, up 14 pp.

Our 2022 ambition is to reach a 75% employee engagement.

All employees have an opportunity to communicate with their employer through different channels: e-mail, a whistleblowing hotline, the Ethics Hotline, or regular mail. Rostelecom’s President also maintains an open communication with the Company’s employees. In May 2018, a direct line to Mikhail Oseevsky, President of Rostelecom, provided employees with an opportunity to learn about the Company’s new strategy through 2022 and ask questions to the top executive.

Also, Rostelecom has a standing bilateral collective bargaining commission; all of its meetings are minuted. The commission had four meetings in 2018. In 2019, in line with the Company’s strategy of digital transformation we will focus on automation of compliance processes, including the development of the Compliance Control automated system (resolution of conflicts of interest, and handling employee and third party enquiries).
The Company continues to improve its employee onboarding process. All new employees are provided with a ready-to-use workplace and access to a corporate mobile application from their first day of employment. This makes the onboarding process more smooth and gives the new hires an opportunity to get answers to their questions from the HR team.

A total of 7,388 women were hired in 2018, a 21.8% increase from 2017.

**AGE DISTRIBUTION OF NEW HIRES IN 2016–2018, PEOPLE**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 25</td>
<td>4,045</td>
<td>3,685</td>
<td>3,722</td>
</tr>
<tr>
<td>26–35</td>
<td>4,947</td>
<td>4,887</td>
<td>6,087</td>
</tr>
<tr>
<td>36–56</td>
<td>4,318</td>
<td>3,424</td>
<td>5,085</td>
</tr>
<tr>
<td>Over 56</td>
<td>832</td>
<td>1,085</td>
<td>1,054</td>
</tr>
<tr>
<td>Total</td>
<td>14,142</td>
<td>13,067</td>
<td>15,948</td>
</tr>
</tbody>
</table>

**SHARE OF NEW HIRES IN TOTAL HEADCOUNT IN 2016–2018, PEOPLE**

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>6,994</td>
<td>7,290</td>
<td>8,560</td>
</tr>
<tr>
<td>Women</td>
<td>7,148</td>
<td>5,777</td>
<td>7,388</td>
</tr>
</tbody>
</table>

Promoting health and active lifestyles

Rostelecom is promoting a proactive attitude and cares about employees’ health. The Company makes efforts to popularise sports and organises events for cultural entertainment of its employees.

In 2018, Rostelecom organised a corporate esports tournament for employees across all macroregional branches. The tournament featured three games: World of Tanks, Counter-Strike: Global Offensive, and Dota 2. A total of about 1,000 employees took part in the cyber festival, with over 400 gamers making it to the finals. Employees from all across the country could cheer for their colleagues as we broadcast live coverage of the event.
Rostelecom’s sustainable development relies on the professionalism and qualifications of its employees. We view human capital development as a key strategic priority, driving excellent employee performance by offering comprehensive professional and personal development programmes.

The newly created department started the transformation of internal employee training in line with its mission to create a favourable environment for continuous employee development across all functions and roles throughout their entire careers with Rostelecom. Guided by Rostelecom’s strategy and values, the department leverages state-of-the-art technology and global best practices in training and development.

In 2018, Rostelecom established its Knowledge Management Department.

RUB 496,042,000 (USD 7,912,542) was invested by Rostelecom in employee training in 2018. RUB 4,600 – Rostelecom’s training cost per employee in 2018.

TRANSFORMATION OF INTERNAL EMPLOYEE TRAINING SEEKS TO ADDRESS THE FOLLOWING OBJECTIVES

Implement uniform, effective business processes to train and develop employees

Define the standards and methodology for training, as well as for development and implementation of nationwide skill building programmes

Finalise the updated centralised catalogue of internal programmes to build soft skills

Enhance the competencies of in-house coaches
Rostelecom increases its investment in employee training every year, investing RUB 496.04 million in 2018 (RUB 463.57 million in 2017). Training cost per employee increased accordingly, to RUB 4,600 in 2018 from RUB 3,500 in 2017. Rostelecom’s employment practices are free from gender discrimination in training and development access. Our zero tolerance for gender discrimination is evidenced by our leadership training statistics, with female managers completing 59.3 hours of training in 2018 and male managers 49.8 hours.

In 2018, Rostelecom employed 33,520 women with higher education, or 26.08% of the total headcount.

A total 41,561 employees (32.3% of the total headcount) received professional training in 2018.

PJSC ROSTELECOM’S EMPLOYEE TRAINING COSTS IN 2016–2018, RU THOUSAND

<table>
<thead>
<tr>
<th>Year</th>
<th>Total employee training costs</th>
<th>Annual training cost per employee</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>452,565</td>
<td>3.6</td>
</tr>
<tr>
<td>2017</td>
<td>463,570</td>
<td>3.5</td>
</tr>
<tr>
<td>2018</td>
<td>496,042</td>
<td>4.6</td>
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</table>

In 2018, Rostelecom offered nationwide and regional development programmes completed by about 50,000 employees.

LAUNCHED A COMPREHENSIVE NATIONWIDE SKILL BUILDING PROGRAMME FOR MANAGERS

Developed a catalogue containing 22 blended learning programmes to build soft skills for middle managers, with 4 programmes rolled out to regional branches.

LAUNCHED A NATIONWIDE ECONOMY PROJECT, which received over 390,000 views

DEVELOPMENT ENVIRONMENT

Broadcast 8 lectures and produced 21 issues of the Development Environment digest.

TOP 100 MANAGERS

Launched new management development programmes for the top 100 managers: Sberbank 2020 18 participants and the New Rostelecom Leadership Development programme at the SKOLKOVO Moscow School of Management 55 participants.

ONLINE COURSES

Developed over 50 online courses on the Company’s products and services.

1. Including extra costs related to training and development.
Cooperation with the public education system

Rostelecom pays special attention to its cooperation with educational institutions. We work consistently in this area: from training young talents to having them participate in the development of innovative solutions and technology.

Rostelecom organised the Ticket to the Future careers festival in eight Russian cities. As part of the festival, in Veliky Novgorod from 13 to 15 November, Rostelecom employees gave lectures to school students on cyber security. Started in 2018, the event has grown into a career guidance platform for secondary school students. Over three days, the festival was attended by more than 6,000 students from Tomsk, Seversk, and the Tomsky, Asinovsky, Zyryansky, Pervomaisky, and other districts of the Tomsk Region.

On 5 January, the Komi Branch employees took part in the ProfYESSiYa – the Territory of Choice project, traditionally held at the Syktyvkar College of Service and Communications. The event gathered over 550 final year students from Syktyvkar’s 26 high schools and lyceums. The students learned about various professions and options available at Syktyvkar’s public vocational education institutions. As a partner of the college and a potential employer, Rostelecom set up a stand showcasing the trade of a telecommunications equipment technician and the services provided by the Company.

“We have enjoyed a long-lasting partnership with the Syktyvkar College of Service and Communications. The college trains electricians to service telephone transmission lines and radio stations. Most of them start out as interns at our branch, and our specialists give master classes. We have participated in the project for several years. It’s an effective tool to engage young skilled talents.”

— Svetlana Kovalenko, HR business partner of Rostelecom’s Komi Branch

On 25 October 2018, Rostelecom organised a welcome tour for senior school students in Murmansk. The undergraduates of specialised IT courses who participated in the Arctic Young Engineers regional science and technology festival visited telecommunications sites. Rostelecom specialists acquainted the children with modern telecommunications equipment and explained the basics of data transmission and fibre-optic communication. The students saw a digital PBX, an optical distribution frame, a line equipment room, a data centre server room (the heart of the region’s internet), and the work of those at the regional network operations centre and the technical support centre. They learned that the network condition is controlled automatically and an operator is promptly alerted to any faults.

“Our task is to familiarise the younger generation with the opportunities and options available to them in the Murmansk Region. I’m sure that learning about Rostelecom’s services and technologies was exciting and useful, and that senior school students see our dynamic, innovative company as an attractive employer offering opportunities for professional development.”

— Olga Shangina, Director of Rostelecom’s Murmansk Branch

The ProfYESSiYa – the Territory of Choice project has been run since 2011.

For a third year, the Arctic Young Engineers festival will bring together young researchers and engineers from every corner of the Arctic Kola Peninsula. Since its beginning, the event has welcomed over 8,000 children and teenagers. The new season does not only focus on polar research and expeditions but also the research and technology driven development of Arctic regions. The festival covers the entire Murmansk Region and is held as a large-scale research and technology marathon for young people, during which 15 cities will host over 50 competitions for young engineers, with the final event scheduled for April 2019.
From May to June 2018, Rostelecom and the Ministry of Education and Science of the Kaluga Region held the 24th annual P.M. Golubitsky Competition. University students involved in information technology and telecommunications research were invited to participate. Ten projects out of a total 67 won the competition, with eleven young developers awarded subsequent grants from Rostelecom.

Winners of Rostelecom awards 2018:

- Bauman Moscow State Technical University (Kaluga Branch): Evgeny Cherepkov, Anastasia Kozina, Andrey Solomatin, Svetlana Medvedeva, and Alexey Kuzminsky
- Financial University under the Government of the Russian Federation: Dmitry Chelyapin, Yana Tarashchuk, and Anna Stepanova
- Kaluga College of Electronic Devices: Denis Ivanushkin, Denis Gruzdev, and Kirill Polichev

“The focus of this competition was practicality. We met most of the participants personally to discuss the outlook for the IT industry and their potential contribution to its development. The names of the winners were announced at their universities, as this success is reflective of the winners’ adept engineering skills as well as their universities and professors. The award is financing for their research. This approach fully correlates with Rostelecom’s growth focus: transformation into a digital partner for households, business, and government customers. Young talented IT professionals are our valuable future human resource and capital. These kinds of investment foster technological progress and an accelerated digitalisation of the region and the whole country.”

— Natalia Kalyatskaya, Director of Rostelecom’s Kaluga Branch 

 Cooperation with Sirius Educational Centre: Cyberchallenge Competition

The project focuses on selecting talented school students matching the Company profile and training them. Our task is to fully involve them in IT and cyber security and show the challenges faced by the Company. The final interactive event was designed to consolidate their learnings and select the most talented participants.

The competition reached 3 million people in 2018. A talent pool was built of 1,500 participants actively involved in the online round, and the basics of the industry and Rostelecom operations were discussed with them. The competition also provides career guidance. The Company now has an asset of 60 school students well-trained in information security. The finalist diploma also gives five to ten extra points to those who choose to study through specialised information security departments at technical universities.

“Everyone showed amazing results. All first-stage tasks were completed within five hours. The competition for points became fiercer each hour, with simpler tasks increasingly losing in value. The heat grew even greater at the second stage.”

— Vladimir Dryukov, Head of the Security Operations Centre Solar JSOC, Rostelecom-Solar
In 2018, to engage the best students and graduates, Rostelecom launched the Internship 365 leadership programme to boost managerial skills. The participants majored in four fields: analytics, marketing and product management, project management, and business support.

Candidates were selected through stages:

- Stage 1: Screening questionnaires
- Stage 2: McKinsey Problem Solving Test
- Stage 3: Online interview with recruiter
- Stage 4: Immersive escape game based assessment

The project encouraged experimentation, as its KPIs included emotional connection, unusual format, and the WOW effect. The escape game was based around the dystopian fallout from ubiquitous digitalisation.

In solving the challenges, the interns and employees were expected to explore problems on their own and be pro-active and experimental. Although the tasks set may have been clear, the solutions were not. Bunker-42 cold-war era complex in Moscow’s Taganka district was chosen for the escape game, sitting 65 metres beneath the city with dark tunnels, armoured hermetic doors, and damp shafts. The winning students were gathered in the bunker entrance area, divided into teams, and sent off to pass the assessment.

The participants moved through the bunker tunnels, interacted with the game actors, solved the game and business challenges (putting diagrams and ideas on flip charts), and recorded the outcome on video. Six pressing problems were chosen for the escape game scenarios: pandemic disease, overpopulation, language extinction, rubbish crisis, mass unemployment, and escape into virtual reality. The task was to create products and services to address these problems and build a better everyday life for humanity.

As the students were working on their solutions, they were assessed Rostelecom’s recruiting managers posing as experts from the Institute of Time. Those who were unable to attend participated through an online stream.

- Step 5: following the assessment, the best-performing students were invited for an interview with Rostelecom HR managers.

Launching IT internships are within plans for 2019.
Employee training and development

The Corporate Online University

In 2019, we plan to redesign the corporate training portal and add functions such as planning and completing blended learning programmes, filing applications for external training, and uploading certificates of education, detailed analytics, and reporting. The renewed portal will be named the Corporate Online University to become Rostelecom’s single entry point for training.

The purpose of Rostelecom’s Corporate Online University is to build employees’ modern professional skills. Both in-house and external experts are involved: Russian trainers with experience of training in similar educational institutions, specialists who have studied and interned abroad, and international business coaches. Both face-to-face and distance learning opportunities are offered in-house.

We offer professional development opportunities to every employee from their very first day at work. Depending on an employee’s professional development needs, the following is offered, among many other benefits:

- Training programmes in various business segments
- Face-to-face training and distance learning courses or programmes through the Corporate Online University
- Access to Rostelecom’s e-library

Employee training and upskilling courses in business segments are provided by B2B/B2G, B2C, and B2O Centres of Excellence and the Technical Training Centre of Excellence jointly with the Knowledge Management Department.

In 2018, we began to build a pool of segment-specific trainers, and plan to deliver a nationwide trainer development programme in 2019. The programme aims to improve trainers’ professional knowledge, competencies, and skills, while fostering a community of employees to provide training and development within Rostelecom.

In 2018, to improve in-house training quality control, we developed common performance indicators with a focus on NPS scores for training programmes, and new feedback forms for trainees and their line managers.

Building digital skills

Remaining successful and efficient in the modern world requires building digital skills. To raise digital literacy in 2018, Rostelecom employees were offered the Basics of the Digital Economy online educational series, which received over 390 thousand views during the year. The series includes ten mini lessons in the form of 10-minute videos and self-check tests.

It covers key topics required for an IT company to build digital skills and capabilities:

- The Internet of Things
- Blockchain
- VR/AR
- Agile
- Digital communications
- Data science
- Robotics
- Quantum technology
- Cyber security

The training series got over 390 thousand views in 2018.

For each topic in the series, the Digital Economy. Jobs of the Future online programme commences in 2019 and is available to Rostelecom employees. Whatever the educational background, position, age, or length of service, every Rostelecom employee has a fair chance of mastering a new digital job. Those with the best performance will be offered a job in a chosen, new specialty. The online training will be delivered both in groups and individually, enabling trainees to learn at a comfortable pace at any time and place, surrounded by like-minded people.

70% of employees joined the Basics of the Digital Economy educational project.
To get employees involved in various training projects, we held the Conquest of Digital Space quiz in October 2018, with 1,899 people taking the quiz. The quiz questions revolved around the topic of the digital economy, and the answers were available from the Corporate Online University’s courses.

The UX/UI Basics online course was completed by 1,200 employees, who were taught to develop modern interfaces and use innovative solutions for visual content design and layout.

A top priority of the Knowledge Management Department for 2019 is to offer employees a set of user-friendly tools for self-learning and development, create a user-friendly Corporate Online University platform with a library of video courses and programmes to master related specialties, from the basics of digital communication to the basics of coding and algorithmics.

Developing management skills

To boost the management skills of future and current managers across the corporate hierarchy, we offer in-house and external training programmes. Managers master key tools for efficient team management and incentivising and leading their employees to achieve the best results.

We launched two programmes for top managers in 2018:
- The Sberbank 2020 programme from the Sberbank Corporate University – 18 managers
- The New Rostelecom Leadership Development programme at the SKOLKOVO Moscow School of Management – 55 managers

In late 2018, two new programmes (Key Leadership Skills and Situational Leadership) for new managers were developed and made available to in-house trainers.

Building soft skills

In 2018, the Knowledge Management Department began finalising the updated, centralised catalogue of in-house programmes for building soft skills.

Starting from 2019, all new training programmes will be launched in the blended learning format: at 80% for distance learning of theoretical material and 20% for practising the newly acquired skills at face-to-face master classes. Each programme will offer a range of options for immersive learning: a selection of articles and books on the subject, video courses or webinars hosted by experts, knowledge tests, and tools and advice on how to apply the new knowledge.

Key principles in rolling out the nationwide catalogue of programmes to build soft skills:

Centralised training methodology.
24/7 access to online content
Programme quality control
Introduction of NPS scores for training programmes
Regular trainer assessment system

Building professional skills

Rostelecom places a special focus on developing the professional expertise of employees and ensures a consistent approach to training, tailored to the business requirements of each business unit. Both the best external professional training providers and in-house experts from the corporate Centres of Excellence are engaged in professional skills building.

Rostelecom’s Centres of Excellence:
- Technical Training Centre of Excellence
- B2B Centre of Excellence
- B2C Centre of Excellence

Technical Training Centre of Excellence

2018 highlights:
1. Developed a comprehensive training programme for six functional roles within the Technical Infrastructure Unit’s customer service function. The programme serves as a roadmap for developing educational content
2. Developed a nationwide programme, Customer Focus for Installers and Level 3 Technical Support, to improve touch point NPS scores. More than 3,600 employees completed classroom training within the programme
3. Successfully carried out the Video Mentor pilot project for technicians. Over 35 training videos showing technical processes were created with support from the Technical Training Centre of Excellence
4. Created a community of in-house domain experts bringing together over 150 specialists. The community aims at maintaining and developing expertise and sharing and discussing experience by the Company’s technicians throughout Russia. The in-house domain experts help collect content for future educational materials across a range topics – technology, equipment, and Rostelecom products and services
The Technical Training Centre of Excellence priorities for 2019:
- Develop customer focus and up-selling skills among Rostelecom technicians
- Develop educational materials for six functional roles within the Technical Infrastructure Unit’s customer service function

B2B Centre of Excellence

2018 highlights:
1. Developed a product-focused training system. Developed and rolled out 25 new product-focused training courses. Over 4,000 employees completed the courses, with 36 webinars on products organized across all macroregional branches
2. Actively pursued two nationwide training programmes:
   - Over 2,700 employees underwent training within the Customer League programme
   - Over 2,200 employees underwent training within the Sales League programme
3. Created a training portal, Intellectual Power, in collaboration with the Headquarters’ marketing department. A total of 3,873 employees benefitted from access to the portal since its launch, including 107 new hires trained through the portal’s Onboarding section. The portal enables staff to acquire new knowledge and put it into practice immediately, helping them in preparing and consolidating quotes
4. Developed and approved a segment-specific coach management model
5. Launched the Pro100 Best, a joint project with the Headquarters’ Regional Development Department, with the first module implemented in December – 15 webinars covering 5 industries and over 500 employees

B2C Centre of Excellence

The B2C Centre of Excellence was set up in the second half of 2018. Every macroregional branch appointed a supervisor for the B2C sales force training process, responsible for developing B2C coaches and organizing distance and classroom training within product- and skill-focused programmes.

Goals of the B2C Centre of Excellence:
- Build a high performance sales team with excellent product knowledge and good sales and promotion skills
- Develop and roll out a uniform system for skill- and product-focused training for the Company’s B2C sales force
- Build a centralised system for B2C coach development and assessment
- Build automated reporting on training and development of B2C sales force, including the Active Sales’ technical team agents

Objectives of the B2C Centre of Excellence:
- Plan and set up the training process for the B2C sales force, including the Active Sales’ technical team agents
- Develop training methodology in line with the B2C annual training matrix
- Manage, control, assess, and supervise the activities of the B2C coaches
- Set up and supervise training programmes
- Perform assessments of the employee training process
- Introduce new training methods and techniques

The B2C Centre of Excellence 2018 highlights:
1. Built a team comprising 110 B2C coaches from all across Russia
2. Developed a uniform coach assessment system. Performed an annual B2C coach assessment bringing in an accredited external provider. Coaches at the Volga Macroregional Branch showed the strongest performance
3. Launched the B2C Coach Workshops, where all employees can gain new knowledge and master their skills while working with a team of experts. The programme helps build a talent pool and train coaches to be mentors or teachers at the workshops
4. Developed new sales training programmes in late 2018 for each channel, including for the B2C Active Sales’ technical team agents
5. Developed a new, unique mentorship programme covering all B2C sales channels

Product-focused training

Starting from 2018, all nationally available products and nationwide campaigns and changes have been launched via an integrated training system. Courses are developed by the B2C Centre of Excellence, adapted by macroregional branches (if needed), and then provided to coaches within Rostelecom branches for employee training. We use different formats to provide training to employees: long reads, interactive courses with challenges, video lectures, broadcasts, product review videos, interactive instructions on how to use IT systems, dialogue trainers, a chatbot which attracted over 1,000 users in a month, interactive battles to assess product knowledge, and many others. All new formats are developed in-house.

In 2018, Rostelecom developed over 160 product- and skill-focused programmes and tests, and provided training to more than 15,000 employees, including 5,000 technical team agents at the B2C Active Sales. Plans for 2019 include launching a single training platform offering all available courses and tests online.
Investing in Our People

Plans for 2019:
1. Launch a single B2C incentive and training portal enabling users to monitor their KPI performance and earnings, learn about all existing and new products and best practices, and join a nationwide incentive programme
2. Standardise training programmes across the B2C sales channels
3. Launch a mentorship programme
4. Enhance the competencies of coaches through programmes offered by the Knowledge Management Department and the B2C Coach Workshops
5. Launch digital training tools (a chatbot, text message training, and online training on different platforms)
6. Provide B2C coaches with new programmes to build soft skills for regional B2C sales force (Emotional Intelligence, Individual Performance, Antifragile Team, Leadership Skills Development, etc.)
7. Automate reporting on training and build an individual learning path for each B2C employee, complete with an online feedback option

Online training

Over 45,000 employees were trained online in 2018, and 400,000 courses and programmes in total were completed by employees. Up to 8,000 unique users per month were trained through distance learning.

Over 45,000 Rostelecom employees trained online in 2018. Over 400,000 courses and programmes completed in total.

In 2018, the Company launched Online Lectorium, a new educational project. It includes lectures delivered as webinars on relevant and interesting topics by leading industry speakers and successful people from various fields. The eight broadcasts gathered an audience of over 10 thousand people. Lectorium’s average NPS score for all broadcasts is 72. Over 20 lectures are planned for 2019, covering topics such as business leadership, robotics, self-driving vehicles, humour in a corporate environment, and others.

In addition to the Corporate Online University, employees were trained under upskilling and retraining programmes at higher education institutions and with training providers delivering advanced and professional training programmes. Over 400 educational institutions and training providers are contributing their services to upskilling and retraining at Rostelecom.

ROSTELECOM EMPLOYEES TRAINED BY HIGHER EDUCATION INSTITUTIONS OR TRAINING PROVIDERS

<table>
<thead>
<tr>
<th>Employee category</th>
<th>2018</th>
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<tr>
<td>Managers</td>
<td>1,376</td>
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<td>Specialists</td>
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<td>Workers</td>
<td>991</td>
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Ensuring Workplace Safety

RUB 697.8 million
– Rostelecom’s expenditure on occupational health and safety in 2018.

Rostelecom focuses on specific programmes and activities ensuring occupational health and safety for employees (both own employees and contractors) engaged in installation, operation, and maintenance of towers, base stations, and other facilities, as well as fibre deployment.

The absence of any health and safety issues in 2018 is reflective of Rostelecom’s strong health and safety performance. The Company’s trade union members are actively involved in supervising and advising on workplace health and safety programmes. No working time was lost due to industrial disputes or strikes.

Rostelecom’s Karelia Branch ranked the best product company in Karelia in terms of occupational health and safety.

Rostelecom’s Karelia Branch won the Etalon Association’s competition in the Success and Safety category as the best product company in Karelia in terms of occupational safety and health. The competition was initiated by the Russian Ministry of Labour and Social Protection to raise awareness of workplace safety issues and promote best practice sharing for occupational safety and health. The event is held every year in each Russian region to select the best employer in various sectors. The Karelia Branch was the winner in the category for product companies employing more than 500 people, chosen from among the five major employers operating in the Republic of Karelia and competing for the award. In the overall rating of Russian companies, Rostelecom’s Karelia Branch was ranked 71st for compliance with labour laws and workplace safety standards.

The Company monitors harmful factors such as carcinogens, noise, and airborne particles, as well as ergonomic factors. The Company has all new workplaces assessed for compliance as per the Federal Law On Special Assessment of Working Conditions dated 28 December 2013. In 2018, one fatal accident was recorded occurring due to a breach of safety rules when operating electrical equipment.

Our contracts with service providers always include health and safety requirements. Following special assessments of working conditions, we design and implement corrective actions in order to improve the level of occupational health and safety at Rostelecom.

The Company’s injury rate in 2018 was 0.27, down from 0.31 in 2017 and below the industry average of 0.36.

The safety of employees working at heights, exposed to electric shocks, electromagnetic or radio-frequency fields, or hazardous chemicals is monitored through special assessments of working conditions, regular health and safety compliance audits, and proper, timely training. All employees have the right to refuse a task they believe to be dangerous to their health or life.

We promote safe work through training, briefing, and participation in firefighting drills.

The Occupational Health and Safety Centre and the Network Operations Centre have adopted an incident reporting procedure for business unit and functional heads to keep them involved in health and safety activities.

In 2018, the Company recovered RUB 23 million from the Social Insurance Fund for organising occupational health and safety events and providing health resort treatments to employees.

In 2018, employees from the pilot units of four macroregional branches were provided with the Company’s first branded protective clothing with improved performance.

Our health and safety improvement projects involve the technical and health and safety experts from all macroregional branches to ensure the full-fledged, comprehensive development of new standards.

RUB 697.8 million
– Rostelecom’s expenditure on occupational health and safety in 2018.
Our Digital Equality Integrated Social Programme is aimed at improving the accessibility of digital services for underprivileged and vulnerable groups of people.

The programme includes projects such as ABC of the Internet, Growth, Learn the Internet – Manage It!, Social Impact Award, Internet for Social Infrastructure Facilities, Computerisation of Orphanages, and Distance Learning for Disabled Children.
Our Digital Equality Integrated Social Programme is aimed at improving the accessibility of digital services for underprivileged and vulnerable groups of people. The programme includes projects such as ABC of the Internet, Growth, Learn the Internet – Manage It!, Social Impact Award, Internet for Social Infrastructure Facilities, Computerisation of Orphanages, and Distance Learning for Disabled Children.
Our Approach

Our long-term, socially significant initiatives and projects across the Russian Federation form an important part of our work. Rostelecom not only provides quality telecommunications services but also actively contributes to fostering a stable social environment and improving the quality of life across the country.

Taking social and cultural changes into consideration is essential to digital transformation. Along with infrastructure solutions, they allow us to address key challenges of the new digital age.

We rely on factors significant to the international, corporate, and social spheres when executing our new five-year strategy, focused on Rostelecom’s transformation into a leading digital company. This focus allows us to apply the Company’s technology in an optimal way and organise our activities nationwide, employing sustainable development approaches.

Rostelecom’s solutions and digital technology are consistently used to achieve its socially significant programmes. While maintaining an open dialogue with non-governmental organisations, various levels of authority, and educational, medical, and other socially significant institutions, the Company employs advanced solutions to achieve the greatest benefit for society.

Currently, all social and charitable projects of the Company are grouped by areas of integrated programmes – Digital Equality, Health, Care, Cultural Heritage, Sports, and Environment. This approach allows Rostelecom to consistently boost the positive impact from each programme.

About 142 thousand school students from across Russia have benefited from the Learn the Internet – Manage It! project since its launch.

PJSC Rostelecom (including subsidiaries and affiliates) allocated RUB 193,320.18 thousand to charitable purposes in 2018.

CHARITABLE PRIORITIES, %

Over 10,000 media references made to Rostelecom’s social projects and charitable activities in 2018.

85 thousand senior citizens trained under the ABC of the Internet programme in 2018.

Rostelecom runs social projects and programmes in line with Russian laws, the Company’s Charter and a number of modern principles. The Company is also committed to international norms and standards. Within our social development projects, combining the strategic interests of the Company, its shareholders, and the interests of the state is integral.
Rostelecom predominantly invests in addressing societal challenges by using its own infrastructure, building and allocating advanced telecommunications equipment, as well as providing communications services. We believe that providing maximum openness and transparency in our social activities is highly important. Rostelecom employs a range of tools when contributing to societal development, including programmes developed both individually and in partnerships, volunteering, charity, sponsorship, and others. We develop social partnerships by joining our efforts with local communities, authorities, non-profit organisations, and Rostelecom employees actively engaged in volunteering programmes. Rostelecom is one of the founders of Autonomous Non-Commercial Organisation Digital Economy aimed at ensuring interaction between businesses, expert communities, and government authorities when implementing the Digital Economy of the Russian Federation national programme. The programme will run until 2024 and comprises five areas: statutory regulation, education and personnel, cyber security, research, and IT infrastructure.

The Company is committed to providing an easier and more comfortable life for senior citizens. To this end, the Company runs and develops ABC of the Internet – a project to train senior user in basic computer and internet skills. Rostelecom consistently supports educational projects, offering new opportunities and improving existing ones while contributing to early career guidance for young people. We are particularly focused on training highly skilled telecommunications specialists, ensuring information security for younger generation, and bridging the digital divide. Rostelecom actively cooperates with orphanages, paying close attention to educational projects fostering patriotism and contributing to environmental education and preservation of the cultural identity. We consider it critical that our social projects cover all the regions in which we operate and all socially vulnerable groups of people as we ensure digital equality and affordable communication not only in cities, but also in the most remote and sparsely populated towns and villages.

We are committed to the United Nations Sustainable Development Goals (UN SDGs) aimed at economic, social, and environmental matters significant to the global community, both in widespread and focused matters. Rostelecom’s socially significant initiatives and projects contribute considerably to the UN’s Sustainable Development Goals. We lay a strong focus on these goals when running our social projects and programmes, particularly Goal 4: Quality Education; Goal 9: Industry, Innovation, and Infrastructure; and Goal 10: Reduced Inequalities. Rostelecom’s activities in this area also contribute to Goal 1: No Poverty; Goal 2: Zero Hunger; and Goal 8: Decent Work and Economic Growth.

As part of the annual Best Social Projects in Russia programme, Rostelecom’s Growth – Online Education for Children in Orphanages was recognised as the best project supporting vulnerable groups in 2018. Our partner in the project is Autonomous Non-Commercial Organisation ROST with whom we provided distance learning to about 500 children in orphanages. All the students successfully passed their final exams and later enrolled at higher education institutions and specialised secondary schools. This initiative was made possible through the advanced online education technology widely used in our programmes.

“Rostelecom places a great emphasis on its social responsibility programmes. We believe that the level of societal progress can be judged primarily by the state of the least advantaged people – those who fall through the cracks of the system. We also believe that the best strategy moving forward involves projects aiming to improve the future and creating high-quality conditions that prepare younger generations to begin their careers. In today’s complex and fast-paced environment, the smartest investments for development and the future are in education.”

— Juliana Sokolenko, Deputy Director of Rostelecom’s External Communications Department
### Rostelecom's Contribution to the UN's Sustainable Development Goals

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<th>Programmes</th>
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Digital Equality Integrated Social Programme

The Digital Equality programme is the most ambitious and important integrated social programme created and developed by Rostelecom to more effectively solve significant societal challenges in digital transformation. The pilot phase of the programme was successfully implemented in several Russian regions, and the projects were deployed in most regions covered by Rostelecom in 2018.

The key goal of the Digital Equality programme is to improve the quality of life for millions of Russian citizens by bridging digital divides and ensuring accessibility of digital solutions for underprivileged and vulnerable groups such as senior citizens, children in orphanages, children in needy families, children with special needs, and many others.

The Digital Equality programme comprises Rostelecom’s socially significant and successful projects: ABC of the Internet, Growth, Learn the Internet – Manage It!, Social Impact Award, Internet for Social Infrastructure Facilities, Computerisation of Orphanages, and Distance Learning for Disabled Children. In 2018, the nationwide projects Proektoria, Quantorium, and Sirius joined the Digital Equality programme.

Non-profit organisations are not only actively engaged in the Digital Equality programme but are major partners in a number of our projects. The Company also works closely with development institutes and infrastructure partners, universities, educational institutions, and ministries, including the Russian Ministry of Education and Science and the Russian Ministry of Digital Development, Communications, and Mass Media. Rostelecom employees are active volunteers for all projects within the programme.

Rostelecom’s integrated Digital Equality programme won the Leaders in Corporate Philanthropy project, receiving the first prize from the Graduate School of Management (GSOM SPbU) for the Best Programme (Project) Facilitating Education Development in Russia.
Rostelecom also received the award of the international contest held by the UN World Summit on the Information (WSIS) to select the best innovative projects involving Information and Communications Technology (ICT). Rostelecom entered its Digital Equality programme in the contest. The Rostelecom project won the Ethical Dimensions of the Information Society category. The award ceremony was hosted by the International Telecommunication Union within the WSIS Forum on 20 March 2018 in Geneva.

ABC of the Internet, an educational project developed with the Pension Fund of the Russian Federation in 2014, aims to guide senior citizens and people with special needs to access public e-government services via the internet and improve their quality of life through the general use of computers and the internet. We are constantly developing course content for ABC of the Internet and adding new modules and up-to-date information on the most popular topics. The content is defined by course participants and internet users.

ABC of the Internet – a programme offering quality training on basic computer and internet skills for senior citizens and people with disabilities.

IMPLEMENTING THE ABC OF THE INTERNET PROJECT, 2017–2018

<table>
<thead>
<tr>
<th>NUMBER OF SENIOR PARTICIPANTS</th>
<th>FUNDS ALLOCATED FOR THE PROGRAMME</th>
<th>NUMBER OF TRAINING MODULES</th>
</tr>
</thead>
<tbody>
<tr>
<td>65,000</td>
<td>2,250</td>
<td>5</td>
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</table>

1. The WSIS Forum is one of the world’s largest annual meetings of the Information and Communication Technologies for Development community.
An electronic version of the guide is available on the training portal established within the project: www.azbukainterneta.ru. The course comprises 14 chapters and includes training materials. Guidelines on teaching senior citizens basic computer and internet skills, visual aids, presentations, and useful links are also available on the portal.

All ABC of the Internet programme materials are available for download and consistently updated and supplemented. The site contains a version for the visually impaired.

Rostelecom’s ABC of the Internet and Classroom Internet educational projects were among the winners of the first regional Leaders in Corporate Philanthropy contest held in Siberia. Both projects are part of the Company’s Digital Equality programme and won the prize in the Leadership in Innovation in the Social Sector category. Rostelecom’s contribution to Philanthropy Management and Management Processes was also recognised. The contest is held by the Russia Donors Forum, an association of the largest grant-making organisations in Russia. For 11 years, it has been assessing the social responsibility of businesses in Central Russia. In 2018, other regions had the opportunity to participate in the contest for the first time.

The new training module of Rostelecom’s and the Pension Fund’s ABC of the Internet programme is Video Communication over the Internet. This next part of the course contains an overview of software used for communicating on the internet via webcam. During the course, students become familiar with the most widely used programmes for video communication, including the differences and functions of each and how to install them. Students can also refresh their knowledge of safe internet use when browsing and particularly when making video calls.

Rostelecom and the Pension Fund of Russia developed another training module to teach basic tablet computer skills in 2018. The module provides detailed information on the distinctive features and basic skills needed to use tablets, describes the capabilities of app stores with recommendations on how to safely install new applications, and contains detailed guidance on choosing a tablet.

The ABC of the Internet training programme and study guide materials were reviewed by the Institute of Education Informatisation of the Russian Academy of Education. The Institute concluded that the materials meet all the requirements to be classed as educational materials, have been published in a timely manner, and are useful and necessary for their target audience.

Rostelecom’s corporate volunteers are actively engaged in the ABC of the Internet project, which has not only enabled the project to be facilitated by an ample number of volunteers, but has also raised the number of Rostelecom employees involved in the Company’s social projects. Our volunteers organised computer skills trainings on a mass scale during their off-hours at the Company offices.

**ABC of the Internet in Kalmykia**

In July 2018, another group of 16 people completed the ABC of the Internet course in computer skills at the Republican Centre of Integrated Social Services in the city of Elista. Since the launch of the project in June 2016, over 400 senior citizens in the Kalmykia Republic have learned the basics of using computers, text applications, and photo editors, and got to know how to use the internet and communicate on social networks. The nationwide ABC of the Internet project is run in Kalmykia through the Republican Centre of Integrated Social Services. About ten to twenty senior citizens complete the course every month.
“I sincerely admire the graduates of the ABC of the Internet course. With their rich life experience, they take advantage of a well-deserved rest to lead an active life, attend computer courses, study modern technology, travel, and enjoy life. ABC of the Internet remains one of Rostelecom’s most important projects.”

— Sergey Ovsyannikov, Acting Director of Rostelecom’s Kalmykia Branch

The nationwide contest Thanks to the Internet 2018!

Within the ABC of the Internet programme, Rostelecom holds the nationwide contest for seniors’ personal achievements in computer skills, Thanks to the Internet!, aimed at increasing the number of users on the public services portal (www.gosuslugi.ru), promoting an active senior lifestyle, and encouraging widespread computer literacy training among senior citizens and people with disabilities.

Nine contestants are over the age of 90 – eight men and one woman. At 91 years old, Boris Stepanov, a resident of Marks in the Saratov Region, said that he communicates with his family via Skype, gets the weather forecast on the internet, plays online chess, and researches his hobby:

“I like music very much. I play the accordion and sing. On the internet, I search for recordings of talented performers and learn something from them, like picking up lyrics and rehearsing a performance.”

— Boris Stepanov, a resident of Marks in the Saratov Region

Another eight participants in the course above 90 years of age from other Russian regions have shared their experiences. Organisers noted an increased interest among elderly users to study software, and further encouraged them to lead an active life.

“Another eight participants in the course above 90 years of age from other Russian regions have shared their experiences. Organisers noted an increased interest among elderly users to study software, and further encouraged them to lead an active life.”

— Yuri Soldatenkov, Director of the branch in the Bryansk and Orel Regions

ABC of the Internet in Orel

2018 marked eight years since Rostelecom began training Orel seniors on how to use the internet. During this time, 2,500 Orel residents completed the ABC of the Internet course. Rostelecom’s training process is aimed at providing computer skills for using the public services (e-government) portal. These skills are crucial for senior citizens, as over one hundred federal, regional, and municipal public services in the Orel Region are provided electronically.

“The internet remains a mystery for many older people. Rostelecom helps them discover this world. Each of our graduates can work with standard office applications, search for information on the internet, and use public services and social media. Seniors now have many opportunities to both communicate and solve all sorts of everyday tasks.”

— Yuri Soldatenkov, Director of the branch in the Bryansk and Orel Regions

“We had three times as many course entrants from Saratov as last year. Our region is among the ten most active in computer skills training for seniors. Older people are making an effort to keep up with the younger generations, and we help them master advanced digital technology through the ABC of the Internet study guide and portal.”

— Dmitry Moiseev, Director of Rostelecom’s Saratov Branch
Ninety-year-old Nikolay Ivanov, Ph.D. in biology from Saint Petersburg, won third place in the My Internet Achievements category. In his entry, he retold how the internet helps him prepare and give lectures on living a healthy life.

For the third year in a row, the Republic of Tatarstan won the Most Active Region category with 506 participants. The Voronezh Region takes second place with 331 participants, and the Moscow Region is third with 179 participants.

**Growth**

The fourth Thanks to the Internet 2018! contest welcomed 3,383 people from 74 Russian regions, a 22.7% increase in participation from 2017. Women make up 84% of participants. The mean age of the participants is 63 years.

**THE GROWTH PROJECT, 2017–2018**

**NUMBER OF PARTICIPANTS**

<table>
<thead>
<tr>
<th>200</th>
<th>170</th>
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<tr>
<td>150</td>
<td>95</td>
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<tr>
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<td>50</td>
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| 2017 | 2018 |

**NUMBER OF INSTITUTIONS COVERED**

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<td>1</td>
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</tbody>
</table>

| 2017 | 2018 |

**NUMBER OF GROWTH PROJECT PARTICIPANTS WHO PASSED THE STATE EXAMS**

<table>
<thead>
<tr>
<th>80</th>
<th>69</th>
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<tr>
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<td>12</td>
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**Growth** is a distance learning project to promote development, education, socialisation, and employment, run jointly by Rostelecom and Autonomous Non-Commercial Organisation ROST. The project was developed for children in orphanages and foster homes, as well as those deprived of parental care, providing children with access to quality individual education over the internet and a healthy social environment while paving the way towards gainful employment in the future. Special digital educational materials such as electronic textbooks combining various kinds of educational text, interactive theoretical and practical materials, video tutorials, and audio and video commentaries from teachers have been developed for the project.

During Rostelecom’s partnership with ROST, many children have successfully passed exams to enter various educational institutions.

Rostelecom’s support enabled a presidential grant, following which the number of students participating in the Growth project during the 2017/2018 school year increased dramatically.

The project has expanded, reaching three new regions, in which ten institutions have joined the project, and more than 4,800 lessons in total have been held in all subjects of the school curriculum.

During the school year, 67 students (38.4% of all Growth project participants) passed the state exams; forty-five students passed the ninth grade and twenty-two passed the eleventh grade. All eleventh-grade graduates successfully passed the national Unified State Exam and got the opportunity to enrol for tertiary education. Of those who passed the state exam, 42 students received grades that exceeded expectations.
Investing in Society

IT Growth project

Rostelecom and the youth volunteer organisation AIESEC have been jointly running the IT Growth project for five years, helping students improve their IT knowledge. Media security was the project’s main topic in 2018, with the goal of teaching the history of the internet, types of malware, methods of protecting against viruses, types of fraud, and how to competently navigate the information space. For six weeks, lectures and master classes were conducted by foreign volunteers from ten countries in seven Russian cities.

Senior students from China, Egypt, Colombia, Algeria, India, Austria, Italy, Ghana, Turkey, and Togo taught Russian schoolchildren on digital trends.

In running the IT Growth project together, AIESEC and Rostelecom create an innovative educational environment that meets the demand of IT companies for highly qualified specialists and school graduates wishing to master skills in one of the fastest growing industries. The project contributes to increasing the number of young people who possess the technical knowledge and skills needed to become successful professionals in the IT industry in the near future. The project provides seminars, master classes, career guidance classes, and excursions.
Learn the Internet – Manage It!

Learn the Internet – Manage It! is a socio-educational project for school students using a modern interactive format to teach the basics of the internet, its tools, and capabilities. The project is organised by the Coordination Center for TLD RU and PJSC Rostelecom.

LEARN THE INTERNET – MANAGE IT!, 2017–2018

REGISTERED PORTAL ACCOUNTS

LEARN THE INTERNET – MANAGE IT! NATIONWIDE ONLINE CHAMPIONSHIP PARTICIPANTS

Funds allocated for the project by Rostelecom

RUB thousand

NATIONWIDE ONLINE CHAMPIONSHIP

SCHOOL OF REAL DEEDS

LOCAL ONLINE TOURNAMENTS

ON-SITE EVENTS

2017

1

1

88

10

2018

1

1

91

10

Provided in an accessible and entertaining format, the project offers education on the internet, the operation of basic IT services, and safe surfing. The project also includes a training app for mobile devices to improve and maintain the knowledge gained. Based on the project, IT marathons and quizzes are held, as well as the main event of each year – the Nationwide Online Championship on Cyber Literacy, where each participant can compete for top places and valuable prizes.
By the Safe Runet Week 2018 – the main Russian event dedicated to safe and positive use of digital technology – PJSC Rostelecom, together with the Coordination Center for TLD RU had launched a new game module within the Learn the Internet – Manage It! educational project about phishing.

**Learn the Internet – Manage It! in Altai**

From 23 to 30 June 2018, the 7th International Forum Electronic Week in Altai – 2018 events took place in Barnaul and its suburbs. This is one of the largest IT events in the region, a professional educational platform for sharing experience and discussing the latest IT applications across all fields and industries. The Coordination Center for TLD RU and PJSC Rostelecom were partners of the week.

Within 60 minutes, participants had to complete tasks of varying levels of complexity based on the key IT trends of 2018 and technology of the future: robotics, artificial intelligence, the Internet of Things, blockchain technology, virtual and augmented reality, telemedicine, and cybersecurity. School students also had the opportunity to improve their results by completing additional tasks: conducting online tournament training for Learn the Internet – Manage It! at school, or posting news about the championship on social media, at school, or in the local media.

**Internet for Social Infrastructure Facilities in Vladimir**

In May 2018, Rostelecom presented a platform integrating library and information centre resources at the School Libraries section of the All-Russian Library Congress in Vladimir. The main topic of the congress was, “Based on the past, we build the future. The role of cultural heritage in transforming library science in Russia.” The event’s aim was to develop a concept for library development in the Russian Federation.

“A platform integrating library and information resources transforms a modern library into a media centre with a wide variety of uses. It can serve as a foundation for e-learning opportunities in our region. The catalogue has already collected more than 1,100 textbooks from the federal list as well as over 500 fiction books, and the numbers continue to grow.”

— Pavel Shatokhin, Director of Rostelecom’s branch in the Vladimir and Ivanovo Regions

**Internet for Social Infrastructure Facilities in the Voronezh Region**

In 2018, Rostelecom became the provider of the Digital School of the Voronezh Region project, connecting 773 regional institutions to the internet. The Company will provide the internet to 773 regional institutions of general and professional education in four stages. The work will be completed in April 2020.

“The Digital School of the Voronezh Region programme will expand opportunities for organising education. We will provide equal access to quality education for residents in distant rural areas. The project will help schools that show consistently low results and provide improved support for teachers throughout the entire region.”

— Alexander Mitrofanov, First Vice Rector of the Voronezh Institute of Education Development

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1. A platform integrating library and information resources is a comprehensive automated IT solution that includes an electronic library, a unified reporting system, a media player, and other features, and provides access to various types of educational resources such as textbooks, books, journals, popular science periodicals, dictionaries, and manuals. The content can be played both online and offline on personal computers and tablets.
Internet in the library of an old Karelian village

The Company focuses on providing the internet to the libraries in remote settlements. At the end of August, Rostelecom's Karelia Branch connected a general education school in the village of Voknavolok to the internet. The indigenous settlement is located in the north of the Republic of Karelia, 59 km from the town of Kostomuksha. Following the connection, school students and teachers got access to the internet at a speed of up to 10 Mbps.

Computerisation of Orphanages

“Unfortunately, the number of visually impaired children is increasing. Our school is the only educational institution in the Irkutsk Region attended by more than 50 blind and 137 visually impaired children – 10 of whom are orphans and children deprived of parental care. They all need help, and since specialised equipment and software cost more than their common equivalents, the help of Rostelecom is invaluable for us.”

— Ivan Makarenko, Director of Boarding School No. 8

THE COMPUTERISATION OF ORPHANAGES PROJECT, 2017–2018

Within the Computerisation of Orphanages project, Rostelecom provides children with computer equipment and communication tools to learn from the most up-to-date information resources. The project helps school students learn how to solve various practical challenges using advanced information and communication technologies, ICT tools, and open information sources that will be useful when choosing a future profession.

Computerisation of Orphanages in Irkutsk

In January 2018, schoolchildren of Irkutsk Boarding School No. 8 for visually impaired students received special equipment for the computer lab as a gift from Rostelecom. Now, visually impaired and blind schoolchildren have more possibilities for studying computer technology, mastering the internet and new software applications.

“Unfortunately, the number of visually impaired children is increasing. Our school is the only educational institution in the Irkutsk Region attended by more than 50 blind and 137 visually impaired children – 10 of whom are orphans and children deprived of parental care. They all need help, and since specialised equipment and software cost more than their common equivalents, the help of Rostelecom is invaluable for us.”

— Ivan Makarenko, Director of Boarding School No. 8
Thanks to Rostelecom’s Distance Learning for Disabled Children project, children with disabilities study the school curriculum at home. Teachers participating in the project take special courses to provide distance education for school subjects. Students are taught in real time through interactive video lessons, during which teachers guide students and evaluate their progress.

**Distance Learning for Disabled Children**

**THE DISTANCE LEARNING FOR DISABLED CHILDREN PROJECT, 2017–2018**

**CHILDREN WHO RECEIVED ACCESS TO DISTANCE LEARNING**

<table>
<thead>
<tr>
<th>Year</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>625</td>
</tr>
<tr>
<td>2018</td>
<td>1,001</td>
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</tbody>
</table>

“Thanks to Rostelecom’s Distance Learning for Disabled Children project, children with disabilities study the school curriculum at home. Teachers participating in the project take special courses to provide distance education for school subjects. Students are taught in real time through interactive video lessons, during which teachers guide students and evaluate their progress.”

— Raissa Kassina, Minister of Education and Science of the Perm Territory

**Distance learning in the Perm Territory**

In 2018, Rostelecom and the Ministry of Education and Science of the Perm Territory signed a government contract to organise distance learning for children with special needs. Under the contract, Rostelecom will create jobs for training and provide access to educational resources and information systems of the internet.

As part of the project, 41 more children will receive a set of the latest equipment: a computer, a microphone, headphones, a graphics tablet, a printer and scanner, a digital camera, a digital microscope, and a set of equipment for physical testing and physiological observations. Software and hardware sets for teachers providing the children’s education will be also installed at 14 schools in the region. The highly qualified teachers involved in this project have received special training and possess the necessary skills and educational practices to ensure a quality education for children with special needs.

“Thanks to Rostelecom’s Distance Learning for Disabled Children project, children with disabilities study the school curriculum at home. Teachers participating in the project take special courses to provide distance education for school subjects. Students are taught in real time through interactive video lessons, during which teachers guide students and evaluate their progress.”

— Raissa Kassina, Minister of Education and Science of the Perm Territory

**Distance learning in Dagestan**

In Dagestan, Rostelecom provided access to the internet for schoolchildren with developmental disabilities. Rostelecom specialists connected the home computers of 486 children to a distance learning centre in Makhachkala. The internet access also includes protection against inappropriate content. In accordance with internet security standards, the system restricts sources containing information prohibited by Russian laws. The project was implemented under a government contract with the Ministry of Education and Science of the Republic of Dagestan.

“To provide schoolchildren with equal conditions for education, we had to solve a difficult task. The technical conditions across the republic are not the same everywhere, and therefore we provided access depending on the requirements of each specific settlement. Our solutions included the installation of fibre or copper, while the more complex technical solutions involved connecting radio access or satellite communications in remote, hard-to-reach locations with mountainous terrains, as well as establishing combined networks in some places. Now we can report with satisfaction to our fellow countrymen that our children have all the necessary conditions for a proper education, regardless of their place of residence or the state of their health.”

— Ruslan Yarakhmedov, Director of Rostelecom’s Dagestan Branch
Distance learning in the Republic of Mari El

In the village of Kuchka in the Republic of Mari El, a dish with an amplifier station was installed in 2018 on the front of 11-year-old Diana Shevnyakova’s house to receive signals from a nearby cell tower for her distance learning. The signal reaches Diana’s home computer via a network cable. The internet connection speed is up to 10 Mbps.

“Nina Shevnyakova addressed the regional office of Rostelecom with a request for an internet connection. There are few residents and no optics in her village, which is not included in the BDD (Bridging the Digital Divide) programme. The only possible option was to set up a GSM channel. We organised dispatch of a mobile team. Our specialists installed a dish with a signal amplifier, as the nearest base station is in Orshanka, 8 km from the Shevnyakov home. There was a risk that the signal would not reach the dish, but we made it work. Now Diana has high-speed internet for her studies.”

— Vladimir Sergeyev, Deputy Head of the line support facility of the interregional telecommunications operation and maintenance centre of Orshanka village

“We are very happy that our daughter will be able to continue her studies and have the opportunity to fulfill her dreams. Remote technology will also help Diana communicate with her schoolmates and friends at any distance.”

— Nina Shevnyakova, Diana’s mother

Social Impact Award programme supporting social enterprise among young people

Social Impact Award (SIA) is an international programme promoting social enterprise among young people, developed in 2010 by the University of Vienna with participation from the international Impact Hub network.

In 2018, 98 applications were submitted for participation in SIA, with 13 proposed projects from 8 cities getting to the finals and the winners offered free tuition for an incubation programme. Following the contest results, two projects won the main prize – money and a trip to Tbilisi for the international meeting of the winners.

In Russia, four projects competed in Rostelecom’s Internet for a Better World category: SkillsBooster, a project aimed at teaching and employing young IT specialists (Saint Petersburg); Goody, an online platform for requesting and providing help (Moscow); LifeTalk, an application and online course for learning sign language (Ufa); and YouTalk, a service providing psychological help (Moscow). The winner was the start-up YouTalk, which provides an opportunity for different groups of people, including those with limited mobility, to receive psychological support online.
“The use of IT in social projects is crucial, as it can cover a significant number of people and improve their lives. The YouTalk team has achieved significant results working on their project. The winners in our category clearly identified the main recipients of their charitable endeavours and developed a sustainable business model providing consistent assistance.”

— Juliana Sokolenko, Deputy Director of Roskom’s External Communications Department

The internet can be a helping hand for non-commercial organisations to achieve financial sustainability by opening up new sales opportunities (within legal restrictions), informing more people, and attracting more funds to the organisation’s activities. Impact Hub’s Internet for a Better World programme hosts webinars and provides IT support for non-commercial organisations. Preparation for the competition involves open seminars, video lectures, and master classes covering key topics from researching a target audience to writing a business plan. The programme is aimed at supporting the IT initiatives of pre-selected non-commercial organisations by ensuring their stable collaboration with involved IT specialists.

Proektoria

The Proektoria nationwide career guidance forum (formerly – Future Intellectual Leaders of Russia) brings together experts from major Russian companies and universities, the country’s best teachers, and motivated school students to solve current issues in career guidance and self-determination. The project has several different formats – open lessons, career festivals (ProfProba), as well as a final forum in Yaroslavl. Each lesson is held as an online broadcast simultaneously participated in by more than 20 thousand schools and connecting four Russian regions via teleconference. Rostelecom provides technological support and high-quality digital services for the project at each stage. For more details see www.proektoria.online.

Proektoria in Yaroslavl

Rostelecom was a partner of the Proektoria nationwide career guidance forum held in Yaroslavl from 11 to 14 December 2018. During the Forum, Rostelecom specialists told school students about the trends in digital economy development and the professions most in-demand by the industry, gave lectures on the importance of protecting information, demonstrated their own Cyber Security Centre, and held practical exercises on building a smart school network.

“The forum is intended to help shape the intellectual leaders of the future and to help children make the right choice and their professional contribution to the development of the country.”

— Mikhail Oseevsky, President of PJSC Rostelecom

Quantorium

Quantorium children’s technopark is a modern form of additional education for schoolchildren. It is aimed at reviving the prestige of engineering and scientific professions and training future highly qualified personnel in this area.

Children’s technoparks are being built across Russia on the instructions of the President within the Russian Government priority project, Accessible Additional Education for Children. Rostelecom is launching its own initiative to support this focus area in all Russian regions. At Quantorium, Rostelecom opens demonstration zones for innovative developments. For example, in a number of Quantoriums, the Company built a zone for a Smart Home system to show schoolchildren an out-of-the-box solution for ensuring safety and comfort of housing, and enabling the household to be monitored around the clock in real time. For more details on Quantorium technopark see https://www.roskvantorium.ru/.
Quantorium in North Ossetia

Rostelecom connected the Quantorium children’s technopark in Vladikavkaz to the internet at a reduced tariff. At the Company’s own expense, specialists laid a fibre-optic communications line with a capacity of up to 100 Mbps. Rostelecom also provided Wi-Fi access at the technopark.

“By 2024, 245 stationary and 340 mobile Quantorium technoparks, 340 IT Cube children’s creativity centres, and 100 centres for modern skills development for children based at universities will operate in Russia.”

— Maxim Inkin, Acting CEO of the Foundation for New Forms of Education Development, the federal operator of the network of Quantorium children’s technoparks

Quantorium in Kaluga

Rostelecom’s Kaluga Branch began cooperating with the Quantorium children’s technopark, opened on 13 December 2018 in Kaluga. The Company provided the technopark with internet access and equipment for the project activities section. Rostelecom’s smart stands, featuring a Smart Home interactive game and an extensive electronic library, help children master interaction with advanced intelligent systems and succeed in personal development using digital technology.

“A partnership with a national digital provider is essential for us. The demonstration zone will be the first of our joint projects. Rostelecom’s smart stands are already well-favoured by the first users – working with them is exciting, informative, and accessible for both children and adults.”

— Alla Kononova, Director of the Quantorium children’s technopark in Kaluga

Safe Internet

Under the project, Rostelecom employees hold open lessons on the Safe Internet among schoolchildren, at parent-teacher conferences, and training seminars for teachers. The Company actively runs its long-term project on safe internet in a number of federal districts, and intends to scale up and roll out the project in all regions of the Company’s operation.

The project’s goal is to develop skills for competent, safe, and responsible online behaviour among younger generations, as well as raise awareness of the need to inform children and parents of threats, personal data and computer protection methods, and the legal, social, and psychological consequences of inappropriate behaviour on the internet. The target audience of the project are schoolchildren and their parents, and the second largest audience will soon be the older generation. The project is focused on the following internet risks:

- Dangerous content
- Cyberbullying
- Meeting online strangers
- Cyber fraud and viruses
- Internet addiction

Safe Internet in the Vologda Region

As part of the nationwide Secure Internet campaign, classes on internet security are held annually for school students from grades 5 through 9. One of these lessons was held at the Musorskaya school of the Sheksninsky district in the Vologda Region. The schoolchildren learned how internet resources are protected from malicious content. For example, all Rostelecom’s subscribers have had a content filter since 2015. It is actively used in schools throughout the Vologda Region. The programme blocks forbidden websites, certain content in web pages, and pop-ups, filters text queries in a search engine, protects resources from malicious programmes, and analyses URL requests. A separate topic with the schoolchildren were threats they might encounter on the internet, such as phishing, spam, and trolling. The children were taught how to protect themselves from negative content and malicious software, as well as use their personal data smartly and maintain confidentiality and civility when communicating with other users. Internet security classes are held in the region’s schools throughout the school year.
Investing in Society

“The main goal of these lessons is to increase the internet skills of the younger generation. The lesson combines educational material with interactive activities for enabling a stronger grasp of the information. The children were given basic knowledge of the global network, the development of technology providing internet access, and the capabilities of modern electronic services. According to statistics, 98% of school students actively use the internet – it has become an integral part of their lives, which is why it is crucial to teach teenagers awareness and responsibility when consuming information online.”

— Andrey Ganov, Director of Rostelecom’s Vologda Branch

Safe Internet in Ulyanovsk

Rostelecom’s Ulyanovsk Branch organised a lecture, Safe Internet, for the students at Special (Correctional) Comprehensive School No. 39 in Ulyanovsk. The Company’s employees told the children about modern types of online threats and ways to protect computers and mobile devices from malicious programmes and online fraudsters. A quiz was held at the end to help solidify the information. Over 20 children took part in the event. The Ulyanovsk Branch plans to continue engaging with the school in 2019, during which the branch will hold Safe Internet lectures and an excursion for the students to the Rostelecom office.

“Modern children spend a lot of time on the internet: looking for information when preparing for lessons, chatting with friends on social media, watching movies, and playing games. Besides useful materials, a lot of negatively-charged content also exists online, and schoolchildren should be protected from this. Today, Rostelecom specialists told the children about information threats and the basics of online behaviour. I am sure that the knowledge gained will be useful for children and will help prevent sticky situations.”

— Margarita Ponomareva, Principal of Special (Correctional) Comprehensive School No. 39

Safe Internet in Yuzhno-Sakhalinsk

Safe Internet lessons are held at secondary schools in Yuzhno-Sakhalinsk twice a year. They are organised by PJSC Rostelecom, the Ministry of Education of the Sakhalin Region, and administrations of the schools involved in the project.

“It is great that today, in lessons and extracurricular activities, schoolchildren can learn how to behave on the internet, learn to analyse the reliability of information, protect their personal data, and make safe purchases in online stores. Children learn to understand and evaluate the risks and harm that certain internet sites can cause.”

— Natalia Murashova, Minister of Education of the Sakhalin Region
Classroom Internet

The organisers of Rostelecom’s Classroom Internet contest aim to use the wide variety of opportunities and resources on the internet to make the real world more interesting, bringing practical benefits and supporting self-development. The main goal of the contest is to guide schoolchildren and teachers in using and becoming accustomed with various kinds of internet technology. Classroom Internet has been running since 2015. For more details see www.safe-internet.ru.

In 2018, a series of webinars for teachers on the use of modern technology in the classroom were held as part of the contest, with the topics of: blended learning technology, development and use of digital workbooks, and information visualisation technology using electronic teaching aids. Blended learning is a modern educational approach drawing on the concept of combining classroom learning and e-learning based on new didactic opportunities provided by ICT and modern teaching aids, was discussed at webinars.

“We got acquainted with new technology as part of the digital school programme. Blended learning allows class activities to be organised from a new angle. This technology gives students an opportunity to learn new material individually, but does not prevent them from live communication with their peers and teacher. In the digital school era, this technology can be used by most schools.”

— Julia Pupynina, Deputy Principal of Secondary School No. 2 in the village of Kinel-Cherkassy in the Samara Region

Given the strong interest in the subject, Rostelecom will continue to hold webinars for teachers on technology in the classroom.

Specialised cyber security session at Sirius Educational Centre

Sirius Educational Centre was established in Sochi by the Talent and Success Educational Foundation based on Olympic infrastructure at the initiative of the Russian President for the early detection, development, and further professional support of gifted children who have shown outstanding abilities in the arts, sports, and natural sciences, as well as those who succeed in technical creativity. 800 children aged 10 to 17 years from across Russia come to Sirius every month. They are accompanied by more than 100 teachers and trainers. The educational programme lasts 24 days and includes both occupational lessons and leisure activities such as master classes, creative meetings with professionals recognised in their fields, a variety of recreational activities, as well as general education during the school year. Rostelecom was invited as a partner to develop specialised programmes and projects on information security, education, and new technology for the Centre.

For more details on Sirius Educational Centre see www.sochisirius.ru.

In November 2018, the first educational programme on cyber security for schoolchildren was held at Sirius, supported by representatives of the IT Education Development Centre of the Moscow Institute of Physics and Technology (MIPT), and Rostelecom’s Department of Talent Management. The programme was attended by 60 schoolchildren in grades 8 through 11 from 27 Russian regions of Russia, who had won the nationwide online competition held by the digital services operator in September 2018. They scored maximum points and were interviewed by Rostelecom experts. Within one month, high school students were tasked with mastering a set of tools, strategies, and principles ensuring cyberspace protection.
“The cyber security session at Sirius gathered gifted children from all over Russia. The future of the industry and the country’s aptitude in cyberspace depend on them. Being a market leader, we must make every effort to create an effective nationwide programme that covers not only universities but also schools, and supports national talent in information security.”

— Igor Lyapunov, Vice President for Information Security of PJSC Rostelecom

Sirius for the winners of the Cyberchallenge

In September 2018, Rostelecom held the nationwide Cyberchallenge Competition on information security. Its participants were schoolchildren in grade 8 through 11 skilled in programming. A total of 4,300 schoolchildren participated from most regions of Russia and the CIS countries. For several days, the children competed for a place among the 80 finalists. Tasks on searching for web vulnerabilities and cryptography proved popular among the contestants. The Cyberchallenge contestants also noted the high level of the event’s organisation and the lack of triviality in the proposed tasks. 60 winners won a trip to Sirius Educational Centre in Sochi.

Rostelecom Lyceum project

The Rostelecom Lyceum project is a service for schoolchildren and their parents offering a wide choice of educational courses and supplements. The platform provides high-quality, safe, and accessible extracurricular activities and courses, such as courses preparing for the OGE (Basic State Exam) and the EGE (Unified State Exam) and deepening knowledge in any subject, including English. The system can provide career guidance and help to find a suitable university, while a personal curator can help choose a development programme for a child and answer any questions from the parents. Class schedules and student performance can be tracked in the personal account on the portal. Top education specialists are involved in the Lyceum project, which helps guarantee positive results.

All details on the Rostelecom Lyceum platform are available at www.lc.rt.ru.
Useful Internet

In 2018, more than 500 children aged 12 to 16 years from Krasnoyarsk and Abakan took part in the Useful Internet seminars. Specialists from Rostelecom’s Krasnoyarsk Branch have been contributing their efforts to this educational project for three years now. Its goal is to foster a conscious attitude towards virtual reality among teenagers.

At the Useful Internet lessons, Rostelecom volunteers acquaint children with interesting facts from the history of the internet and talk about the basics of cyber security and the rules of online etiquette. A significant part of the Useful Internet seminar is dedicated to social media addiction and ways to prevent and overcome it. Events are held as a live discussion.

This year, the Useful Internet course went beyond schools and children’s summer camps and successfully joined the programme of the Summer in Krasnoyarsk youth leisure project implemented with the support of the city administration. Rostelecom held here a series of exclusive educational seminars for teenagers. Over 70 children took part in events held in July and August. Rostelecom specialists interacted with teenagers in an exciting way intended to make them feel like they were on a roller coaster ride. After a thorough and almost academic immersion into the history of communications in the Krasnoyarsk Territory and the origins of the communications specialist profession, based on the corporate museum, the children took part in a hot debate on cyber security during the Useful Internet seminar.

“The children liked everything, particularly the Museum of Communications with its unique exhibits and the history of the profession. The Useful Internet seminar was also of great interest. I can confidently say now that our cooperation with Rostelecom will progress from here and continue beyond the summer time.”

— Elena Bershadskaya, Youth Specialist at the Centre of Travellers Municipal Youth Autonomous Institution in Krasnoyarsk, curator of the Summer in Krasnoyarsk project

Summer in Krasnoyarsk is an innovative project organising productive leisure for teenagers staying in the city for the summer holidays. Together with the city’s largest enterprises, exclusive excursions for children on local history, education, and career guidance have been specially developed. The project is unique and currently unparalleled in Russia.

2018 Mashuk Youth Forum

Rostelecom was the telecoms partner for the 2018 Mashuk North Caucasus Youth Forum held in Pyatigorsk. The Company provided participants and organisers with wired and wireless internet access with a data transfer capacity of up to 20 Gbps.

As always, Rostelecom’s interactive stand was very popular among all participants. The Company held dozens of World of Tanks tournaments, intellectual competitions, and table football championships.

“This year, Mashuk gathered more than 2,000 young people from different regions across Russia, each of them learned something new, found new friends, and tried out deploying their own projects. Organising the forum was challenging, but thanks to Rostelecom and our other partners, we held a high-level event. Today, the internet is an integral part of any project, especially a youth project.”

— Dmitry Donetsky, Director of the 2018 Mashuk North Caucasus Youth Forum
Investing in Society

Charity and Volunteering

Rostelecom employees are actively engaged in volunteering and charity activities, programmes, and events, and their numbers increase with every year. Helping children in difficult life circumstances is one of the key areas of Rostelecom’s social policy. Our volunteers help by organising social and vocational guidance events at orphanages, become mentors for orphans, help run educational projects such as taking part in activities encouraging vocational self-determination among high school students, donate personal funds to help seriously ill children and lonely elderly people, and participate in charity races and blood donations. Many volunteering projects run over several years and cover almost all regions of the Company’s operations. There are also many targeted, but no less important projects.

In 2018, PJSC Rostelecom (including its subsidiaries and affiliates) allocated RUB 193,320,180 to charitable causes. In 2017, RUB 169,764,000.

Run and Help

For the first time in the Company’s history, Rostelecom, together with the Life Line charity foundation, launched the nationwide Run and Help sports charity project. The project matches RUB 10 for every kilometre run by Rostelecom employees, covering the total 100 thousand kilometres run and resulting in RUB 1 million, which was then donated to the Life Line foundation for treating children with severe and rare diseases. The project began in April, bringing together more than 1,500 runners among employees and 500 volunteers from across the country within five months.

The Run and Help project was also designed to help get Rostelecom employees involved in a healthy lifestyle. The project helped running fans meet up and independently organise group training. This had a positive effect on employee communication within the Company and helped them solve their tasks more effectively. The Company’s management highly appreciated the involvement of employees and supported the idea to prolong this important social project.

“It is so great and so important when employees unite to train together. They meet at the races, support colleagues, and involve more and more new employees in this project. We are happy that Rostelecom does good deeds and not only helps children from the Life Line charity foundation, but also cares for the health and well-being of its employees, making sports accessible and desirable.”

— Natalia Vorobyova, representative of the running school I LOVE RUNNING

The goal of the project was achieved. In October 2018, Rostelecom transferred RUB 1 million to the Life Line charity foundation for an endoprosthesis for Maxim Bashkirev, who had previously been diagnosed with bone cancer.
At the 11th People Investor 2018 Forum, our Run and Help project made it to the top four social projects in the Healthy Lifestyle category. In total, 70 applications from large Russian and international companies were submitted to the contest in this category. The contest was organised to identify the most successful practices improving the physical and emotional well-being of Rostelecom employees.

Rostelecom is launching the second stage of Run and Help in 2019. Employees will be able to engage not only in jogging and walking, but also swimming and cross-country skiing. To bring participants closer to a new common goal, all kilometres will be tracked on the online platform. The money raised will be used by the Life Line charity foundation to fund endoprosthetic surgeries.

Exciting Readings

Exciting Readings is a joint project of Rostelecom’s Krasnoyarsk Branch and Komsomolskaya Pravda Publishing House. Its first stage took place in April 2018. To date, the project has covered five children’s medical institutions in Krasnoyarsk and five in the Republic of Khakassia. About 200 children and teenagers came to listen to the open readings, and received books and CDs with cartoons as a gift.

Exciting Readings in Krasnoyarsk

The Company’s volunteers held the first meeting in March for patients of the Department of Oral and Maxillofacial Surgery of the Krasnoyarsk Interdistrict Children’s Clinical Hospital No. 5. Rostelecom’s volunteers read aloud short stories and poems from the book I Love to Walk on the Clouds by the famous children’s writer Anastasia Orlova. All the stories in the book are told from the point of view of a six-year-old boy. The goal of the Exciting Readings project is to revive the tradition of reading out loud collectively, impersonating characters, and exchanging opinions and ideas.

In addition to reading aloud, the project organisers hold creative master classes in hospitals. They teach the basics of puppet drama, make cut-outs or drawings from fairy tales with children, construct flying rockets, and organise other interesting activities.

“Digital cloud technology is the scope of our Company, but we understand how vital human warmth and attention are for children staying at the hospital, often without parents. I am sure that this kind of interaction will help children take a fancy to reading, as well as enrich both the children and our volunteer employees.”

— Sergey Shol, Director of the Krasnoyarsk Branch – Technical Director at PJSC Rostelecom

For five days, the Rostelecom’s team visited hospitals No. 1, No. 4, and No. 5, as well as Krasnoyarsk Interdistrict Clinical Hospital No. 20 named after I.S. Berzon and Krasnoyarsk Regional Clinical Center for Maternity and Childhood Protection. Volunteers visited children from the trauma unit, the cardiology ward, the oral and maxillofacial surgery wards, and the burns unit.

Exciting Readings at children’s hospitals in Khakassia

The initiative received such a warm reception that the organisers decided to bring it to large settlements in Khakassia. The second stage of Rostelecom’s Exciting Readings charity project covered five children’s medical institutions in Abakan, Bely Yar, Sayanogorsk and Chernogorsk, as well as the children’s department at a tuberculosis dispensary in the capital of Khakassia.

“Urban and rural hospitals don’t have educators, and young patients are often left by themselves. Books for different ages are a good choice to make sure everyone involved gets something positive from the experience. All the books are large and very colourful, with familiar heroes from films and cartoons. We thank Rostelecom for the productive partnership in this project, which is social in essence and empathetic in content.”

— Tatiana Aronova, Editor at the Special Projects Department of Komsomolskaya Pravda – Krasnoyarsk Publishing House
Investing in Society

The idea of Exciting Readings was also supported by Krasnoyarsk libraries. Librarians and Rostelecom employees continue to spend time with children in hospitals.

Exciting Readings will not be limited to the Krasnoyarsk Territory and the Republic of Khakassia. Rostelecom employees from other regions are planning to follow this successful example to involve as many branch employees in the volunteer movement as possible.

Want to Be!

Rostelecom is actively engaged in the Want to Be! charity programme organised by the AIF. Dobroye Serdtse (AIF. Kind Heart) charity. It is focused on providing targeted assistance to children suffering from chronic renal failure, who have recently undergone or are preparing for a kidney transplant. The programme also aims to foster the children's interest in various professions, helping them to further understand their creative and intellectual potential and decide what they want to do when they grow up.

In 2018, the Want to Be! programme covered 412 children under the care of the AIF. Dobroye Serdtse charity. The main participants were young patients of the Russian Scientific Centre of Surgery (RSCS) named after B.V. Petrovsky.

After their successful kidney transplant surgeries at the RSCS named after Petrovsky, children took part in a photo shoot. Children from the Republic of Bashkortostan, Chelyabinsk, Sverdlovsk, Kaluga, Nizhny Novgorod Regions, Krasnodar Territory, Moscow, and Saint Petersburg gathered in Moscow to participate in an interesting and fascinating transformation into a forester, tamer, violinist, physical education teacher, woodworker, welder, banker, postman, beekeeper, judge, or carpenter.

Illustrated Books for Little Blind Children

Illustrated Books for Little Blind Children Regional Charity Foundation was established in 1994. The foundation's project, publishing vibrantly illustrated books complete with relief drawings for visually-impaired children, is included in the programme of the World Decade for Cultural Development of the United Nations and UNESCO. For a quarter of a century, the foundation has been publishing and distributing polysensory books free of charge for children of preschool and primary school age with special educational needs. Every year, Rostelecom contributes to the publication of these books and runs the Books as a Gift programme.

Through the foundation's programmes in 2018, more than 9,000 children across all regions in Russia received new sets of special books which had been created based on the latest scientific research on the visual, tactile, and aural perceptions of disabled children.

In 2018, the foundation delivered and distributed books for visually impaired children to 380 specialised institutions and 185 libraries, as well as to 120 children at home in 160 cities and settlements across Russia.

House of Veronica

House of Veronica is a home in Penza offering accommodation to disabled young people. It was opened in June 2017. Here, people with severe disabilities can work and lead an active, self-sufficient life. They are helped by specially selected staff with no experience of working in institutions for people with special needs, as the boarding house staff should only support the residents rather than assist them with everything.
In 2018, Rostelecom installed high-speed internet in a workshop at the House of Veronica. At the new workshop, the tenants learn crafting and earn money, while the provided service helps them accept and process orders for creating souvenirs and printed goods. In the future, Rostelecom will help the House of Veronica acquire computers and specialised equipment for its small-scale printing shop. The Company employees regularly hold lessons on computer skills for young people at the centre.

“The Creative Workshop is a combined pottery and small-scale printing shop, where the people at the House of Veronica can learn to craft souvenirs. We plan to sell them at city and inter-regional exhibitions and charity fairs. The internet will help us effectively interact with both partners and customers.”

— Maria Lvova-Belova, Executive Director of Autonomous Non-Commercial Organisation Kvartal Louie

KnowTeach

The task of the KnowTeach socio-educational project is to help children who undergo lengthy inpatient treatment in oncohematological departments at hospitals receive a comprehensive school education without lagging behind their peers after returning to school. It also unites teachers working in hospitals. At the project sites, PJSC Rostelecom runs its Steps to Success! socio-educational programme. Children undergoing treatment participate together with their parents. Through training in media technology, personal development, and art theory, the programme provides children with a distraction from their illness to acquire useful self-presentation skills and confidence necessary for passing state exams and participating in scholarly competitions.

Over the past five years, fully fledged schools have been created at large federal and regional children’s hospitals and oncohematological centres in 25 Russian regions. Over 20 thousand children have been taught so far. In 2019, more educational sites in several cities are planned to be opened.

The KnowTeach project has time and again won the annual awards of patient organisations and organisations established by the parents of children undergoing cancer treatment.

“We very much appreciate the work of the participating teachers and all partners who make an effort to improve the life quality of young patients and contribute to their recovery and return to a full life.”

— Arina Sharapova, President of Autonomous Non-Commercial Organisation Artmediaobrazovaniye

Schools in the KnowTeach project provide not only an education based on the state school curriculum (and tailored to the particular conditions of a sick child), but also additional educational programmes, exciting events with interesting people, creative and scientific research sessions inspiring the children to recover, as well as support for family members.
The Believe in Yourself social project in Krasnodar

Beginning in Krasnodar in April 2017 and running for one full year, the Believe in Yourself social project, jointly run by Rostelecom and Autonomous Non-Commercial Organisation Sinyaya Ptitsa (Blue Bird), provides career guidance for high school students and children with special needs.

The project included excursions to enterprises and organisations in the Krasnodar Territory, seminars on labour law and Work from Home seminars, group trainings and meetings with successful entrepreneurs, special classes for children with autism, master classes on professions, and other activities.

The Believe in Yourself joint project of Rostelecom and Autonomous Non-Commercial Organisation Sinyaya Ptitsa won the second prize at the Champions of Good Deeds contest.

Midday

This interactive educational programme provides career guidance with a focus on the telecoms industry and social adaptation for children in orphanages and foster homes. The lessons help children acquire the necessary skills for living self-sufficiently in society: to set tasks, organise teamwork, communicate with people, and constructively solve problems as they arise. The role playing method gives children the opportunity to independently take part in a specially designed dilemma to gain valuable life experience, understand their personal areas for improvement, and learn new skills. An interactive game teaching telecoms professions is currently being developed within the Midday project.

The programme is being run by PJSC Rostelecom and Social Development Foundation Polden (Midday).

On 19 December, Mikhail Oseevsky held the traditional pre-New Year meeting with the most active Rostelecom volunteers. The Company’s President highly appreciated the work of Rostelecom volunteers in 2018. Commemorative awards were given to 25 employees from different regions. During the five years of the Midday project, more than 300 educational events were held for 10 orphanages in Moscow, Saint Petersburg, Nizhny Novgorod, Vladivostok, and Irkutsk. In total, 150 Rostelecom volunteers participated in the project.

“Rostelecom employees have participated in the Midday project for the full five years of its existence. In an entertaining way, they teach children to be independent, solve life tasks constructively, communicate with each other calmly, find a common solution, and work in a team. With each meeting, the Company’s volunteers get to know the children on a more personal level and understand how much they need our help.”

— Natalya Beloshitskaya, Head of Social Projects at PJSC Rostelecom

In 2018, a Digital Equality module of educational games was developed for the first time within the project, career guidance with a focus on the telecoms industry was organised for participants, and master classes in acting skills were held.

1. The All-Russian corporate volunteering contest, Champions of Good Deeds, was organised to identify best practices and the most successful methods of corporate volunteering.
An integral part of the adaptation programme is to hold the annual charity balls within the Midday project: in the festive atmosphere of a dance ball, children not only have fun but also get acquainted with ball culture and etiquette, learn historical dances, and most importantly have an opportunity they are deprived of in an orphanage – to communicate with adults on equal footing. Rostelecom employee volunteers are delighted to provide them such an opportunity. The 2018 Midday Charity Ball for children from Moscow orphanages and social rehabilitation centres was held for the sixth time at the Pashkov House. The festival gathered over 250 young participants.

I Can Help

Rostelecom’s branch in the Kabardino-Balkarian Republic, together with the Shag Vpered (Step Forward) charity helping children with neurodegenerative disorders and the I Can Help volunteer association introduced a project with the same name.

The goal is to help parents of children with special needs adapt to society. Within a month, teachers and psychologists of the Institute of Pedagogy, Psychology, and Physical and Sport Education of the Kabardino-Balkarian State University conducted a course of lessons for 50 families. The programme consisted of four educational modules aimed at strengthening parenting skills for those raising children with disabilities and providing psychological counselling and information for preventing emotional disorders. While the parents attended lessons, their children played games with volunteers of the association.

“I sincerely thank Rostelecom for responding to our request to support the project. We finally got the chance to get this project off the ground. I am sure that this course will help children with special needs adapt to standard schools alongside ordinary children, as well as help their parents find the right approach to supporting their children on this difficult, but very important journey.”

— Zara Kochesokova, Head of the I Can Help volunteer association and the project creator

The I Can Help charity project, presented by Rostelecom’s branch in Kabardino-Balkaria at the Best Social Projects in Southern Russia annual regional independent award, made it to the top three finalists in the Corporate Social Projects category. The expert council of the contest evaluated more than 70 applications from non-commercial organisations and companies that ran social initiatives in 2018.

Job Factory

In 2018, Rostelecom launched its own volunteer project, Job Factory, helping high school students determine their own professional path. Within the project, volunteers from the Company’s Kemerovo Branch held a number of excursions to the different enterprises in the region’s capital for 43 children from Orphanage No. 2.

The first Job Factory excursion was to Rostelecom’s Kemerovo local telecoms operation centre, and the guides were Company employees. Young people learned how information technology is developing in Kuzbass and got acquainted with the history of Rostelecom. A master class on welding optical fibre was held for children at the service and technological support site No. 1. In Rostelecom’s Document Communication Department, guests were shown an algorithm for sending and receiving telegrams marked with a route index. For example, 215099 is the index of the city of Kemerovo.
“Career guidance for the younger generation today helps us form a potential talent pool for tomorrow. The Company employees are masters of their craft and can talk about their profession in a way that piques interest. According to the volunteers, the children took interest in the information explained, and it is possible that one of them will later choose to be a communications specialist.”

— Konstantin Yarygov, Director of Rostelecom’s Kemerovo Branch

Let’s Help Together

Everyone can help those who have fallen into a difficult life situation. Each year, Rostelecom employees donate their personal funds through charitable foundations to help seriously ill children and lonely elderly people, including within the Let’s Help Together initiative.

In 2018, 566 Rostelecom employees transferred RUB 1,083,642 from their personal funds to help seriously ill children and elderly people through the Life Line and Old Age is Fun charity foundations.

In 2017, the programme had 398 participants. They transferred RUB 643,830 to help seriously ill children and elderly people.

Become a Santa

In preparation for the New Year’s holidays, every employee of the Company creates a small miracle by giving gifts to children in sponsored orphanages as part of Rostelecom’s Become a Santa charity drive. Rostelecom employees have been carrying out this mission for six years leading up to the eve of each New Year. During this time, Rostelecom has fulfilled the New Year dreams of thousands of children deprived of parental care and those who are in a difficult life situation. Wishlists from the children at sponsored orphanages are published on the corporate portal, and employees wishing to participate can choose a gift and a child who will receive the gift. This year, children wished for remote-control toy cars, cosmetic sets, paint-by-numbers sets, music speakers, and headphones.

Every year on New Year’s Eve, Rostelecom provides financial assistance to regional orphanages and foster homes across the country. The financial assistance provided in 2018 totalled over RUB 5.5 million.

Approximately 2,000 children from 38 orphanages in 36 Russian cities received New Year’s gifts from Rostelecom employees.

In 2017, 1,880 children in 47 orphanages received New Year’s gifts from Rostelecom.

Become a Santa in the Amur Region

In 2018, employees of the Amur Branch provided New Year’s gifts to children from the State Autonomous Institution of the Amur Region – the Rostok Konstantinovsky Social Assistance Centre for Children and Families. Gifts for 31 children residing at the orphanage were collected, and the gift giving ceremony was held on the eve of the New Year. A letter of gratitude was offered to Rostelecom. The branch plans to traditionally take part in this event in 2019.
Become a Santa in Oimyakon ulus

In 2018, the Sakhatelecom Branch held two charity events for children from sponsored organisations, providing New Year’s gifts to orphans and children at the Ust-Nera Child Support Centre (Oimyakon ulus). The branch also allocated funds in the amount of RUB 200 thousand to buy a 3D printer for the Sakha (Yakutia) Republic Special (Correctional) General Educational Boarding School for Hearing and Visually Impaired Children.

Become a Santa in the Tomsk Region

Rostelecom employees arranged gifts on New Year’s Day for the children from the Assistance Centre for Children Deprived of Parental Care in the village of Bakchar in the Tomsk Region. The Company’s volunteers prepared a programme which included fun games, contests, and dances with Grandfather Frost and the Snow Maiden. The children were most impressed and dazzled by the dance floor, decorated with glittering silver confetti.

*“Rostelecom representatives visiting our centre has become a much anticipated tradition. Children decorate their rooms and halls, prepare costumes, learn holiday poems and songs, and make souvenirs for their guests. Children receiving the gift they wished for from Rostelecom employees willing to fulfill those wishes is truly important and unforgettable.”

— Olga Teslenok, Director of the Bakcharsky District Assistance Centre for Children Deprived of Parental Care

Donor Days in Magadan

In Magadan, Donor Days are held every two to three months, in which only completely healthy people are permitted to donate. The partnership between Rostelecom and Magadan Regional Blood Transfusion Station began some years ago – Donor Days have been taking place on site at the enterprise’s premises since 2012. The employees of Rostelecom’s Magadan Branch participated in the Donor Day campaign four times in 2018, donating about fifteen litres of blood in total throughout the year.

“*I became a donor today for the first time, and I know for sure that it was not the last time. Medics told us that one blood donation can save up to three human lives, so I have already made my choice to donate regularly.”

— Marina Milkina, Sales Support and Service Team Specialist at Rostelecom’s Magadan Branch

Donorship in Novosibirsk

In Novosibirsk on New Year’s Eve, 37 Rostelecom employees took part in the first donor campaign of the Novosibirsk Branch – #WeCannotManageItWithoutYou. In the macroregional branch’s main office building, the Blood Centre deployed a mobile donor centre, with all safety requirements and sanitary methods followed.

“I have been a regular donor for several years in the Republic of Kazakhstan, and I am so pleased that Rostelecom decided to support a donor campaign. It doesn’t matter where you live, it’s important to help people who are in dire need of help.”

— Alexander Aldushin, First Category Engineer at the Internal User Support Department

Donorship

In total, over 600 people took part in donor sessions.

Rostelecom employees regularly donate blood. In 2018, the Donor Day involved 20 employees in the Khabarovsky Branch, 64 in Kaluga, 80 in Saransk, 100 in Magadan, more than 150 in Kostroma, 90 in Moscow, 90 in Yaroslavl, and 12 in the Sakhatelecom Branch. Similar campaigns were also held in other regions.
Rostelecom’s total environmental investments amounted to RUB 160 million in 2018.

In pursuing its smart city initiatives, Rostelecom also contributes to lower energy consumption and reduced environmental footprint.

Rostelecom cuts polluting emissions down by improving its waste disposal performance and retiring outdated vehicles.
Rostelecom's total environmental investments amounted to RUB 160 million in 2018.

In pursuing its smart city initiatives, Rostelecom also contributes to lower energy consumption and reduced environmental footprint. Rostelecom cuts polluting emissions down by improving its waste disposal performance and retiring outdated vehicles.
Rostelecom’s total environmental expenditures and investments amounted to RUB 159,485,860 in 2018.

31,300 fluorescent lamps were replaced with LEDs across 502 facilities in 2018.

In 2018, Rostelecom procured 1,104 Euro 5 vehicles. As at the end of 2018, Euro 5 vehicles accounted for 27.7% of the Company’s total fleet.

In 2018, 5,981.72 sq m of land across the Company’s sites and public recreation areas were covered with land improvement and urban greening initiatives. Almost 1,000 trees and shrubs and 30,000 flowers were planted.

Our Approach

PJSC Rostelecom is committed to minimising its environmental footprint. We run projects to improve energy efficiency, upgrade our equipment, and perform environmental monitoring of our existing infrastructure facilities. A special focus is placed on sustainable use of natural resources and energy. We annually invest in environmental initiatives across our operating regions, running ongoing land improvement and urban greening programmes and holding environmental events and activities.

The Company seeks to optimise the use of resources and consumables across its business units (office paper, water, etc.). To support this commitment, we actively roll out advanced technology solutions, enhance sustainable resource culture among employees, as well as encourage the use of biodegradable and recycled materials. Our environmental responsibility performance is detailed in PJSC Rostelecom’s annual corporate reports. In addition, we engage with all our stakeholders as part of our environmental impact assessment process for the design and construction of new facilities.

The Company has an Environmental Policy, setting requirements for managing Rostelecom’s activities with a potential impact on the environment. The Policy outlines our key objectives in environmental protection and safety:

- Sustainable use of natural resources
- Minimising Rostelecom’s environmental footprint
- Preserving the environment for future generations.
To achieve the objectives and implement the key principles of its Environmental Policy, the Company is committed in particular to:

- prioritising preservation of natural ecosystems, landscapes, and habitats
- balancing its economic needs with the environmental and social needs of the government and general public
- abandoning projects and plans with an uncertain environmental impact
- focusing on prevention over mitigation for negative environmental impacts
- embedding environmental safety considerations into deploying new solutions, purchasing technology, materials, and equipment, and engaging contractors
- prioritising environmentally-friendly materials, technology, and equipment
- using environmentally-friendly technology to transfer data and phasing-in fibre across its entire service footprint
- reducing specific energy consumption for telecommunications services
- increasing the share of renewables in power consumption. For more details on the Environmental Policy see the Company’s website at www.company.rt.ru/ir/corporate Governance/docs/Экологическая_политика_ПАО_Ростелеком_.pdf

For more details on PJSC Rostelecom’s environmental performance against key metrics see Appendix 6. Key Performance Indicators to this Report.

Our environmental protection objectives are aligned with the United Nations Sustainable Development Goals. We seek to employ renewable energy sources in line with the UN Goal 7: Affordable and Clean Energy. Rostelecom continues transitioning from paper to e-billing in line with Goal 12: Responsible Consumption and Production. Our environmental initiatives such as boiler facility upgrades, replacement of transport equipment with poor environmental performance, and many others support Goal 13: Climate Action.

PJSC ROSTELECOM’S CONTRIBUTION TO THE UN SDGS IN FOSTERING A SAFE AND FAVOURABLE ENVIRONMENT

<table>
<thead>
<tr>
<th>Focus areas and programmes</th>
<th>8</th>
<th>12</th>
<th>13</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental initiatives</td>
<td>V</td>
<td>V</td>
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</tr>
<tr>
<td>Environmental safety</td>
<td>V</td>
<td>V</td>
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<tr>
<td>Green Office</td>
<td>V</td>
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<tr>
<td>Separate waste collection programme</td>
<td></td>
<td>V</td>
<td></td>
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<tr>
<td>E-billing</td>
<td></td>
<td>V</td>
<td></td>
<td></td>
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<tr>
<td>Energy efficiency</td>
<td>V</td>
<td>V</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Use of alternative energy sources</td>
<td>V</td>
<td>V</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Fostering environmental culture</td>
<td>V</td>
<td>V</td>
<td>V</td>
<td>V</td>
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<tr>
<td>Operational safety</td>
<td>V</td>
<td>V</td>
<td>V</td>
<td>V</td>
</tr>
</tbody>
</table>
Fostering a Safe and Favourable Environment

PJSC Rostelecom is not just an industry leader, but a socially responsible company with a special focus on environmental initiatives.

Key environmental initiatives in 2018

**IMPROVING THE ENVIRONMENTAL MANAGEMENT SYSTEM**
the Company’s environmental management system successfully passed an external recertification audit for compliance with GOST ISO 14001, with the certificate of conformity renewed for one year. Within the Company’s environmental operational control framework, 758 specific internal audits (540 on-site audits and 218 desk audits) were performed, with 974 facilities audited and 1,029 violations identified and remedied.

**BOILER FACILITY UPGRADES**
(replacement of boilers, equipment, and automatics with modern, higher performance ones; conversion to cleaner fuels)
46 boiler facilities were upgraded for a total of RUB 14,476.16

**REPLACING FLUORESCENT LAMPS WITH LEDS**
a total 31,300 lamps were replaced across 502 facilities

**REPLACEMENT OF TRANSPORT EQUIPMENT WITH POOR ENVIRONMENTAL PERFORMANCE**
The Company procured 1,104 Euro 5 vehicles to replace the retired Euro 0–4 vehicles. As at the end of 2018, Euro 5 vehicles accounted for 27.7% of the Company’s total fleet, Euro 4 (22.5%, and Euro 3 and lower 49.8%) – 22.5%, 3-го класса и ниже — 49.8%.

**OPTIMISING THE USE OF WATER SUPPLY WELLS**
the number of wells in use decreased by 8% from 104 to 96, with groundwater consumption reduced by 38%, from 372 thousand cu m to 229.55 thousand cu m
Rostelecom presented intelligent solutions at the RIF Technology – 2018 forum in Ulyanovsk

In October, Rostelecom presented intelligent solutions supporting the Ulyanovsk Region’s development at the Digital Economy – Regional Aspect (DERA 2018) international conference held as part of the RIF Technology – 2018 forum. The Company has been successfully meeting its obligations under energy service contracts in the Ulyanovsk Region.

“The Ulyanovsk Region residents can enjoy homes equipped with smart security cameras, smart street lighting, and schools and kindergartens with weather-compensated controllers. We offer automatic meter reading solutions for the utilities sector and intelligent video surveillance systems for public safety. All these projects comprise the Smart Region programme promoting regional development and improving the quality of life for local communities.”

— Elena Alpova, Director of Rostelecom’s Ulyanovsk Branch

Rostelecom presented an electric vehicle charging point in the Moscow Region Duma

In June, a round table discussion on electric vehicles as an important part of efforts to reduce air pollution was held at the Moscow Region Duma where Rostelecom presented a commercial solution for charging electric vehicles in yards across the Moscow Region. A smart lamp post for street lighting developed by the Company can be equipped with an electric vehicle charging point in addition to smart controls.

“Growing fuel prices along with exhaust emission and noise pollution concerns are driving the popularity of electric vehicles globally. However, the uptake in Russia has been hampered by a lack of charging points. The Government of the Moscow Region will build the required charging infrastructure and, hopefully, Rostelecom will get involved in this ambitious project. Our smart lamp post for street lighting combines several solutions and offers a smart lighting controller in addition to a charging point. This is a cost-effective Russia-made solution which reduces electricity consumption by switching the lights on or off at the right moment and enables individual control of each lamp post. Imagine the potential it offers for urban illumination.”

— Alexander Varev, Deputy Director of Rostelecom’s Centre Macroregional Branch

Managing environmental issues and risks

The Company’s administrative function has been comprising operational control department since 2015. The department and similar units across the Company’s branches are responsible for environmental controls. The following indicators are monitored:

- Wastewater discharge
- Concentration of pollutants in the wastewater
- Waste handed over for processing, neutralisation, and landfill
- Air pollutant emissions
- Compliance of the Company’s operations (including projected operations) with environmental protection and safety regulations

The key documents guiding the Company’s environmental management and environmental control are the Environmental Policy updated in early April 2019 and the Regulations on Environmental Operational Control adopted in 2016 and updated in 2018, respectively.
Fostering a Safe and Favourable Environment

**Environmental safety**

Rostelecom sees environmental protection as an integral part of its business. One of the environmental safety procedures put in place by the Company is training of managers and employees responsible for making decisions that could have adverse environmental impact, and employees responsible for managing Hazard Classes 1–4 wastes.

Employees are trained in certified training centres under the following programmes:

1. Environmental safety for managers and general business management specialists – 72 hours
2. Environmental safety for managers and specialists with environmental protection and environmental control functions – 200 hours
3. Environmental safety and waste management for Hazard Classes 1–4 wastes – 112 hours

A total 147 employees were trained under the programmes in 2018.

**TOTAL ENVIRONMENTAL EXPENDITURES AND INVESTMENTS IN 2018**

<table>
<thead>
<tr>
<th>Cost item</th>
<th>Expenditure, RUB thousand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landfill disposal fees for municipal/household solid waste</td>
<td>88,685.5</td>
</tr>
<tr>
<td>Disposal/neutralisation fees for non-landfill wastes</td>
<td>10,489.7</td>
</tr>
<tr>
<td>Environmental charges for air pollution</td>
<td>764.8</td>
</tr>
<tr>
<td>Environmental charges for waste landfill</td>
<td>10,412.7</td>
</tr>
<tr>
<td>Third party fees for drafting an environmental charge declaration</td>
<td>514.0</td>
</tr>
<tr>
<td>Permit/license fees and duties</td>
<td>1,428.5</td>
</tr>
<tr>
<td>Fees for the development of emission limits, obtaining air pollution permits</td>
<td>12,827.0</td>
</tr>
<tr>
<td>Fees for the development of draft waste generation rates and disposal limits, obtaining approvals for waste generation rates and disposal limits</td>
<td>10,175.0</td>
</tr>
<tr>
<td>Expenses related to obtaining subsoil licences (for wells), (excluding duties)</td>
<td>1,206.8</td>
</tr>
<tr>
<td>Employee training and upskilling</td>
<td>1,566.8</td>
</tr>
<tr>
<td>Expenses related to setting up separate waste collection (procurement of containers, waste sorting, etc.)</td>
<td>657.0</td>
</tr>
<tr>
<td>Expenditures on land improvements and urban greening</td>
<td>2,133.5</td>
</tr>
<tr>
<td>Expenditures on air pollution control and climate change mitigation (filter installation and repairs, air sampling and analysis, etc.)</td>
<td>5,753.1</td>
</tr>
<tr>
<td>Expenditures on surface water and groundwater pollution control, and wastewater treatment (renovation and refurbishment of water treatment facilities, water well cementing, cleaning of river beds, setting up sanitary protection zones around water bodies and wells, etc.)</td>
<td>1,507.3</td>
</tr>
<tr>
<td>Expenditures on soil contamination control (sampling, decontamination, reclamation, etc.)</td>
<td>69.0</td>
</tr>
<tr>
<td>Expenses on wastewater laboratory testing</td>
<td>2,334.3</td>
</tr>
<tr>
<td>Expenses on groundwater laboratory testing</td>
<td>1,997.1</td>
</tr>
<tr>
<td>Expenses related to the development and approvals of draft projects to establish sanitary protection zones</td>
<td>1,746.9</td>
</tr>
<tr>
<td>Fees for official registration of facilities affecting the environment</td>
<td>2417</td>
</tr>
<tr>
<td>Fees for the development of environmental operational control programmes</td>
<td>4,147.0</td>
</tr>
<tr>
<td>Development of passports for Hazard Classes 1–4 wastes</td>
<td>64.8</td>
</tr>
<tr>
<td>Other</td>
<td>763.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>159,485.9</strong></td>
</tr>
</tbody>
</table>
Real estate portfolio optimisation

To reduce property maintenance costs and improve operational efficiency, we seek to optimise our real estate portfolio. Key steps to reduce the real estate portfolio:

- Upgrade (digitise) PBXs
- Replace indoor telecoms equipment with containerised telecoms equipment modules
- Convert unused PBXs into open-space offices
- Dispose of non-core or unused property assets, lease out unused premises

As a result of our efforts during the year, total floor area of the premises occupied by the Company reduced by 228,683 sq m, or 2.74%, in 2018, and the number of property assets on our books was down by 613, or 2.95%.

Green Office

Our special focus is on workplace greening. The Green Office principles are actively implemented in operating office spaces: reduced energy and water consumption, use of environmentally safe consumables, reduced paper use through electronic document flow, wider use of videoconferencing, etc.

Separate waste collection programme

By sorting and handing over household and office waste for recycling and reuse we mitigate the negative environmental impacts of waste and help address the issue of overflowing household waste sites and landfills. We at Rostelecom want to give a good example of environmental responsibility. In 2017, we developed the separate office waste collection concept, and currently we sort out two types of office waste: waste paper at 52 regional branches and 238 facilities, and used household batteries at 37 regional branches and 112 facilities.

1.1 tonnes of batteries collected by our employees in 2018. 270 tonnes of paper waste handed over for recycling.
We served 153 million e-bills in 2018, up 6% year-on-year (143 million in 2017).

Starting from 2013, we deliver bills for our services electronically, a fundamentally new billing model. An e-bill is a contemporary alternative to paper-based bills. It is a convenient way to receive and store information on payments of bills for telecommunication services. A PDF file contains the same information as a paper-based document but is delivered much faster. E-bills are sent out automatically irrespective of the staff workload, a subscriber’s place of residence, mail logistics or other factors. It is possible to receive more than one e-bill to the same email address and pay from different regions. The service supports payments via a bank card, online bank, online wallet or other remote payment methods. It is a more convenient and cost-efficient, as well as safer, faster, and greener option. By choosing to go digital we avoid harm to the environment and save trees. Statistically, it takes a several decades old tree to produce 10 thousand paper bills.

Tula residents and Rostelecom saved a grove over one year

In June 2018, the number of Rostelecom’s Tula Branch customers who have signed up to e-billing for telecoms services exceeded 170 thousand. According to the Association for Information and Image Management (AIRM), saving one tonne of paper a year helps save 17 trees. Residents of the Tula Region who have opted in to be billed electronically save 170 thousand sheets of paper every month, an equivalent of over 14 trees (a 500-sheet ream weighs 2.5 kg).

“I have to travel a lot on business. Before, payment of bills was a time-consuming exercise: you had to keep checking your mailbox for a bill and then find time to go to a bank branch to pay it. Now everything is easy and convenient: I have set up auto payment for all Rostelecom services, both at home and at work. Remotely through my customer account, I can not only check my balance but also switch to a better plan or sign up to various services. I cannot think how I managed without it before.”

— Ilya Sergeev, businessman, Tula

### WASTE PAPER MANAGEMENT IN 2016–2018

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</tr>
</thead>
<tbody>
<tr>
<td>Waste paper, tonnes</td>
<td>998.23</td>
<td>632.45</td>
<td>745.83</td>
<td>−36.64 %</td>
<td>17.93%</td>
<td>The increase was due to a 14.6% increase in the weight of paper consumed</td>
</tr>
<tr>
<td>Paper handed over for</td>
<td>145.87</td>
<td>346.00</td>
<td>269.50</td>
<td>237.20%</td>
<td>−22.11%</td>
<td>Possibly due to the fact that the selective waste collection project is in its second year now and is already perceived as routine rather than innovation.</td>
</tr>
<tr>
<td>recycling, tonnes</td>
<td></td>
<td></td>
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</tbody>
</table>

Sustainable use of paper, electronic document management

Separate collection of waste paper at 171 facilities across 43 branches
E-billing beyond the Arctic Circle

On 25 October, the World Paper Free Day, Rostelecom counted the number of its Murmansk Region based subscribers who had shifted away from paper-based billing for telecoms services. We found that over 110 thousand of the Region’s residents have chosen to be billed electronically. In addition, Rostelecom subscribers are increasingly activating our text-based bill notification service. Most of our customers prefer to receive information via the Online Customer Account: over 200 thousand people use it in the Arctic Region.

“Paper bills go through several stages to get from an operator to a service consumer: printing, mailing, sorting, and delivery to the customer’s mailbox. Such logistics is time-consuming. By opting for e-billing, our customers need not wait for a paper bill.”

— Olga Shangina, Director of Rostelecom’s Murmansk Branch

Rostelecom’s Paper Free environmental event in the Altai Territory

In October, Rostelecom’s Altai Branch held the Time to Use Paper Sustainably environmental event, with 2,000 employees participating. The branch HR and administrative staff discussed with employees a range of paper-saving options (print on both sides of the paper, use less draft copies, set the minimum line spacing and narrow margins, etc.). They put “Think twice before printing!” and “How much paper have you wasted today?” posters next to printers, and held a quiz for employees themed “Everything about Paper”. In the offices, they put cardboard boxes labelled with stickers reading “Waste Paper” and “Save a Tree” to collect paper waste and hand it over to specialised recycling companies. Our employees bought young trees with their own money and gave them to a sponsored organisation for planting.

“Rostelecom introduced electronic document management in 2006. Our customers are also billed electronically via online customer accounts, text messages, email or interactive TV menu. From 2014 to 2017, we at the Altai Branch saved 30 thousand reams of printer paper, an equivalent of 1,265 trees. Still we aim to go even further and continue reducing our paper consumption to conserve natural resources.”

— Sergey Medvedev, Deputy Director of Rostelecom’s Altai Branch and Head of the Administrative Directorate

E-billing in Karelia

Over 15 thousand Rostelecom customers have opted out of receiving paper bills. They all are billed for telecoms services via email or the free messenger app for mobile gadgets. Karelia’s residents first started using Rostelecom’s e-billing service in 2014. For customers, it is a convenient alternative to printed paper bills.

“E-bills are sent out automatically irrespective of the staff workload, a subscriber’s place of residence or mail logistics. Customers going digital are awarded points which can be redeemed for discounts or VAS services.”

— Andrey Maniev, Director of Rostelecom’s Karelia Branch
Energy Efficiency

Energy efficiency is a driver of digital economy and a critical element for improving production competitiveness. Rostelecom develops and actively implements energy saving and energy efficiency projects. Each of these projects is aimed at cutting electricity, heat, and water consumption, as well as reducing the usage of road, air, and all-terrain transport. The Company uses natural resources sustainably and upgrades networks and infrastructure by introducing more energy efficient equipment. PJSC Rostelecom seeks to reduce its energy consumption and greenhouse gas emissions and helps its customers to follow suit. Energy efficiency is one of the key focus areas outlined in Rostelecom's Innovative Development Programme for 2016–2020. Energy efficiency is a critical component of developing smart cities within the Digital Economy of the Russian Federation national programme.

Centralised initiatives to improve the Company’s energy efficiency over the long term and reduce the environmental footprint include optimising and standardising the operation of communications networks. In particular, we implement projects to upgrade our data network and data centres, virtualise the infrastructure, and deploy remote equipment monitoring technologies. In addition, communications networks in rural areas are upgraded and warehousing logistics processes are optimised, driving cuts in the Company’s energy consumption. Rostelecom also seeks to reduce vehicle operating costs. Fleet optimisation, in its turn, helps cut the cost of fuel and lubricants, reduce waste generated by vehicle operation (such as batteries, tyres, used oils) and vehicle exhaust emissions.

In 2017, PJSC Rostelecom introduced its Energy Policy, setting requirements for managing the Company’s activities and promoting energy saving and energy efficiency. The Policy was developed to formalise the Company’s new principles and commitments on energy saving and energy efficiency, as well as relevant implementation methods and mechanisms. The document supports and promotes the deployment and improvement of the energy management and energy performance system within its defined scope and boundaries. The Company’s energy policy is focused on reducing the energy component of the cost of services and cutting operating expenses on the maintenance of buildings and electrical equipment across all Rostelecom’s core business lines.

In 2018, Rostelecom reduced its electricity consumption by 52,149,620 kWh (down 3.74%).

The Company’s branches develop energy saving and energy efficiency action plans on an annual basis. A total of 461 activities were carried out in 2018, resulting in a year-on-year reduction in energy consumption of:

- electricity, by 52,150,000 kWh (3.74%)
- heat, by 39,438 Gcal (3.38%)
- cold water, by 288,260 cu m (11.15%)
- hot water, by 16,490 cu m (7.62%)
- natural gas, by 3,332,000 cu m (10.91%)

Total number of projects – 461, facilities covered – 674, total cost – RUB 218,874,000.
FUEL AND ENERGY CONSUMPTION BY PJSC ROSTELECOM IN 2016–2018

<table>
<thead>
<tr>
<th>Fuel and energy item</th>
<th>Unit of measurement</th>
<th>Actual consumption in 2016</th>
<th>Actual consumption in 2017</th>
<th>Actual consumption in 2018</th>
<th>Savings percentage in 2018 by volume</th>
<th>Possible reasons for the change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity</td>
<td>thousand kWh</td>
<td>1,682,578.00</td>
<td>1,394,200.29</td>
<td>1,342,050.67</td>
<td>– 3.74%</td>
<td>Optimisation (reduction) of the real estate portfolio. Upgrades of telecommunications equipment.</td>
</tr>
<tr>
<td>Heat</td>
<td>Gcal</td>
<td>1,243,338.59</td>
<td>1,167,448.54</td>
<td>1,128,010.78</td>
<td>– 3.38%</td>
<td>Activities to reduce heat loss at facilities (the Cost Optimisation and Improvement of Fuel and Energy Management at PJSC Rostelecom project). Optimisation (reduction) of the real estate portfolio.</td>
</tr>
<tr>
<td>Cold water</td>
<td>cu m</td>
<td>2,776,347.84</td>
<td>2,584,312.82</td>
<td>2,296,051.11</td>
<td>– 11.15%</td>
<td>Saving and metering (installation of automated heat metering units, weather-compensated controllers, and heat recovery systems)</td>
</tr>
<tr>
<td>Hot water</td>
<td>cu m</td>
<td>374,867.28</td>
<td>216,495.18</td>
<td>200,006.27</td>
<td>– 7.62%</td>
<td>Activities to reduce heat loss at facilities (the Cost Optimisation and Improvement of Fuel and Energy Management at PJSC Rostelecom project). Optimisation (reduction) of the real estate portfolio.</td>
</tr>
<tr>
<td>Natural gas</td>
<td>cu m</td>
<td>38,316,914.00</td>
<td>30,540,204.00</td>
<td>27,208,391.49</td>
<td>– 10.91%</td>
<td>Reduction in the number of boiler facilities, installation of more energy-efficient boilers. Activities to reduce heat loss at facilities</td>
</tr>
<tr>
<td>Liquefied gas</td>
<td>l</td>
<td>1,266,922.08</td>
<td>1,123,053.24</td>
<td>1,087,580.07</td>
<td>– 3.16%</td>
<td>Reduction of the gas-powered vehicle fleet</td>
</tr>
<tr>
<td>Coal</td>
<td>t</td>
<td>12,363.60</td>
<td>10,010.99</td>
<td>10,695.46</td>
<td>6.84%</td>
<td>Higher number of abnormally cold days during the 2017/2018 winter season in the regions covered by the Ural Macroregional Branch and the Siberia Macroregional Branch, where coal-fired boiler facilities are used</td>
</tr>
<tr>
<td>Wood</td>
<td>cu m</td>
<td>10,127.88</td>
<td>9,860.86</td>
<td>9,237.92</td>
<td>– 6.32%</td>
<td>Optimisation (reduction) of the real estate portfolio</td>
</tr>
<tr>
<td>Fuel briquettes (pellets)</td>
<td>cu m</td>
<td>485.20</td>
<td>474.78</td>
<td>503.00</td>
<td>5.94%</td>
<td>Higher number of abnormally cold days during the 2017/2018 winter season in the regions covered by the Volga Macroregional Branch, where pellet-fired boiler facilities are used</td>
</tr>
<tr>
<td>Diesel fuel</td>
<td>l</td>
<td>8,624,524.69</td>
<td>8,535,517.13</td>
<td>7,956,847.58</td>
<td>– 6.78%</td>
<td>Replacement of boilers and diesel generators with more modern and energy-efficient ones</td>
</tr>
<tr>
<td>Gasoline</td>
<td>l</td>
<td>25,774,005.88</td>
<td>24,447,231.10</td>
<td>28,644,554.40</td>
<td>1717%</td>
<td>Expansion of the vehicle fleet, increase in mileage per vehicle</td>
</tr>
</tbody>
</table>
Fostering a Safe and Favourable Environment

ENERGY EFFICIENCY PROJECTS IMPLEMENTED IN 2017–2018 UNDER THE ENERGY SAVING AND ENERGY EFFICIENCY ACTION PLAN

<table>
<thead>
<tr>
<th>Name of project/activity</th>
<th>Unit of measurement</th>
<th>2017</th>
<th>Activity costs, RUB thousand</th>
<th>Quantitative indicators (number of projects/facilities)</th>
<th>2018</th>
<th>Activity costs, RUB thousand</th>
<th>Quantitative indicators (number of projects/facilities)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installation of sensor-based lighting control systems</td>
<td>facilities</td>
<td>6.00</td>
<td>1</td>
<td>1</td>
<td>4.50</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Replacement of incandescent and fluorescent lamps with LEDs</td>
<td>facilities</td>
<td>4,403.92</td>
<td>35</td>
<td>3</td>
<td>1,432.27</td>
<td>502</td>
<td></td>
</tr>
<tr>
<td>Repairs and upgrades of boiler facilities, replacement of boilers and equipment with modern, higher performance ones</td>
<td>boiler facilities</td>
<td>24,001.62</td>
<td>62</td>
<td>46</td>
<td>14,476.16</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>Installation and upgrades of heat meters</td>
<td>facilities</td>
<td>10,802.45</td>
<td>82</td>
<td>183</td>
<td>34,347.46</td>
<td>183</td>
<td></td>
</tr>
<tr>
<td>Installation/upgrades of automated heating control systems (weather-dependent automatics, temperature sensors, remote control systems)</td>
<td>facilities</td>
<td>1,178.00</td>
<td>2</td>
<td>13</td>
<td>7,517.00</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Repairs and upgrades of heating systems (radiator, heating units, heating pipelines)</td>
<td>facilities</td>
<td>47,655.07</td>
<td>116</td>
<td>115</td>
<td>48,905.63</td>
<td>115</td>
<td></td>
</tr>
<tr>
<td>Upgrades of power supply systems</td>
<td>facilities</td>
<td>8,140.63</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Installation of automated controls on the air conditioning system</td>
<td>facilities</td>
<td>4.20</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Repair/revamp of the water supply system</td>
<td>facilities</td>
<td>538.30</td>
<td>7</td>
<td>4</td>
<td>1,284.00</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Installation of water metres</td>
<td>pcs</td>
<td>248.90</td>
<td>39</td>
<td>9</td>
<td>352.44</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Repair/upgrade of the gas supply system</td>
<td>facilities</td>
<td>137.45</td>
<td>14</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Repair/upgrade of gas metering units</td>
<td>pcs</td>
<td>548.00</td>
<td>25</td>
<td>20</td>
<td>191.68</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Upgrades of lifts to achieve a higher energy efficiency class</td>
<td>facilities</td>
<td>0</td>
<td>0</td>
<td>2.00</td>
<td>5,434</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activities to reduce heat loss in buildings, including</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Thermal insulation of doors</td>
<td>pcs</td>
<td>148.10</td>
<td>7</td>
<td>36</td>
<td>1,565.02</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>Installation of PVC windows</td>
<td>pcs</td>
<td>45,171.68</td>
<td>1,985</td>
<td>1,708</td>
<td>35,238.41</td>
<td>1,708</td>
<td></td>
</tr>
<tr>
<td>Thermal insulation of walls</td>
<td>facilities</td>
<td>2,586.06</td>
<td>8</td>
<td>33</td>
<td>26,658.23</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>Insulation of heating pipelines</td>
<td>facilities</td>
<td>1,026.60</td>
<td>27</td>
<td>1</td>
<td>210.00</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Repairs and insulation of roofs</td>
<td>facilities</td>
<td>26,971.40</td>
<td>41</td>
<td>44</td>
<td>25,946.02</td>
<td>44</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>173,568.38</td>
<td>198,130.82</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PJSC Rostelecom’s Energy Saving and Energy Efficiency Programme for 2019–2023 was developed in 2018 with the primary goal of reducing fuel and energy consumption and keeping down fuel and energy costs through a range of technical and organisational energy saving activities considering tariff growth and network expansion.
Introduction of an automated electricity control and metering system, replacement of meters, power balance control, loss reduction. Negotiating more attractive price bands for facilities

Replacement of obsolete conventional lighting with modern LEDs. Installation of motion, light level, and presence sensors. Upgrades of outdoor and street lighting and introduction of an automated control system

Installation of modern, optimal performance electrical equipment with higher efficiency while decommissioning old, energy-intensive electrical equipment

Deployment of free cooling systems / balanced ventilation equipment in technology containers – using outside air to cool technological equipment rooms

Negotiating electricity supply contracts with independent electric utilities to get more attractive terms and a discount off the sales markup of a guaranteeing supplier

Bringing major technological facilities with an installed capacity exceeding 670 kW to the wholesale electricity and capacity market (WECM)

ENERGY CONSUMPTION AT PJSC ROSTELECOM BY TYPE OF ENERGY IN 2016–2018

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel</td>
<td>3,333,193,615.47</td>
<td>2,936,455,748.72</td>
<td>396,737,866.76</td>
<td>2,993,054,593.00</td>
<td>-56,598,844.40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electricity</td>
<td>1,682,578.00</td>
<td>1,394,200.29</td>
<td>318,377,711</td>
<td>1,342,050.67</td>
<td>42,149,558.32</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heat</td>
<td>1,243,34</td>
<td>6,989,914,372.00</td>
<td>6,563,269,527.00</td>
<td>1,128.01</td>
<td>6,341,546,787.00</td>
<td>221,722,759.98</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TARGET INDICATORS FOR THE ENERGY SAVING AND ENERGY EFFICIENCY PROGRAMME

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Unit of measurement</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific electricity consumption per 1 sq m of gross area</td>
<td>thousand kWh/sq m</td>
<td>0.155844</td>
<td>0.157176</td>
<td>0.14763</td>
<td>0.142918</td>
</tr>
<tr>
<td>Specific heat consumption per 1 sq m of gross area</td>
<td>Gcal/sq m</td>
<td>0.130497</td>
<td>0.132109</td>
<td>0.12962</td>
<td>0.125483</td>
</tr>
</tbody>
</table>

Energy saving is supported by the energy efficiency of the Company's buildings and offices. Specifically, Rostelecom has been fitting out its premises with LEDs, weather-compensated heating controllers, water saving devices, and materials that reduce heat loss.
Fostering a Safe and Favourable Environment

Rostelecom presented energy efficiency projects for smart cities in Vologda

Rostelecom presented its projects to upgrade street lighting at the Regional Power Industry Investment Conference in Vologda. During a round-table discussion, Rostelecom’s specialists talked about energy efficient technologies offered by the Company to local authorities, businesses, and institutions, as well as the Company’s successful track record of performance under energy service contracts. Rostelecom views projects to upgrade outdoor lighting as a vital element of the Smart City programme. The Company replaces obsolete street lights with energy efficient dimming sodium-vapour lamps or LEDs (which change brightness when supply voltage changes) and rolls out an automated lighting control system. Smart street lamps and modern technologies help make city streets safer and reduce energy consumption.

“Our extensive, modern fibre infrastructure and vast experience in delivering government contracts in the Vologda Region and in Russia’s North West make us well-placed to carry out full-scale upgrades of street lighting systems. Rostelecom cooperates with reliable technology partners – equipment manufacturers and software developers – to implement turnkey projects. Our arrangements do not require a customer to make any investments in a proposed project. Financial benefits are achieved through resource efficiency, ensuring payback of our investments and generating savings for the customer.”

– Andrey Ganov, Director of Rostelecom’s Vologda Branch

Smart lighting by Rostelecom installed in Vyatskiye Polyany

In 2018, Rostelecom upgraded the street lighting network in Vyatskiye Polyany (Kirov Region) under an energy service contract signed by the operator and the local authorities. By deploying an automated street lighting control system and installing modern energy saving street lights, the municipality will cut street lighting costs by 70%. Over six years, at least 5.7 million kWh will be saved. Rostelecom’s specialists replaced old street lamps with 2,333 LEDs which switch on instantly (unlike conventional lamps), consume several times less power, and have a service life exceeding 10 years.

“We have high expectations for the energy service contract with Rostelecom. And we already see the first results: Vyatskiye Polyany has once again become a bright town. Street lamps now have a longer service life. We have responded to citizens’ requests to improve the lighting in certain streets and enabled manual control of the lighting system depending on weather and during festivities. We will use the funds saved through smart power consumption to finance other municipal needs.”

– Valery Mashkin, Mayor of Vyatskiye Polyany

ENERGY EFFICIENCY OF THE COMPANY’S BUILDINGS AND OFFICES, 2017–2018

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
<th>Increase in 2018 vs 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pcs</td>
<td>sq m</td>
<td>pcs</td>
</tr>
<tr>
<td>Buildings (offices) fitted with LEDs</td>
<td>866</td>
<td>-</td>
<td>1,182</td>
</tr>
<tr>
<td>Buildings (offices) fitted with weather-compensated (climatic) heating controllers</td>
<td>97</td>
<td>318,268.2</td>
<td>185</td>
</tr>
<tr>
<td>Buildings (offices) fitted with sensor-based lighting controllers</td>
<td>52</td>
<td>54,806.8</td>
<td>193</td>
</tr>
<tr>
<td>Buildings (offices) fitted with controlled shut-off valves on heating appliances</td>
<td>272</td>
<td>454,695.6</td>
<td>510</td>
</tr>
<tr>
<td>Data centres and server rooms fitted with free cooling systems</td>
<td>60</td>
<td>-</td>
<td>91</td>
</tr>
<tr>
<td>Buildings (offices) fitted with water saving devices (sensor taps, dual flush toilets, etc.)</td>
<td>n/a</td>
<td>n/a</td>
<td>21</td>
</tr>
<tr>
<td>Buildings (offices) fitted with integrated electronic heat and energy control systems (Smart Office)</td>
<td>n/a</td>
<td>n/a</td>
<td>41</td>
</tr>
<tr>
<td>Buildings (offices) fitted with structural materials that reduce heat loss (PVC windows, wall and roof insulation, etc.)</td>
<td>n/a</td>
<td>n/a</td>
<td>914</td>
</tr>
</tbody>
</table>

Note. The indicators shown are cumulative year-end figures.
Rostelecom won a tender organised by the Ministry of Energy of the Moscow Region

Rostelecom won a tender for the development and support of the Automated Power Metering System of the Moscow Region. The digital provider upgraded the system and integrated it with the unified information and analytical system for utilities, as commissioned by the Ministry of Energy of the Moscow Region. The integration of platforms and databases enables automation of the process for creating energy performance certificates (energy passports) for regional budgetary institution properties.

“Rostelecom will bring all stakeholders of the Digital Moscow Region programme together onto one platform, thus strengthening control over budget spending. The regional government will get a tool to monitor activities carried out by budgetary institutions to optimise energy consumption in the housing and utilities sector. In addition, energy efficiency assessments will become more comprehensive.”

— Leonid Neganov, Energy Minister of the Moscow Region

Use of alternative energy sources

The use of alternative energy sources by the Company is limited and focuses mainly on power supply to feed the telecommunications equipment installed in sparsely populated areas far from power grids. These energy sources include solar panels, hybrid wind and solar power systems, wind plants, micro turbines, and wind and diesel battery units. As at the end of 2018, alternative energy sources were used in the following Rostelecom macroregional branches:

- Solar panels: South MRF – 15 facilities, Ural MRF – 18 facilities
- Wind plants: Siberia MRF – 2 facilities
- Microturbines: Far East MRF – 19 facilities
- Hybrid wind and solar power systems: North East MRF – 34 facilities, Far East MRF –17 facilities

There were no changes in the Company’s renewable fleet composition vs 2017. The aggregate capacity of our renewable energy sources amounts to 368 kW.

Rostelecom will take charge of asset energy management in the Tula Region

In December 2018, LLC RTC-EnergoBalans, a Rostelecom subsidiary, and the Ministry of Education of the Tula Region signed an agreement for cooperation in developing potential specifications for an asset energy management system of the Tula Region. The agreement defines the energy management system as a tool enabling the use of a centralised regional digital platform ensuring collection, processing, storage, and analysis of energy metering data, which implies the subsequent introduction of an energy consumption monitoring system. Educational institutions in the Tula Region were selected for piloting the system. The parties agreed to identify priority tasks and approaches for transformation of the information and communication infrastructure of the energy management system, including technology transformation and support of management decision-making.
Fostering Environmental Culture

Rostelecom is committed to promoting environmental culture and values and has been very active on this front. The Company provides information support for educational, awareness, and promotional initiatives for environmental protection, sustainable use of natural resources, nature reserve management, and protection of rare plant and animal species. Our employees regularly participate in environmental events held by federal or local authorities, non-profit organisations, and NGOs, as well as in public hearings and discussions of environmental initiatives and draft regulations affecting Rostelecom operations.

We particularly focus on forest fire prevention. Specifically, we install video surveillance systems for automatic forest monitoring and early detection of forest fires in forested areas in various regions of the country. The monitoring system is capable of automatically detecting a white smoke cloud billowing against a green forest background at the early stages of a fire incident and roughly locating the fire site and the forest fire brigades and equipment closest to the source of the fire.

**Rostelecom’s video-based fire surveillance system in the Perm Territory**

During the 2018 fire season, our optical sensor based automatic forest fire detection system helped prevent around 70 wildfires in the Perm Territory. The innovative system was designed jointly by Rostelecom and the Perm Forest Fire Centre as commissioned by the regional ministry of natural resources, forestry, and environment in 2016 and is part of the Smart Region project.

“During the 2018 fire season, the Lesokhranitel system proved its effectiveness and ensured emergency crews’ prompt arrivals to the sites with reported smoke, thus preventing fires from spreading into forested areas from other areas. We handled some 70 system alarms alerting to smoke in locations near forested areas. Rostelecom provides communications lines and the overall system maintenance. The rapid completion of the tasks that were set to our partner has enabled continuous monitoring for fires in the Perm Region forests.”

— Grigory Chechushkov, Head of the Regional Emergency Dispatch Service at the Perm Forest Fire Centre

**Lesnoy Dozor launched in Salekhard**

In June 2018, another three stations of the innovative automatic, optical sensor based forest fire early warning and detection system developed by Rostelecom and its partners were launched in Salekhard, Yamal-Nenets Autonomous Area. The system was first tested in 2017 and proved to be a reliable fire prevention tool for the region. As at the end of 2018, the Arctic Region had six video surveillance stations to monitor fires, equipped with modern IP video cameras ensuring full coverage of hazard-prone areas in real time and full situational awareness.

“Unlike, say, space and aerial surveillance systems, the Lesnoy Dozor solution we have been deploying in the Yamal Peninsula ensures 24/7 real-time monitoring; it is also much cheaper than using aircraft and faster than satellite-based surveillance. And its principal distinction from the existing forest fire surveillance systems is scalability and use of computer vision technology.”

— Viktor Sysov, Business Development Director of Rostelecom’s Yamal-Nenets Branch

**Rostelecom deployed the Safe City in Siberia**

Gorno-Altaisk is the first Siberian city that has integrated protection of people and infrastructures from natural, manmade and criminal hazards. As instructed by the Government of the Altai Republic and Gorno-Altaisk Administration, Rostelecom has launched the Safe City hardware/software solution in Gorno-Altaisk. The solution integrates Gorno-Altaisk emergency dispatch and response services and municipal utilities into a single information space. The Safe City system quickly processes citizen reports, analyses the monitoring systems, and ensures forecasting, warning and response monitoring for emergencies and incidents. The city now has a water level and weather monitoring station, a seismic station, 15 smart CCTV cameras, and two forest fire surveillance cameras.
over 35 organised a four-week camp in Karelia. Rostelecom employees joined islands. The Company also helped the project sponsors place for tourists turned into a national park in 2017. For more e to transport tourist equipment, rubbish, and cleanup teams to the volunteers did not only come for one-day cleanups, but also Ladoga from household rubbish. In 2018, the volunteers chose the northwestern coast of Lake Ladoga – a popular ci, the volunteers chose the Ladoga skerries off the northwestern coast of Lake Ladoga – a popular place for tourists turned into a national park in 2017. For more efficiency, the volunteers did not only come for one-day cleanups, but also organised a four-week camp in Karelia. Rostelecom employees joined the team of volunteers. The Company also helped the project sponsors to transport tourist equipment, rubbish, and cleanup teams to the islands. During the camp’s four shifts, the volunteers gathered a total of over 35 tonnes of rubbish.

“Rostelecom joined the Clean Ladoga project

In July 2018, Rostelecom joined the Clean Ladoga project run in northwest Russia. It is a large gathering of volunteers from across Russia coming together to clean up the islands and coasts of Lake Ladoga from household rubbish. In 2018, the volunteers chose the Ladoga skerries off the northwestern coast of Lake Ladoga – a popular place for tourists turned into a national park in 2017. For more efficiency, the volunteers did not only come for one-day cleanups, but also organised a four-week camp in Karelia. Rostelecom employees joined the team of volunteers. The Company also helped the project sponsors to transport tourist equipment, rubbish, and cleanup teams to the islands. During the camp’s four shifts, the volunteers gathered a total of over 35 tonnes of rubbish.

“Rostelecom joined a voluntary cleanup to support the March for Parks event in the Kaliningrad Region

In April 2018, Rostelecom’s Kaliningrad Branch joined the March for Parks environmental event as the Company employees took part in a voluntary cleanup in the Curonian Spit National Park. The initiative seeks to support the specially protected natural areas in Russia and the CIS. This year, the Curonian Spit cleanup brought together over 2,000 volunteers from across the region, including employee volunteers from Rostelecom’s western-most branch. Our employees cleaned up the Lesnoye recreation camp and the neighbouring nature reserve areas from dry branches and leaves and household rubbish, gathering a total of about 50 large bags of rubbish. In Russia, the annual March for Parks event was first held in 1995, with the Kaliningrad Branch employee volunteers participating annually.

“This event covers the whole of Russia. We live in a beautiful region with unique nature which I think we should preserve together, helping the National Park’s Administration. It is good to know that we contribute to the preservation of this nature reserve.”

— Alexey Semenov, Director of Rostelecom’s Kaliningrad Branch

Rostelecom helped save Lake Baikal in the Irkutsk Region

Employees of Rostelecom’s Irkutsk Branch joined En+ Group’s major nationwide volunteering environmental marathon 360 Minutes held on the coasts of Lake Baikal on 7 and 8 September 2018. For the eighth time, the initiative to clean up the famous lake’s coasts from household rubbish brought together people who care from ten Russian cities and 30 companies. The environmental volunteers cleaned up illegal waste sites, set up eco-trails, planted trees, and gave awareness to local communities. This year, 16,500 people gathered over 16,000 bags of rubbish.

“Lake Baikal has topped the rating of the most popular Russian sites on UNESCO’s World Heritage List, while its coasts are polluted with rubbish left behind by millions of tourists. The 360 Minutes marathon resulted in tonnes of rubbish collected and is an example of business and civil society teaming up to address the environmental issues facing Lake Baikal. It also helps build the environmental culture and responsible attitude to places where people live and rest. This is why our employees contribute much to protecting nature from waste pollution.”

— Yuri Timan, Director of Rostelecom’s Kaliningrad Branch says

“We are always try to respond to charity or volunteer initiatives, particularly those aiming to preserve the country’s natural resources. We know only too well that many past initiatives would have never been sustained without assistance from large businesses and philanthropists. Looking at the enthusiasm of volunteers who came to the camp caring about the future world their children will live in, we feel even more determined to support these young people.”

— Andrey Balatsenko, Director of Rostelecom’s North-West Macroregional Branch

“The city’s population today is 64 thousand and continues to grow. Our area is prone to sudden deterioration in weather conditions, earthquakes, forest fires, and rising river levels. In this context, residents expect authorities to respond fast. Together with Rostelecom we worked hard to create such management model. This software solution is unique in that it models and forecasts the likely development of the emergency, and offers the lowest-risk response scenarios.”

— Olga Safronova, Mayor of Gorno-Altaisk

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— Olga Safronova, Mayor of Gorno-Altaisk
Fostering a Safe and Favourable Environment

Operational Safety

Safe and favourable environment for employees and customers is a top priority for the Company. Rostelecom has in place an operational control system to ensure sustainable operation of its facilities and compliance with fire regulations and operational and environmental safety laws. The operational control system lowers the risks of fires and fire outbreaks, prevents accidents and injuries at hazardous facilities, and improves the overall environmental impact.

In 2018, we recorded 32 fires and fire outbreaks, down by 64% year-on-year. Over half of all fire incidents (62.5%) occurred through the fault of other entities or individuals in premises leased to or by the Company. The major root causes were identified as non-compliance with electrical installation regulations and failure to observe fire safety precautions for hot work.

FIRE INCIDENTS AT ROSTELECOM FACILITIES IN 2016–2018

<table>
<thead>
<tr>
<th>Macroregional Branch</th>
<th>Number of fires in 2016</th>
<th>Number of fires in 2017</th>
<th>Fire damage in 2017 (RUB thousand)</th>
<th>Number of fires in 2018</th>
<th>Fire damage in 2018 (RUB thousand)</th>
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<tr>
<td>Centre</td>
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<td>7 (1*)</td>
<td>497.63</td>
<td>7 (6*)</td>
<td>5,462.12</td>
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<tr>
<td>North-West</td>
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<td>2</td>
<td>0</td>
<td>4 (3*)</td>
<td>0</td>
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<tr>
<td>South</td>
<td>0</td>
<td>1*</td>
<td>276</td>
<td>4 (2*)</td>
<td>384.04</td>
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<tr>
<td>Volga</td>
<td>4</td>
<td>6 (2*)</td>
<td>60.38</td>
<td>9 (6*)</td>
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<td>Ural</td>
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<td>279.5</td>
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<td>Siberia</td>
<td>3</td>
<td>10 (4*)</td>
<td>1,089.6</td>
<td>2 (1*)</td>
<td>2,089.32</td>
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<tr>
<td>Far East</td>
<td>31</td>
<td>23 (17*)</td>
<td>3,486.8</td>
<td>5 (2*)</td>
<td>3,450.12</td>
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<tr>
<td>Total</td>
<td>48</td>
<td>50 (25*)</td>
<td>5,689.9</td>
<td>32 (20*)</td>
<td>12,219.94</td>
</tr>
</tbody>
</table>

* Fires that occurred through the fault of other entities or individuals in premises leased to or by the Company through the fault of other entities or individuals.
In 2018, fire authorities carried out audits of 301 facilities and recommended 715 corrective actions to eliminate the identified gaps. For breach of fire safety regulations, 23 notifications were given, and one entity and 11 officers were fined. The total number of fines was down by 70% year-on-year and notifications were down by 43%, which is a testament to our improved performance on fire prevention. Through our engagement with fire authorities to reclassify facilities to lower hazard categories, the number of facilities inspected in 2018 reduced 2.5 fold to 301 from 761 in 2017.

We continue to upgrade and renovate buildings and install fire protection systems: RUB 163.7 million was spent in 2018 to install these systems at 148 facilities.

All our technology equipment classified as hazardous facilities is registered with Rostekhnadzor (Federal Environmental, Industrial and Nuclear Supervision Service of Russia) in accordance with Russian laws. We maintain a licence for operating fire and explosion hazardous facilities of Hazard Classes 1, 2 and 3. The Company has a total of 188 officially registered hazardous facilities, including 87 facilities classified as Hazard Class 3 (gas grids).

All hazardous facilities are insured with annual insurance premiums totalling RUB 1.8 million.

To prevent occupational accidents and incidents and monitor compliance with operational safety regulations, we have set up operational controls over operational safety compliance at hazardous facilities and perform regular audits of our business units. In 2018, we had 677 audits, audited 187 hazardous facilities, and identified 481 violations. All violations were eliminated by the end of 2018.

In 2018, we also renewed contracts with emergency response and rescue teams, updated our accident containment and response action plans, carried out operational safety audits on our facilities, and provided operational safety training and certification to employees across our branches.
Rostelecom is a market leader in high-speed internet access and retail Pay TV. We are building a digital ecosystem which includes Smart Home solutions, online education services, telemedicine technology, and other services. Rostelecom also leads the market in telecommunications services for government authorities and corporate users at all levels.

Rostelecom is a market leader in innovative solutions for e-government systems, cyber security, data centres, cloud computing, healthcare, education, and utilities. Since 2018, Rostelecom has been the operator of the national Unified Biometric System, enabling remote banking services.

Our Approach

Digital Economy of the Russian Federation National Programme

Universal Service Obligation and Bridging the Digital Divide

Social and Charitable Projects
Rostelecom is a market leader in high-speed internet access and retail Pay TV. We are building a digital ecosystem which includes Smart Home solutions, online education services, telemedicine technology, and other services.

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Our Approach

- Digital Economy
- Of the Russian Federation
- National Programme
- Universal Service Obligation and Bridging the Digital Divide

DELIVERING HIGH-QUALITY SERVICES TO CUSTOMERS

Social and Charitable Projects
Delivering High-Quality Services to Customers

Our Approach

PJSC Rostelecom is Russia’s largest provider of digital services and solutions operating across all market segments and covering millions of households, public and private entities.

In March 2018, Rostelecom’s Board of Directors approved the Company’s new 5-year development strategy. Rostelecom has already come a long way to transform from a telephony provider into a digital services provider. The new strategy is designed to reinforce Rostelecom’s status as a digital and IT company.

In 2018, 55% of the Company’s revenue was generated by digital and content services, including high-speed internet access, Pay TV, cloud, and data centre services, cyber security, etc. The Company is focused on high-powered growth in the segments of new digital services for both retail customers, and business and government customers. We have built teams, centres of excellence, and product development offices in such new areas as biometrics, cyber security, cloud solutions, the Internet of Things, Smart City, Smart Home, etc.

Rostelecom is expanding the ecosystem of digital services for households, which also includes Smart Home solutions, online education services, telemedicine technology, etc.

Rostelecom is traditionally the operator of choice for telecommunications and IT services for government authorities and corporate users at all levels. Over 1.0 million entities use our high-speed internet access and VPN services. Rostelecom offers turnkey innovative solutions for e-government systems, cyber security, data centres, cloud computing, biometrics, healthcare, education, and utilities.

Rostelecom today:

No. 1 player in the market for ultrafast broadband for households, business, and government customers

No. 1 player in the TV market (by revenue) and the leader in cable and interactive TV

No. 1 by fibre network coverage in both urban (35 million households) and rural areas (8,200 communities with a population between 250 and 500 people and 9,000 healthcare centres across the country)

No. 1 player in the data centre market by number of rack units

No. 1 by contribution to government-sponsored digital programmes (from Bridging the Digital Divide programme to the public services ecosystem to the Digital Economy of the Russian Federation national programme)

No. 1 player in IPTV, the most innovative segment of the pay TV market (78% of the Russian market)
“2018 was a special year for Rostelecom. In 2018, we launched our new Strategy 2022 focused on enhancing our ecosystems of products, services, and customer care, improving operational excellence, upgrading our technology platform, and, of course, developing the Rostelecom team.

The Company has already made a huge step towards digitalisation: we have expanded and improved our product offerings and entered new markets by launching a biometric platform, and we are developing digital solutions for healthcare and education and enhancing our cyber security system. Today, we do not simply create products and services – we offer positive experiences, open up opportunities to get education and healthcare services, and give people a sense of security and save them time by reducing bureaucracy. We help customers of any size to grow their business, and help the government reach out to the people.”

— Mikhail Oseevsky, President of PJSC Rostelecom

Rostelecom priorities include developing Russia’s digital infrastructure and bridging the digital divide.

E-government services are used by more than a half of Russia’s population –86 million people.

As part of the universal service reform, the Company is focused on the Bridging the Digital Divide (BDD) project bringing affordable telecoms services to people in rural areas, particularly in remote and hard-to-access locations. Due to the infrastructure built by the Company, residents of rural areas can now get the most from the internet-based digital technologies and have access to online public, healthcare, and education services to the same standards as their urban counterparts.

As at the end of 2018, 8,000 access points (57% of the target as per the project plan) were deployed within the BDD project. In 2017, the Company made internet access available free of charge at its Wi-Fi access points installed within the BDD project. Also in 2018, the Company zeroed out the rates for local and intra-zone calls from universal payphones, so residents can now call any landline numbers within their region completely free of charge.

By taking part in the government-sponsored programmes and implementing own projects, the Company makes its contribution to the UN SDGs. Specifically, our participation in the Digital Economy of the Russian Federation national programme and the implementation of the BDD project simultaneously contribute to as many as seven Sustainable Development Goals: Goal 1: No Poverty; Goal 3 Good Health and Well-Being; Goal 4: Quality Education; Goal 8: Decent Work and Economic Growth; Goal 9: Industry, Innovation and Infrastructure; Goal 10: Reduced Inequalities; and Goal 11: Sustainable Cities and Communities.

The number of registered users of the Integrated Identification and Authentication System has reached almost 84 million. Thus, every second user in the Russian segment of the internet has digital access to public services.

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All our products and services are thoroughly assessed for any potential negative impacts on the environment or local communities. If any such impact is identified, the Company makes every effort to eliminate or minimise it.
Delivering High-Quality Services to Customers

PJSC ROSTELECOM’S CONTRIBUTION TO THE UN SDGS IN PROVIDING SERVICES FOR CUSTOMERS

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<tr>
<th>Programmes</th>
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<td>Digital Economy of the Russian Federation</td>
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<td>Ensuring the operation of the e-government infrastructure</td>
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<td>Unified Public and Municipal Services Portal</td>
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<td>Integrated Identification and Authentication System</td>
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<td>Unified System of Interdepartmental Electronic Cooperation</td>
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<td>Unified Biometric System</td>
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<td>Smart City</td>
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<td>Services for the Great Patriotic War (WWII) veterans</td>
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<td>Higher quality of services</td>
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The largest internet provider in Russia

Rostelecom is the largest operator of ultrafast broadband for households, business, and government customers. As at the end of 2018, the Company provided internet connectivity to 12 million households across the country and over 1 million commercial and government entities. In this way, we are the largest provider of access to online and digital services for Russian citizens and companies, bringing them all associated benefits and opportunities.

In 2017, Rostelecom completed an ambitious programme for the deployment of fibre access networks (GPON, FTTx), reaching 35 million households across Russia. Between 2012 and 2017, we connected over 19 million households to fibre, in some years covering as many as 5 to 6 million households per year by fibre broadband networks.

This effort provided a solid technical platform to drive our business growth for years to come, as well as maintain our leadership in the Russian market not only in the ultrafast broadband segment, but also in IPTV. Our current focus is on increasing capacity utilisation for the deployed fibre networks and expand our bundled offerings (selling users connectivity to activate and use two or more services simultaneously), which improves the loyalty of the subscriber base and increases customer retention.

The growth in fibre networks has recently been driven by government-sponsored infrastructure projects (bridging the digital divide, internet connectivity for hospitals and schools, deployment of submarine FOCLs to connect Magadan, Kamchatka, and the Kuril Islands, etc.), which involve the construction of hundreds of thousands of kilometres of new high-speed fibre lines. This increases data speeds available to customers across all segments in remote and sparsely populated areas.

Providing excellent services and better life quality for Russian people is an integral part of our values.
Russia’s largest operator of cable TV and interactive TV networks

Rostelecom is the largest operator of cable TV and interactive TV networks in the Russian market by subscriber base and revenue. Over 10 million households across the country benefit from the Company’s services (the Company passed this milestone in 2018).

More than 5.3 million households use our unique nationwide service – Interactive TV (IPTV). This is a multimedia entertainment centre for the whole family, which adapts to the tastes and preferences of the user.

Rostelecom aims to consolidate, sort and bundle the most interesting TV and video content, which can then be delivered, regardless of the distribution environment, to any screen capable of playing video.

The Company offers a maximum range of digital technologies for accessing content. The Multiscreen service enables watching Rostelecom’s TV and video content on absolutely any screen – be it a TV (via a regular set-top box, OTT set-top box, or a Smart TV application), or using a desktop, laptop (via a video portal), tablet or a smartphone (via a mobile application). Multiscreen integrates all devices into a single space for viewing content: you can start watching a movie on one device and then continue on any other from where you stopped watching. Up to five different devices can be linked to Multiscreen, i.e. devices of all family members.

Through its Video Rental service, Rostelecom offers a selection of over 250 different TV channels and about 20 thousand films and episodes of TV series. Interactive TV supports a maximum range of extra features such as an on-screen TV guide, Freeview (pause, rewind, programme archive), Parental Control (restricting children’s access to content based on age labelling), on-screen information services, Karaoke, and others.

The Company places a particular emphasis on producing and offering high-quality content for children and young people. In 2018, the Company, together with the children’s TV channel TiJi and the Art, Science and Sport Charity Foundation, for the first time demonstrated content with audio description, enabling visually impaired and blind people to “watch” videos. The audio description technology helps visually impaired viewers better understand what is happening on the screen. Dialogues of the characters are accompanied by an additional audio track which conveys the details of the “picture” – objects, actions and phenomena a viewer needs to know to fully understand the plot.

Rostelecom also offers turnkey TV products for corporate customers, e.g. user-friendly integrated solutions for the HoReCa industry.
Delivering High-Quality Services to Customers

Digital Economy of the Russian Federation National Programme

Developing the digital economy in Russia improves the quality of life for citizens and enhances the global competitiveness of domestic industries.

Rostelecom is the government’s key partner both in implementing infrastructure initiatives under the Digital Economy of the Russian Federation programme, and in developing Russian modern digital services and platforms for the benefit of private citizens and businesses, also developing solutions to drive digitalisation within specific industries of the national economy. At the same time, the Company enhances the institutional tools promoting domestic ICT technologies, and bolsters the demand for innovative solutions.

The key prerequisite for driving the emergence and development of the digital economy is ensuring that equal access to digital services, including electronic public services, is enabled throughout the country. To this end, in recent years, we have successfully deployed the high-speed Kamchatka–Sakhalin–Magadan and Sakhalin–Kuril Islands submarine fibre lines. Within the Bridging the Digital Divide (BDD) project, Rostelecom will bring internet connectivity to up to 10,000 communities with a population between 250 and 500 people by 2020. In 2017 and 2018, the Company provided high-speed internet access to 9,000 federal and local healthcare centres. We are exploring options for bringing high-speed fibre broadband to secondary schools (about 40,000 schools) and other socially significant institutions (authorities and local governments, military commissariats, fire departments and district police stations, the National Guard of Russia (Rosgvardia) facilities, etc.).

Rostelecom also plans to participate in building and developing 5G wireless networks. In 2018, to test promising technical solutions, Rostelecom set up three 5G pilot zones, including at Skolkovo Innovation Centre, on the premises of the State Hermitage Museum, and in Innopolis. The future of key areas of the digital economy such as the Industrial IoT, self-driving vehicles, smart cities, etc. is directly linked to the availability of 5G networks.

The rise of data economy will inevitably require transformation of data storage and processing. Rostelecom’s capex programme provides for a major expansion of the data centre network in Russian regions, covering every federal district. The total capacity of the Company’s data centres will reach 10 thousand rack units by 2020.

In the public administration area, Rostelecom ensures the operation and development of the e-government infrastructure. The Company creates key digital platforms driving the advances in this area, including the Digital Profile solution and the Unified Biometric System.

By expanding digital infrastructure, we are providing a foundation for the development of digital economy in Russia.

Internet connectivity for the Kuban region and the Republic of Adygeya

In 2018, Rostelecom brought advanced internet connectivity to 321 healthcare centres in the Kuban region and in Adygeya. The Company’s specialists installed over 1,500 km of fibre cables to connect the healthcare centres within the project, thus completing it on time before the end of the year.

“With the support from Rostelecom, we have been addressing the critical task of developing telemedicine services. Doctors from remote rural hospitals and primary care centres will be able to have online consultations with colleagues from all over the country and from abroad while patients will benefit from qualified medical advice provided remotely. The use of new value-added services and products will be enabled. We expect that the project will enhance the performance of healthcare professionals and the efficiency of using expensive medical equipment while the quality and speed of healthcare services will be improved for patients.”

— Yevgeny Yushkov, Head of the Krasnodar Territory Department of Informatisation and Communications
Rostelecom installed over 800 km of fibre to connect rural hospitals across the Omsk Region

In September, Rostelecom completed the first stage of infrastructure construction for rural healthcare centres in the Omsk Region. Within eight months, the Company deployed 843 km of fibre, bringing internet connectivity to 93 hospitals. Doctors are now able to use advanced informational technology to provide qualified medical assistance and offer advice to patients in remote locations.

“Providing modern healthcare services, including using electronic document management systems, is impossible without high-quality, uninterrupted data transmission. Fibre not only ensures a stable high-speed connection but also enables the deployment of advanced technology solutions at healthcare centres, including various digital diagnostic equipment.”

— Eduard Serobabin, Director of Rostelecom’s Omsk Branch

Rostelecom completed the deployment of the submarine section of the fibre link to the Kuril Islands

In 2017, Rostelecom started the construction of the Sakhalin–Kuril Islands submarine fibre-optic cable link (SFOCL). The project was included in the federal targeted programme for the social and economic development of the Kuril Islands for 2016–2025.

Deployment of the submarine cable link commenced in June 2018. The total length of the link is about 815 km. The link’s capacity is 40 Gbps across all sections, with an expansion option of up to 8 Tbps, the link’s maximum capacity. The Sakhalin–Kuril Islands SFOCL supports the delivery of a wide range of digital services.

Most tasks, including submarine sections, were completed in 2018. The new SFOCL, built by Rostelecom, connected Yuzhno-Sakhalinsk to Kurilsk (Iturup Island), Yuzhno-Kurilsk (Kunashir Island), and the villages of Krabozavodskoye and Malokurilskoye (Shikotan Island). The fibre-optic backbone link provided residents, business and public sector entities of the Southern Kuril Islands with a high-speed internet connection.

For many years we have ensured the operation and development of the e-government infrastructure.

The key information systems comprising the technology platform for digitising public services:

- Unified and regional public and municipal services portals set up in almost all regions of the Russian Federation; official websites and portals of federal and local authorities
- The Integrated Identification and Authentication System, used by almost all federal authorities providing public services; regional public services portals and other organisations legally required to be connected
- The Unified System of Interdepartmental Electronic Cooperation, supporting data transfer between federal and regional authorities and the public services (e-government) portal
- A number of other systems

The number of public services (e-government) portal users grew to 86 million in 2018. During the year, the number of services ordered by users via the portal and the Gosuslugi (Public Services) mobile application more than doubled to over 56 million. Over 2,000 information systems of federal and regional authorities, and commercial entities are connected to the Integrated Identification and Authentication System. In 2018, users made more than 1.5 billion logins using their accounts in the system for authorisation. The Unified System of Interdepartmental Electronic Cooperation registers an average of about 80 million transactions per day.
Delivering High-Quality Services to Customers

Unified Public and Municipal Services Portal

Over 1,000 federal, more than 7,600 regional, and over 19,800 municipal public services are provided electronically via the portal to individuals and legal entities.

In June 2018, a business mobile application was launched – Gosuslugi.Business. The user-friendly application enables a user to check for traffic fines, check the audit schedule, manage data, and receive bank details. The app is available in the application stores Google Play and App Store.

The Gosuslugi application continues to function and evolve, and can be downloaded to mobile devices from application stores Google Play and App Store. The number of installations by users exceeded 17 million in 2018, with about 12 million services ordered over the period via the mobile version of the unified public services (e-government) portal.

During 2018, users completed and sent via the portal a total of over 60 million electronic application forms for public services, up by 55% year-on-year. The most popular service was the option to check the balance of a personal account with the Pension Fund of the Russian Federation – citizens made over 16 million requests. The second most popular service was vehicle registration: it was used 4.8 million times. About 3 million applications were submitted for next-generation foreign passports and registration of titles. Nearly 2.6 million services were provided to renew a driving licence. The volume of payments at RUB 52.6 billion was almost double the 2017 figure.

Russian Post began delivering postal items using the unified public services portal account

In October 2018, Russian Post expanded the use of a simple electronic signature (SES) for customers. Citizens with a verified account at the unified public services portal, operated and developed by Rostelecom, now have an option to apply for SES remotely via the Russian Post website.

The introduction of the simple electronic signature feature has enabled visitors of the Russian Post website from across the country to receive parcels and registered letters requiring no payment without presenting a passport and notices, which significantly reduces the time for handing out postal items regardless of their type, weight or size.

“Integrating the service for obtaining a simple electronic signature with the unified public services portal will make the process of application for SES fully remote. Customers no longer need to visit a post office to verify their identity and personal data. Currently, more than 3.5 million customers across the country have registered a simple electronic signature, and over 20 million postal items have been delivered using e-signature, and these numbers will increase significantly as we get closer to the New Year’s holidays. In future, remote SES connection will also become available in a mobile application.”

— Nikolay Podguzov, CEO of Russian Post

Yugra made it to the Top 10 regions by number of residents registered with the public services portal

As at the end of 2018, the Integrated Identification and Authentication System had 1.27 million registered residents of the Khanty-Mansi Autonomous Area – Yugra, or 97.3% of the region’s total population over 14 years.

“Since the beginning of 2018, over one and a half billion logins have been made in Russia using the Integrated Identification and Authentication System accounts. This is nearly double the figure for 2017. Citizens use the system as a single point of access point to more than 2,000 public and commercial portals. Using the system, more than 9,000 users per minute access the unified and regional public services portals, the websites of the Federal Service for State Registration, Cadastre, and Cartography (Rosreestr), the Federal Tax Service of Russia, the Pension Fund, and the Russian Public Initiative.”

— Dmitry Lukoshkov, Director of Rostelecom’s Khanty-Mansiysk Branch
Electronic Cooperation (USIEC) transfers data on payments made by banking institutions to the State Information System for State and Municipal services accordingly, with corresponding user notifications.

Unified Identification and Authentication System

The number of registered users of the Integrated Identification and Authentication System, which turned seven in November 2018, totals nearly 84 million – more than a half of Russia’s population.

Today, the Integrated Identification and Authentication System (IIAS) is a large independent information system, a single point for individuals, businesses and public officials to access the e-government infrastructure, and other information systems connected to the Unified System of Interdepartmental Electronic Cooperation (USIEC).

The Integrated Identification and Authentication System stores a user’s main account within the e-government database. The account enables requesting electronic public services via the www.gosuslugi.ru, using departmental and regional portals, for example, the Federal Tax Service portal, and other public resources, in particular www.zakupki.dov.ru.

In 2018, to keep data in the accounts of verified IIAS users up to date, we successfully implemented a feature allowing State Information System (SIS) departments to update user data in the IIAS. We also successfully implemented a mechanism for capturing changes in IIAS user data and updating user profiles accordingly, with corresponding user notifications.

Unified System of Interdepartmental Electronic Cooperation

Public sector institutions connected to the system share information independently, without the need to involve citizens in collecting the required documents. All federal executive authorities in Russia are connected to the system. The Unified System of Interdepartmental Electronic Cooperation (USIEC) transfers data on payments made by banking institutions to the State Information System for State and Municipal Payments.

In 2018, as part of the USIEC development as a data exchange platform within the public digital platform for providing electronic public and municipal services to citizens, the following solutions were implemented:

- 50% automation was achieved for the routine procedures related to connecting information systems to the USIEC, display of different data views was enabled in the USIEC, along with data exchange through the USIEC.
- Quality of interdepartmental cooperation and reliability of the USIEC were improved through enhanced functionality in message queue management and message addressing, routing, and delivery to recipients.

In the overall operation of the e-government infrastructure, the following tasks were successfully addressed in 2018:

- Robust remote service delivery to individuals and entities by authorities at all levels was ensured.
- Shorter lead times for obtaining electronic services were achieved.
- The required transparency of service status was ensured.
- The required quality metrics were maintained despite increased loads, which enabled uninterrupted delivery of public and municipal electronic services.

In 2018, Rostelecom launched a back-up data centre for the e-government infrastructure. The centre hosts the more critical elements of the e-government infrastructure, such as the public services portal, the Integrated Identification and Authentication System, the Unified System of Interdepartmental Electronic Cooperation, and the Unified Reference Data System.

Now in case of emergencies in the Federal Data Centre for the e-government infrastructure (e.g. power outages, fire, floods, structural collapse, etc.), user requests will be redirected to the back-up data centre. This procedure enhances the resilience of the e-government infrastructure and enables recovery of its systems in a matter of hours.

Unified Biometric System

The Unified Biometric System has been operational in Russia since 30 June 2018. It is a key element of the remote identification process that provides citizens with remote access to financial services. The system uses two features for user identification – voice and facial recognition. Their simultaneous use enables distinguishing a live person from a digital simulation of their biometric data. At the moment, facial and voice recognition are the most widely spread biometric features available for mass application.

To register with the system, a user needs to visit a bank just once. A bank employee will help the user register in the Integrated Identification and Authentication System, which is now used to access the public services portal, if the user has not been registered before. Then the bank employee will capture the user data – face image and voice recording, and upload the data into the system. Upon registration, an individual can remotely access the services of any bank supporting the identification system. All the customer needs is to enter the IIAS login/password and read out a short verification phrase generated by the system while looking into the camera of their smartphone or PC. For remote identification, the user only needs access to the internet and a device with a webcam; no additional equipment is required.
Delivering High-Quality Services to Customers

The process of getting remote access to banking services is as follows: after selecting a service on a bank’s website or in the bank’s application, the user automatically enters the Key Rostelecom, signs in through the public services portal and passes the biometrics based identity verification procedure. To do this, a few numbers have to be said while looking into the camera. The system then compares the biometrics – face and voice – with the previously created digital image. If the data matches, the application displays a successful identification message and the user receives the requested service.

Going forward, the Unified Biometric System will become a nationwide platform for simple and secure access by individuals to public and commercial services. At the end of 2018, registration with the system was available at 4,500 branches of 150 banks in 450 cities across the country. Remote identification will enable access to financial services from anywhere in the world.

Watch the Exam – video surveillance during the Unified State Exam (USE)

Rostelecom runs video surveillance projects across the country. Since 2014, the Company has been running a video surveillance project for the Unified State Exam (USE) campaign. The project drives improvements to the exam procedure as video surveillance ensures the objectivity and quality of the Unified State Exam procedure, as well as equal conditions for all its participants.

For more details on the Unified State Exam (USE) see www.ege.edu.ru.

In 2018, Rostelecom’s video surveillance system for the Unified State Exam provided 100% online broadcasting coverage and was running trouble free during the entire USE 2018 campaign from 28 May to 2 July 2018. More than 117 thousand cameras were used in the video surveillance project for the Unified State Exam, and the total number of broadcast hours exceeded 2.6 million.

Throughout the period live video links were available on the portal www.smotriege.ru. The portal enabled monitoring of the national exams by online observers, with a total of 21,900 users registered on smotriege.ru, twice the figure from 2017. The increase was due to the fact that regional online observers were involved in 2018.

Watch the Exam project in the Tomsk Region

In the Tomsk region, Rostelecom provided video surveillance for the Unified State Exam in 603 classrooms across 58 schools and at four regional exam data processing centres. The entire examination process was available for monitoring online. In 2018, six district schools – in Mogochin, Parbig, Stepanovka, Narym, Bely Yar, and Ulu-Yul – were connected to fibre by Rostelecom. Previously, the schools had only a copper connection. At Tomsk’s school No. 50 and lyceum No. 7, we upgraded the equipment by replacing legacy webcams with modern IP cameras offering a wider viewing angle and better image quality picture, with no connection to a laptop needed. A total of 17 educational institutions across the region were equipped with these cameras.

“We have successfully completed our task of preparing the equipment for uninterrupted operation during the exams.”

— Alexey Makhorin, Director of Rostelecom’s Tomsk Branch
Watch the Exam project in Siberia

Over 15% of total video equipment within the project was used to support the national exam campaign in the Siberian Federal District. The total number of cameras operated across all exam sites averaged 8,000; however, on the days of Russian language and math exams it peaked at 15,440. During the exams in Siberia, more than a million hours of video broadcasts were recorded.

“The video surveillance system was running smoothly throughout the entire Unified State Exam campaign for Siberian graduates. This allowed us to make the procedure more transparent and objective, and as convenient as possible for online observers – due to the SMOTRIEGE.RU portal.”

— Nikolay Zenin, Vice President and Director of Rostelecom’s Siberia Macroregional Branch

Watch the Exam project in the Southern and North Caucasian Federal Districts

In the Southern Federal District (SFD) and the North Caucasian Federal District (NCFD), the Company provided live video links for 654 exam sites and 21 regional exam data processing centres covering a total of 9,549 rooms, with 99.5% of the rooms monitored online.

“The video surveillance project for the Unified State Exam campaign has already become a routine for us; however, we improve the technical side of it every year, adding various innovations. For example, this year we have upgraded some of the equipment in several regions, as well as arranged online video surveillance and video surveillance in classrooms for dispute commissions responsible for handling challenges to exam scores.”

— Denis Lysov, Vice President and Director of Rostelecom’s South Macroregional Branch

National Cloud Platform

The National Cloud Platform is a suite of integrated information systems, launched in 2012 and designed to provide cloud computing services to executive authorities of various levels, local authorities, commercial organisations, and individuals.

Rostelecom’s National Cloud Platform has been certified for compliance with Federal Law No. 152 (On Personal Data), and the platform management system is included in the register of Russian-made software.

For more details on the National Cloud Platform see www.company.rt.ru/projects/07

The National Cloud Platform offers application-based services in healthcare, education, security, public utilities, and property and land management to public authorities and private enterprises.

The Company developed services for SMEs covering office work flow management, customer relationship management, and accounting for trade and operations.

To promote the National Cloud Platform, Rostelecom has created a portal O7.com providing a link to managers at the Innovation Centre. Through the portal, users can obtain the latest info on the products offered by Rostelecom and its partners, and developers can have their solutions reviewed or offer their development services.
Universal Service Obligation and Bridging the Digital Divide

Universal service obligation is commonly used throughout the world to ensure that basic communication services are available at an affordable price to all citizens. In Russia, the universal service concept was introduced by the Federal Law On Communications. Universal service includes:

- telephony via payphones, multifunctional devices, information terminals, and similar devices (installed within an hour’s walk from a person’s home in most communities across the country);
- data transmission and internet services via public access points (to be installed in all communities with a population between 250 and 500 people).

In accordance with the Federal Law On Communication, the Government of the Russian Federation shall assign the universal service obligation across the country to an operator holding a significant share of the public communications network in at least two-thirds of the Russian Federation regions. Rostelecom is the only operator that meets this criterion.

As the only designated universal service provider throughout the Russian Federation, Rostelecom is ensuring the operation of 148 thousand universal payphones; under the universal service obligation, any Russian citizen must have access to a universal payphone within an hour’s walk. Moreover, the Company shall install Wi-Fi access points with bandwidths of at least 10 Mbps at almost 14 thousand communities with a population between 250 and 500 people and payphones installed.

Universal service payphones have an important social function: they are as yet the only communications channel available in many remote and hard-to-access areas. In 2018, Rostelecom made all local and intra-zone calls free of charge. Within the region where a universal service payphone is installed, any landline phone can now be called completely free.

The Company has made yet another step to make the universal service more affordable and easy-to-use for the general public. Neither money nor a phone card is now required to call one’s family or friends from another district or town or to contact a hospital or another institution located in the regional centre. This is to help rural residents handle most day-to-day tasks remotely and free of charge.

To install Wi-Fi access points in small communities, the Company has launched its Bridging the Digital Divide project. Under a ten-year agreement signed with the Federal Communications Agency (Rossvyaz) under the BDD project, Rostelecom will install internet access points with bandwidths of at least 10 Mbps at almost 14 thousand communities with a population between 250 and 500 people. A smartphone or another Wi-Fi enabled device is required to use the internet service. To increase the availability of universal service during summer 2018, Rostelecom completed a phased migration of Wi-Fi points to a new platform and a single Wi-Fi network. Logging in has become easier and more straightforward: wherever the customers are, the network name they see on their screen remains the same, Rostelecom_UUS, and they can log in by sending a text message, using their account on the public services (e-government) portal, or calling to a toll-free number.
New communications lines bring services previously available in large cities only to small villages. In 2018, Rostelecom installed 722 km of fibre–optic communications lines (FOCL) in the Amur Region, 575 km in the Khabarovsk Territory and 435 km in the Primorye Territory.

Rostelecom's internet service in the Arkhangelsk Region

In 2018, in furtherance of the Bridging Digital Divide project, Rostelecom brought internet to 23 rural communities in the Velsky, Kargopolsky and Ustyansky districts of the Arkhangelsk Region. To that end, the Company's engineers installed 520 km of FOCL during the year.

Since the launch of the respective federal programme in 2015, internet service has been expanded over 87 communities with a population between 250 and 500 people in the Arkhangelsk Region and the Nenets Autonomous Area.

“In 2018, we met our target for the number of internet access points. However, we modified the original list of communities in the course of network expansion, mostly because we had to coordinate the communications lines’ routing. Despite all challenges, we will continue our efforts to provide the region’s rural population with internet access.”

— Andrey Prishchemikhin, Director of Rostelecom’s Arkhangelsk Branch

FOCLs in the Far East

In 2018, Rostelecom commissioned 3,669 km of FOCL in the Far East, a several-year high. These FOCLs helped bring broadband internet access to residents of remote communities with Yakutia accounting for over one-third of the lines installed in 2018. Rostelecom installed 1,472 km of FOCL in the Republic of Sakha (Yakutia), including over 650 km for the final phase of the Vilyuy Express project.

“Fast and reliable internet has reached private households and healthcare centres giving people new opportunities to study, work, and communicate. I believe that the development of the communications infrastructure will contribute to Yakutia’s social and economic growth.”

— Vladimir Solodov, Chairman of the Republic of Sakha (Yakutia) Government

Rostelecom’s free Wi-Fi service in the Kaliningrad Region

In 2018, wireless internet access points were launched in 19 Kaliningrad Region villages. Since the commencement of the respective project, Rostelecom has launched a total of 97 public internet access points in the region. To that end, over 500 km of FOCL have been installed.

“In 2014, the region’s communities with a population between 250 and 500 people were covered under the Bridging the Digital Divide project in line with the decision made by federal authorities. The Kaliningrad Region has 127 such communities. At present, authorities at all levels consider whether rural communities with a population between 100 and 250 people should also be covered under the programme to increase internet penetration across Russia.”

— Victor Fedosov, Technology Director of Rostelecom’s Kaliningrad Branch

FOCLs in the Republic of Mari El

In 2018, Rostelecom installed almost 100 km of FOCL in the Republic of Mari El. Wi-Fi internet access was launched in nine Novotoryal District communities. Since the commencement of the BDD project in 2015, Rostelecom has connected 110 small villages in the Republic of Mari El giving internet access at bandwidths of at least 10 Mbps to over 30 thousand residents.

Venedict Suvorov, Director, Information Technology and Communications Department of the Republic of Mari El:
Delivering High-Quality Services to Customers

“Bridging the Digital Divide contributes to the development of small rural communities. Today, residents of remote areas have access to modern technology and digital services same as their urban counterparts.”

BDD in the Kirov Region

In 2018, Rostelecom installed 1,000 km of FOCL in the Kirov Region, including 380 km laid to bring internet access to 97 healthcare centres and over 500 km laid under the BDD project. Active Wi-Fi access points are now found in 92 small communities in the region. Over 100 km of FOCL were installed to connect 350 public institutions and businesses. Broadband services are now available to the local branches of the National Guard of Russia, Kirovenergo, and Vyatavtodor.

“Demand for digital solutions in business and the public sector is growing, and we develop our communications networks to respond to the customers’ needs. Since 2014, rollout of fibre in our region has increased fivefold. By expanding digital infrastructure, we are providing a foundation for the development of digital economy.”

— Evgeny Valov, Director of Rostelecom’s Kirov Branch

BDD in the Ulyanovsk Region

In 2018, Rostelecom launched Wi-Fi internet access in 22 small Ulyanovsk Region communities. To that end, the Company installed 296 km of FOCL. The construction of these fibre-optic lines through difficult terrain proved a challenging task. We laid our FOCLs across ravines in the Pavlovka District, thick forests in the Kuzovatovo District, and hills in the Sengiley District.

“Internet access helps improve the quality of life for rural residents. Fibre broadband enables them to benefit from online services same as their urban counterparts. Residents of small communities can now book a doctor appointment, buy goods, and pay their bills online, contact social welfare institutions, as well as connect with their family and friends on social media.”

— Elena Alpova, Director of Rostelecom’s Ulyanovsk Branch

Smart City

Rostelecom has implemented various Smart City projects across 50 Russian regions to improve city management. The Company’s projects introduce digital technologies in transport (intelligent transport systems, traffic safety), safety (city surveillance, emergency management), utilities (smart metering systems, inventory control), energy efficiency enhancement, and other areas.

In 2018, the Russian Ministry of Construction, Housing, and Utilities approved an industry-wide Smart City project for digital transformation of cities. Rostelecom joined the national Smart City Centre of Excellence and ANO Digital Economy Smart City working group.

Smart City projects are one of the Company’s business growth drivers. In 2018, Rostelecom’s revenue from Smart City projects was at RUB 23.2 billion, up 46% year-on-year.

The Smart City project is aimed at making Russian cities more competitive, improving the efficiency of city management, and creating a safe and comfortable environment for urban residents. It is designed around five fundamental principles:

- Focus on the people
- Technology-driven cities
- Enhanced city management
- Comfortable and safe environment
- Emphasis on cost efficiency, including public services

Smart City aims to enhance the efficiency of city management and improve the quality of life in cities by introducing advanced digital and engineering solutions.

Rostelecom showcased the solutions for the first-ever Smart City in the Urals

In December 2018, Satka, a town in the Chelyabinsk Region, hosted the Smart City: From Pilots to Large-Scale Initiatives interregional forum. Teams of government officials from the Tyumen and Kurgan regions came to collect the lessons learned from the Smart City pilot in the Urals. As one of the 36 cities selected by the Russian Ministry of Construction, Housing, and Utilities to implement comprehensive Smart City solutions, Satka ran the first pilot in the Urals. The project is being implemented under agreements between the regional government, the Satka District administration, and Rostelecom.
“Satka has already run a few pilots related to improving municipality–citizen communication, energy efficiency, and safety. It is essential that other Chelyabinsk Region communities also introduce digital services for the public. We would be happy to serve as a pilot region for the introduction of best practices generated by the Digital Economy of the Russian Federation national programme. This target was set by Governor of the Chelyabinsk Region Boris Dubrovsky, and we are steadily moving towards it.”

— Alexander Kozlov, Minister of Information Technology and Communications of the Chelyabinsk Region

Smart City in Kursk

In December 2018, Rostelecom took part in a meeting held by the Kursk Chamber of Commerce and Industry to discuss the matters of driving digital economy in the region. At the meeting, the country’s largest digital services provider presented Smart City solutions and reported on the Safe City project that had already been rolled out in Kursk. Rostelecom engineers had connected all of the city’s emergency services into a unified emergency call processing system that may be contacted by dialling 112. Moreover, to contribute to the city residents’ safety, a video surveillance system has been deployed. CCTV cameras monitor the areas near apartment block entrance doors and control the city’s road traffic. These solutions were included in the Safe City project.

“Smart City system implies running an ongoing extensive, artificial intelligence–driven analysis of many disparate data. Rostelecom has all the requisite capabilities in place. Some of these solutions have already been deployed by our Kursk engineers and provide a solid foundation enabling us to roll out a full-scale project. Its core objective is to merge various municipal services and departments into a single digital environment.”

— Sergey Ovcharov, Deputy Director of Rostelecom’s Kursk Branch, Director for B2B and B2G

Rostelecom’s smart street lighting comes to Vyatskiye Polyany

In 2018, under an energy service contract with the city administration, Rostelecom upgraded the city’s street lighting system. By deploying an automated street lighting control system and installing modern energy saving street lights, the municipality will cut street lighting costs by 70%. Over six years, at least 5.7 million kWh will be saved. Instead of old street lights, Rostelecom engineers installed 2,333 LED lights. Unlike the previous generation bulbs, these lights can be switched on instantly, consume a fraction of the power and have a 10+ years’ service life. The Company replaced all damaged and broken lamp posts and consoles, reconfigured the power supply scheme, and reduced the number of power supply stations by 25%. Thus, the system’s operating costs were reduced, whereas its reliability increased.

“This was the third smart street lighting project to be implemented in the Kirov Region. The first two were in Kirovo-Chepetsk and Kotelnich. Rostelecom spends its own funds for these projects and expects to return the investments over the next several years by charging the cost of energy saved thereby. As a result, our cities receive state-of-the-art automated street lighting systems without spending a penny of their municipal funds.”

— Evgeny Valov, Director of Rostelecom’s Kirov Branch

Rostelecom, Tele2 Russia, and Ericsson tested innovative utilities solutions in Moscow and Saint Petersburg

Rostelecom, Ericsson, and Rostelecom’s mobile operator Tele2 Russia tested an IIoT solution for utilities. Pilot testing of a new solution for energy companies was held in Moscow and Saint Petersburg. During the testing, an automatic meter reading solution was deployed. The tests were run in pursuance of a memorandum of understanding signed by Rostelecom, Ericsson, and Tele2 Russia in November 2018. The data network for testing was based on Tele2 Russia’s infrastructure and used Ericsson’s technology. Data transmission was arranged via Rostelecom cellular modems.

During the Moscow and Saint Petersburg tests, power meter data were transmitted via Tele2 Russia network to the modem manufacturer’s server. The tests confirmed the efficiency of smart meters that enable power distribution companies to optimise costs while providing consumers with more comfort in using their services.
Social and Charitable Projects

As a company focused on social responsibility, PJSC Rostelecom prioritises various projects and initiatives that have significant social impact. The Company maintains close cooperation with several non-commercial organisations.

**PJSC Rostelecom is contributing to digital transformation of Downside Up Charity**

The Company is carrying out a distance learning project for carers and parents of children with Down’s syndrome. The project is part of the charity’s three-year web-based services development programme intended to expand the charity’s target audience and improve the effectiveness of its services. The key objective is to propagate and develop the technologies enabling a family-focused approach to supporting children with Down’s syndrome.

**RT.Health**

Rostelecom is implementing RTHealth, a large-scale project, in two areas:

- The Regional Medical Information System (RMIS) project launched in 2011 and comprising over 40 different modules for automating key business processes for the healthcare sector. Alongside basic modules (out-patient clinic, registration office, electronic health records, etc.), the system features specifically targeted ones. RMIS is functioning across 18 regions and is used by over 1500 healthcare centres. RMIS enables automation of key processes for healthcare institutions and information exchange between regional and nationwide data sources for diagnostics and treatment. The system improves the quality and accessibility of public healthcare services, accelerates the decision-making process for doctors and healthcare administrators, and brings many other benefits.

- The Central Archive of Medical Images (CAMI) Teleradiology project. The system automates diagnostic and radiological departments in healthcare centres. CAMI is a cloud storage for diagnostic materials that provides remote access to the data within a unified data and diagnostic environment, which enables healthcare professionals to request and provide remote advising on acute and complicated illnesses, improves the quality of diagnostic services and brings many other benefits.

**Telephony**

Rostelecom traces its roots to the time when the first landline phones appeared in Russia and to this day remains the country’s largest fixed-line operator. Millions of families and businesses in Russia still use landline phones in their homes and offices. Rostelecom’s total fixed-line subscriber base in 2018 was at 17.4 million while revenue in the segment totalled RUB 16.9 billion.

There are several reasons why people continue using landline phones. The main reason is that fixed-line telephony remains the cheapest option for those who make lengthy calls and thus is preferred by subscribers who love talking. A landline phone needs no charging and is unaffected by power outages. Many people feel that landline phone is a more reliable way of contacting emergency services. It is also a handy device for those who wish to check whether their children or childdminder are home. Moreover, irregularities in radio wave propagation may cause mobile services to be unavailable in some areas, even in cities (e.g., in valleys, ravines, on lower floors, or in underground premises) and a landline phone is the only viable and reliable communication device in such places, which also emits no radio waves. Finally, some mobile phone users keep their landline phone at home so that they may dial their own mobile number and locate the misplaced handheld device. Quite a few subscribers tell that this is the very reason they keep their landline.

Voice service is also gradually migrating to new digital formats, such as SIP telephony or Virtual PBX for corporate customers.
Services for the Great Patriotic War (WWII) veterans

Rostelecom has a long tradition of supporting the veterans of the Great Patriotic War (WWII). To celebrate the Victory Day, the Company enables the Great Patriotic War veterans and disabled ex-servicemen to make free calls to their fellow servicemen, families, and loved ones within Russia and the CIS. In April and May 2018, all Rostelecom subscribers who were in service during the Great Patriotic War were granted 100 free minutes per month for intra-zone, long-distance, and international (within the CIS) calls and an unlimited cable message allowance. Veterans of the Great Patriotic War were able to contact their fellow servicemen and family from their home landline phones, Russian Post public long-distance telephones, Russian Post offices and telegraph outlets. Moreover, on 28 April, Rostelecom arranged video conference calls for the Great Patriotic War veterans residing in the Southern and North Caucasian federal districts. Honourable guests were able to face one another as they communicated; they were recalling the years of their youth immersed in military action, greeting one another on the Victory Day and sharing their plans for the future. This was the eighth time that the Company arranged video conference calls for the Great Patriotic War veterans.

Cyber security

When carrying out data transmission, processing, or storage, Rostelecom ensures information security by using Russia-made solutions (including in-house ones). Rostelecom is Russia’s largest provider of B2B and B2G cyber security services; the Company’s products and services are used by most public institutions in the country and by 30% of businesses on Russia’s Top 100 list. The Company continuously monitors and responds to information security incidents, provides services to protect clients against cyber threats and ensures integrity, sustainability, and safety in the operation of Russia’s segment of the internet.

Technological advancement brings new kinds of threats: viruses, malware, identity theft, DDoS attacks, etc. This is why the Company endeavours to make digital technology not merely accessible but also safe for the government, businesses, individuals. Countering cyber threats and building up information security competencies for all customer segments are a vital part of the digital operator’s development strategy.

Rostelecom is expanding the ecosystem of digital services for households by enabling its customers to use top vendors’ reliable antivirus software for a monthly fee. The 2018 antivirus software sales revenue was up 2.4 times year-on-year.

Rostelecom’s Interactive TV product features the Parental Control service, whereby inappropriate TV and video content may be restricted by enabling age rating filters.

In May 2018, Rostelecom’s officials attended a parents’ forum held in Penza and spoke about various ways of protecting children against inappropriate content on the internet. The forum guests learned about Rostelecom’s Parental Control features and reliable solutions that help keep children safe online. A discussion on the topic of information security was held. Parental Control is a specialised client software. Once installed on user (parent’s and child’s) devices, it protects the child’s online privacy and tracks the child’s location and phone battery level.

In the autumn 2018, Rostelecom launched a series of workshops for parents in Kostroma, named Children and the Web. The digital operator’s employees told the parents about various threats faced by their children while surfing the web and various services intended to protect under-age users’ privacy not only as they access the internet but also as they watch TV. Rostelecom also took part in the regular nationwide Unified Online Safety Lesson. This year, the event was attended by students from Vladimir Polytechnic College. The event’s topic was how to counter online threats, such as phishing, spam, and trolling.

Rostelecom also held a series of workshops for parents in furtherance of its Media Safety project. The meetings were held during the 2017–2018 school year in various educational and public institutions of the Kostroma Region. Over that period, Rostelecom’s employees trained over 1,000 parents to protect their children against inappropriate information as they access the internet and watch TV. The Media Safety programme aims to foster online safety culture among general public.

In December, Rostelecom conducted online safety lessons for the fourth-grade children in Novosibirsk. The students learned basic rules that help avoiding online threats and spending time on the internet productively. Almost 60 children attended the interactive lesson. In the summer 2018, Rostelecom launched a series of open online safety lessons in children’s summer camps across the Kostroma Region.

Rostelecom also provides information security solutions for businesses.

Smart Home and cloud-based video surveillance

Safety of one’s family is one of the most fundamental needs of every human being and often the cause of their stress. Rostelecom offers a convenient turnkey solution for home video surveillance. With this service, one may always check whether their child has returned from school and is doing their homework, whether the senior family members feel well, whether the repairs service team is working at the property, and also watch their pets.

Rostelecom’s Video Surveillance is a cloud-based service developed entirely in-house and featuring smart controls and reliable protection of the user’s sensitive data. Rostelecom’s solution uses data encryption across the entire transmission path from the camera to the Company’s data centres.

To begin using the service, a user has to buy a Rostelecom-branded IP camera kit (HD of Full HD); all cameras are wide-angle, support infrared illumination at night and feature sound and motion sensors. The cameras have push-to-talk capability to transmit voice messages enabling the user to contact their loved ones who are at home but, for instance, have disabled their mobile phone ringer.
Rostelecom offers both indoor and outdoor surveillance cameras; the latter help keep watch over one’s courtyard, garden, car park, or any other grounds. Camera installation, activation, and image settings selection are simple enough to be done by the customers.

Configuring the service is a straightforward process requiring a mobile app or an Online Customer Account. A user may add several indoor and outdoor Rostelecom cameras installed in different regions of the country to their Online Customer Account. A cloud-based video data storage and processing platform enables one to retain an archive copy of their CCTV video for the last 7 to 30 days. The cameras switch to video recording mode automatically when triggered by motion sensors or when their field of view is obstructed. Customers may also start the video transmission by clicking on a hyperlink. If a camera’s internet connection fails, video is saved on an SD card and may be accessed later.

At present, the Company also offers three versions of Smart Home OTT kits:
- Extended Safety (a controller plus door/window sensors, 3-in-1 motion sensors, smoke and water leak detectors)
- Basic Safety (a controller plus door/window sensors and 3-in-1 motion sensors)
- Smart Home Management (a controller plus door/window sensors, 3-in-1 motion sensors, smart socket, and smart lamp)

The basic Smart Home kit (a controller plus a minimum set of sensors) may be expanded by adding more devices. Our solution is based on the Z-Wave wireless communication protocol which helps quickly integrate any sensor into an existing system.

The Smart Home platform is a cloud storage that retains all settings and parameters for the controller and Z-Wave devices (sensors, detectors, and other connectible devices) installed at each customer’s premises. The heart of each system is a controller that coordinates the operation of all devices, executes various response scenarios, and governs the interaction between different parts of the system.

The controller maintains a continuous link with the platform and transmits to it the current status of the customer’s devices (whether or not the motion sensors, door/window sensors, water leak or smoke detectors have been activated; smart socket and smart lighting status). Customers may configure the system via a mobile app or an Online Customer Account. In either case, all information about the customer’s devices, operation modes, and events will be available.

Higher quality of services

Maintaining adequate customer service is one the Company’s key objectives. To this end, we use all channels of communication. One of the main channels is Rostelecom’s Call Centre which may be accessed at www.rostelecom-cc.ru. The centre operates a 24-hour hotline where customer support professionals respond to customer calls, provide advice on the Company’s services and tariff plans, handle complaints and orders, and assist customers who wish to speak to a sales manager and subscribe to Rostelecom’s services. In total, Rostelecom’s Call Centre operators answer over 4 million calls per month.

The Company invests substantial efforts to provide training to the operators and line managers. Thus, in 2018, Rostelecom’s call centres’ employees went through Client League, a customer focus training programme. In September 2018, Rostelecom Retail Systems, a PJSC Rostelecom’s subsidiary, won the Consumer Rights and Service Quality annual award in the Communications and Telecoms category. Within the nine years this annual award has been held, Rostelecom Retail Systems received it three times.

Rostelecom retail network runs a full-scale employee performance evaluation system. It uses mystery shoppers, a classic method for assessing customer service quality. However, this approach does have some weak points: high cost and lack of customer feedback. Moreover, the findings it renders are often depersonalised. This is why Rostelecom Retail Systems decided to consolidate and automate the best available practices of customer service quality control and to add analytical and educational capabilities to the system.

Rostelecom retail network has switched to an automated quality control system that comprises three modules. The first module is a toolbox that measures brand loyalty and customer satisfaction and creates a feedback channel. The second module comprises assessment of employee competency and qualification and provides additional professional training when necessary. The third module generates reports of various detail and provides analysis of massive amounts of data.

The workplace of every employee who interacts with customers is monitored. The system records all conversations with the customers. Some of the conversations are subsequently audited by the quality control function. Any customer may evaluate the Company’s or a specific employee’s performance.
Rostelecom's Call Centre offers business clients a smart toll-free phone service with the 800 code so that all calls made to the client’s office from anywhere in Russia and from any telecoms operator’s network are free for the caller.

By using the Online Customer Account, Rostelecom’s customers may configure their services and services for their families at any time, straight from their home or office or while travelling: www.lkrt.ru.

The Online Customer Account is a Rostelecom customer’s online office that consolidates all services provided to the customer: telephony, internet, TV, and mobile services, regardless of the regions in which they are used.

The Online Customer Account allows to configure tariff plans and options, subscribe to new services, check account balance, transfer money between accounts, and pay bills instantly with a debit or credit card at no extra fee.

The Company creates new capabilities for small and medium-size enterprises and offers digital solutions to facilitate their development. In the early 2018, Rostelecom launched “Byt v plyuse” (“Plus Account”) bundle for SMEs. This was the first time Rostelecom’s digital and traditional services were offered in one bundle under one account. In particular, the Company started offering Virtual PBX service to SME customers. Virtual PBX contains a comprehensive bundle of communications services and office telephony. The customer may use a single external phone number and configure extension numbers and many other options. The service enables businesses to process more calls and acquire more clients. In 2018, Rostelecom launched the service in another 80 cities bringing its coverage to over 350 cities across Russia. In 2018, Rostelecom’s Virtual PBX subscriber base was at 60 thousand. The “Byt v plyuse” (“Plus Account”) bundle also features Freephone 2.0, a new digital service. In 2018, over 800 customers were using it.

In March 2018, Rostelecom launched Rostelecom.Screens, a new service for corporate customers, enabling remote visual content marketing via video walls which can be integrated into a single network and used to promote services.

PJSC Rostelecom is implementing a business development programme for the promising SaaS products. The Company cooperates with various businesses which offer original and promising products and assists them in scaling up their presence across Russia and increasing their sales. All operational issues are handled by Rostelecom.

We have been actively developing cloud-based video surveillance and analytics. The service enables subscribers to build a capex-free intelligent video surveillance system to ensure security and improve their business performance. In 2018, Rostelecom became a leader in the B2B cloud-based video surveillance segment with 25 thousand connected IP cameras across more than 10 thousand organisations in all Russian regions.

In 2018, we greatly improved the accessibility of our Virtual Data Centre service. Virtual Data Centre enables Rostelecom’s corporate clients to rent computing capacities of Rostelecom’s National Cloud Platform and host their information systems therein. The service allows creating virtual workstations with any operating system and configuration and keeping them protected against DDoS attacks and viruses, thus reducing hardware maintenance costs.

Making digital services available to families is one of the Company’s strategic priorities. Rostelecom offers a wide range of services and products, building a digital environment around every family. Our digital services in entertainment, education, healthcare, data storage, management, and security bring value to customers and are essential for today’s consumers.

Rostelecom is further expanding its presence in the global markets and deploying advanced technology. We always endeavour to meet the highest standards and create high-quality, reliable and yet affordable, easy-to-use, and convenient products and services. We remain a reliable partner for the government in the implementation of federal and many other programmes for the benefit of all residents of Russia.
Stakeholder engagement is an indispensable component of responsible business practice. Rostelecom considers and maintains the balance of interests between all stakeholders, thereby reducing risks and identifying new opportunities.

We engage our stakeholders through mass media, official websites, profiles on social media, and corporate media. The Company has 38 federal and regional social media profiles with the aggregate number of subscribers exceeding 670 thousand.

In 2018, 4.5 million users visited our website while mentions in the mass media exceeded 140 thousand.
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Stakeholder Engagement

Our Approach

Stakeholder engagement is an indispensable component of responsible business conduct. Rostelecom's approach to the process includes seeking to balance the interests of all stakeholders to reduce risks and identify new opportunities. Since 2018, the Company has had a strong focus on making stakeholder engagement a systemic priority for reporting, provided that non-financial reports are an effective channel for communication with the external community.

For business, high standards of openness and transparency foster partnership and mutually beneficial relations with stakeholders. The Company enhances stakeholder communication through proactive, regular, constructive, and ongoing dialogue. By disclosing material topics related to business, Rostelecom builds trust-based and sincere relationships with stakeholders.

Rostelecom's stakeholder engagement channels include official websites, the Company's profiles on social media, and corporate media.

140 thousand
Rostelecom's mass media mentions in 2018

4.5 million
users visited the Company's website in 2018

12.2 million
views of PJSC Rostelecom's website in 2018

Leader of sustainable development indices compiled by the Russian Union of Industrialists and Entrepreneurs

Rostelecom's performance in 2018 placed the Company among the leaders of sustainable development indices compiled by the Russian Union of Industrialists and Entrepreneurs (same as the previous year). Thus, Rostelecom's success in evolving its public reporting was commended and recognised, encouraging the Company to continue adhering to high standards of informational openness and transparency.

Responsibility and Transparency

The Responsibility and Transparency index reflects corporate disclosure practices for information on sustainability and corporate responsibility.

Sustainable Development Vector

The Sustainable Development Vector index reflects a company's progress in sustainable development by focusing on trends in key social and economic indicators across several years.

RSPP has been compiling the indices since 2014 based on the analysis of publicly available annual and non-financial reports of multiple companies. Being a good corporate citizen, Rostelecom seeks to combine cost efficiency with strong environmental and social performance while also maintaining high-quality corporate governance of risks and reputation. In adhering to high standards of openness and transparency, PJSC Rostelecom makes stakeholder engagement a systemic priority and seeks to establish a dialogue with stakeholders, to improve the quality of reporting on the Company's business practices and social impacts.
PJSC Rostelecom has annually published a Sustainability Report in compliance with international standards on non-financial reporting, such as the GRI Guidelines and the AA1000 Stakeholder Engagement Standard (SES), since 2011. Since 2018 (starting from the preparation of Sustainability Report 2017), the Company has switched to reporting under the GRI Standards. The Company’s Sustainability Reports are included in the National Register of Corporate Non-Financial Reports compiled by RSPP. In 2018, the United Nations Sustainable Development Goals (UN SDGs), as well as particular objectives and metrics, were deeply integrated into Rostelecom’s non-financial reporting for the first time.

Identifying stakeholders

Rostelecom considers the level of mutual impact and common interests of stakeholders. The identification and selection of stakeholders is based on their impact on the Company’s current operations and strategy, as well as the existing practice for engaging with external stakeholders and their dependence on PJSC Rostelecom’s performance. The first stakeholders mapping was carried out in 2017 (the survey involved 50 respondents representing 11 stakeholder groups). While preparing the 2018 Report, 68 respondents representing 11 stakeholder groups took part in the survey. Due to the extended number of respondents, the results of the survey ended up more balanced (compared to the previous reporting period), which prompted the update of stakeholder map.

Rostelecom’s key stakeholders:
- Shareholders
- Investors
- Customers
- Business partners
- Government authorities
- Local communities
- Public organisations
- Environmental organisations
- Mass media
- Scientific and expert community
- Employees
PJSC ROSTELECOM’S STAKEHOLDER MAP IN 2018

A stakeholder’s impact on PJSC Rostelecom in 2018

PJSC Rostelecom’s impact on a stakeholder in 2018
## Stakeholder Engagement at PJSC Rostelecom

### Key expectations and interests of stakeholders

#### Shareholders

1. Strategy implementation
2. Cost efficiency
3. High financial stability in a competitive market
4. Shareholder value growth
5. Dividend policy
6. Openness and transparency of business processes

#### Government authorities

1. Complying with Russian laws
2. Contributing to Russia’s socioeconomic development
3. Participating in the implementation of national projects
4. Contributing to Russia’s transition to innovative development
5. Conforming to the highest standards of business ethics
6. Sustainable development over the longer term

### Engagement mechanisms

- Holding general shareholders’ meetings including the Annual General Shareholders’ Meeting (management presentation to shareholders)
- Disclosing information on an external website (publication of press releases and presentations)
- Regular reporting (financial statements and other materials for the reporting period)
- Engaging with rating agencies (Fitch Ratings, Standard & Poor’s, ACRA)
- Signing cooperation agreements
- Participating in the implementation of national programmes
- Participating in public events
- Expert work in committees and commissions

### 2018 highlights

- Investor Day in Moscow, 21 March 2018
- AGM 18 June 2018
- EGM 24 December 2018

- Digital Economy of the Russian Federation programme
- Electronic Russia federal targeted programme
- Comprehensive upgrade of Moscow’s video surveillance system
- ABC of the Internet programme
- Watch the Exam
## Stakeholder Engagement

### Business partners

- **Key expectations and interests of stakeholders**
  1. Creating a transparent, competitive environment
  2. Using market pricing
  3. Conforming to the highest standards of business ethics
  4. Sustainability over the longer term
  5. Mutually beneficial cooperation
  6. Anti-corruption policy

- **Engagement mechanisms**
  - Signing agreements with manufacturers
  - Handling complaints and enquiries
  - Participating in exhibitions and conferences, joint workshops
  - Monitoring of satisfaction levels
  - Bilateral visits
  - Holding public tenders
  - Signing long-term agreements with transparent pricing terms
  - Implementing social programmes

- **2018 highlights**
  - Integrated Digital Equality social programme
  - Learn the Internet – Manage It! educational project

### Investors

- **Key expectations and interests of stakeholders**
  1. Financial performance
  2. Stable position in a competitive market
  3. Dividend policy
  4. Strong corporate governance
  5. Conforming to the highest standards of business ethics
  6. Openness and transparency
  7. Risk management

- **Engagement mechanisms**
  - Participating in investment forums and conferences (one-on-one and small group meetings with management)
  - Disclosing information on an external website (publication of press releases and presentations)
  - Presentations for investors and professional communities (financial statements and other materials for the reporting period)
  - Communications with investment bank analysts
  - Meetings with potential investors in the Company securities

- **2018 highlights**
  - Renaissance Capital’s 22nd Annual Russia Investor Conference, Moscow, Russia
  - VTB Capital’s RUSSIA CALLING! Investment Forum, Moscow, Russia
  - Raiffeisen Institutional Investors Conference, Zürs, Austria
## Stakeholder Engagement

<table>
<thead>
<tr>
<th>Stakeholder</th>
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<th>2018 highlights</th>
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<tr>
<td><strong>Employees</strong></td>
<td>1. Decent salary&lt;br&gt;2. Safe and comfortable working environment&lt;br&gt;3. Fair remuneration and social benefits for employees&lt;br&gt;4. Protection of human rights&lt;br&gt;5. Opportunities for professional development and career advancement</td>
<td>▶ Rostelecom’s University or Knowledge Management Department&lt;br▶ Technical Training Centre of Excellence&lt;br▶ B2B/B2G, B2C, and B2O Centres of Excellence&lt;br▶ In-house coaches&lt;br▶ Rostelecom’s Corporate Online University&lt;br▶ Rostelecom’s department at the Bonch-Bruevich Saint-Petersburg State University of Telecommunications&lt;br▶ Long-term incentive programmes (share matching plan)&lt;br▶ Monetary Incentives for Employees Based on Project Performance&lt;br▶ Corporate pension scheme&lt;br▶ Business process gamification&lt;br▶ Corporate media and portals&lt;br▶ Social partnership&lt;br▶ Public reporting&lt;br▶ Professional training</td>
<td>Basics of the Digital Economy educational series&lt;brConquest of Digital Space quiz&lt;brOnline Lectorium&lt;brWeekly Development Environment newsletters&lt;brE-libraries&lt;brIntranet portal (LIVE, Grow with Rostelecom and other sections)&lt;brRostelecom Vestnik corporate newsletter&lt;brOpen Talk project, a discussion with the Company’s top management&lt;brUnified HRM platform and unified SuccessFactors system&lt;brRecognition award&lt;brCorporate esports tournament&lt;brSports Competition 2018&lt;brJoint internship programme with Skoltech&lt;brWorldSkills, WorldSkills Russia&lt;brTechnology for Life – More Opportunities international journalism contest&lt;brCorporate TV</td>
</tr>
<tr>
<td><strong>Mass media</strong></td>
<td>1. Business process transparency&lt;br2. Ensuring easy access to the information on the Company’s operations</td>
<td>▶ Arranging for press events (briefings, media scrums, etc.)&lt;br▶ Timely update of the information on websites and in social media&lt;br▶ Handling mass media enquiries and requests&lt;br▶ Press conferences and media tours&lt;br▶ Public reporting</td>
<td>Anti-phishing protection, protecting children from inappropriate information, content filtering, antivirus software and VAS for B2C, Parental Control&lt;brGaming tariff, MVNO, Smart Home&lt;brE-billing, self-service terminals, NPS, call centre&lt;brServices for the Great Patriotic War (WWII) veterans&lt;br38 profiles (federal and regional profiles on Facebook, Twitter, VKontakte, Odnoklassniki, Instagram, and YouTube)&lt;brUnified Biometric System</td>
</tr>
</tbody>
</table>
| **Customers** | Providing reliable telecommunications service | ▶ Interaction under contracts, agreements, and cooperation agreements<br▶ Regular customer surveying (including flash mob organisation)<br▶ Safety of services<br▶ Higher quality of services<br▶ Improved customer experience<br▶ Communications within the blogosphere<br▶ Higher accessibility of services | }
<table>
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</table>
| Environmental organisations                     | Reducing the environmental footprint                                                                           | > Partner programmes and projects  
> Social and charitable programmes  
> Public reporting                                                                   | Separate waste collection programme  
Green Office concept  
E-billing  
Energy efficiency  
Use of alternative energy sources  
Fostering environmental culture                                                        |
| Scientific and expert community                 | 1. Contributing to the development of science and technology  
2. Applying innovations and solutions mitigating the environmental footprint  
3. Digital transformation of the economy                                                | > Partner programmes  
> Research and education conferences  
> Orders for R&D (research and development)                                             | Bridging the Digital Divide project  
Technology projects  
KnowTeach socio-educational programme  
Growth distance learning project  
Midday educational programme  
Learn the Internet – Manage It! educational project                                     |
| Local communities                                | 1. Receiving information on the Company’s growth prospects  
2. Contributing to social stability in the regions of operation  
3. Implementing social programmes  
4. Supporting Russian manufacturers                                                      | > Working and expert groups, commissions  
> Cooperation and partnership agreements  
> Joint events – voluntary cleanups, trainings, exercises  
> Sponsorship and charitable programmes  
> Public reporting                                                                      | ABC of the Internet educational programme  
Distance Learning for Disabled Children  
Internet for Social Infrastructure Facilities  
Classroom Internet, an all-Russian contest of school internet projects  
Want to Be! charity programme for children with impaired kidney function  
Illustrated Books for Little Blind Children  
House of Veronica volunteer project                                                         |
<table>
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<tbody>
<tr>
<td>Public organisations</td>
<td>1. The Company’s performance and growth prospects 2. Key events 3. Social responsibility</td>
<td>&gt; Forums, conferences, exhibitions, round tables &gt; Public reception offices &gt; Public opinion research &gt; Volunteer projects</td>
<td>Computerisation of Orphanages Social Impact Award programme promoting social enterprise among young people IT Growth international volunteer project for Russian schools involving young foreign specialists Safe Internet Let’s Help Together corporate programme for voluntary donations Stan Dedom Morozom (Become a Santa) volunteer programme</td>
</tr>
</tbody>
</table>
Information Transparency

Our information transparency is indispensable to building confidence in business, and public reporting is a crucial component of this process. The focus placed by stakeholders on the evolution of these processes is ever-growing as evidenced by the current trend of increasing demand for information, including non-financial aspects and performance.

PJSC Rostelecom's press service provides information related to its operations to all federal and regional mass media and informs them on important industry events. In 2018, the Company’s publications and mentions amounted to 140,000, including over 9,000 mentions in the context of its social policy. The Company publishes the information on all material aspects of its business on the corporate website https://www.rostelecom.ru/mainpage/. In 2018, the number of the website’s visitors increased to 4.5 million users (compared to 3.4 million in 2017), and the number of views amounted to 12.2 million (compared to 9.3 million in 2017). All news, the information on corporate projects, non-cash incentive programmes, and benefits for employees are published on the intranet portal and corporate social network. Almost 90 thousand employees are registered on the portal, while the number of unique daily users amounts to about 30 thousand people. The Rostelecom Vestnik corporate newsletter is issued for the employees of Rostelecom and the Group companies. Rostelecom PRO customer magazine is issued twice a year as a supplement to the newsletter. The Company publishes annual and sustainability reports every year. The Corporate TV covers all regions of Rostelecom’s operations.

The Company has 38 federal and regional social media profiles with the aggregate number of subscribers exceeding 670 thousand (671,895 subscribers in February 2019). In addition to reading news, users can leave feedback. For details on corporate social responsibility see:

- ABC of the Internet, a programme offering training for senior citizens – www.azbukainterneta.ru
- Classroom Internet, an all-Russian contest of school internet projects – www.safe-internet.ru
- Together into the eFuture, an international journalism contest – www.smirt.ru/about

Annual media tours across all operating regions are held for journalists and bloggers to make the media community acquainted with the Company’s current operations, new projects, and strategic initiatives.
Stakeholder Engagement as Part of the Report Preparation Process

Rostelecom is increasingly using the results of the Report evaluation for stakeholder engagement, performance benchmarking, and responding to the interests of multiple external groups. Due to these processes, the quality of reporting on business practices and social impacts is expected to grow. An integrated report is just one prospect of many. PJSC Rostelecom believes that a set procedure of handling citizens’ enquiries, openness, and willingness to engage with the general public on multiple topics will further drive its sustainability.

In 2018, PJSC Rostelecom had its first dialogue with stakeholders as part of summarising the 2016–2017 reporting campaign and preparing for the next reporting cycle. The said procedure was guided by the AA1000 SES international standard developed by the Institute of Social and Ethical Accountability, and the Global Reporting Initiative (G4 Guidelines). Representatives of multiple stakeholder groups, government authorities, public and environmental organisations, and mass media took part in the event, and all feedback was incorporated.

On 20 February 2019, as part of preparing the 2018 Report, PJSC Rostelecom held its second dialogue with stakeholders to summarise the 2017–2018 reporting campaign and discuss the concept of the 2018 Sustainability Report. The meeting gathered 35 people, and the procedure was guided by the above-mentioned international standards. In addition, the United Nations Sustainable Development Goals were also taken into account.

The Company’s representatives expressed their appreciation for the stakeholders’ constructive engagement with the event and highlighted the 25 key proposals to sum up, which will be listed in the table below.

### INCORPORATION OF KEY STAKEHOLDERS’ PROPOSALS INTO THE 2018 REPORT

<table>
<thead>
<tr>
<th>Key queries and proposals of stakeholders</th>
<th>The Report section expanded in line with a query or proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Include the performance indicators over the past three years into the Report, providing commentary and process explanation</td>
<td>Incorporated into Report sections and the Key Performance Indicators Appendix</td>
</tr>
<tr>
<td>2) Seek to disclose the achieved indicators for the reporting period as a benchmark against the plans outlined in the report for the previous reporting period</td>
<td>Incorporated into Report sections</td>
</tr>
<tr>
<td>3) Ensure that information is balanced and provided equally</td>
<td>Incorporated into Report sections</td>
</tr>
<tr>
<td>4) Disclose information on the management system by demonstrating the risk management system, both for financial and market risks and for sustainability and reputation risks</td>
<td>Incorporated into Section 1. Company Profile</td>
</tr>
<tr>
<td>5) Disclose the context of the Report preparation demonstrating the national and global environment, as well as Rostelecom’s role in these processes</td>
<td>Incorporated into: Section 2. Building a Sustainable Digital Future Section 4. Investing in Society Section 6. Delivering High-Quality Services to Customers</td>
</tr>
<tr>
<td>6) Disclose the UN SDGs in a more detailed manner highlighting their connection to the Company’s strategic goals</td>
<td>Incorporated into: Section 2. Building a Sustainable Digital Future Section 3. Investing in Our People Section 4. Investing in Society Section 5. Fostering a Safe and Favourable Environment Section 6. Delivering High-Quality Services to Customers</td>
</tr>
<tr>
<td>7) Ensure close monitoring over the consistency of sections so that they do not contradict each other</td>
<td>Incorporated into Report sections</td>
</tr>
<tr>
<td><strong>Key queries and proposals of stakeholders</strong></td>
<td><strong>The Report section expanded in line with a query or proposal</strong></td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>8) Introduce a section on the Company’s economic impact (similar to that in the Annual Report) in the Sustainability Report although ensuring a different perspective and demonstrating the Company’s social impact, rather than repeating the same information</td>
<td>Incorporated into Section 1. Company Profile</td>
</tr>
<tr>
<td>9) Disclose information on Rostelecom’s presence in international sustainable development indices and ESG ratings, relevant for investors</td>
<td>The Company is currently reviewing the feasibility of joining an international sustainable development index, which will be explored in greater depth in the Report</td>
</tr>
<tr>
<td>10) Disclose information on Mikhail Oseevsky, Head of the RSPP Committee on Digital Economy since 2018</td>
<td>Incorporated into Section 1. Company Profile</td>
</tr>
<tr>
<td>11) Integrate a cross-reference system into the Report</td>
<td>Incorporated into Report sections</td>
</tr>
<tr>
<td>12) Include the RSPP Certificate as well as the Opinion as it is important to disclose the recommendations on the improvement of Rostelecom’s report</td>
<td>Incorporated into the RSPP Opinion Appendix</td>
</tr>
<tr>
<td>13) Upload the English version of the Report to the Corporate Register – the major global directory of corporate responsibility reports</td>
<td>The English version of PJSC Rostelecom’s Sustainability Report will be uploaded to the Corporate Register</td>
</tr>
<tr>
<td>14) Add text boxes with the opinion of relevant stakeholders</td>
<td>Incorporated into: Section 4. Investing in Society Section 6. Delivering High-Quality Services to Customers</td>
</tr>
<tr>
<td>15) Disclose information on the Company’s social initiatives, the method for measuring the social performance of its projects, and the customer satisfaction index</td>
<td>Incorporated into Section 4. Investing in Society</td>
</tr>
<tr>
<td>16) Disclose cooperation with non-commercial organisations in a more detailed manner and implement additional social initiatives</td>
<td>Incorporated into Section 4. Investing in Society</td>
</tr>
<tr>
<td>17) Demonstrate the way Rostelecom helps non-commercial organisations carry out digital transformation</td>
<td>Incorporated into: Section 4. Investing in Society Section 6. Delivering High-Quality Services to Customers</td>
</tr>
<tr>
<td>18) Demonstrate Rostelecom’s contribution to the youth development and support</td>
<td>Incorporated into Section 4. Investing in Society</td>
</tr>
<tr>
<td>19) Participate in corporate practice competitions in addition to international annual report competitions</td>
<td>The Company plans on taking part in international corporate practice competitions</td>
</tr>
<tr>
<td>20) Disclose the topic of early career guidance for the youth</td>
<td>Incorporated into Section 4. Investing in Society</td>
</tr>
<tr>
<td>21) Add colourful and representative photo illustrations to the Report</td>
<td>This year’s concept and design template do not include photo illustrations. In future, we will consider this proposal and add photo illustrations provided that they are necessary for the concept</td>
</tr>
<tr>
<td>22) Disclose information on Rostelecom’s activities for supporting multiple business categories</td>
<td>Incorporated into Section 1. Company Profile</td>
</tr>
</tbody>
</table>
Appendix 1 Report Profile

This is the eighth Report of PJSC Rostelecom (the Report) representing the Company’s sustainability initiatives from 1 January 2018 to 31 December 2018. Rostelecom has historically adhered to an annual reporting cycle, with the previous Report issued in 2018 following the reporting year 2017. For other reports see the website at www.company.rt.ru.

This document is the Company’s stakeholder communication tool for customers, shareholders, employees, business partners, government authorities, local communities, and public organisations, as well as a corporate development tool aimed at increasing the Company’s transparency and public accountability, taking into account a wider range of non-financial risks, as well as sustainable development goals.

The Report has been prepared in accordance with the new Sustainability Reporting Standards of the Global Reporting Initiative (the GRI Standards: Core option1). The Company monitors the development of non-financial reporting and relevant global trends. While preparing the 2018 Report, Rostelecom took into account key provisions of Directive 2014/95/EU of the European Parliament and of the Council as regards disclosure of non-financial and diversity information by certain large undertakings and groups2, in particular, methodology and information disclosure indicators.

Since 2017, PJSC Rostelecom has included information on its contribution to the United Nations Sustainable Development Goals (UN SDGs) in the Report. The same approach is also applied in this Report (see the Building a Sustainable Digital Future, Investing in Our People, Investing in Society, Fostering a Safe and Favourable Environment, and Delivering High-Quality Services to Customers sections). We seek to bring Rostelecom’s development strategy more in line with the UN SDGs in respect of environmental, social, and economic matters, which is reflected in the text of the Report. In 2018, the Company prioritised the list of SDGs to identify the areas where it could contribute the most: Goals 4, 9, 10, 11, and 16. While prioritising the SDGs, we were mainly focused on the targets which are the most aligned with the Company’s industry specifics and strategy, as well as its stakeholders’ interests.

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1. On 19 October 2018, the GRI Global Sustainability Standards Board (GSSB) published the new Sustainability Reporting Standards.
The Report comprises key information on the economic, environmental, and social aspects of PJSC Rostelecom’s operations, including the description of the following focus areas:

- Corporate governance
- Risk management
- Business ethics, human rights, and anti-corruption
- Sustainability management system
- HR management
- Industrial safety
- Environmental protection and energy efficiency improvement
- Development of local communities in the Company’s regions of operation
- Ensuring quality, accessibility, and safety of products and services
- Stakeholder engagement
- Supplier engagement

There were some changes in disclosure of several topics in 2018. This is due to several factors:

- Changing sustainability context in which the Company operates
- Further alignment of the Company’s strategy with the Digital Economy of the Russian Federation programme
- Stakeholders’ expectations established during the identification of material topics to cover in the Report, in particular, during PJSC Rostelecom’s dialogue with stakeholders to discuss the concept of the 2018 Sustainability Report
- Enhancement of the non-financial reporting standards applied by the Company
- Disclosure of Rostelecom’s contribution to the United Nations Sustainable Development Goals in line with global best practices

At the same time, several topics which proved to be less important for the stakeholders following the materiality assessment and had already been disclosed partially or in full in previous reports, were not disclosed in a detailed way in this Report.

We sought to make the Report useful and concise by avoiding duplication of information and added links to additional sources of information including the Annual Report, PJSC Rostelecom’s official website, and other publicly available relevant documents.

The Report covers the activities of Rostelecom Group as a whole, including PJSC Rostelecom and its subsidiaries within the consolidation boundaries for the Company’s annual (financial) reporting.

Legal address: 15 Dostoevskogo St., Saint Petersburg.

No significant changes were made to the 2018 Report compared to the previous reporting periods in terms of boundaries and scope (disclosure of economic, social, and environmental topics).

MATERIAL TOPICS

When defining material topics to cover, we were guided by the GRI Standards1 and:

- made a list of potential material topics considering the industry (telecommunications) specifics
- assessed the materiality topics based on the analysis of the internal and external environment, including:
  - the analysis of internal environment – monitoring regulations on multiple aspects of operations; interviewing representatives of key business units responsible for sustainability
  - the analysis of external environment – reviewing sustainability reports of Russian and international telecommunications companies; analysing the media space (monitoring the coverage of relevant topics by mass media); analysing the stakeholders’ opinions received following the publication of the Company’s sustainability reports during meetings and via e-mail addresses and phone numbers specified in Contact Details
  - the analysis of RSPP’s recommendations received as part of the public assurance of the Company’s 2017 non-financial Report as regards material topics to disclose in future reports.

In 2018, in addition to the above-mentioned stakeholder engagement tools, PJSC Rostelecom held a survey and a dialogue to discuss the concept of the 2018 Sustainability Report. The comments and recommendations received during the discussion were considered while preparing this document (for more details see the Stakeholder Engagement section). In the future, the Company plans on improving its approach to incorporating the stakeholders’ opinions in its non-financial reporting.

Key material topics:
- Contribution to the digital economy
- Contribution to societal development
- Improving the quality of life in the regions of operation
- Responsible business practice and anti-corruption
- Creating an attractive and safe working environment
- Rollout of innovations
- Higher accessibility of services

PRINCIPLES FOR DEFINING REPORT QUALITY

The quality of the Report is assured through applying the following principles outlined in the GRI Standards:

- Balance. The document provides unbiased information both on the positive and negative aspects of the Company’s performance
- Comparability. The Report comprises the Company’s indicators over time, which allows stakeholders to assess its performance
- Accuracy. The information (both text and quantitative measurements) is detailed and allows stakeholders to assess the Company’s performance for each of the material topics. All data is officially recognised by PJSC Rostelecom and is confirmed by internal and publicly available documents
- Clarity. The Report is written in a manner that is understandable and accessible to the majority of stakeholders and comprises a glossary
- Reliability. The Report has links to data sources
- Timeliness. The Report contains information for 2018 and is published in 2019

PUBLIC ASSURANCE OF THE REPORT

The document was assured by an independent party – the RSPP Board on Non-Financial Reporting.

The Company will take into account RSPP recommendations and comments received during the public assurance of the 2018 Report and incorporate them into its future non-financial reports.

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1. Material topics are the topics reflecting the organisation’s significant economic, environmental, and social impacts, or having substantive influence on the assessments and decisions of stakeholders. Source: GRI Standards.
СВИДЕТЕЛЬСТВО
об общественном заверении
корпоративного нефинансового отчета

Отчет об устойчивом развитии
ПАО «Ростелеком» за 2018 год

прошел общественное заверение в Совете РСПП
по нефинансовой отчетности

Размещенное заключение Совета РСПП об общественном заверении Отчета об устойчивом развитии ПАО «Ростелеком» за 2018 год направлено в Компанию, которая может публиковать его без каких-либо изменений и использовать как для внутрикорпоративных целей, так и в целях коммуникации с заинтересованными сторонами.

Регистрационный номер 138.01.020.09.18

Президент РСПП

Москва, 2019
MATERIALITY MATRIX

High

- Employee development
- Creating an attractive and safe working environment
- Improving the quality of life in the regions of operation
- Human rights
- Responsible business practice and anti-corruption
- Contribution to societal development
- Donation to the digital economy
- Charity
- Rollout of innovations
- Higher accessibility of services
- Supply chain
- Infrastructure development and upgrade
- Higher quality of services
- Safety of services
- Energy efficiency
- Combating climate change

Low

Key material topics:
- Contribution to the digital economy
- Contribution to societal development
- Improving the quality of life in the regions of operation
- Responsible business practice and anti-corruption
- Creating an attractive and safe working environment
- Rollout of innovations
- Higher accessibility of services
## Appendix 2. Glossary

<table>
<thead>
<tr>
<th><strong>5G</strong></th>
<th>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</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AGM</strong></td>
<td>Annual General Shareholders’ Meeting</td>
</tr>
<tr>
<td><strong>ANO</strong></td>
<td>Autonomous non-commercial organisation</td>
</tr>
<tr>
<td><strong>B2B</strong></td>
<td>Business-to-business</td>
</tr>
<tr>
<td><strong>B2C</strong></td>
<td>Business-to-customer</td>
</tr>
<tr>
<td><strong>B2G</strong></td>
<td>Business-to-government</td>
</tr>
<tr>
<td><strong>B2O</strong></td>
<td>Business-to-operator</td>
</tr>
<tr>
<td><strong>BDD</strong></td>
<td>The Bridging the Digital Divide project</td>
</tr>
<tr>
<td><strong>Broadband</strong></td>
<td>Broadband internet access</td>
</tr>
<tr>
<td><strong>CAMI</strong></td>
<td>Central Archive of Medical Images</td>
</tr>
<tr>
<td><strong>CAPEX</strong></td>
<td>Capital expenditures for acquiring or upgrading non-current assets</td>
</tr>
<tr>
<td><strong>CCTV</strong></td>
<td>Closed-circuit television</td>
</tr>
<tr>
<td><strong>Cloud services</strong></td>
<td>A model for enabling on-demand network access to a shared pool of configurable computing resources</td>
</tr>
<tr>
<td><strong>Credit rating</strong></td>
<td>A quantified assessment of the creditworthiness of an individual, company, regional authority, or sovereign government</td>
</tr>
<tr>
<td><strong>Data centre</strong></td>
<td>Data processing centre</td>
</tr>
<tr>
<td><strong>EGM</strong></td>
<td>Extraordinary Shareholders’ Meeting</td>
</tr>
<tr>
<td><strong>Employee engagement</strong></td>
<td>Emotional and intellectual commitment of employees to go above and beyond in doing their job</td>
</tr>
<tr>
<td><strong>FCF</strong></td>
<td>Free cash flow</td>
</tr>
<tr>
<td><strong>FOCL</strong></td>
<td>Fibre-optic communications line</td>
</tr>
<tr>
<td><strong>FTTB (fibre-to-the-building)/FTTx</strong></td>
<td>Broadband network architecture using optical fibre to provide all or part of the local loop used for last mile telecommunications</td>
</tr>
<tr>
<td><strong>GEPON</strong></td>
<td>Gigabyte Passive Optical Network</td>
</tr>
<tr>
<td><strong>GRI Standards (The Global Reporting Initiative)</strong></td>
<td>The GRI Sustainability Reporting Guidelines offer an international standard for the preparation of voluntary sustainability reports by organisations</td>
</tr>
<tr>
<td><strong>HR</strong></td>
<td>Human resources</td>
</tr>
<tr>
<td><strong>HRM</strong></td>
<td>Human resource management</td>
</tr>
<tr>
<td><strong>ICS</strong></td>
<td>Internal control system</td>
</tr>
<tr>
<td><strong>ICT</strong></td>
<td>Information and communication technology</td>
</tr>
<tr>
<td><strong>IIAS</strong></td>
<td>Integrated Identification and Authentication System</td>
</tr>
<tr>
<td><strong>IIoT</strong></td>
<td>Industrial Internet of Things</td>
</tr>
<tr>
<td><strong>Interactive TV</strong></td>
<td>A TV format/service for viewing television online via any internet provider</td>
</tr>
<tr>
<td><strong>IPTV</strong></td>
<td>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</td>
</tr>
<tr>
<td><strong>Issuer</strong></td>
<td>An entity or an individual issuing securities to support and finance their business</td>
</tr>
<tr>
<td><strong>KPIs</strong></td>
<td>Key performance indicators</td>
</tr>
</tbody>
</table>
LED | Light-emitting diode
---|---
MRF | A macroregional branch of PJSC Rostelecom
MVNO | Mobile Virtual Network Operator
NCO | Non-commercial organisation
NGO | Non-governmental organisation
NPS (Net Promoter Score) | An index reflecting consumer loyalty to a product or company (likelihood to recommend) and used to gauge repurchase intent
OIBDA | Operating income before depreciation and amortisation (an evaluation metric)
OKPD 2 | Russian Classification of Products by Economic Activities
OTT (over the top) | Delivery of video signals from a content provider directly to a user’s device over the internet bypassing an operator
PBX | Private branch exchange
PJSC | Public joint stock company
Regions of operations | Regions where the organisation has production facilities and key personnel
RMIS | Regional Medical Information System
RRS | Rostelecom Roznichnye sistemy (Rostelecom Retail Systems)
RSCS | Russian Scientific Centre of Surgery
RSPP | Russian Union of Industrialists and Entrepreneurs
S&A | Subsidiaries and affiliates
SaaS | Software as a service
SES | Stakeholder Engagement Standard OR simple electronic signature
SIA | Social Impact Award
Smart City | A project for digital transformation of cities
Smart TV | An advanced television set with integrated internet and digital interactive feature
SMEs | Small and medium-sized enterprises
Stakeholder | An individual, group, or entity that can be affected by the Company and/or who can affect the Company
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
Sustainability | Societal development that meets the needs of the present generations without compromising the ability of future generations to meet their own needs
UN | The United Nations
UN SDGs | The United Nations Sustainable Development Goals
USE | The Unified State Exam
USIEC | Unified System of Interdepartmental Electronic Cooperation
VAS | Value added services
VPN/IP VPN | 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
WECM | Wholesale electricity and capacity market
Wi-Fi | Wireless local area networking (WLAN) of devices
WSIS | World Summit on the Information Society
Appendix 3. Membership of Associations

<table>
<thead>
<tr>
<th>Name</th>
<th>Date of admission</th>
<th>Type of membership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Association for Educational, Scientific and Business Collaboration between Educational Institutions, Businesses and Organisations in the Telecommunications Industry Sodeystviye</td>
<td>1992</td>
<td>Member</td>
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<tr>
<td>Regional Commonwealth in the Field of Communication (RCC)</td>
<td>1997</td>
<td>Member</td>
</tr>
<tr>
<td>International Telecommunication Union (ITU)</td>
<td>1999</td>
<td>Member of Telecommunication Standardisation Sector</td>
</tr>
<tr>
<td>Nizhgorodskaya Association of Industrialists and Entrepreneurs</td>
<td>2011</td>
<td>Member</td>
</tr>
<tr>
<td>Union of Industrialists and Entrepreneurs of the Republic of Buryatia</td>
<td>2011</td>
<td>Member</td>
</tr>
<tr>
<td>Union of Employers of the Rostov Region</td>
<td>2011</td>
<td>Member</td>
</tr>
<tr>
<td>Union of InfoComm Design Engineers ProjektSvyazTelekom</td>
<td>2011</td>
<td>Member</td>
</tr>
<tr>
<td>Russian Institute of Directors</td>
<td>2011</td>
<td>Member</td>
</tr>
<tr>
<td>Innovation and R&amp;D Directors Club</td>
<td>2012</td>
<td>Member</td>
</tr>
<tr>
<td>National Association of Procurement Institutes</td>
<td>2012</td>
<td>Member</td>
</tr>
<tr>
<td>National Radio Association</td>
<td>2012</td>
<td>Member</td>
</tr>
<tr>
<td>Association of Electronic Document Communications</td>
<td>2013</td>
<td>Member</td>
</tr>
<tr>
<td>Media Communication Union</td>
<td>2014</td>
<td>Member</td>
</tr>
<tr>
<td>Association of Cable TV of Russia</td>
<td>2014</td>
<td>Member</td>
</tr>
<tr>
<td>International Cable Protection Committee (ICPC)</td>
<td>2014</td>
<td>Member</td>
</tr>
<tr>
<td>Anti-Corruption Charter of Russian Business</td>
<td>2014</td>
<td>Signatory</td>
</tr>
<tr>
<td>National Association of Contact centres (NACC)</td>
<td>2015</td>
<td>Member</td>
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<tr>
<td>Industrial Internet Consortium (IIC)</td>
<td>2015</td>
<td>Member</td>
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<tr>
<td>Russian Association for Electronic Communications (RAEC)</td>
<td>2015</td>
<td>Member</td>
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<tr>
<td>Russian Association of Industrial Internet (RAII)</td>
<td>2016</td>
<td>Member</td>
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<tr>
<td>Construction Association (Association of Self-Regulatory Organisations)</td>
<td>2017</td>
<td>Member</td>
</tr>
<tr>
<td>Autonomous Non-Commercial Organisation Digital Economy</td>
<td>2017</td>
<td>Member</td>
</tr>
<tr>
<td>Russian Union of Industrialists and Entrepreneurs (RSPP)</td>
<td>2017</td>
<td>Member</td>
</tr>
<tr>
<td>Internet of Things Association (IOTAS)</td>
<td>2018</td>
<td>Member</td>
</tr>
</tbody>
</table>
Appendix 4. Awards

RSPP’s sustainable development leaders

Rostelecom’s performance in 2017 placed the Company among the leaders of the Responsibility and Transparency and Sustainable Development Vector indices compiled by the Russian Union of Industrialists and Entrepreneurs.

Published by RSPP since 2014, the indices are based on public corporate reporting, including annual and non-financial reports.

The international contest held by the UN World Summit on the Information Society (WSIS) in 2018

Rostelecom’s Digital Equality programme won the Ethical Dimensions of the Information Society category at the international contest held by the UN World Summit on the Information Society (WSIS) to select the best innovative projects involving Information and Communications Technology (ICT).

Leaders in Corporate Philanthropy

Rostelecom became a winner of the Leaders in Corporate Philanthropy project, getting the first prize of the Graduate School of Management (GSOM SPbU) for the Best Programme (Project) Facilitating Education Development in Russia with its integrated Digital Equality social programme.

Best Social Projects in Russia

Rostelecom won an award under the Best Social Projects in Russia annual programme in 2018 in the Projects to Support Vulnerable Groups category with its Growth – Online Education for Children in Orphanages project.

Corporate Transparency Rating of the Largest Russian Companies

PJSC Rostelecom ranked 12th in the Corporate Transparency Rating of the Largest Russian Companies. The aim of the rating is to highlight companies that contribute most to the society while minimising their environmental impact and find a balance between how much businesses affect the natural environment and what positive change they bring.

People Investor 2018

At the 11th People Investor 2018 Forum in Moscow our Run and Help sports charitable project made it to the top four social projects for Healthy Lifestyles. The people participating in the event aimed to run a cumulative distance of 100 thousand km, which Rostelecom “converted” into RUB 1 million and donated to the Life Line Charity Foundation to help children with rare illnesses.

Awards received by PJSC Rostelecom’s macroregional branches

South Macregional Branch

At the All-Russian corporate volunteering contest, Champions of Good Deeds 2018, our Believe in Yourself social project won the second prize for Skill-based Volunteering.

The Company won an award at the Social Investment in Russia’s South 2018 competition.

I Can Help, a charitable project run by Rostelecom’s Kabardino-Balkaria Branch, was shortlisted among the three finalists in the Corporate Social Projects category at the Best Social Projects in Russia’s South, an independent annual regional award.

Rostelecom won a public award for charitable work and volunteering from the Krasnodar Territory authorities.

The Company received a letter of gratitude from the Ministry of Culture of the Republic of Dagestan for supporting aesthetic education initiatives across the Republic, its regions and localities.

North-West Macregional Branch

Rostelecom was ranked the best product company in Karelia in terms of occupational health and safety.

In April, Rostelecom’s Karelia Branch won the regional event of Success and Safety, an annual nationwide competition to select the best company for occupational health and safety practices.

Siberia Macregional Branch

Rostelecom won the third prize in the Leadership in Innovation in the Social Sector category at the Donors Forum’s Leaders in Corporate Philanthropy – Siberia awards.

The Company also received a special award for Philanthropy Management and Management Processes at the event.

Volga Macregional Branch

Rostelecom won the second prize (across Russia) at the 3rd Best in the Trade contest for HR professionals in the Russia in the 21st Century – a Digital Economy Country category.
### Appendix 5. GRI Table

<table>
<thead>
<tr>
<th>General Standard Disclosure</th>
<th>Description</th>
<th>Section of the Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRI 102-1</td>
<td>Name of the organisation</td>
<td>Company Profile</td>
</tr>
<tr>
<td>GRI 102-2</td>
<td>Activities, brands, products, and services</td>
<td>Company Profile</td>
</tr>
<tr>
<td>GRI 102-3</td>
<td>Location of headquarters</td>
<td>Company Profile</td>
</tr>
<tr>
<td>GRI 102-4</td>
<td>Location of operations</td>
<td>Company Profile</td>
</tr>
<tr>
<td>GRI 102-5</td>
<td>Ownership and legal form</td>
<td>Company Profile</td>
</tr>
<tr>
<td>GRI 102-6</td>
<td>Markets served</td>
<td>Company Profile</td>
</tr>
<tr>
<td>GRI 102-8</td>
<td>Information on employees and other workers</td>
<td>Company Profile</td>
</tr>
<tr>
<td>GRI 102-9</td>
<td>Supply chain</td>
<td>Company Profile</td>
</tr>
<tr>
<td>GRI 102-10</td>
<td>Significant changes to the organisation and its supply chain</td>
<td>No significant changes were made to the organisation and its supply chain in the reporting period</td>
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<tr>
<td>GRI 102-12</td>
<td>External initiatives</td>
<td>Company Profile</td>
</tr>
<tr>
<td>GRI 102-13</td>
<td>Membership of associations</td>
<td>Appendix 3. Membership of Associations</td>
</tr>
<tr>
<td><strong>Strategy</strong></td>
<td>Statement from senior decision-maker</td>
<td>Letter from the President of PJSC Rostelecom</td>
</tr>
<tr>
<td>GRI 102-14</td>
<td>Key impacts, risks, and opportunities</td>
<td>Company Profile</td>
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<tr>
<td>GRI 102-15</td>
<td></td>
<td></td>
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<tr>
<td><strong>Ethics and integrity</strong></td>
<td>Values, principles, standards, and norms of behaviour</td>
<td>Company Profile</td>
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<tr>
<td>GRI 102-16</td>
<td></td>
<td></td>
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<tr>
<td><strong>Governance</strong></td>
<td>Mechanisms for advice and concerns about ethics</td>
<td>Company Profile</td>
</tr>
<tr>
<td>GRI 102-18</td>
<td>Governance structure</td>
<td>Company Profile</td>
</tr>
<tr>
<td>GRI 102-21</td>
<td>Consulting stakeholders on economic, environmental, and social topics</td>
<td>Stakeholder Engagement</td>
</tr>
<tr>
<td>GRI 102-22</td>
<td>Composition of the highest governance body and its committees</td>
<td>Company Profile</td>
</tr>
<tr>
<td>GRI 102-23</td>
<td>Chair of the highest governance body</td>
<td>Chairman of PJSC Rostelecom’s Board of Directors is not an executive director of the Company</td>
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<tr>
<td>GRI 102-25</td>
<td>Conflicts of interest</td>
<td>Company Profile</td>
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<tr>
<td>GRI 102-26</td>
<td>Role of highest governance body in setting purpose, values, and strategy</td>
<td>Company Profile</td>
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<td>GRI 102-28</td>
<td>Evaluating the highest governance body’s performance</td>
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<td>GRI 102-30</td>
<td>Effectiveness of risk management processes</td>
<td>Company Profile</td>
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<tr>
<td>GRI 102-33</td>
<td>Communicating critical concerns</td>
<td>Investing in Our People</td>
</tr>
<tr>
<td>GRI 102-35</td>
<td>Remuneration policies</td>
<td>Company Profile</td>
</tr>
<tr>
<td>GRI 102-36</td>
<td>Process for determining remuneration</td>
<td>Company Profile</td>
</tr>
<tr>
<td>GRI 102-39</td>
<td>Percentage increase in annual total compensation ratio</td>
<td>Company Profile</td>
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<td><strong>Stakeholder engagement</strong></td>
<td><strong>Stakeholder engagement</strong></td>
<td><strong>Stakeholder engagement</strong></td>
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<td>GRI 102-40</td>
<td>List of stakeholder groups</td>
<td>Stakeholder Engagement, Appendix 1. Report Profile</td>
</tr>
<tr>
<td>GRI 102-41</td>
<td>Collective bargaining agreements</td>
<td>Rostelecom’s collective bargaining agreement covers all employees</td>
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<tr>
<td>GRI 102-42</td>
<td>Identifying and selecting stakeholders</td>
<td>Stakeholder Engagement</td>
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<td>GRI 102-43</td>
<td>Approach to stakeholder engagement</td>
<td>Stakeholder Engagement, Appendix 1. Report Profile</td>
</tr>
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<td>GRI 102-44</td>
<td>Key topics and concerns raised</td>
<td>Stakeholder Engagement</td>
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<td><strong>Reporting practice</strong></td>
<td><strong>Reporting practice</strong></td>
<td><strong>Reporting practice</strong></td>
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<td>GRI 102-45</td>
<td>Entities included in the consolidated financial statements</td>
<td>See Section 10 of PJSC Rostelecom’s consolidated financial statements</td>
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<td>Defining report content and topic boundaries</td>
<td>Appendix 1. Report Profile</td>
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<td>GRI 102-47</td>
<td>List of material topics</td>
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<td>GRI 102-48</td>
<td>Restatements of information</td>
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<tr>
<td>GRI 102-49</td>
<td>Changes in reporting</td>
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<td>GRI 102-50</td>
<td>Reporting period</td>
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<td>GRI 102-51</td>
<td>Date of most recent report</td>
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</tr>
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<td>GRI 102-52</td>
<td>Reporting cycle</td>
<td>Appendix 1. Report Profile</td>
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<tr>
<td>GRI 102-53</td>
<td>Contact point for questions regarding the report</td>
<td>Report cover</td>
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<tr>
<td>GRI 102-54</td>
<td>Claims of reporting in accordance with the GRI Standards</td>
<td>Appendix 1. Report Profile</td>
</tr>
<tr>
<td>GRI 102-55</td>
<td>GRI content index</td>
<td>Appendix 5. GRI Table</td>
</tr>
<tr>
<td>GRI 102-56</td>
<td>External assurance</td>
<td>Appendix 1. Report Table</td>
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<td><strong>GRI 200: Economic</strong></td>
<td><strong>GRI 200: Economic</strong></td>
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<td>GRI 201-1</td>
<td>Direct economic value generated and distributed</td>
<td>See PJSC Rostelecom’s Annual Report 2018</td>
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<td>General Standard Disclosure</td>
<td>Description</td>
<td>Section of the Report</td>
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<tr>
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<td>Ratios of standard entry level wage by gender compared to local minimum wage</td>
<td>Investing in Our People Appendix 6. Key Performance Indicators</td>
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<td>GRI 203: Indirect Economic Impacts</td>
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<td>Investing in Society</td>
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<td>GRI 205: Anti-corruption</td>
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<td>GRI 205-2</td>
<td>Communication and training about anti-corruption policies and procedures</td>
<td>Fostering a Safe and Favourable Environment Appendix 6. Key Performance Indicators</td>
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<td>GRI 300: Environmental</td>
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<td>Fostering a Safe and Favourable Environment</td>
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<td>GRI 302: Energy</td>
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<td>Appendix 6. Key Performance Indicators</td>
</tr>
<tr>
<td>GRI 302-1</td>
<td>Energy consumption within the organisation</td>
<td>Appendix 6. Key Performance Indicators</td>
</tr>
<tr>
<td>GRI 302-4</td>
<td>Reduction of energy consumption</td>
<td>Appendix 6. Key Performance Indicators</td>
</tr>
<tr>
<td>GRI 303: Water</td>
<td></td>
<td>Appendix 6. Key Performance Indicators</td>
</tr>
<tr>
<td>GRI 303-3</td>
<td>Water withdrawal by source</td>
<td>Appendix 6. Key Performance Indicators</td>
</tr>
<tr>
<td>GRI 304: Biodiversity</td>
<td></td>
<td>Appendix 6. Key Performance Indicators</td>
</tr>
<tr>
<td>GRI 304-3</td>
<td>Habitats protected or restored</td>
<td>Appendix 6. Key Performance Indicators</td>
</tr>
<tr>
<td>GRI 305: Emissions</td>
<td></td>
<td>Appendix 6. Key Performance Indicators</td>
</tr>
<tr>
<td>GRI 305-7</td>
<td>Nitrogen oxides (NOx), sulphur oxides (SOx), and other significant air emissions</td>
<td>Appendix 6. Key Performance Indicators</td>
</tr>
<tr>
<td>GRI 306: Effluents and Waste</td>
<td></td>
<td>Appendix 6. Key Performance Indicators</td>
</tr>
<tr>
<td>GRI 306-1</td>
<td>Water discharge by quality and destination</td>
<td>Appendix 6. Key Performance Indicators</td>
</tr>
<tr>
<td>GRI 306-2</td>
<td>Waste by type and disposal method</td>
<td>Appendix 6. Key Performance Indicators</td>
</tr>
<tr>
<td>GRI 306-3</td>
<td>Significant spills</td>
<td>Not relevant</td>
</tr>
<tr>
<td>GRI 307: Environmental Compliance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRI 307-1</td>
<td>Monetary value of significant fines and total number of non-monetary sanctions</td>
<td>Appendix 6. Key Performance Indicators</td>
</tr>
<tr>
<td>GRI 400: Social</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRI 401: Employment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRI 401-1</td>
<td>New employee hires and employee turnover</td>
<td>Investing in Our People Appendix 6. Key Performance Indicators</td>
</tr>
<tr>
<td>GRI 401-2</td>
<td>Benefits provided to full-time employees that are not provided to temporary or part-time employees</td>
<td>Investing in Our People</td>
</tr>
<tr>
<td>GRI 401-3</td>
<td>Parental leave</td>
<td>Appendix 6. Key Performance Indicators</td>
</tr>
<tr>
<td>GRI 402: Labour/Management Relations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Standard Disclosure</td>
<td>Description</td>
<td>Section of the Report</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------</td>
</tr>
<tr>
<td>GRI 402-1</td>
<td>Minimum notice periods regarding operational changes</td>
<td>In compliance with applicable Russian laws</td>
</tr>
<tr>
<td>GRI 403-2</td>
<td>Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities</td>
<td>Investing in Our People</td>
</tr>
<tr>
<td>GRI 403-4</td>
<td>Health and safety topics covered in formal agreements with trade unions</td>
<td>Health and safety topics are included in the Company's collective bargaining agreement</td>
</tr>
<tr>
<td>GRI 403-9</td>
<td>Work-related injuries</td>
<td>Appendix 6. Key Performance Indicators</td>
</tr>
<tr>
<td></td>
<td><strong>GRI 404: Training and Education</strong></td>
<td></td>
</tr>
<tr>
<td>GRI 404-1</td>
<td>Average hours of training per year per employee</td>
<td>Investing in Our People</td>
</tr>
<tr>
<td>GRI 404-2</td>
<td>Programmes for upgrading employee skills and transition assistance programmes</td>
<td>Appendix 6. Key Performance Indicators</td>
</tr>
<tr>
<td>GRI 404-3</td>
<td>Percentage of employees receiving regular performance and career development reviews</td>
<td>Investing in Our People</td>
</tr>
<tr>
<td></td>
<td><strong>GRI 405: Diversity and Equal Opportunity</strong></td>
<td></td>
</tr>
<tr>
<td>GRI 405-1</td>
<td>Diversity of governance bodies and employees</td>
<td>Appendix 6. Key Performance Indicators</td>
</tr>
<tr>
<td>GRI 405-2</td>
<td>Ratio of basic salary and remuneration of women to men</td>
<td>Investing in Our People</td>
</tr>
<tr>
<td></td>
<td><strong>GRI 406: Non-discrimination</strong></td>
<td>Appendix 6. Key Performance Indicators</td>
</tr>
<tr>
<td>GRI 406-1</td>
<td>Incidents of discrimination and corrective actions taken</td>
<td>Not relevant</td>
</tr>
<tr>
<td></td>
<td><strong>GRI 408: Child Labour</strong></td>
<td>Not relevant</td>
</tr>
<tr>
<td>GRI 408-1</td>
<td>Operations and suppliers at significant risk for incidents of child labour</td>
<td>Not relevant</td>
</tr>
<tr>
<td></td>
<td><strong>GRI 409: Forced or Compulsory Labour</strong></td>
<td></td>
</tr>
<tr>
<td>GRI 409-1</td>
<td>Operations and suppliers at significant risk for incidents of forced or compulsory labour</td>
<td>Not relevant</td>
</tr>
<tr>
<td></td>
<td><strong>GRI 411: Rights of Indigenous Peoples</strong></td>
<td></td>
</tr>
<tr>
<td>GRI 411-1</td>
<td>Incidents of violations involving rights of indigenous peoples</td>
<td>Not relevant</td>
</tr>
<tr>
<td></td>
<td><strong>GRI 413: Local Communities</strong></td>
<td></td>
</tr>
<tr>
<td>GRI 413-1</td>
<td>Operations with local community engagement, impact assessments, and development programmes</td>
<td>Investing in Society</td>
</tr>
<tr>
<td></td>
<td><strong>GRI 416: Customer Health and Safety</strong></td>
<td></td>
</tr>
<tr>
<td>GRI 416-1</td>
<td>Assessment of the health and safety impacts of product and service categories</td>
<td>Delivering High-Quality Services to Customers</td>
</tr>
</tbody>
</table>
## Appendix 6. Key Performance Indicators

### Environment

<table>
<thead>
<tr>
<th>Waste</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>Change 2018/2017, %</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class 1</td>
<td>61.944</td>
<td>40.435</td>
<td>40.268</td>
<td>-0.41%</td>
<td>The total number of fluorescent lamps decreased due to their replacement with LEDs, which also resulted in the decreasing number of replaced (burnt out) light bulbs</td>
</tr>
<tr>
<td>Class 2</td>
<td>87.505</td>
<td>32.665</td>
<td>28.515</td>
<td>-12.70%</td>
<td>Writing off, disposal of, and outsourcing vehicles. Results of the previous standby generator upgrades (old batteries were written off and replaced with the new ones with a longer service life)</td>
</tr>
<tr>
<td>Class 3</td>
<td>45.844</td>
<td>47.639</td>
<td>39.297</td>
<td>-17.51%</td>
<td>Writing off, and disposal of, vehicles and copper-wire communications lines</td>
</tr>
<tr>
<td>Class 4</td>
<td>21,021.057</td>
<td>20,714.299</td>
<td>20,615.764</td>
<td>-0.48%</td>
<td>Decreasing the number of used buildings (real estate portfolio optimisation). Office space optimisation.</td>
</tr>
<tr>
<td>Class 5</td>
<td>15,886.163</td>
<td>13,772.160</td>
<td>13,385.635</td>
<td>-2.81%</td>
<td>Decreasing the number of used buildings (real estate portfolio optimisation). Office space optimisation.</td>
</tr>
<tr>
<td>Total</td>
<td>37,102.513</td>
<td>34,607.198</td>
<td>34,109.479</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### WASTE DISPOSAL METHODS IN 2016–2018, TONNES

<table>
<thead>
<tr>
<th>Method</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landfill</td>
<td>33,825.5</td>
<td>30,280.8</td>
<td>30,616.7</td>
</tr>
<tr>
<td>Reuse (for own operational needs)</td>
<td>44.9</td>
<td>681.0</td>
<td>271.6</td>
</tr>
<tr>
<td>Other methods (disposal and neutralisation)</td>
<td>3,232.1</td>
<td>3,645.3</td>
<td>3,221.1</td>
</tr>
</tbody>
</table>

### RECLAMATION OF DISTURBED LAND IN 2016–2018

<table>
<thead>
<tr>
<th>Expenses related to reclamation, RUB thousand</th>
<th>Reclaimed land area, sq m</th>
<th>Expenses related to reclamation, RUB thousand</th>
<th>Reclaimed land area, sq m</th>
<th>Expenses related to reclamation, RUB thousand</th>
<th>Reclaimed land area, sq m</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>0</td>
<td>150</td>
<td>0</td>
<td>312</td>
<td>0</td>
</tr>
<tr>
<td>2017</td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### WATER DISCHARGE IN 2016–2018, THOUSAND CU M

<table>
<thead>
<tr>
<th>Water discharge</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>Change 2018/2017, %</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Into water bodies (water ejectors)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Increased discharge of collected rainwater</td>
</tr>
<tr>
<td>planned</td>
<td>43.23</td>
<td>39.81</td>
<td>40.33</td>
<td>1.31%</td>
<td></td>
</tr>
<tr>
<td>unplanned</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.00%</td>
<td></td>
</tr>
<tr>
<td>Into public sewage systems (under agreements)</td>
<td></td>
<td></td>
<td></td>
<td>~ 11.26%</td>
<td>Equals to reducing water consumption by 11%</td>
</tr>
<tr>
<td>2,639.75</td>
<td>2,327.41</td>
<td>2,065.34</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### WASTE DISPOSAL IN 2016–2018

<table>
<thead>
<tr>
<th>Relevant types of waste</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Neutralisation</td>
<td>Disposal</td>
<td>Landfill</td>
</tr>
<tr>
<td>Fluorescent lamps</td>
<td>6194</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Batteries</td>
<td>46.75</td>
<td>40.75</td>
<td>0.00</td>
</tr>
<tr>
<td>Used motor oil</td>
<td>5.11</td>
<td>40.19</td>
<td>0.00</td>
</tr>
<tr>
<td>Rags</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sawdust and sand</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fuel and oil filters</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Battery acid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waste tyres</td>
<td>0.00</td>
<td>69.48</td>
<td>0.00</td>
</tr>
<tr>
<td>Non-ferrous metal scrap</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Municipal waste</td>
<td>0.00</td>
<td>436.49</td>
<td>16,993.79</td>
</tr>
<tr>
<td>Waste office equipment</td>
<td>2,139.30</td>
<td>34.76</td>
<td>1,344.72</td>
</tr>
<tr>
<td>Oily sludge</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cesspit waste</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>and other waste</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Municipal waste and bulk waste</td>
<td>0.00</td>
<td>9.60</td>
<td>13,602.88</td>
</tr>
<tr>
<td>Construction waste</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sweepings from the sites</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paper and cardboard waste</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Broken glass</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waste plastic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waste cable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water conditioning and effluent treatment waste</td>
<td>0.00</td>
<td>347.72</td>
<td>998.24</td>
</tr>
<tr>
<td>and other waste</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ferrous metal scrap</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paper and cardboard waste</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wood waste, bottom ash from burning coal</td>
<td>0.00</td>
<td>0.00</td>
<td>885.90</td>
</tr>
<tr>
<td>Total</td>
<td>2,253.11</td>
<td>978.98</td>
<td>33,825.53</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ENERGY CONSUMPTION BY TYPE OF ENERGY IN 2016–2018

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel</td>
<td>1,678,785</td>
<td>2,062,971</td>
<td>2,076,528</td>
<td>2,139,200</td>
</tr>
<tr>
<td>Electricity</td>
<td>1,552</td>
<td>8,724,794</td>
<td>9,899,944</td>
<td>11,463,269</td>
</tr>
<tr>
<td>Heat</td>
<td>1,734,879</td>
<td>1,774,849</td>
<td>1,817,653</td>
<td>1,894,746</td>
</tr>
</tbody>
</table>

SIGNIFICANT AIR EMISSIONS IN 2016–2018, TONNES

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>Change 2018/2017, % Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon oxide</td>
<td>916.4</td>
<td>904.4</td>
<td>857.2</td>
<td>– 5.22% Increased gas consumption</td>
</tr>
<tr>
<td>Nitrogen dioxide</td>
<td>111.7</td>
<td>117.1</td>
<td>131.4</td>
<td>12.1% Increased coal consumption</td>
</tr>
<tr>
<td>Sulphur dioxide</td>
<td>107.3</td>
<td>105.5</td>
<td>116.0</td>
<td>9.94% Increased coal consumption</td>
</tr>
<tr>
<td>Nitrogen oxide</td>
<td>22.8</td>
<td>22.1</td>
<td>22.6</td>
<td>2.26% Increased coal consumption</td>
</tr>
<tr>
<td>Soot</td>
<td>158.6</td>
<td>147.3</td>
<td>178.7</td>
<td>21.31% Increased coal consumption</td>
</tr>
<tr>
<td>Total</td>
<td>1,316.7</td>
<td>1,296.4</td>
<td>1,305.9</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL WATER WITHDRAWAL IN 2016–2018, THOUSAND CU M

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total water withdrawal</td>
<td>3,315.22</td>
<td>2,800.81</td>
<td>2,496.06</td>
</tr>
<tr>
<td>Groundwater</td>
<td>377.97</td>
<td>375.57</td>
<td>229.55</td>
</tr>
<tr>
<td>Surface water</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Municipal water supplies or other public or private water utilities</td>
<td>2,773.25</td>
<td>2,425.24</td>
<td>2,266.51</td>
</tr>
</tbody>
</table>

MONETARY VALUE OF SIGNIFICANT FINES AND TOTAL NUMBER OF NON-MONETARY SANCTIONS FOR NON-COMPLIANCE WITH ENVIRONMENTAL LAWS AND REGULATIONS IN 2016–2018, RUB THOUSAND

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations</td>
<td>74</td>
<td>154</td>
<td>90</td>
</tr>
</tbody>
</table>

FUEL AND ENERGY EXPENSES IN 2016–2018, %

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power supply</td>
<td>55</td>
<td>68</td>
<td>66.5</td>
</tr>
<tr>
<td>Heat supply</td>
<td>17</td>
<td>219</td>
<td>23.4</td>
</tr>
<tr>
<td>Fuel for vehicles and mechanical equipment</td>
<td>18</td>
<td>8.5</td>
<td>8.7</td>
</tr>
<tr>
<td>Gas and gas supply expenses</td>
<td>7</td>
<td>1.5</td>
<td>1.4</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>0.1</td>
<td>0</td>
</tr>
</tbody>
</table>
ENVIROMENTAL PERFORMANCE OF PJSC ROSTELECOM’S VEHICLES AND PERFORMANCE IMPROVEMENT INITIATIVES IN 2018

<table>
<thead>
<tr>
<th>Rostelecom's vehicles by emission standard</th>
<th>not certified</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicles purchased in 2018</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1,104</td>
<td>1,104</td>
</tr>
<tr>
<td>Vehicles on Rostelecom’s balance sheet as at the end of 2018</td>
<td>1,002</td>
<td>505</td>
<td>3,363</td>
<td>864</td>
<td>1,247</td>
<td>3,164</td>
<td>3,889</td>
<td>14,034</td>
</tr>
</tbody>
</table>

ROSTELECOM’S ENVIRONMENTAL SAFETY EXPENDITURES IN 2016–2018

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee training</td>
<td>1,489.79</td>
<td>2,351.71</td>
<td>1,566.79</td>
</tr>
<tr>
<td>Disposal/neutralisation fees for non-landfill wastes</td>
<td>9,772.59</td>
<td>11,815.94</td>
<td>10,489.66</td>
</tr>
<tr>
<td>Payments to transport organisations for transporting municipal wastes to landfills</td>
<td>83,774.71</td>
<td>70,803.62</td>
<td>88,685.53</td>
</tr>
<tr>
<td>Emission charges to the federal budget</td>
<td>1,235.94</td>
<td>636.07</td>
<td>764.78</td>
</tr>
<tr>
<td>Charges to the federal budget for municipal waste landfill</td>
<td>32,546.79</td>
<td>18,956.10</td>
<td>10,412.69</td>
</tr>
<tr>
<td>Total</td>
<td>128,819.82</td>
<td>104,563.44</td>
<td>111,919.45</td>
</tr>
</tbody>
</table>

Occupational health and safety

WORK-RELATED INJURIES AT ROSTELECOM IN 2016–2018

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of injuries, people</td>
<td>42</td>
<td>39</td>
<td>30</td>
</tr>
<tr>
<td>Number of incidents per 1,000 employees (frequency rate)</td>
<td>0.34</td>
<td>0.31</td>
<td>0.27</td>
</tr>
<tr>
<td>including: women</td>
<td>6</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>fatalities</td>
<td>5</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Lost days resulting from incidents</td>
<td>2,078</td>
<td>4,503</td>
<td>2,145</td>
</tr>
</tbody>
</table>

ROSTELECOM’S EXPENDITURE ON OCCUPATIONAL HEALTH AND SAFETY IN 2016–2018, RUB MILLION

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditure on occupational health and safety</td>
<td>550.6</td>
<td>640.8</td>
<td>697.8</td>
</tr>
</tbody>
</table>
### Employees

<table>
<thead>
<tr>
<th>GRI 401-1</th>
<th>GRI 401-3</th>
<th>GRI 404-1</th>
<th>GRI 405-1</th>
<th>GRI 405-2</th>
<th></th>
</tr>
</thead>
</table>

**ROSTELECOM’S AVERAGE HEADCOUNT BY EMPLOYMENT TYPE IN 2016–2018, PEOPLE**

<table>
<thead>
<tr>
<th>Employment Type</th>
<th>2016 (as at 31 December 2016)</th>
<th>2017 (as at 31 December 2017)</th>
<th>2018 (as at 31 December 2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indefinite contract</td>
<td>116,161</td>
<td>108,286</td>
<td>101,488</td>
</tr>
<tr>
<td>Fixed-term contract</td>
<td>5,155</td>
<td>4,308</td>
<td>6,442</td>
</tr>
<tr>
<td>Full-time</td>
<td>114,037</td>
<td>105,039</td>
<td>101,320</td>
</tr>
<tr>
<td>Part-time</td>
<td>7,279</td>
<td>7,555</td>
<td>6,610</td>
</tr>
<tr>
<td>Under independent contractor agreements</td>
<td>16,111</td>
<td>17,814</td>
<td>21,834</td>
</tr>
</tbody>
</table>

**ROSTELECOM’S EMPLOYEES BY FUNCTION IN 2016–2018, PEOPLE**

<table>
<thead>
<tr>
<th>Function</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical team</td>
<td>93,201</td>
<td>92,471</td>
<td>89,234</td>
</tr>
<tr>
<td>Commercial team</td>
<td>28,101</td>
<td>26,793</td>
<td>24,772</td>
</tr>
<tr>
<td>Administrative team</td>
<td>10,190</td>
<td>3,985</td>
<td>3,347</td>
</tr>
<tr>
<td>Other</td>
<td>11,040</td>
<td>10,436</td>
<td>11,231</td>
</tr>
<tr>
<td>Total</td>
<td>142,532</td>
<td>133,685</td>
<td>128,584</td>
</tr>
</tbody>
</table>

**ROSTELECOM’S EMPLOYEES BY CATEGORY IN 2017–2018**

<table>
<thead>
<tr>
<th>Category</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialists</td>
<td>68,823</td>
<td>66,919</td>
</tr>
<tr>
<td>Workers</td>
<td>28,325</td>
<td>26,147</td>
</tr>
<tr>
<td>Heads of functions</td>
<td>12,014</td>
<td>12,149</td>
</tr>
<tr>
<td>Top managers</td>
<td>95</td>
<td>86</td>
</tr>
<tr>
<td>Total</td>
<td>109,257</td>
<td>105,301</td>
</tr>
<tr>
<td>Other employees</td>
<td>115</td>
<td>112</td>
</tr>
</tbody>
</table>

Note: The “Rosteilecom’s employees by category” table comprises data for Rosteilecom, excluding subsidiaries and affiliates, as at 31 December 2018.
## Rostechnocom's Employees by Category in 2016–2018

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Permanent employees as at 31 December</td>
<td>Permanent employees as at 31 December</td>
<td>Permanent employees as at 31 December</td>
</tr>
<tr>
<td></td>
<td>By gender</td>
<td>By gender</td>
<td>By gender</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>Women</td>
<td>Men</td>
</tr>
<tr>
<td>Top managers</td>
<td>123</td>
<td>84</td>
<td>95</td>
</tr>
<tr>
<td>Heads of functions</td>
<td>11,671</td>
<td>7,869</td>
<td>12,014</td>
</tr>
<tr>
<td>Specialists</td>
<td>79,455</td>
<td>35,016</td>
<td>68,823</td>
</tr>
<tr>
<td>Workers</td>
<td>33,116</td>
<td>30,190</td>
<td>28,325</td>
</tr>
<tr>
<td>Total</td>
<td>124,365</td>
<td>73,159</td>
<td>109,257</td>
</tr>
<tr>
<td>Other employees</td>
<td>115</td>
<td>5</td>
<td>110</td>
</tr>
</tbody>
</table>

## Rostechnocom's Employees by Age in 2016–2018

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Men</td>
<td>Women</td>
<td>Men</td>
</tr>
<tr>
<td>Top managers</td>
<td>25,38</td>
<td>4,525</td>
<td>3,013</td>
</tr>
<tr>
<td>Heads of functions</td>
<td>30,895</td>
<td>16,636</td>
<td>14,259</td>
</tr>
<tr>
<td>Specialists</td>
<td>67,800</td>
<td>38,185</td>
<td>29,615</td>
</tr>
<tr>
<td>Workers</td>
<td>13,132</td>
<td>13,813</td>
<td>4,319</td>
</tr>
<tr>
<td>Total</td>
<td>124,365</td>
<td>73,159</td>
<td>109,257</td>
</tr>
</tbody>
</table>

## Share of New Hires in Total Headcound in 2016–2018, People

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of permanent employees as at 31 December</td>
<td>124,365</td>
<td>109,372</td>
<td>105,413</td>
</tr>
<tr>
<td>Including new hires</td>
<td>14,142</td>
<td>13,067</td>
<td>15,948</td>
</tr>
</tbody>
</table>

## Gender Distribution of New Hires in 2016–2018, People

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>6,994</td>
<td>7,290</td>
<td>8,560</td>
</tr>
<tr>
<td>Women</td>
<td>7,148</td>
<td>5,777</td>
<td>7,388</td>
</tr>
</tbody>
</table>

## Share of New Hires in Total Headcound in 2016–2018, %

<table>
<thead>
<tr>
<th></th>
<th>New hires in 2016</th>
<th>New hires in 2017</th>
<th>New hires in 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees</td>
<td>89%</td>
<td>88%</td>
<td>87%</td>
</tr>
<tr>
<td>New hires</td>
<td>11%</td>
<td>12%</td>
<td>13%</td>
</tr>
</tbody>
</table>
## Gender Distribution of New Hires in 2016–2018, %

<table>
<thead>
<tr>
<th>Gender</th>
<th>New hires in 2016, %</th>
<th>Gender distribution of new hires in 2017, %</th>
<th>Gender distribution of new hires in 2018, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women</td>
<td>51%</td>
<td>56%</td>
<td>51%</td>
</tr>
<tr>
<td>Men</td>
<td>49%</td>
<td>44%</td>
<td>49%</td>
</tr>
</tbody>
</table>

## Age Distribution of New Hires in 2016–2018 (Years), %

<table>
<thead>
<tr>
<th>Age distribution of new hires in 2016 (years), %</th>
<th>Age distribution of new hires in 2017 (years), %</th>
<th>Age distribution of new hires in 2018 (years), %</th>
</tr>
</thead>
<tbody>
<tr>
<td>36–55</td>
<td>30%</td>
<td>28.20%</td>
</tr>
<tr>
<td>26–35</td>
<td>35%</td>
<td>37.40%</td>
</tr>
<tr>
<td>Under 25</td>
<td>29%</td>
<td>26.20%</td>
</tr>
<tr>
<td>Over 56</td>
<td>6%</td>
<td>8.30%</td>
</tr>
</tbody>
</table>

## Rostelecom’s Average Headcount in 2016–2018, People

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rostelecom Group’s average headcount (including subsidiaries and affiliates)</td>
<td>142,532</td>
<td>133,685</td>
<td>128,530</td>
</tr>
<tr>
<td>Rostelecom’s average headcount (excluding subsidiaries and affiliates)</td>
<td>121,316</td>
<td>112,594</td>
<td>107,930</td>
</tr>
<tr>
<td>Average headcount of subsidiaries and affiliates</td>
<td>21,216</td>
<td>21,090</td>
<td>20,600</td>
</tr>
</tbody>
</table>

## Region Distribution of Rostelecom’s New Hires in 2016–2018

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Volga</td>
<td>18,544</td>
<td>15,933</td>
<td>14,872</td>
<td>2,029</td>
<td>1,990</td>
<td>2,157</td>
<td>10.9%</td>
<td>12.5%</td>
<td>15%</td>
</tr>
<tr>
<td>Centre</td>
<td>24,452</td>
<td>23,655</td>
<td>23,254</td>
<td>2,286</td>
<td>1,775</td>
<td>2,386</td>
<td>9.3%</td>
<td>7.5%</td>
<td>10%</td>
</tr>
<tr>
<td>Far East</td>
<td>9,148</td>
<td>8,308</td>
<td>7,919</td>
<td>961</td>
<td>984</td>
<td>812</td>
<td>10.5%</td>
<td>11.8%</td>
<td>10%</td>
</tr>
<tr>
<td>North-West</td>
<td>14,949</td>
<td>13,505</td>
<td>12,734</td>
<td>1,710</td>
<td>1,413</td>
<td>1,303</td>
<td>11.4%</td>
<td>10.5%</td>
<td>10%</td>
</tr>
<tr>
<td>Siberia</td>
<td>15,562</td>
<td>14,960</td>
<td>14,346</td>
<td>1,917</td>
<td>1,505</td>
<td>1,757</td>
<td>12.3%</td>
<td>10.1%</td>
<td>12%</td>
</tr>
<tr>
<td>Ural</td>
<td>15,217</td>
<td>14,351</td>
<td>13,973</td>
<td>1,754</td>
<td>2,409</td>
<td>2,541</td>
<td>11.5%</td>
<td>16.6%</td>
<td>18%</td>
</tr>
<tr>
<td>South</td>
<td>17,831</td>
<td>16,444</td>
<td>15,161</td>
<td>1,590</td>
<td>1,368</td>
<td>2,557</td>
<td>8.9%</td>
<td>8.3%</td>
<td>17%</td>
</tr>
<tr>
<td>Headquarters</td>
<td>1,936</td>
<td>1,942</td>
<td>2,281</td>
<td>388</td>
<td>526</td>
<td>853</td>
<td>20%</td>
<td>27%</td>
<td>37%</td>
</tr>
<tr>
<td>Training and Production Centre</td>
<td>259</td>
<td>244.4</td>
<td>151</td>
<td>161</td>
<td>61</td>
<td>41</td>
<td>62.1%</td>
<td>25%</td>
<td>27%</td>
</tr>
<tr>
<td>Multifunctional General Service Centre</td>
<td>3,418</td>
<td>3,252</td>
<td>3,219</td>
<td>1,346</td>
<td>1,038</td>
<td>1,541</td>
<td>39.3%</td>
<td>31.9%</td>
<td>48%</td>
</tr>
<tr>
<td>Total</td>
<td>121,316</td>
<td>112,594</td>
<td>107,930</td>
<td>14,142</td>
<td>13,070</td>
<td>15,948</td>
<td>11.6%</td>
<td>11.6%</td>
<td>15%</td>
</tr>
</tbody>
</table>
### TOTAL NUMBER OF EMPLOYEES THAT RETURNED TO WORK IN 2016–2018 AFTER PARENTAL LEAVE ENDED

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average headcount, people</td>
<td>121,316</td>
<td>112,594</td>
<td>107,930</td>
</tr>
<tr>
<td>Employees that returned to work, %</td>
<td>5.23%</td>
<td>5.26%</td>
<td>2.40%</td>
</tr>
<tr>
<td>Total number of employees that took parental leave, people</td>
<td>4,098</td>
<td>4,987</td>
<td>4,635</td>
</tr>
<tr>
<td>Total number of employees that returned to work, people</td>
<td>6,343</td>
<td>5,919</td>
<td>2,589</td>
</tr>
</tbody>
</table>

Note: Data for PJSC Rostelecom.

### EMPLOYEE TURNOVER BY REGION IN 2016–2018

<table>
<thead>
<tr>
<th>Region/centre</th>
<th>Number of dismissals in 2016, people</th>
<th>Employee turnover rate in 2016, %</th>
<th>Number of dismissals in 2017, people</th>
<th>Employee turnover rate in 2017, %</th>
<th>Number of dismissals in 2018, people</th>
<th>Employee turnover rate in 2018, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volga</td>
<td>4,269</td>
<td>6.5%</td>
<td>4,330</td>
<td>6.70%</td>
<td>2,943</td>
<td>8.11%</td>
</tr>
<tr>
<td>Centre</td>
<td>2,783</td>
<td>4.9%</td>
<td>2,516</td>
<td>4.33%</td>
<td>3,035</td>
<td>6.62%</td>
</tr>
<tr>
<td>Far East</td>
<td>1,704</td>
<td>8.0%</td>
<td>1,687</td>
<td>9.30%</td>
<td>1,276</td>
<td>9%</td>
</tr>
<tr>
<td>North-West</td>
<td>2,580</td>
<td>6.4%</td>
<td>2,881</td>
<td>6.78%</td>
<td>1,821</td>
<td>4.97%</td>
</tr>
<tr>
<td>Siberia</td>
<td>2,269</td>
<td>6.7%</td>
<td>2,129</td>
<td>7.65%</td>
<td>2,589</td>
<td>9%</td>
</tr>
<tr>
<td>Ural</td>
<td>2,817</td>
<td>7.3%</td>
<td>3,002</td>
<td>10.60%</td>
<td>3,265</td>
<td>14.37%</td>
</tr>
<tr>
<td>South</td>
<td>2,558</td>
<td>6.0%</td>
<td>3,019</td>
<td>7.50%</td>
<td>3,741</td>
<td>9.55%</td>
</tr>
<tr>
<td>Headquarters</td>
<td>220</td>
<td>6.4%</td>
<td>557</td>
<td>9.70%</td>
<td>420</td>
<td>10.41%</td>
</tr>
<tr>
<td>Training and Production Centre</td>
<td>155</td>
<td>42.9%</td>
<td>121</td>
<td>33.10%</td>
<td>103</td>
<td>35.79%</td>
</tr>
<tr>
<td>Multifunctional General Service Centre</td>
<td>1549</td>
<td>23.7%</td>
<td>1,269</td>
<td>26.00%</td>
<td>1,248</td>
<td>5.36%</td>
</tr>
<tr>
<td>Total</td>
<td>20,904</td>
<td>6.89%</td>
<td>21,511</td>
<td>7.93%</td>
<td>20,441</td>
<td>8.64%</td>
</tr>
</tbody>
</table>

### AVERAGE MONTHLY PAY OF ROSTELECOM EMPLOYEES IN 2016–2018, RUB THOUSAND

|PJSC Rostelecom| 39| 44| 47|
|Rostelecom Group (including subsidiaries and affiliates)| 40| 44| 46|

### PJSC ROSTELECOM’S SALARY EXPENSES IN 2016–2018, RUB BILLION

|PJSC Rostelecom| 56.85| 58.16| 62.77|
|Rostelecom Group (including subsidiaries and affiliates)| 66.02| 67.20| 69.81|
### RATIOS OF ENTRY LEVEL WAGE BY GENDER IN 2016–2018

<table>
<thead>
<tr>
<th>Region</th>
<th>Women</th>
<th>Men</th>
<th>Women</th>
<th>Men</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volga</td>
<td>245%</td>
<td>204%</td>
<td>304%</td>
<td>305%</td>
<td>276%</td>
<td>294%</td>
</tr>
<tr>
<td>Far East</td>
<td>395%</td>
<td>302%</td>
<td>249%</td>
<td>224%</td>
<td>430%</td>
<td>451%</td>
</tr>
<tr>
<td>Moscow</td>
<td>1,197%</td>
<td>1,330%</td>
<td>1,231%</td>
<td>1,598%</td>
<td>840%</td>
<td>1,027%</td>
</tr>
<tr>
<td>North-West</td>
<td>334%</td>
<td>327%</td>
<td>343%</td>
<td>315%</td>
<td>366%</td>
<td>384%</td>
</tr>
<tr>
<td>Siberia</td>
<td>271%</td>
<td>350%</td>
<td>267%</td>
<td>252%</td>
<td>319%</td>
<td>319%</td>
</tr>
<tr>
<td>Ural</td>
<td>314%</td>
<td>293%</td>
<td>287%</td>
<td>263%</td>
<td>349%</td>
<td>375%</td>
</tr>
<tr>
<td>Centre</td>
<td>304%</td>
<td>310%</td>
<td>316%</td>
<td>324%</td>
<td>387%</td>
<td>414%</td>
</tr>
<tr>
<td>South</td>
<td>236%</td>
<td>210%</td>
<td>305%</td>
<td>285%</td>
<td>275%</td>
<td>289%</td>
</tr>
</tbody>
</table>

### ROSTELECOM’S EMPLOYEE TRAINING COSTS IN 2016–2018, RUB THOUSAND

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total employee training costs</td>
<td>452,565</td>
<td>463,570</td>
<td>496,042</td>
</tr>
<tr>
<td>Annual training cost per employee</td>
<td>3.6</td>
<td>3.5</td>
<td>4.6</td>
</tr>
</tbody>
</table>

### ROSTELECOM’S EMPLOYEES TRAINED IN 2016–2018, PEOPLE

<table>
<thead>
<tr>
<th>Employee category</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top managers</td>
<td>92</td>
<td>54</td>
<td>92</td>
</tr>
<tr>
<td>Managers</td>
<td>7,951</td>
<td>7,148</td>
<td>5,752</td>
</tr>
<tr>
<td>Specialists</td>
<td>20,075</td>
<td>18,999</td>
<td>17,506</td>
</tr>
<tr>
<td>Dedicated categories (providing for the Company’s core competence implementation)</td>
<td>9,111</td>
<td>7,837</td>
<td>6,424</td>
</tr>
<tr>
<td>Total</td>
<td>37,229</td>
<td>34,038</td>
<td>29,774</td>
</tr>
</tbody>
</table>
Appendix 7. Opinion of the RSPP Board

Opinion of the RSPP Board on Non-Financial Reporting on PJSC Rostelecom’s Sustainability Report 2018 submitted for public assurance purposes

The RSPP Board on Non-Financial Reporting (the Board), which was established by the resolution of the RSPP Bureau (Decree dated 28 June 2007), reviewed PJSC Rostelecom’s Sustainability Report 2018 (the Report) submitted by PJSC Rostelecom (the Company, Rostelecom).

The Company contacted RSPP asking the Board to provide public assurance of the Report. The Board’s task was to form an opinion on the relevance and completeness of information on the Company’s performance disclosed in the Report in accordance with the principles of responsible business practice contained in the Social Charter of Russian Business and compliant with the United Nations Global Compact, as well as Russian and international social responsibility standards.

In the period between 12 and 28 May 2019, the Board examined the Report submitted by the Company and prepared this Opinion in accordance with the Public Assurance Procedure for non-financial corporate reports approved by the Board. Members of the Board have the necessary expertise in corporate responsibility, sustainability, and non-financial reporting, comply with ethical requirements (independence and objectivity of assessment), and express their own expert opinion rather than the opinion of the organisations they represent.

The Report was evaluated based on the following criteria for the relevance and completeness of the information contained in it:

Information is deemed relevant if it reflects the Company’s activities aimed at implementing the principles of responsible business practice outlined in the Social Charter of Russian Business (www.rspp.ru).

Information is deemed complete if the Report gives a comprehensive view of the Company’s activities: values and underlying strategic priorities, governance systems and structures, stakeholder engagement, achievements, key results, and KPIs.

The public assurance procedure takes into account the fact that the Company used international reporting standards. However, assurance of the Report’s compliance with the international reporting standards is outside the scope of this Opinion.

Responsibility for the information and statements contained in the Report lies with PJSC Rostelecom. Reliability of the reported data is not subject to public assurance.

This Opinion has been prepared for PJSC Rostelecom. The Company is entitled to use this Opinion both for internal purposes and for stakeholder communications, publishing it with no alterations.

CONCLUSIONS

After analysing the Report and the information publicly available on the Company’s website, and holding a group discussion of results of the independent evaluation performed by members of the Board, the Board confirms the following:

PJSC Rostelecom’s Sustainability Report 2018 contains relevant information on key areas of responsible business practice in compliance with the principles outlined in the Social Charter of Russian Business and discloses the Company’s overall performance with sufficient completeness. Recommendations offered by the Board after the public assurance of PJSC Rostelecom’s Sustainability Report 2017 were reflected in the Report for 2018. Specifically, the new Report provides more detailed information on the alignment between the Company’s goals and objectives and the United Nations Sustainable Development Goals, also known as the 2030 Agenda for Sustainable Development. Also, there is a more detailed description of stakeholders’ participation in defining material topics.

The Report contains relevant information on the following principles of responsible business practice:

Economic freedom and responsibility. The Report describes the Company’s core business lines, the scope of activities, and markets served, covering its financial performance and key events in the reporting year. It discloses information reflecting the Company’s role in promoting digital services to public and private entities, highlighting their economic and social impacts. The Report outlines the Company’s strategic priorities for 2018–2022 and describes its business model, providing details on the actions taken to improve the quality and accessibility of services. The document discloses the Company’s capital expenditures in 2018 and includes information on its innovative solutions for e-government systems, cyber security, data centres, cloud computing, biometrics, healthcare, education, and utilities. The Report outlines Rostelecom’s sustainable development priorities in the context of the UN SDGs and includes information on the Company’s actions related to them. The corporate governance and risk management systems are also covered. The Report highlights sustainable development and CRS activities and management. The Company has the Code of Ethics reflecting its key anti-corruption principles and anti-corruption programmes implemented at subsidiaries and affiliates. The document describes the scope of anti-corruption training for employees, as well as the Company’s participation in the Anti-Corruption Charter of Russian Business.

Partnership in business. The Report explores the Company’s principles and practices of engaging with stakeholders, describing engagement mechanisms and formats. According to the document, the Company secures the rights of its shareholders, including by using state-of-the-art digital solutions. The Report discloses information on Rostelecom’s partnership with the government, including under the Digital Economy of the Russian Federation programme and other federal IT and telecommunications projects, as well as its active promotion of the national SME development policy. The document describes the Company’s role in ensuring the operation of the e-government infrastructure. It provides information on HR management, including professional development, the Long-Term Incentive Programme for
 Participation in local community development. The Report describes the Company’s socially significant initiatives and projects in Russia, stating that the Company makes full use of its R&D and production capabilities to develop telecommunications infrastructure across all Russian regions. Also, it outlines the key areas covered by the Company’s social and charitable programmes. Specifically, in 2018, Rostelecom’s digital technology and solutions were used for implementing the following integrated programmes: Digital Equality, Health, Care, Cultural Heritage, Sports, and Environment. Data on the events and scope of the programmes is given for different regions of the Company’s operations. When implementing social programmes, PJSC Rostelecom cooperates with federal and regional authorities and non-commercial organisations. Data on PJSC Rostelecom’s costs associated with charitable projects is also disclosed. Yet another topic covered by the Report is the Company’s volunteer activities.

Final conclusions

On the whole, the information contained in the Report reflects the Company’s consistent steps to integrate corporate social responsibility and sustainable development principles into its business practices. The Report describes PJSC Rostelecom’s strategic priorities, principles, and performance across the key responsible business practices. Special emphasis is placed on the introduction of digital technology and ensuring wide accessibility and quality of telecommunication products and services. It discloses stakeholder engagement, including for the needs of preparation of the Report.

The Report is prepared in compliance with international standards – the GRI Guidelines and the AA1000 Stakeholder Engagement Standard (SES) – which makes the information provided therein easily comparable to the one contained in the reports compiled by other companies. The Company’s strategy and performance is presented in the context of the United Nations Sustainable Development Goals and stakeholders’ proposals.

PJSC Rostelecom’s Sustainability Report 2018 is the Company’s eighth non-financial report, which reflects its consistent efforts to enhance public reporting and its commitment to transparency and openness.
RECOMMENDATIONS

While recognising the strengths of PJSC Rostelecom’s Sustainability Report 2018, the Board would like to draw the Company’s attention to several aspects of relevance and completeness of information that are of importance for stakeholders and recommends taking them into account when preparing reports in the future.

The Board would like to note that the recommendations offered after analysing the Company’s 2017 Report remain relevant and can be used in future reporting practice.

The Report discloses specific performance indicators for the key sustainable development areas. In order to enhance completeness, the Board recommends consistently evolving the practice and that all relevant indicators, including labour productivity and capex, reflecting the Company’s performance, be expanded and disclosed over time.

The Board would also like to draw the Company’s attention to the importance of giving more details on the economic aspect of sustainable development. It recommends including significant information on the topic into future reports, providing links to sources that contain more details on the issue (e.g., an annual report).

The Report contains information on the alignment between the Company’s business priorities and the United Nations Sustainable Development Goals. The Board recommends continuing to disclose progress in contributing to the UN SDGs, assessing the Company’s performance in attaining strategic goals and objectives from this perspective as well.

The Report also describes Rostelecom’s engagement with business partners. It would be useful to give more details on the Company’s efforts to ensure compliance with the principles responsible business practice among its business partners, including suppliers of products and services, and contractors, which could provide a better understanding of the Company’s responsibility in the supply chain.

Providing per unit rates for environmental impact along with the gross ones helps get a clearer picture of performance on sustainable use of resources and minimisation of negative environmental impact. For instance, the Report discloses the Company’s energy consumption rates per sq m. The Board recommends applying the same approach across other areas of environmental impact, specifically, to waste generation.

The Report describes the scope of PJSC Rostelecom’s corporate social programmes. However, the Board’s recommendation concerning disclosure of information on the projects’ results and performance assessment for the most significant projects, including from the perspective of their positive impact and sustainability of results, remains relevant.

The Board would also like to draw the Company’s attention to the fact that relevant information on anti-corruption practices will be more complete and convincing if Rostelecom describes the percentage of operations assessed for corruption risks in more detail, which will illustrate the effectiveness of management in the field.

We also recommend describing PJSC Rostelecom’s structure in line with its IFRS financial statements to make it more transparent and straightforward.

The RSPP Board on Non-Financial Reporting expresses its positive opinion on the Report, supporting the Company’s commitment to the principles of responsible business practice and noting the consistency in enhancing its reporting practices, and confirms that PJSC Rostelecom’s Sustainability Report 2018 has passed the public assurance process.

The RSPP Board on Non-Financial Reporting
Appendix 8. Feedback Questionnaire

Dear reader!

You have just read PJSC Rostelecom’s Sustainability Report 2018.

We strive to maintain the most transparent and honest dialogue with all stakeholders, and we would be grateful for your responses to the questions below to help us improve the Company’s reporting quality.

Which stakeholder group are you in?

- Shareholder
- Investor
- Employee
- Partner/contractor/supplier
- Customer
- Government authority representative
- Public organisation/local community representative
- Environmental organisation representative
- Mass media representative
- Academic/expert community representative
- Other group: __________________________

1. Have you found material information on the issues you are concerned with in the Report?

- Yes, full
- Yes, partial
- No
- I have just looked through the Report

2. Which information included in the Report was of most interest to you?

3. Which information did you find the least interesting?

4. Which topics of interest are not included in the Report?

5. Please assess this Report against the following criteria:
6. What would you recommend to improve the Company’s performance?

7. Other comments and recommendations on the Report:

8. If you wish to get a response to your comments, please leave your contact details:

Name _______________________________
Organisation _______________________________
Position _______________________________
Phone/e-mail _______________________________

THANK YOU FOR YOUR FEEDBACK!

For access:

to the interactive version of PJSC Rostelecom’s Sustainability Report 2018, please use the QR code
to the interactive version of PJSC Rostelecom’s Annual Report 2018, please use the QR code
to the digital version of the feedback questionnaire, please use the QR code

Rostelecom’s website: www.company.rt.ru/en/