Digital Ecosystem of the Future Economy

Sustainability Report 2018
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 citizens 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 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 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, constructed a submarine fibre-optic cable link to the Kuril Islands in 2018, providing them with access to advanced telemedicine technology.

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 centre in 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 professionalism at Rostelecom-Solar and the launch of the Unified Cyber Security Platform during the year.

Rostelecom’s team, counting 120 thousand people, is central to driving our digital transformation. 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 3,000 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.

Mitchell Ososky
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.
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).

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.

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

Stable financial position

<table>
<thead>
<tr>
<th>Rating Agency</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fitch Ratings</td>
<td>&quot;BBB-&quot;</td>
</tr>
<tr>
<td>Standard &amp; Poor’s</td>
<td>&quot;BB+&quot;</td>
</tr>
<tr>
<td>Analytical Credit Rating Agency (ACRA)</td>
<td>&quot;AA (RU)&quot;</td>
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</table>

P JSC ROSTELECOM’S CONTRIBUTION TO SOCIETY

<table>
<thead>
<tr>
<th>Stakeholder group</th>
<th>Engagement</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shareholders</td>
<td>Dividend payments, RUB m</td>
<td>15,000</td>
<td>14,050</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Total headcount, thousand</td>
<td>143</td>
<td>134</td>
<td>120</td>
</tr>
<tr>
<td>Employees</td>
<td>Salary expenses, RUB m</td>
<td>60,018</td>
<td>67,238</td>
<td>69,812</td>
</tr>
<tr>
<td></td>
<td>Investment in training, RUB m</td>
<td>453</td>
<td>464</td>
<td>464</td>
</tr>
<tr>
<td></td>
<td>Contributions to Telecom-Soyuz and Alliance private pension funds, RUB m</td>
<td>704</td>
<td>164</td>
<td>757</td>
</tr>
<tr>
<td></td>
<td>Health and safety expenses, RUB m</td>
<td>551</td>
<td>641</td>
<td>608</td>
</tr>
<tr>
<td>Government</td>
<td>Income tax, RUB m</td>
<td>4,692</td>
<td>4,856</td>
<td>4,427</td>
</tr>
<tr>
<td></td>
<td>Other taxes, RUB m</td>
<td>5,079</td>
<td>4,661</td>
<td>5,747</td>
</tr>
<tr>
<td>Society</td>
<td>Member fees, charity contribution, payments to labour units, RUB m</td>
<td>660</td>
<td>657</td>
<td>767</td>
</tr>
<tr>
<td>Environment</td>
<td>Environmental expenditure, RUB m</td>
<td>129</td>
<td>105</td>
<td>112</td>
</tr>
<tr>
<td></td>
<td>Other environmental expenditures, RUB m</td>
<td>7</td>
<td>21</td>
<td>48</td>
</tr>
</tbody>
</table>

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

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 totalled 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.
Company Structure

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.

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:
- Volga
- Far East
- North-West
- Siberia
- Ural
- Centre
- South

Statistics:
- 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.

**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 Rostelecom’s credit rating at “AA(RU)” with a stable outlook.

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

**August**
- Rostelecom launched the VideoServer cloud service.

**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.

**Key events after the reporting period**

**January**
- 16 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.
- 18 February 2019: Rostelecom developed an off-the-shelf solution for secure biometric data collection.

**March**
- 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. Crosscutting 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:

• 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.

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 is an all-volunteer body established within the Russian Union of Industrialists and Entrepreneurs in November 2017.

Legislative and regulatory proposals

• Experts actively engaged in improving digital economy regulation
• Proposals brought forward to amend 32 draft federal laws and resolutions of the Russian Government
• Extensive efforts made at the regional level to involve Russian regions in the national digital agenda

The Committee’s mandate

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Development Strategy

In 2018, Rostelecom launched its strategy for 2018–2022 aimed at transforming the Company from a telecoms operator into a digital partner for households, business, and government customers.

ROSTELECOM’S STRATEGIC PRIORITIES until 2022

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.
Corporate Governance

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 Boards 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)
- the President and the Management Board (appointed by the Board of Directors to manage the Company’s day-to-day operations)
- the Audit Committee
- the Risk Management Committee
- the Remuneration Committee
- the Nominations and Shareholders’ Relations Committee
- the Corporate Governance Committee

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 on the public services (e-government) portal 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

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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
Corporate governance self-assessment results
Since 2019, Rostelecom has been self-assessing its corporate governance by benchmarking its standards against the key provisions of the Corporate Governance Code. In 2020, the assessment scored our corporate governance at 93%, much higher than the minimum 65% requirement of the Federal Agency for State Property Management (Rosimushchestvo).

CORPORATE GOVERNANCE LEVEL, %

Shraderight...31 65
Board of Directors...32 88
Executive management...33 95
Transparency and information disclosure...34 97
Risk management, internal control, and audit...35 100
Social responsibility, business ethics...36 87
Minimum requirement...37 65

Corporate governance level...38 93%

Corporate governance rating assigned by the Russian Institute of Directors (RID). \[\text{RID}\]: 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.1

Board of Directors

In May 2018, 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 4.86 out of 5.

Assessment of the Board of Directors’ performance20

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.20

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 the most objective and well-balanced decisions for the benefit of all shareholders
- Interpret ambiguities in the rules 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 Rostelecom’s Annual Report 2018 available at www.company.rt.ru.

Board of Directors and its Committees’ performance report for 2018

The Board of Directors held 27 meetings: 3 in person, 3 in absentia/102 matters were discussed.

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.
## 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. |
| Audit Committee | 6 meetings (1 in person)  
  - 20 matters | Strengthening control over technology risks related to import substitution programmes |
| Nomination and Remuneration Committee | 5 meetings (2 in person)  
  - 16 matters | 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.  
  - Closer monitoring of M&A transactions, reviewing the efficiency of the acquired asset integration. |
| Strategy Committee | 7 meetings (4 in person)  
  - 8 matters | 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.  
  - Developed the updated Strategy 2022 and updated the Long-Term Development Programme accordingly. |
| Corporate Governance Committee | 1 meeting in absentia  
  - 1 matter | 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

- **Operations and operational excellence**
  - Reports on budget performance and drafting the budget for 2018.
  - Enhancement of the corporate project management.
  - Implementation status and key priorities of Rostelecom’s production system.
  - Procurement optimisation.
  - Monitoring of the progress on key strategic projects:
    - Bridging the Digital Divide
    - Providing Internet Access for Hospitals and Out-Patient Clinics
    - Installing the Sakhalin-Kuril Islands Submarine FOCL
    - Arranging for Video Surveillance and Ensuring the Operation of the Broadcasting Portal during the Elections in Russia
    - Launching the Unified Biometric System
    - Decommissioning of analogue network equipment.
  - Changes in the organisation of the Company’s branches.
- **The Company’s growth**
  - Strategy 2022.
  - Strategy of business segments and key subsidiaries.
  - Target IT architecture development and transformational solutions for telecoms networks.
- **Risk management**
  - Progress of the Risk Management Programme.
  - Enhancement of corporate governance standards.
  - Development and approval of the Risk Management Programme.
  - Internal control development concept.
- **Social responsibility**
  - Charity and sponsorship initiatives.
  - No conflicts of interest involving members of the Management Board were identified in 2018.
Control bodies

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 results

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
- 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/abusive 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 legalization 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

Internal Control Unit
- Assisting the top management in building an efficient internal control system (ICS)
- Reviewed the ICS across the key processes and the Company’s macroregional branches to develop recommendations and take actions to enhance its efficiency

Audit Commission
- Monitoring financial and business operations between General Shareholders’ Meetings
- Audited the financial and business performance of the Company in 2018, including the annual report and annual accounting statements

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%.

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.
Remuneration

BOARD OF DIRECTORS

<table>
<thead>
<tr>
<th>Type of remuneration</th>
<th>Basic salary</th>
<th>Annual bonus</th>
<th>Long-Term Incentive Programme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective</td>
<td>Attract and retain professional managers by offering competitive salaries</td>
<td>Achieve annual business KPIs¹</td>
<td>Achieve long-term KPIs: OIBDA, FCF, and ROIC.</td>
</tr>
</tbody>
</table>

Table 21: Annual remuneration to the Board of Directors in 2013–2018, excluding long-term incentives, RUB M¹

<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>153,198,454.25</td>
</tr>
<tr>
<td>Bonuses, including:</td>
<td>78,467,788.02</td>
<td>48,676,079.17</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>387,869,042.00</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>959,075,060.02</td>
<td>643,876,133.42</td>
</tr>
</tbody>
</table>

¹ For more details see the Incentive Programmes section below.

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 size to nine people (until 10 May 2017, six people; until 27 October 2017, eight people; currently, nine people), and changes in the composition of the Board.

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

<table>
<thead>
<tr>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>601.8</td>
<td>443.8</td>
</tr>
<tr>
<td>392.2</td>
<td>212.3</td>
</tr>
<tr>
<td>253.7</td>
<td>388.5</td>
</tr>
</tbody>
</table>

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.
Risk Management

Rostelecom’s risk management framework allows for effective modeling, 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.

The Company’s risk management framework emphasizes 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 Internal Audit and Internal Control units</td>
<td>Manages key risks and regularly monitors the risk management framework.</td>
</tr>
<tr>
<td>Senior Risk Manager and Risk Management units</td>
<td>Assess risk management performance and advise on improvements.</td>
</tr>
<tr>
<td>Business units and employees</td>
<td>Build, monitor, and maintain the risk management framework.</td>
</tr>
</tbody>
</table>
1. For more details on risks see RSC Rostelecom’s Annual Report 2018 (Table 6: Risks and mitigators).

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

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.ru/upload/protected/docblock/2a6/02-C1_Annual_Report_2018_en.pdf.

Supply Chain

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.
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 10,000 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 that SMEs can participate in. 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.

**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
PERFORMANCE

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.

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.

Conflict 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 pre-determined 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 minimize corruption risks in procurement (as part of monitoring the performance of 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.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 counterparts and potential service providers in Russian regions to comply with anti-corruption laws and business ethics standards.
Rostelecom subsidiaries were trained on anti-corruption issues (as per the requirements of anti-corruption laws) through distance or classroom and Medium Business Corporation (JSC Rostelecom) held 54 educational workshops for the Company’s counterparts and potential service providers in Russian regions. Saint Petersburg, Vladivostok, Irkutsk, 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 430 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.

To foster business relations with counterparties supporting 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 ROMB Corporation) held 54 educational workshops for the Company’s counterparts and potential service providers in Russian regions. Saint Petersburg, Vladivostok, Krasnodar, and other regional centres were among the major cities hosting our workshops.

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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 modeling the desired behaviours and setting the Tone from the Top. For example, Rostelecom’s Anti-Corruption Policy is professed 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=materisl.video.

In 2018, 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 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 those 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 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 bandwiths 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.
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.”

— Nikita Ovseyev, President of JSC 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 ways – 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.

PJSC Rostelecom’s programmes

<table>
<thead>
<tr>
<th>JSC Rostelecom’s programmes</th>
<th>Focus areas of the Digital Economy of the Russian Federation programme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-corruption programmes of 30 subsidiaries and affiliates</td>
<td>Corruption Risk Mitigation Programme for 2018 (the “Compliance Programme”)</td>
</tr>
<tr>
<td>Distance and classroom training on anti-corruption</td>
<td>Distance and classroom training on anti-corruption</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>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>Basics of the Digital Economy project</td>
<td>Basics of the Digital Economy project</td>
</tr>
<tr>
<td>Ticket to the Future careers festival</td>
<td>Ticket to the Future careers festival</td>
</tr>
<tr>
<td>Online Lectorium, a new educational project</td>
<td>Online Lectorium, a new educational project</td>
</tr>
<tr>
<td>Affordable supplementary education for children</td>
<td>Affordable supplementary education for children</td>
</tr>
<tr>
<td>Rostelecom Lyceum project</td>
<td>Rostelecom Lyceum project</td>
</tr>
<tr>
<td>Training under the Sberbank 2020 programme</td>
<td>Training under the Sberbank 2020 programme</td>
</tr>
<tr>
<td>Training under the New Rostelecom Leadership Development programme at the SKOLKOVO Moscow School of Management</td>
<td>Training under the New Rostelecom Leadership Development programme at the SKOLKOVO Moscow School of Management</td>
</tr>
<tr>
<td>Arctic Young Engineers festival</td>
<td>Arctic Young Engineers festival</td>
</tr>
<tr>
<td>24th annual FIM Golubitsky Competition</td>
<td>24th annual FIM Golubitsky Competition</td>
</tr>
<tr>
<td>Rostelecom’s showcase zones across Quantum technology parks for children</td>
<td>Rostelecom’s showcase zones across Quantum technology parks for children</td>
</tr>
</tbody>
</table>

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.

Investing in Our People

Letter from the President
Company Profile
Building a Sustainable Digital Future
Investing in Our People
Stakeholder Engagement
Appendices

Building a Sustainable Digital Future Sustainability Report 2018
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. It not only builds infrastructure and develops advanced services in cities, but also brings 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 1, 2, 3, and 5).²

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 ROSTTELECOM

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

<table>
<thead>
<tr>
<th>PJSC Rostelecom sustainable development goals</th>
<th>Ensuring high standards of customer service</th>
<th>Development of product and service ecosystems around customers</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>
<th>Continued implementation of the operational efficiency programme</th>
<th>Improved decision-making and business processes</th>
<th>Real estate portfolio optimisation</th>
<th>Building digital skills and capabilities</th>
<th>Staff retraining and internal migration</th>
<th>Adaptation of approaches to staff development and corporate culture improvements to meet digital company requirements</th>
<th>United Nations Sustainable Development Goals</th>
</tr>
</thead>
</table>
| Enable systematic development and deployment of digital technology |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \[
| Contribute to Russia’s transition to innovative development |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \[
| Become a technology leader in innovative solutions | \[\] | \[
| Make telecommunications technology accessible and safe |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \[
| Ensure high quality of customer service in line with the highest standards |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \[
| Conform to the highest standards of business ethics | \[\] | \[
| Reduce corruption and bribery |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \[
| Improve the quality of life for Russian citizens by bridging digital divides and ensuring accessibility of communications services for all |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \[
| Improve customer satisfaction | \[\] | \[
| Contribute to ensuring equal access to education and improving the computer literacy of Russian citizens |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \[
| Become an employer of choice attracting highly skilled talent |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \[
| Ensure a healthy and safe working environment |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \[
| Contribute to making cities and settlements more inclusive, safe, and sustainable |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \[
| Reduce Rostelecom’s environmental footprint and preserve the environment for future generations |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \[
| Reduce energy consumption and switch to green energy |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \[
| \[\] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \[
| \[\] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \[
| \[\] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \[
| \[\] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \[
| \[\] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \[
| \[\] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \[
| \[\] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \[

*PJSC Rostelecom sustainable development goals:
- Enable systematic development and deployment of digital technology
- Contribute to Russia’s transition to innovative development
- Become a technology leader in innovative solutions
- Make telecommunications technology accessible and safe
- Ensure high quality of customer service in line with the highest standards
- Conform to the highest standards of business ethics
- Reduce corruption and bribery
- Improve the quality of life for Russian citizens by bridging digital divides and ensuring accessibility of communications services for all
- Improve customer satisfaction
- Contribute to ensuring equal access to education and improving the computer literacy of Russian citizens
- Become an employer of choice attracting highly skilled talent
- Ensure a healthy and safe working environment
- Contribute to making cities and settlements more inclusive, safe, and sustainable
- Reduce Rostelecom’s environmental footprint and preserve the environment for future generations
- Reduce energy consumption and switch to green energy*

*United Nations Sustainable Development Goals:
- No Poverty (8)
- Zero Hunger (2)
- Good Health and Well-being (3)
- Quality Education (4)
- Decent Work and Economic Growth (8)
- Industry, Innovation and Infrastructure (9)
- Responsible Consumption and Production (12)
- Clean Water and Sanitation (6)
- Affordable and Clean Energy (7)
- Sustainable Cities and Communities (11)
- Life on Land (15)
- Life Below Water (14)
- Peace and Justice (16)
- Strong Partnerships (17)
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 spent RUB 109,320,800 on charitable purposes.

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.

The Company publishes its sustainability report, which can be accessed 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 and the Ministry of Agriculture of the Samara Region signed an agreement to adopt UAV technology for high-definition low-altitude aerial photography.

Rostelecom presented an integrated and automated IT platform integrating library and information centre resources.

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

The eighth annual sustainability report published by the Company.

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

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

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- Reduced paper use through electronic document flow
- Wider use of videoconferencing

Rostelecom’s contribution to the United Nations Sustainable Development Goals (UN SDGs) in 2018

Investments in education and development 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 spent RUB 109,320,800 on charitable purposes.

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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’s contribution to the United Nations Sustainable Development Goals (UN SDGs) in 2018
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 and personal development year over year to ensure agile responses to the challenges posed by globalisation.

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.

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 8). 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 3).

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.

PJSC ROSTELECOM’S CONTRIBUTION TO THE UN SDGS IN HR MANAGEMENT AND EMPLOYEE DEVELOPMENT

<table>
<thead>
<tr>
<th>Programmes</th>
<th>United Nations Sustainable Development Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Online Reception on the intranet portal</td>
<td>4 9 11 12 13 15 16 17</td>
</tr>
<tr>
<td>2. Robotics and coding classes for employees’ children</td>
<td>4 5 9 16</td>
</tr>
<tr>
<td>3. Long-Term Incentive Programme</td>
<td>4 5 9 16</td>
</tr>
<tr>
<td>4. HR management strategy 2018–2022</td>
<td>4 5 9 16</td>
</tr>
<tr>
<td>5. Pension scheme of the subsidiary pension fund Alliance</td>
<td>4 5 9 16</td>
</tr>
<tr>
<td>6. Cafeteria Plan</td>
<td>4 5 9 16</td>
</tr>
<tr>
<td>7. Housing Programme</td>
<td>4 5 9 16</td>
</tr>
<tr>
<td>8. Corporate sports tournament</td>
<td>4 5 9 16</td>
</tr>
<tr>
<td>9. Ticket to the Future</td>
<td>4 5 9 16</td>
</tr>
<tr>
<td>10. ProfYESSiYa – the Territory of Choice</td>
<td>4 5 9 16</td>
</tr>
<tr>
<td>11. Arctic Young Engineers</td>
<td>4 5 9 16</td>
</tr>
<tr>
<td>12. The PM, Globality Competition</td>
<td>4 5 9 16</td>
</tr>
<tr>
<td>13. The Cyberchallenge Competition</td>
<td>4 5 9 16</td>
</tr>
<tr>
<td>14. Internship “360° programme”</td>
<td>4 5 9 16</td>
</tr>
<tr>
<td>15. The Basics of the Digital Economy educational series</td>
<td>4 5 9 16</td>
</tr>
<tr>
<td>16. The New Rostelecom Leadership Development programme</td>
<td>4 5 9 16</td>
</tr>
<tr>
<td>17. The Online Lectorium educational project</td>
<td>4 5 9 16</td>
</tr>
<tr>
<td>18. The Development Environment digest newsletter</td>
<td>4 5 9 16</td>
</tr>
</tbody>
</table>

Total number of permanent and temporary employees in the value chain in 2018

<table>
<thead>
<tr>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>67075</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, recognize 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>Macroregion</th>
<th>2016</th>
<th>2017</th>
<th>2018</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>620,244</td>
<td>633,060</td>
</tr>
<tr>
<td>North-West</td>
<td>542,601</td>
<td>535,112</td>
<td>533,022</td>
</tr>
<tr>
<td>Siberia</td>
<td>481,772</td>
<td>442,237</td>
<td>456,711</td>
</tr>
<tr>
<td>Ural</td>
<td>538,233</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>

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 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 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).

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>Other employees</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volga</td>
<td></td>
<td>11</td>
<td>1008</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>1037</td>
</tr>
<tr>
<td></td>
<td>Specialists</td>
<td>1452</td>
<td>2284</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1680</td>
<td>2284</td>
</tr>
<tr>
<td>Far East</td>
<td></td>
<td>3</td>
<td>127</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>81</td>
<td>510</td>
</tr>
<tr>
<td></td>
<td>Managers</td>
<td>98</td>
<td>127</td>
</tr>
<tr>
<td></td>
<td>Specialists</td>
<td>827</td>
<td>462</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1009</td>
<td>1099</td>
</tr>
<tr>
<td>North-West</td>
<td></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>810</td>
</tr>
<tr>
<td></td>
<td>Specialists</td>
<td>103</td>
<td>628</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>326</td>
<td>1628</td>
</tr>
<tr>
<td>Siberia</td>
<td></td>
<td>6</td>
<td>673</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>132</td>
<td>233</td>
</tr>
<tr>
<td></td>
<td>Managers</td>
<td>85</td>
<td>810</td>
</tr>
<tr>
<td></td>
<td>Specialists</td>
<td>1430</td>
<td>844</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1627</td>
<td>1750</td>
</tr>
<tr>
<td>Ural</td>
<td></td>
<td>9</td>
<td>127</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>189</td>
<td>741</td>
</tr>
<tr>
<td></td>
<td>Managers</td>
<td>242</td>
<td>155</td>
</tr>
<tr>
<td></td>
<td>Specialists</td>
<td>1227</td>
<td>697</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1444</td>
<td>1294</td>
</tr>
<tr>
<td>Centre</td>
<td></td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>189</td>
<td>1702</td>
</tr>
<tr>
<td></td>
<td>Managers</td>
<td>242</td>
<td>526</td>
</tr>
<tr>
<td></td>
<td>Specialists</td>
<td>2086</td>
<td>1876</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>3428</td>
<td>4105</td>
</tr>
<tr>
<td>South</td>
<td></td>
<td>3</td>
<td>891</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>138</td>
<td>174</td>
</tr>
<tr>
<td></td>
<td>Managers</td>
<td>84</td>
<td>164</td>
</tr>
<tr>
<td></td>
<td>Specialists</td>
<td>1652</td>
<td>891</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1377</td>
<td>2229</td>
</tr>
</tbody>
</table>

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
Employee Engagement

The Company and its subsidiaries and affiliates respect their employees' freedom of association and the right to collective bargaining. 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.

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></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>1,068</td>
<td>1,064</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

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017</th>
<th>2016</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 1,200 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.
Employee Training and Development

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.

TRANSFORMATION OF INTERNAL EMPLOYEE TRAINING SEeks TO ADDRESS THE FOLLOWING OBJECTIVES

A. Implement uniform, effective business processes to train and develop employees
B. Define the standards and methodology for training, as well as for development and implementation of worldwide skill building programmes
C. Finalise the updated centralised catalogue of internal programmes to build soft skills
D. Enhance the competencies of in-house coaches

P.JSC. 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 costs¹</td>
<td>452,665</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 increases its investment in employee training every year, investing RUB 496,042 million in 2018 (RUB 463,570 million in 2017). Training cost per employee increased accordingly, from RUB 3.5 million in 2017 to RUB 3.6 million in 2018.

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.

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 12 regional branches
- Broadcast 8 lectures and produced 21 issues of the Development Environment digest

OFFERED NATIONWIDE AND REGIONAL DEVELOPMENT PROGRAMMES

- Ran the Basics of the Digital Economy Project, which received over 390,000 views
- Offered 50,000 online courses on the Company’s products and services

AVERAGE HOURS OF TRAINING COMPLETED IN 2018

<table>
<thead>
<tr>
<th>Employee category</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top managers</td>
<td>59.3</td>
<td>40.8</td>
</tr>
<tr>
<td>Managers</td>
<td>32.3</td>
<td>35.9</td>
</tr>
<tr>
<td>Specialists</td>
<td>15.2</td>
<td>22.4</td>
</tr>
<tr>
<td>Workers</td>
<td>10.7</td>
<td>24.6</td>
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</table>

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

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

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 to train young talents to having them participate in the development of innovative solutions and technology.

On 5 January, the Komi Branch employees took part in the ProfYESSiYa – the Territory of Choice project, traditionally held at the Syktyvkry College of Service and Communications. The event gathered over 550 final year students from Syktyvkry’s 26 high schools and lyceums. The students learned about various professions and options available at Syktyvkry’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 Syktyvkry 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 5 October, Rostelecom organised the Ticket to the Future careers festival in eight Russian cities. As part of the festival, in Veliky Novgorod from 15 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, Severak, and the Tomsky, Asinovsky, Zyryansky, Pervomaisky, and other districts of the Tomsk Region.

On the third day, Rostelecom employees held a lecture at the Tomsk Polytechnic University. The lecture covered fundamental aspects of the IT industry. We work consistently in this area: from training young talents for a career in the IT industry to providing modern equipment at educational institutions. We continue to develop the ProfYESSiYa – the Territory of Choice project, traditionally held at the Syktyvkry College of Service and Communications. The event gathered over 550 final year students from Syktyvkry’s 26 high schools and lyceums. The students learned about various professions and options available at Syktyvkry’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.

"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

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 6,000 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.

"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 it. 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 Kiyakataeva, Director of Rostelecom’s Kola Branch

The project focuses on selecting talented student 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 1500 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 fierce 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: Written 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 investment, 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 leaks 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 serving 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 videos.

During the assessment, the best-performing students were invited for an interview with Rostelecom HR managers.

Launching IT internships are within plans for 2019.

In 2019, we plan to redesign the corporate training portal and add functions such as planning and completing blended learning programmes and applications for external training, and using the 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.

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
- Recognition of education
- Training for employees who have completed courses.

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 KPIs scores for training programmes, and new feedback forms for trainers and their line managers.

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Launching IT internships are within plans for 2019.
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: 1. Developed a comprehensive training programme for six functional roles within the Technical Infrastructure Unit’s customer service function. 2. Actively pursued two nationwide training programmes: - Over 4,000 employees received training within the Customer League programme - Over 2,000 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 287 employees benefited from access to the portal since its launch, including 207 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 – 10 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. The B2C Centre of Excellence’s mission is to develop and roll out a uniform system for skill- and product-focused training programmes, and nationwide training programmes.

Objectives of the B2C Centre of Excellence: 1. Plan and set up the training process for the B2C sales force, including the Active Sales’ technical team agents. 2. Develop training methodology in line with the B2C annual training matrix. 3. Manage, control, assess, and supervise the activities of the B2C coaches. 4. Set up and supervise training programmes. 5. Perform assessments of the employees’ training process. 6. 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 vision for regional B2C coaches and formed an annual B2C coach assessment bringing in an accredited external provider. 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 leaders at the workshops. 4. Developed new sales training programmes in late 2018 for each channel (including for the B2C Active Sales’ technical team agents) and 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 trainees, a chatbot, an interactive marketplace (1000 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 training programmes and tools, and provided training to more than 15,000 employees, including 5000 technical team agents at the B2C Active Sales. Plans for 2019 include launching a single training platform offering all available courses and tools online.
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 flow 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 Eleton 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 7th 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, electromagnetism or radio frequency fields, or hazardous chemicals is monitored through special assessments of working conditions, regular health and safety compliance audits, and proper 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 fire fighting 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 informed in health and safety activities.

In 2018, the Company recovered RUB 25 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.
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 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.

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

CHARTER 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 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 the 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 users 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 generations, 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.

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.”

— Julia Sokolents, Deputy Director of Rostelecom’s External Communications Department
**ROSTELECOM’S CONTRIBUTION TO THE UN’S SUSTAINABLE DEVELOPMENT GOALS**

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Digital Equality Integrated Social Programme

Digital equality of Russian regions is key to building a digital country.

The Digital Equality programme is the most ambitious and important integrated social programme created and developed by Rostelecom to 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.

Areas of the Digital Equality programme:
- Providing access to communications and modern technology
- Connecting remote and low income towns and villages to the internet
- Connecting child care services and institutions to the internet
- Ensuring internet security for children, seniors, and other vulnerable groups
- Career guidance with a focus on the telecoms industry
- Promoting social enterprise

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.

1. The WSIS Forum is one of the world’s largest annual meetings of the Information and Communication Technologies for Development community.

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

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.

An electronic version of the guide is available on the training portal established within the project www.alabauvinternet.ru. The course comprises 14 chapters and includes training materials, Guidelines on teaching senior citizens basic computer and internet skills, visual skills, 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 Funds’ 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.

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 Kalmyk 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.

The ABC of the Internet 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.

Sustainability Report 2018

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ABC of the Internet in Oral

2018 marked eight years since Rostelecom began training Oral seniors on how to use the internet. During this time, 2,500 Oral residents completed the ABC of the Internet course. Rostelecom’s training process is aimed at providing computer skills for using 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.”

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.

“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 Mosalev, Director of Rostelecom’s Saratov Branch

Growth

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.

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 eleven-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.
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! 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 F USC Rostelecom.

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.
Investing in Society

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 and the All-Russian Library Congress in Vladimir, 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 trends of 2018 and technology of the future: robotics, artificial intelligence, the Internet of Things, blockchain technology, virtual and augmented reality, telemedicine, and cyber security. Schoolchildren 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 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 Shchedrin, Director of Rostelecom’s branch in the Vladimir and Ivanovo Regions

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.

“Unfortunately, the number of visually impaired children is increasing. Our school is the only educational institution in the Ikitsk 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

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Internet for Social Infrastructure Facilities

Libraries continue to play a significant role in modern life, particularly in remote regions. However, insufficient book stock at libraries remains a critical issue. This can be easily solved by providing these institutions with high-speed internet. We understand the significant role libraries play in societal development and therefore lay a strong focus on connecting them to the internet.

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 and 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.

Computatisation of Orphanages

Within the Computatisation 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.

Computatisation of Orphanages

In January 2018, schoolchildren of Ikitsk Boarding School No. 8 for visually impaired children 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.
Distance Learning for Disabled Children

“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.”

— Raisa Kasina, 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.

“Distance learning is the future. Social networks and video chat are already being used to provide education to schoolchildren with special needs who live in mountainous terrains, as well as to help students complete their homework.”

— Ruslan Yarakhmedov, Director of Rostelecom’s Dagestan Branch

Distance Learning in the Republic of Mari El

In the village of Kuchina in the Republic of Mari El, a dish with an amplifier station was installed in 2018 on the front of 11-year-old Diana Shemyakova’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 Shemyakova 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 Shemyakova 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

“Nina Shemyakova decided to experience. We understand the importance and the need to support special children, so we are always generously financing this area.”

— Raisa Kasina, Minister of Education and Science of the Perm Territory

“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 Shemyakova, Diana’s mother

Social Impact Award programme supporting social enterprise among young people

Social Impact Award (SIA) is a competition for those who want to start their own social business or have recently launched one and need help with its development.

Social Impact Award is preceded by an incubation programme, which tracks the quality of social projects and identifies potential grant recipients.

For the fourth year in a row, Rostelecom announced a special category within the contest – Internet for a Better World. It involves project creators using internet technology as a foundation for creating their product or a key tool in promoting their ideas.

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.

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.
The internet can be a helping hand for non-commercial organisations to achieve financial sustainability by opening up new sales opportunities, 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

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 professionals 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 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.”

— Julia Sokolanksa, Deputy Director of Rostelecom’s External Communications Department

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, Children’s technoparks, 340–350 in number, will operate in Russia.

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.”

— Yasin Irkin, 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 Koronova, Director of the Quantorium children’s technopark in Kaluga

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 to 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 large 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

Safe Internet in the Vologda Region

As part of the nationwide Safe 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 Musonkaya school of the Shklovsky 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 test 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 smarter and maintain confidentiality and clarity when communicating with other users. Internet security classes are held in the region’s schools throughout the school year.
“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, 96% 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

“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 Panormakova, Principal of Special (Correctional) Comprehensive School No. 38

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 clarify the information. Over 20 children took part in the event. The Ulyanovsk Branch plans to continue engaging with the school in 2018, during which the branch will hold Safe Internet lectures and an excursion for the students to the Rostelecom office.

Safe Internet in Yuzhno-Sakhalinsk
Safe Internet lessons are held at secondary schools in Yuzhno-Sakhalinsk twice a year. They are organised by PDSC 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 to 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, which 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 Kiret-Cherlazzi 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 succeeded 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 cybersecurity protection.
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.”

– Dina Berdnikhaya, Youth Specialist at the Centre of Travellers Municipal Youth Autonomous Institution in Krasnoyarsk, curator of the Summer in Krasnoyarsk project.
Charity and Volunteering

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 kilometer run by Rostelecom employees, covering the total 100 thousand kilometers 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 1500 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.

At the 11th People Investor Forum 2018, the 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 kilometers 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 Komsomol’skaya 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 Anatolievna Osipova. 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 renew the tradition of reading out loud collectively, impressing 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.”

— Sergei Shol, Director of the Krasnoyarsk Branch – Technical Director at RUS Telecom

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 Alakal, Bely Yar, Sayanyorsky and Chemogorsky, 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 Ionkova, Editor at the Special Projects Department of Komsomol’skaya Pravda – Krasnoyarsk Publishing House

200 volunteering projects were carried out in 2018.

3,500 Rostelecom employees are regularly involved in volunteering projects.

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

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.

‘"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 Vondyova, representative of the running school / LOVE RUNNING

Sustainability Report 2018

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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 Region, 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 vividly 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 polyaural 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 2019, more educational sites in several cities are planned to be opened.

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.

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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.

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.

KnowTeach

The task of the KnowTeach socio-educational project is to help children who undergo lengthy inpatient treatment in oncohaematological 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, PUSC 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 therapy, 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.

In 2019, more educational sites in several cities are planned to be opened.

Over the past five years, fully fledged schools have been created at large federal and regional children's hospitals and oncohaematological 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.

"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 NonCommercial Organisation Artmediaobrazovanie

"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 Lozov Belova, Executive Director of Autonomous Non-Commercial Organisation Kvartal Lozov

"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.

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— Arina Sharapova, President of Autonomous Non-Commercial Organisation Artmediaobrazovanie"
On 19 December, Mikhail Osevosky 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.

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 all regions of the Republic for 43 children from Orphanage No. 2.

The first Job Factory excursion was to Rostelecom’s Kemerovo local telecommunications 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, 215036 is the index of the city of Kemerovo.

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 Pitsa (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, seminars, group trainings and meetings with successful entrepreneurs, and other activities.

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 and social adaptation for children in orphanages and foster homes. The lessons help children acquire the necessary skills for living self-sufficiently in society. 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.

“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

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 hall. 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. This 2018 Midday Charity Ball for children from Moscow orphanages and social rehabilitation centres was held for the sixth time at the Pushkin House. The festival gathered over 250 young participants.

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The Believe in Yourself joint project of Rostelecom and Autonomous Non-Commercial Organisation Sinyaya Pitsa (Blue Bird) won the second prize at the Champions of Good Deeds contest.1

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).

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.
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. Wishes from the children at sponsored orphanages are published on the corporate portal, and employees willing 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.

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.

In 2018, 1,880 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 employees.

Become a Santa in Oimyakon ulus

In 2018, the Sakhalinkom Branch held two charity events for children from sponsored organizations, 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 Sakhalin 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 Bodaybo with 40 residents. 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 are truly important and unforgettable."
— Olga Tseyrin, Director of the Balakhovsky 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 times 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
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.

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

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 Rostelecom’s annual corporate reports.

Rostelecom continues transitioning from paper to e-billing in line with Goal 7: Affordable and Clean Energy. 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 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.ru/ir/korporativnaya_govornance/docs/Экологическая_политика_ПАО_Ростелеком.pdf.

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

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Environmental Initiatives

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**

1. **Improving the Environmental Management System**
   - The Company's environmental management system successfully passed an external re-certification audit for compliance with GOST ISO 14001:2015, with the certificate of conformity renewed for one year. Within the Company's environmental operational control framework, 758 specific internal audits and 278 desk audits were performed, with 914 facilities audited and 1,025 violations identified and remedied.

2. **Boiler Facility Upgrades**
   - Replacement of boilers, equipment, and automatics with modern, higher-performance units. Conversion to cleaner fuels.
   - 46 boiler facilities were upgraded for a total of 14,476.16 MLU.

3. **Replacing Fluorescent Lamps with LEDs**
   - A total of 31,300 lamps were replaced across 502 facilities.

4. **Replacing Transport Equipment with Poor Environmental Performance**
   - The Company procured 1,104 Euro 5 vehicles.
   - 237% of the Company's total fleet, Euro 4, 23.5%, and Euro 3 and lower 48.8%.
   - 3- to 8-ton vehicles — 49.8%.

5. **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 238.5 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 Varavin, 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:

- 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.
Environmental safety

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>88,685.6</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>784.8</td>
</tr>
<tr>
<td>Environmental charges for waste landfill</td>
<td>10,427.2</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</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>2,333.8</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 (innovation and refurbishment of water treatment facilities, wastewater collection, cleaning of river beds, setting up sanitary protection zones around water bodies and wells, etc.)</td>
<td>15,073.3</td>
</tr>
<tr>
<td>Expenditures on soil contamination control (sampling, decontamination, reclamation, etc.)</td>
<td>690.0</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>241.7</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>648.8</td>
</tr>
<tr>
<td>Other</td>
<td>763.6</td>
</tr>
<tr>
<td>Total</td>
<td>199,485.9</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 (digitalise) PBXs
- Replace indoor telecommunications equipment with containerised telecommunications 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, water 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 ships 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: paper waste at 52 regional branches and 238 facilities, and used household batteries at 31 regional branches and 102 facilities.

11 tonnes of batteries collected by our employees in 2018. 270 tonnes of paper waste handed over for recycling.
E-billing

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 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 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 several decades old tree to produce 10,000 paper bills.

WASTE PAPER MANAGEMENT IN 2016–2018

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste paper, tonnes</td>
<td>998.23</td>
<td>632.45</td>
<td>746.83</td>
<td>–38.64</td>
<td>17.93%</td>
<td>The increase was due to a 34% increase in the weight of paper consumed</td>
</tr>
<tr>
<td>Paper handed over for recycling,</td>
<td>145.87</td>
<td>346.00</td>
<td>289.50</td>
<td>2322%</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>
</tbody>
</table>

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 (AIIIM), 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).

“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.”

— Andrei Maniev, Director of Rostelecom’s Karelia Branch

Rostelecom Paper Free environmental event in the Altai Territory

In October, Rostelecom’s Altai Branch held the Time to Use Paper Sustainability 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 office, 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. The 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 beyond the Arctic Circle

On 26 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.”

— Olya Shangina, Director of Rostelecom’s Murmansk Branch

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.

“We served 153 million e-bills in 2018, up 6% year-on-year (143 million in 2017).”

— Ilya Sergeev, businessman, Tula

“E-billing is a contemporary alternative to paper-based bills. It is a convenient way to receive and store information on payments of 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 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 several decades old tree to produce 10,000 paper bills.”

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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 (11.15%)
- heat, by 39,435 Gcal (10.91%)
- cold water, by 288,260 m3 (11.15%)
- hot water, by 16,490 m3 (10.91%)

Total number of projects - 461, facilities covered - 674, total cost - RUB 218,974,000.

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 carbon footprint of road and all-terrain transport. The Company uses natural resources sustainably and upgrades networks and infrastructure by introducing more energy efficient equipment. 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.

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### 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>Activity costs, RUB thousand</th>
<th>Quantitative indicators (number of projects/facilities)</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>450</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>1,432.27</td>
<td>502</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>14,476.16</td>
<td>46</td>
</tr>
<tr>
<td>Installation and upgrades of heat meters</td>
<td>facilities</td>
<td>10,802.45</td>
<td>82</td>
<td>34,347.46</td>
<td>183</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>7,571.00</td>
<td>13</td>
</tr>
<tr>
<td>Repairs and upgrades of heating systems (radiators, heating units, heating pipelines)</td>
<td>facilities</td>
<td>47,665.07</td>
<td>116</td>
<td>48,805.63</td>
<td>115</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>
</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>
</tr>
<tr>
<td>Repair/upgrade of the water supply system</td>
<td>facilities</td>
<td>5,38.30</td>
<td>7</td>
<td>1,248.00</td>
<td>4</td>
</tr>
<tr>
<td>Installation of water meters</td>
<td>pcs</td>
<td>248,90</td>
<td>39</td>
<td>352.44</td>
<td>137.45</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>
</tr>
<tr>
<td>Repair/upgrade of gas metering units</td>
<td>pcs</td>
<td>548.00</td>
<td>25</td>
<td>19.66</td>
<td>20</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>
</tr>
<tr>
<td>Activities to reduce heat losses in buildings, including thermal insulation of roofs</td>
<td>pcs</td>
<td>148.10</td>
<td>7</td>
<td>1,566.02</td>
<td>36</td>
</tr>
<tr>
<td>Installation of PVC windows</td>
<td>pcs</td>
<td>45,176.88</td>
<td>1985</td>
<td>35,238.41</td>
<td>1,708</td>
</tr>
<tr>
<td>Thermal insulation of walls</td>
<td>facilities</td>
<td>2,586.06</td>
<td>8</td>
<td>26,658.23</td>
<td>33</td>
</tr>
<tr>
<td>Insulation of heating pipelines</td>
<td>facilities</td>
<td>10,266.50</td>
<td>27</td>
<td>210.00</td>
<td>1</td>
</tr>
<tr>
<td>Repairs and insulation of roofs</td>
<td>facilities</td>
<td>29,571.40</td>
<td>41</td>
<td>25,046.02</td>
<td>44</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>173,568.38</td>
<td>198,130.82</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.*

### KEY ENERGY SAVING AND ENERGY EFFICIENCY ACTIVITIES IN 2018 (ELECTRICITY CONSUMPTION):

- **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**
- **Deployment of free cooling systems / balanced ventilation equipment in technology centers – 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**
- **Installation of modern, optimal performance electrical equipment with higher efficiency while decommissioning old, energy-intensive electrical equipment**

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Fuel</th>
<th>Volume</th>
<th>Energy consumption, Gcal</th>
<th>Total reduction in energy consumption, Gcal</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td></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>0.15776</td>
<td>0.14763</td>
<td>0.14299</td>
</tr>
<tr>
<td>Specific heat consumption per 1 sq m of gross area</td>
<td>Gcal/sq m</td>
<td>1.125497</td>
<td>1.132510</td>
<td>1.12062</td>
<td>1.125483</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.
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, and diesel/energy storage.

As at the end of 2018, alternative energy sources were used in the following Rostelecom macro-regional branches:
- Solar panels: South MRF - 8 facilities, North MRF - 10 facilities
- Wind plants: Siberia MRF - 2 facilities
- Microturbines: Far East MRF - 10 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 366 kW.

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.

“Remarkable results have been achieved through the implementation of the project. The brightness of street and road lighting in Vyatskiye Polyany has increased significantly. The high-quality LED street lights installed by Rostelecom have been highly appreciated by the residents of Vyatskiye Polyany. We are considering the possibility of extending the project to other regions of the Kirov Region.”

— Leonid Neganov, Energy Minister of the Kirov Region

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, 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.

“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
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 by analyzing 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 fire detection system helped prevent around 70 thousand wildfires in the Perm Territory. The innovative system was developed 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 Perm Region’s 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 capable of detecting marked hazard-prone areas in real time and full situational awareness.

Lesnoy Dozor launched in Sakha

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 Sakha, Yakutia’s 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 capable of detecting marked 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 Sysoev, Business Development Director of Rostelecom’s Yakut-Kamchatsk Branch

Rostelecom deployed the Safe City in Siberia

Gorno-Altai 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-Altai Administration, Rostelecom has launched the Safe City hardware/software solution in Gorno-Altai. The solution integrates Gorno-Altai 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, early 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.


— GRIGORY CHUCHUHLAEV, HEAD OF THE REGIONAL EMERGENCY DISPATCH SERVICE AT THE PERM FOREST FIRE CENTRE

Rostelecom joined the Clean Ladoga project

In July 2018, Rostelecom joined Clean Ladoga, an environmental project run in northwestern 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 of the northwestern coast of Lake Ladoga – a popular place where tourists have turned into a national park in 2017. For more efficiency, the volunteers did not only come for one-day clean-ups, 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.

“WE ARE ALWAYS TRY TO RESPOND TO CHARTITY OR VOLUNTEER INITIATIVES, PARTICULARLY THOSE AIMING TO PRESERVE THE COUNTRY’S NATURAL RESOURCES. WE KNOW ONLY TOO WELL THAT MANY PAST INITIATIVES WERE NEVER HANDED WITHOUT SUPPORT FROM LARGE BUSINESSES AND PHILOSOPHERS. 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 BAKUZENKO, DIRECTOR OF ROSTELECOM’S NORTH-WEST MACROREGIONAL BRANCH

Rostelecom helped save Lake Baikal in the Irkutsk Region

Employees of Rostelecom’s Irkutsk Branch joined Env’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, 15,000 people gathered over 60,000 bags of rubbish.

“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.”

— ALEKSEI SAMERNOV, DIRECTOR OF ROSTELECOM’S KALININGRAD BRANCH

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 promote the specialty protected natural areas in Russia and the CIS. This year, the Curonian Spit cleanup brought together over 20,000 volunteers from across the region, including employees volunteers from Rostelecom’s westernmost branch. Our employees cleaned up the Linogevo recreation camp and the neighbouring nature reserve areas from dry branches and leaves and household rubbish, gathering a total of about 80 large bags of rubbish. In Russia, the annual March for Parks event was held for the third time with the Kaliningrad Branch employee volunteers participating annually.

“WHEN WE THINK OF THIS VOLUNTARY CLEANUP TO SUPPORT THE MARCH FOR PARKS ENVIRONMENTAL EVENT IN THE KALININGRAD REGION, WE THINK OF THE LOW-RISK RESPONSE SCENARIOS.”

— OLENA SAFRONOVA, MAYOR OF GOMO-ALTAI

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.”

— YURI TIMAN, DIRECTOR OF ROSTELECOM’S KALININGRAD BRANCH

“LAKES 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
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 accidents and injuries at hazardous facilities, and improves the overall environmental impact.

**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>
</tr>
</thead>
<tbody>
<tr>
<td>Centre</td>
<td>5</td>
<td>7 [*]</td>
<td>497.63</td>
<td>7 [*]</td>
<td>5,462.12</td>
</tr>
<tr>
<td>North-West</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>4 (3*)</td>
<td>0</td>
</tr>
<tr>
<td>South</td>
<td>0</td>
<td>1 [*]</td>
<td>276</td>
<td>4 (2*)</td>
<td>384.04</td>
</tr>
<tr>
<td>Volga</td>
<td>4</td>
<td>6 (2*)</td>
<td>60.38</td>
<td>9 (8*)</td>
<td>2,487.60</td>
</tr>
<tr>
<td>Ural</td>
<td>4</td>
<td>1</td>
<td>279.5</td>
<td>1</td>
<td>587.59</td>
</tr>
<tr>
<td>Siberia</td>
<td>3</td>
<td>10 (4*)</td>
<td>1,089.6</td>
<td>2 (1*)</td>
<td>2,089.32</td>
</tr>
<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>
</tr>
<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, we recorded 32 fires and the 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 the safety precautions for hot work.

In 2018, the authorities carried out audits of 301 facilities and recommended 775 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 45%, which is a testament to our improved performance on fire prevention. Through our engagement with the 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 1.87 million was spent in 2018 to install these systems at 148 facilities.

All our technology equipment classified as hazardous facilities is registered with Rosselkhnadzor (Federal Environmental, Industrial and Nuclear Supervision Service of Russia) in accordance with Russian laws. We maintain a licence for operating hazardous facilities, which is extended every three years.

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.
Rostelecom today:

1. No. 1 player in the market for ultrafast broadband for households, business, and government customers
2. No. 1 player in IPTV, the most innovative segment of the pay TV market (76% of the Russian market)
3. 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)
4. No. 1 in fibre network coverage in both urban (36 million households) and rural areas (8,200 communities with a population between 250 and 500 people and 6,000 healthcare centres across the country)
5. No. 1 in the data centre market by number of rack units

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 10 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.

The Company has already made a huge step towards digitalisation: we have expanded and improved our technology platform, and, of course, developing the Rostelecom team.

— 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.

We implement our programmes and projects in close alignment with government-sponsored and federal programmes. One example is our active involvement in the Digital Economy of the Russian Federation national programme.

As part of the universal service reform, the Company is focused on the Bridging the Digital Divide (BDD) project bringing affordable telecom 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) 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 all telecoms providers. We have also launched a free toll-free call to the help centre for any rural dweller who needs to understand how to make use of the new services.

By taking part in the government-sponsored programmes and implementing our 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.

Our Bridging the Digital Divide project simultaneously contributes 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.

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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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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 2019).

According to the Federal Service for Supervision of Communications, the Company provides a solid technical platform to drive its business growth for years to come, as well as maintain its 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 deployment of fibreglass access networks (GPON, FTTx) reaching 35 million households across Russia (Between 2016 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.

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 archives, 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 TLJi 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.
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 modern digital services and platforms for the benefit of private citizens and businesses, as well as developing solutions to drive digitisation 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 demand for innovative solutions is the availability of high-speed internet connectivity. The key task is to connect every federal district. The total capacity of the Company’s data centres will reach 10,000 Gbps by the end of the year. The Company’s specialists installed over 1,500 km of fibre-optic cables to connect rural hospitals and primary care centres, the National Guard of Russia (authorities and local governments, military commissariats, cantonment institutions) and other socially significant institutions (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 Skulls vein 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 cross the 800-km mark 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.

Digital Economy of the Russian Federation National Programme

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

Internet connectivity for the Krasnodar region and the Republic of Adygeya

In 2018, Rostelecom brought advanced internet connectivity to 21 healthcare centres in the Krasnodar 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.

“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 Yusikov, Head of the Krasnodar Territory Department of Informationisation 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 Serobabkin, 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 2018–2025. The deployment of the submarine cable link commenced in June 2018. The total length of the link is about 855 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 (Kuril Islands), Yuzhno-Kurilsk (Kunashir Island), and the villages of Krabovaokraskaya and Makarokraskaya (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.

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.
**Unified Public and Municipal Services Portal**

Over 1,000 federal, more than 7,600 regional, and over 12,800 municipal public services are provided electronically via the portal to individuals and legal entities.

In June 2018, a business mobile application was launched - Gosuslugi.Bussiness. The user-friendly application enables users to check for their accounts, schedule payments, and receive bank details. The app is available in the application stores Google Play and App Store.

**Russian Post** began delivering postal items using the unified public services portal. The number of installations by users exceeded 17 million in 2018, with about 35 million services ordered over the period via the mobile version of the unified public services 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 61 million requests. The second most popular service was vehicle registration; it was used 4.8 million times. About 3.5 million applications were submitted for replacement of foreign passports and registration of titles. Nearly 2.6 million services were provided to renew a driving licence. The volume of payments at the Federal Tax Service of Russia increased 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

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

**In October 2018,** Russian Post expanded the use of a simple electronic signature (SES) for customers. Citizens with a verified electronic certificate can sign documents and register a simple electronic signature, and these numbers will increase significantly.

**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-signatures, 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 of the end of 2018, the Integrated Identification and Authentication System had 127 million registered residents of the Khanty-Mansi Autonomous Area - Yugra, or 97% of the region’s total population over 14 years.

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

**“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.”**

— Nikolay Podguzov, CEO of Russian Post

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

**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 factors 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 IAS login/password and read the code generated by the system while looking into the camera of their smartphone or PC. For remote identification and access to the internet and a device with a webcam; no additional equipment is required.

**Unified Biometric 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 (IAS) 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.dv.ru.

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

**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.**

**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 messaging 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 System of Interdepartmental Electronic Cooperation**

**Delivering High-Quality Services to Customers**

**Sustainability Report 2018**

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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)

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 31,900 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, Partiz, 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 lyceu No. 7, we upgraded the equipment by replacing legacy webcams with modern IP cameras offering a wider viewing angle and better image quality, with no connection to a laptop needed. A total of 11 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 Malakhin, 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 14,940. 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 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 Lysyov, 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 workflow management, customer relationship management, and accounting for trade and operations.

To promote the National Cloud Platform, Rostelecom has created a portal Obyazcom 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

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 met all of local and intra-zone calls for 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 complemented 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. Rostelecom’s internet service in the Amur Region

In 2018, in furtherance of the Bridging Digital Divide project, Rostelecom brought internet to 23 rural communities in the Velikiy Kargopol’ and Ust’Yuryuzansky districts of the Amur 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 Amur Region and the Nemtsov 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 Pritschenkin, Director of Rostelecom’s Amur Region Branch

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 Fedoseev, Technology Director of Rostelecom’s Kaliningrad 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 Vilyu 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 Sobolov, Chairman of the Republic of Sakha (Yakutia) Government

Universal service 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 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.

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In 2018, our Wi-Fi user base grew tenfold year-on-year to 236 thousand while our data traffic exceeded 4.8 PB, up 2.8 times year-on-year.

BDO 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 Novoyotovsk District communities. Since the commencement of the BDO project in 2015, Rostelecom has connected 101 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
“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.”
— Elena Alpova, Director of Rostelecom’s Ulyanovsk Branch

“Smart City aims to enhance the efficiency of city management and improve the quality of life in cities by introducing advanced digital solutions.”
— Sergey Orchanov, Deputy Director of Rostelecom’s Kursk Branch, Director for 5G and 5GS

“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 Kotsko, Minister of Information Technology and Communications of the Chelyabinsk Region

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 up RUB 232 billion, up 4% 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 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. Our core objective is to merge various municipal services and departments into a single digital environment.”
— Sergey Orchanov, Deputy Director of Rostelecom’s Kursk Branch, Director for 5G and 5GS

Rostelecom’s smart street lighting comes to Vytegsky Polyan

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 schemes, 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 Kotelich.”
— Eugene Vilo, Director of Rostelecom’s Kirov Branch

Rostelecom, Telia2 Russia, and Ericsson tested innovative utilities solutions in Moscow and Saint Petersburg

Rostelecom, Ericsson, and Rostelecom’s mobile operator Telia2 Russia tested an IoT 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 Telia2 Russia in November 2018.

The data network for testing was based on Telia2 Russia’s infrastructure and used Ericsson technology. Data transmission was arranged via Rostelecom cellular modems.

During the Moscow and Saint Petersburg tests, power meter data were transmitted via Telia2 Russia network to the modern manufacturer’s server. The tests confirmed the efficiency of smart meters that enable power distribution companies to optimize costs while providing consumers with more comfort in using their services.

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 facilities and over 50 km laid under the BDO 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 260 public institutions and businesses.

Broadband services are now available to the local branches of the National Guard of Russia, Kirovenergo, and Vyatstekh.

“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.”
— Eugene Vilo, Director of Rostelecom’s Kirov Branch

BDD in the Ulyanov 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 Panskid district, thick forests in the Kuzovato district, and valleys in the Sengley 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 from online services same as their urban counterparts.”
— Elena Alpova, Director of Rostelecom’s Ulyanovsk Branch

Smart City: From Pilots to Large-Scale Initiatives

In 2018, Rostelecom’s revenue from Smart City projects was at RUB 232 billion, up 4% year-on-year. 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.

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Social and Charitable Projects

As a company focused on social responsibility, PJSC Rostelecom prioritizes 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 supporting children with Down’s syndrome. Rostelecom is implementing RT.Health, a large-scale project, in two regions and is used by over 1,500 institutions and information exchange between regional and federal levels. CAMI is a cloud storage for diagnostic materials and brings many other benefits.

RT.Health

Rostelecom is implementing RT.Health, 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 clinics, registration office, electronic health records, etc.), the system features specifically targeted ones. RMIS is functioning across 15 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. CAMI is a cloud storage for diagnostic materials that provides remote access to the data within a unified 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.

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-service to make free calls.

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 telephony operator. Millions of families and businesses in Russia still use landline phones in their homes and offices. Rostelecom’s total fixed-line subscribers base in 2018 was at 174 million while revenue in the segment totalled RUB 15.0 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 this is preferred by subscribers who love talking. A landline phone never runs on 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 childminder 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 reliable and communication device in such places, which also emits no radio waves. Finally, some mobile phone users keep their landline phones 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.

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 RBG and B2G cyber security services; the Company’s products and services are used by most public institutions in the country 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 cyber segment of the internet.

Technological advancement brings new kinds of threats: viruses, malware, identity theft, DDoS attacks. 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 the realities孩子们 are exposed to by themselves while surfing the web and various services intended to protect under-age users when using 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 hacking.

Rostelecom also held a series of workshops for parents in furnishing 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 1000 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 65 children attended the interactive session. 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,得很好 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. This solution allows users to get 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 (IP 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’s Security business offers access to the cloud services through the web-based customer service. The service is available in the form of an app that can be installed on various devices. The user can access the services through any web browser. The service provides access to the surveillance cameras via the cloud. The user can watch the live image from the camera and also record the video. The user can also access the recorded video from the camera and watch it offline. The user can also access the settings of the camera, such as the date and time of recording, and also set up the alarm system.

When using the service, the user can set up the alarm system to notify them when certain events occur. The alarm system can be set up to notify the user via email, SMS, or push notification. The user can also set up the alarm system to trigger certain actions automatically. For example, the user can set up the alarm system to turn on the lights in the room when the alarm is triggered. The user can also set up the alarm system to turn off the lights in the room when the alarm is triggered.

Rostelecom’s Video Surveillance service is a 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,得很好 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. This solution allows users to get 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.
Rostelecom offers both indoor and outdoor surveillance cameras; the latter help keep watch over own’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 allows customers to configure and configure their devices and services for their families at any time - straight from their home or office or while traveling - www.rostelecom.ru.

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 its 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.ru or through the 800 code. 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 operates 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 centre’s employees went through Client League, a customer focus training programme. In September 2018, Rostelecom Retail Systems, a PJSC Rostelecom 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 scoreboard 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 telecom 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 traveling - www.rostelecom.ru.

The Online Customer Account is a Rostelecom customer’s online office that consolidates all services provided to the customer: telephone, 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 Screws, 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.
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.
Our Approach

**Stakeholder Engagement**

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, providing 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 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.

**Rostelecom’s key stakeholders:**

- Shareholders
- Customers
- Business partners
- Government authorities
- Local communities
- Public organisations
- Environmental organisations
- Media
- Scientific and expert community
- Employees

**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.
PJSC ROSTELECOM’S STAKEHOLDER MAP IN 2018

Key expectations and interests of stakeholders
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

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)

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

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

2018 highlights
Investor Day in Moscow, 21 March 2018
AGM 18 June 2018
EGM 24 December 2018
Stakeholder Engagement

Business partners
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
7. Risk management

Key expectations 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

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 lenders
- 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
- Renaissance Capital’s 22nd Annual RUSSIA CALLING! Investment Forum, Moscow, Russia
- VTB Capital’s RUSSIA CALLING! Investment Forum, Moscow, Russia
- Raiffeisen Institutional Investors Conference, Zürs, Austria

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

Key expectations of stakeholders
1. Decent salary
2. Safe and comfortable working environment
3. Fair remuneration and social benefits for employees
4. Protection of human rights
5. Opportunities for professional development and career advancement

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
- Rosneft’s University or Knowledge Management Department
- Technical Training Centre of Excellence
- In-house coaches
- Rosneft’s Corporate Online University
- Rosneft’s department at the Bonch-Bruyevich Saint-Petersburg State University of Telecommunications
- Long-term incentive programmes (share matching plan)
- Monetary Incentives for Employees Based on Project Performance
- Corporate pension scheme
- Business process gamification
- Corporate media and portals
- Social partnership
- Public reporting
- Professional training

1. Business process transparency
2. Ensuring easy access to the information on the Company’s operations
3. Interaction under contracts, agreements, and cooperation agreements
4. Regular customer surveying (including flash mob organisation)
5. Safety of services
6. Higher quality of services
7. Improved customer experience
8. Communications within the blogosphere
9. Higher accessibility of services

Mass media
1. Business process transparency
2. Ensuring easy access to the information on the Company’s operations

Customers
1. Providing reliable telecommunications service
2. High quality of services
3. Improved customer experience
4. Communications within the blogosphere
5. Higher accessibility of services

Business partners
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
7. Risk management

Key expectations 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

Engagement mechanisms
- Rencontres with potential investors in the Company’s top management
- Open Talk project, a discussion with the Company’s top management
- Unifiid HFM platform and unifiid SuccessFactors system
- Recognition award
- Corporate sports tournament
- Sports Competition 2018
- Joint internship programme with Skoltech
- WorldSkills WorldSkills Russia
- Technology for Life – More Opportunities International journalism contest
- Corporate TV

2018 highlights
- Basics of the Digital Economy educational series
- Conquest of Digital Space quiz
- Online Lectures
- Educational materials for the mass media
- E-libraries
- Intranet portal (LIVE, Grow with Rosneft and other sections)
- Rosneft’s Vestnik corporate newsletter
- Rosneft s department at the Bonch-Bruyevich Saint-Petersburg State University of Telecommunications
- Long-term incentive programmes (share matching plan)
- Monetary Incentives for Employees Based on Project Performance
- Corporate pension scheme
- Business process gamification
- Corporate media and portals
- Social partnership
- Public reporting
- Professional training
### Stakeholder Engagement

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<th>Engagement mechanisms</th>
<th>2018 highlights</th>
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<td>Reducing the environmental footprint</td>
<td>Partner programmes and projects</td>
<td>Separate waste collection programme</td>
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<td>Social and charitable programmes</td>
<td>Green Office concept</td>
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<td>Public reporting</td>
<td>E-billing</td>
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<td>Energy efficiency</td>
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<td>Use of alternative energy sources</td>
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<td>Fostering environmental culture</td>
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### Scientific and expert community

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<tr>
<th>Stakeholder</th>
<th>Key expectations and interests of stakeholders</th>
<th>Engagement mechanisms</th>
<th>2018 highlights</th>
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<tr>
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<td>Contributing to the development of science and technology</td>
<td>Partner programmes</td>
<td>Bridging the Digital Divide project</td>
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<td>Research and education conferences</td>
<td>Technology projects</td>
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<td>Orders for R&amp;D (research and development)</td>
<td>KnowTeach socio-educational programme</td>
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<td>Growth distance learning project</td>
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<td>Midday educational programme</td>
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<td>Learn the Internet – Manage It! educational project</td>
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### Local communities

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<th>Stakeholder</th>
<th>Key expectations and interests of stakeholders</th>
<th>Engagement mechanisms</th>
<th>2018 highlights</th>
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<tr>
<td></td>
<td>Receiving information on the Company’s growth prospects</td>
<td>Working and expert groups, commissions</td>
<td>ABC of the Internet educational programme</td>
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<td>Cooperation and partnership agreements</td>
<td>Distance Learning for Disabled Children</td>
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<td>Joint events – voluntary cleanups, trainings, exercises</td>
<td>Internet for Social Infrastructure Facilities</td>
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<td>Sponsorship and charitable programmes</td>
<td>Classroom Internet, an all-Russian contest of school internet projects</td>
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<td>Public reporting</td>
<td>Want to Be! charity programme for children with impaired kidney function</td>
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<td>Illustrated Books for Little Blind Children</td>
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<td>House of Veronica volunteer project</td>
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### Public organisations

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<th>Stakeholder</th>
<th>Key expectations and interests of stakeholders</th>
<th>Engagement mechanisms</th>
<th>2018 highlights</th>
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<tbody>
<tr>
<td></td>
<td>The Company’s performance and growth prospects</td>
<td>Forums, conferences, exhibitions, round tables</td>
<td>Computationisation of Orphanages</td>
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<td></td>
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<td>Public reception offices</td>
<td>Social Impact Award programme promoting social enterprise among young people</td>
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<td></td>
<td>2. Key events</td>
<td>Public opinion research</td>
<td>IT Growth international volunteer project for Russian schools involving young foreign specialists</td>
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<td>Volunteer projects</td>
<td>Safe Internet</td>
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<td>Let’s Help Together corporate programme for voluntary donations</td>
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<td></td>
<td>3. Social responsibility</td>
<td></td>
<td>Stan Dedem Morozom (Become a Santa) volunteer programme</td>
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</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 media mentions. Rostelecom’s press service is highly effective in providing commentary and process explanation. On multiple topics, it further drives its sustainability. Rostelecom believes that a set procedure of handling citizens’ complaints, openness, and willingness to engage with the general public are key proposals to sum up, which will be listed in the table below.

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 an integrated report is just one prospect of many. Rostelecom has 38 federal and regional social media profiles with the aggregate number of subscribers exceeding 670 thousand (compared to 3.4 million in 2017). 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: https://www.rostelecom.ru/mainpage/
- Classroom Internet, an all-Russian contest of school internet projects: www.safe-internet.ru
- Together into the efuture, an international journalism contest: www.rinternational.ru

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

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 cycle 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

Key queries and proposals of stakeholders

<table>
<thead>
<tr>
<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>
</tr>
<tr>
<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>
</tr>
<tr>
<td>Incorporated into Report sections</td>
</tr>
<tr>
<td>3) Ensure that information is balanced and provided equally</td>
</tr>
<tr>
<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>
</tr>
<tr>
<td>Incorporated into Report sections</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>
</tr>
<tr>
<td>Incorporated into: Section 2. Building a Sustainable Digital Future</td>
</tr>
<tr>
<td>6) Disclose the UN SDGs in a more detailed manner highlighting their connection to the Company’s strategic goals</td>
</tr>
<tr>
<td>Incorporated into: Section 2. Building a Sustainable Digital Future</td>
</tr>
<tr>
<td>7) Ensure close monitoring over the consistency of sections so that they do not contradict each other</td>
</tr>
<tr>
<td>Incorporated into Report sections</td>
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</tbody>
</table>
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.ru.

This document is the Company’s stakeholder communication tool for customers, shareholders, employees, business partners, government authorities, local communities, and public organizations, 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 option). The Company monitors the development of non-financial reporting and relevant global trends. While preparing the 2019 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 groups, in particular, methodology and information disclosure indicators.

Since 2015 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 2016, 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.

1. On 16 October 2014, the GRI Global Sustainability Standards Board (GSSB) published the new Sustainability Reporting Standards;
REPORT STRUCTURE

The Report comprises key information on the economic, environmental, and social aspects of JSC 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
- Health and safety
- 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

REPORT BOUNDARIES

The Report covers the activities of Rostelecom Group as a whole, including JSC Rostelecom and its subsidiaries within the consolidation boundaries for the Company's annual financial reporting.

Legal address: 15 Osoevskogo 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).

REPORTING PRINCIPLES

While determining the Report's content, JSC Rostelecom was guided by the GRI Standards. Appendix 5 comprises a GRI compliance table, which contains relevant information on the GRI disclosures.

The comments and recommendations of the RSPP Board on Non-Financial Reporting, which had been received following the assurance of the 2017 Report, were considered during the preparation of the Report.

MATERIAL TOPICS

When defining material topics to cover, we were guided by the GRI Standards 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, JSC 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.

The quality of the Report is assured through applying the following principles outlined in the GRI Standards:
- Balance. The document provides unbiased information on both 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 last 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 JSC 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.

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.
Appendix 2. Glossary

5G | The fifth generation of mobile technology achieving higher bandwidths than 4G, driving greater mobile availability, extremely reliable large-scale networking of devices, lower latencies, bandwidths of 1 Gbps–2 Gbps, and lower energy consumption by batteries. 5G adoption will drive the expansion of the Internet of Things.

AGM | Annual General Shareholders’ Meeting

ANO | Autonomous non-commercial organisation

BBC | Business-to-business

B2C | Business-to-customer

B2G | Business-to-government

B2O | Business-to-operator

BDD | The Bridging the Digital Divide project

Broadband | Broadband internet access

CAMI | Central Archive of Medical Images

CAPEX | Capital expenditures for acquiring or upgrading non-current assets

CCTV | Closed-circuit television

Cloud service | A model for enabling on-demand network access to a shared pool of configurable computing resources

Credit rating | A quantified assessment of the creditworthiness of an individual, company, regional authority, or sovereign government

Data centre | Data processing centre


EGM | Extraordinary Shareholders’ Meeting

Employee engagement | Emotional and intellectual commitment of employees to go above and beyond in doing their job

FCF | Free cash flow

FOCL | Fibre-optic communications line

FTTB (fibre-to-the-building)/FTTx | Broadband network architecture using optical fibre to provide all or part of the local loop used for last mile telecommunications

GPON | Gigabit Passive Optical Network

GRI Standards | The GRI Sustainability Reporting Guidelines offer an international standard for the preparation of voluntary sustainability reports by organisations

HR | Human resources

HRM | Human resource management

ICS | Information and communication technology

ICT | Information and communication technology

IAS | Integrated Identification and Authentication System

IIsT | Industrial Internet of Things

Interactive TV | A TV format service for viewing television online via any internet provider

IPTV | A system through which television services are delivered using the internet protocol suite over a packet-switched network such as a LAN or the internet

Issue | An entity or an individual issuing securities to support and finance their business

KPIs | Key performance indicators

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

RMS | 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

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

Subscriber | An individual, group, or entity that can be affected by the Company and/or who can affect the Company

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 | United States of America

USIEC | Unified System of Interdepartmental Electronic Cooperation

VAS | Value-added services

VPN/S/SP 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

WSS | 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 Regional Commonwealth in the Field of Communication (RCCI)</td>
<td>1992</td>
<td>Member</td>
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<tr>
<td>Russian Association for Electronic Communications (RAEC)</td>
<td>1997</td>
<td>Member</td>
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<tr>
<td>International Telecommunication Union (ITU)</td>
<td>1999</td>
<td>Member of Telecommunication Standardisation Sector</td>
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<tr>
<td>Nizhegorodskaya Association of Industrialists and Entrepreneurs</td>
<td>2011</td>
<td>Member</td>
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<tr>
<td>Union of Employers of the Rostov Region</td>
<td>2011</td>
<td>Member</td>
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<tr>
<td>Union of InfoCom Design Engineers Projects/SvyazTelekom</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>
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<tr>
<td>Association of Electronic Document Communications</td>
<td>2013</td>
<td>Member</td>
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<td>Media Communication Union</td>
<td>2014</td>
<td>Member</td>
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<tr>
<td>Association of Cable TV of Russia</td>
<td>2014</td>
<td>Member</td>
</tr>
<tr>
<td>International Cable Protection Committee (IKPC)</td>
<td>2014</td>
<td>Member</td>
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<tr>
<td>Anti-Corruption Charter of Russian Business</td>
<td>2014</td>
<td>Signatory</td>
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<tr>
<td>National Association of Contact Centres (NACC)</td>
<td>2015</td>
<td>Member</td>
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<tr>
<td>Industrial Internet Consortium (IC)</td>
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<td>Russian Association for Electronic Communications (RAIRES)</td>
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<tr>
<td>Russian Association of Industrial Internet (RAI)</td>
<td>2016</td>
<td>Member</td>
</tr>
<tr>
<td>Construction Association (Association of Self-Regulatory Organisations)</td>
<td>2017</td>
<td>Member</td>
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<tr>
<td>Autonomous Non-Commercial Organisation Digital Economy</td>
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<td>Member</td>
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<tr>
<td>Russian Union of Industrialists and Entrepreneurs (RSIPP)</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 52th 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 15th 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 Macroregional Branch
At the All-Russian corporate volunteering contest, Champions of Good Deeds 2018, our Believe in Yourself social project won the first 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-Balkarian 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 Krasnoyarsk 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 Macroregional 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 Macroregional 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 Macroregional 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 102-2</td>
<td>Name of the organisation</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 102-7</td>
<td>Information on employees and other workers</td>
<td>Company Profile</td>
</tr>
<tr>
<td>GRI 102-8</td>
<td>Supply chain</td>
<td>Company Profile</td>
</tr>
<tr>
<td>GRI 102-9</td>
<td>Significant changes to the organisation and its supply chain</td>
<td>Company Profile</td>
</tr>
<tr>
<td>GRI 102-10</td>
<td>External initiatives</td>
<td>Company Profile</td>
</tr>
<tr>
<td>GRI 102-11</td>
<td>Membership of associations</td>
<td>Appendix 3. Membership of Associations</td>
</tr>
<tr>
<td>GRI 102-12</td>
<td>Key impacts, risks, and opportunities</td>
<td>Company Profile</td>
</tr>
<tr>
<td>GRI 102-13</td>
<td>Ethics and integrity</td>
<td>Company Profile</td>
</tr>
<tr>
<td>GRI 102-14</td>
<td>Values, principles, standards, and norms of behaviour</td>
<td>Company Profile</td>
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<tr>
<td>GRI 102-15</td>
<td>Mechanisms for advice and concerns about ethics</td>
<td>Company Profile</td>
</tr>
<tr>
<td>GRI 102-16</td>
<td>Governance structure</td>
<td>Company Profile</td>
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<tr>
<td>GRI 102-17</td>
<td>Consulting stakeholders on economic, environmental, and social topics</td>
<td>Stakeholder Engagement</td>
</tr>
<tr>
<td>GRI 102-18</td>
<td>Composition of the highest governance body and its committees</td>
<td>Company Profile</td>
</tr>
<tr>
<td>GRI 102-19</td>
<td>Chair of the highest governance body</td>
<td>Company Profile</td>
</tr>
<tr>
<td>GRI 102-20</td>
<td>Conflicts of interest</td>
<td>Company Profile</td>
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<tr>
<td>GRI 102-21</td>
<td>Role of highest governance body in setting purpose, values, and strategy</td>
<td>Company Profile</td>
</tr>
<tr>
<td>GRI 102-22</td>
<td>Evaluating the highest governance body’s performance</td>
<td>Company Profile</td>
</tr>
<tr>
<td>GRI 102-23</td>
<td>Remuneration policies</td>
<td>Company Profile</td>
</tr>
<tr>
<td>GRI 102-24</td>
<td>Process for determining remuneration</td>
<td>Company Profile</td>
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<tr>
<td>GRI 102-25</td>
<td>Percentage increase in annual total compensation ratio</td>
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<tr>
<td>GRI 102-26</td>
<td>List of stakeholder groups</td>
<td>Stakeholder Engagement</td>
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<tr>
<td>GRI 102-27</td>
<td>Collective bargaining agreements</td>
<td>Rostelecom’s collective bargaining agreement covers all employees</td>
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<tr>
<td>GRI 102-28</td>
<td>Identifying and selecting stakeholders</td>
<td>Stakeholder Engagement</td>
</tr>
<tr>
<td>GRI 102-29</td>
<td>Approach to stakeholder engagement</td>
<td>Stakeholder Engagement</td>
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<tr>
<td>GRI 102-30</td>
<td>Key topics and concerns raised</td>
<td>Appendix 1. Report Profile</td>
</tr>
<tr>
<td>GRI 102-31</td>
<td>Reporting practice</td>
<td>Stakeholder Engagement</td>
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<td>GRI 102-32</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>GRI 102-33</td>
<td>Defining report content and topic boundaries</td>
<td>Appendix 1. Report Profile</td>
</tr>
<tr>
<td>GRI 102-34</td>
<td>List of material topics</td>
<td>Appendix 1. Report Profile</td>
</tr>
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<td>GRI 102-35</td>
<td>Restatements of information</td>
<td>Appendix 1. Report Profile</td>
</tr>
<tr>
<td>GRI 102-36</td>
<td>Changes in reporting</td>
<td>Appendix 1. Report Profile</td>
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<td>GRI 102-37</td>
<td>Reporting period</td>
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<td>GRI 102-38</td>
<td>Date of most recent report</td>
<td>Appendix 1. Report Profile</td>
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<td>GRI 102-39</td>
<td>Reporting cycle</td>
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<td>GRI 102-40</td>
<td>Contact point for questions regarding the report</td>
<td>Report cover</td>
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<tr>
<td>GRI 102-41</td>
<td>Claims of reporting in accordance with the GRI Standards</td>
<td>Appendix 1. Report Profile</td>
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<td>GRI 102-42</td>
<td>GRI content index</td>
<td>Appendix 5. GRI Table</td>
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<tr>
<td>GRI 102-43</td>
<td>External assurance</td>
<td>Appendix 1. Report Profile</td>
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<tr>
<td>GRI 201-1</td>
<td>Direct economic value generated and distributed</td>
<td>PJSC Rostelecom’s Annual Report 2018</td>
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**General Standard Disclosure**

**Description**

**Section of the Report**

**Company Profile**

**Company Profile**

**Investing in Our People**

**Appendix 1. Report Profile**

**Appendix 1. Report Profile**

**Appendix 1. Report Profile**

**Stakeholder Engagement**

**Appendix 1. Report Profile**

**Rostelecom’s collective bargaining agreement covers all employees**

**Appendix 1. Report Profile**

**Appendix 1. Report Profile**

**Appendix 1. Report Profile**

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**Appendix 1. Report Profile**

**Appendix 1. Report Profile**

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**Appendix 1. Report Profile**

**Appendix 1. Report Profile**

**PJSC Rostelecom’s Annual Report 2018**
Appendix 6. Key Performance Indicators

GRI 202-1  Ratios of standard entry level wage by gender compared to local minimum wage
GRI 203-1  Indirect Economic Impacts
GRI 205-2  Communication and training about anti-corruption policies and procedures
GRI 302-1  Energy consumption within the organisation
GRI 302-4  Reduction of energy consumption
GRI 303-3  Water withdrawal by source
GRI 304-3  Habitats protected or restored
GRI 305-7  Nitrogen oxides (NOx), sulphur oxides (SOx), and other significant air emissions
GRI 306-1  Water discharge by quality and destination
GRI 306-2  Waste by type and disposal method
GRI 306-3  Significant spills
GRI 307-1  Monetary value of significant fines and total number of non-monetary sanctions
GRI 401-1  New employee hires and employee turnover
GRI 401-2  Benefits provided to full-time employees that are not provided to temporary or part-time employees
GRI 401-3  Parental leave
GRI 402: Labour/Management Relations

GRI 401-3  Benefits provided to full-time employees that are not provided to temporary or part-time employees
GRI 401-2  New employee hires and employee turnover
GRI 401-1  Energy consumption within the organisation
GRI 302-4  Reduction of energy consumption
GRI 303-3  Water withdrawal by source
GRI 304-3  Habitats protected or restored
GRI 305-7  Nitrogen oxides (NOx), sulphur oxides (SOx), and other significant air emissions
GRI 306-1  Water discharge by quality and destination
GRI 306-2  Waste by type and disposal method
GRI 306-3  Significant spills
GRI 307-1  Monetary value of significant fines and total number of non-monetary sanctions
GRI 400: Social
GRI 401-2  Benefits provided to full-time employees that are not provided to temporary or part-time employees
GRI 401-1  New employee hires and employee turnover
GRI 402: Labour/Management Relations

GRI 402-1  Minimum notice periods regarding operational changes
GRI 403-2  Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities
GRI 403-4  Health and safety topics covered in formal agreements with trade unions
GRI 403-9  Work-related injuries
GRI 404-1  Average hours of training per year per employee
GRI 404-2  Programmes for upgrading employee skills and transition assistance programmes
GRI 404-3  Percentage of employees receiving regular performance and career development reviews
GRI 405-1  Diversity and Equal Opportunity
GRI 406-1  Ratio of basic salary and remuneration of women to men
GRI 406-2  Percentage of employees receiving regular performance and career development reviews
GRI 406-3  Non-discrimination
GRI 408-1  Operations and suppliers at significant risk for incidents of child labour
GRI 408-8  Child Labour
GRI 409: Forcible or Compulsory Labour
GRI 410-1  Operations and suppliers at significant risk for incidents of forced or compulsory labour
GRI 411-1  Incidents of violations involving rights of indigenous peoples
GRI 413-1  Operations with local community engagement, impact assessments, and development programmes
GRI 415-1  Customer Health and Safety
GRI 416-1  Assessment of the health and safety impacts of product and service categories

Not relevant

Appendix 6. Key Performance Indicators
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>
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<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>28.916</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>
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<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>
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<tr>
<td>Class 4</td>
<td>2102.057</td>
<td>20.714.299</td>
<td>20.618.764</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>15.886.83</td>
<td>13.722.860</td>
<td>13.385.635</td>
<td>- 2.83%</td>
<td>Decreasing the number of used buildings (real estate portfolio optimisation). Office space optimisation</td>
</tr>
<tr>
<td>Total</td>
<td>371.02.813</td>
<td>34.465.798</td>
<td>34.109.479</td>
<td></td>
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WASTE DISPOSAL METHODS IN 2016–2018, TONNES

<table>
<thead>
<tr>
<th>Waste Disposal Method</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
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<tbody>
<tr>
<td>Landfill</td>
<td>33.825.5</td>
<td>30.280.8</td>
<td>30.816.7</td>
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<tr>
<td>Reuse (for own operational needs)</td>
<td>44.9</td>
<td>681.0</td>
<td>2716</td>
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<tr>
<td>Other methods (disposal and neutralisation)</td>
<td>3.221</td>
<td>3.645.3</td>
<td>3.221</td>
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</table>

RECLAMATION OF DISTURBED LAND IN 2016–2018

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<tr>
<th>Reclaimed Land Area, sq m</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
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<tr>
<td>Recycled</td>
<td>0</td>
<td>190</td>
<td>312</td>
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<tr>
<td>Expenses related to reclamation, RUB thousand</td>
<td>0</td>
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<td>0</td>
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</table>

WATER DISCHARGE IN 2016–2018, THOUSAND CU M

<table>
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<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>planned</td>
<td>43.23</td>
<td>39.81</td>
<td>40.33</td>
<td>1.31%</td>
</tr>
<tr>
<td>Into public sewage systems (under agreements)</td>
<td>unplanned</td>
<td>2.639.75</td>
<td>2.327.41</td>
<td>2.065.34</td>
<td>- 11.26%</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>Route for neutralisation</td>
<td>Route for land fill</td>
<td>Route for operational needs</td>
</tr>
<tr>
<td>Fluorescent lamps</td>
<td>45.04</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, BC</td>
<td>3.11</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Material contaminated by oil, sawdust and sand</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Fuel and oil filters, battery acid</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Waste tyres Non-ferrous metal scrap</td>
<td>68.48</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Municipal waste</td>
<td>2.03</td>
<td>34.76</td>
<td>1.34</td>
</tr>
<tr>
<td>Waste office equipment</td>
<td>10.68</td>
<td>132.50</td>
<td>11.22</td>
</tr>
<tr>
<td>Municipal waste and bulk waste, construction waste</td>
<td>36.39</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Municipal waste, sewage from the sites, paper and cardboard waste</td>
<td>3.60</td>
<td>13.62</td>
<td>0.00</td>
</tr>
<tr>
<td>Municipal waste, sewage from the sites, broken glass</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Municipal waste, sewage from the sites, waste cables</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Municipal waste, sewage from the sites, water conditioning and effluent treatment waste and other waste</td>
<td>0.00</td>
<td>34.72</td>
<td>99.24</td>
</tr>
<tr>
<td>Ferrous metal scrap</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Paper and cardboard waste</td>
<td>0.00</td>
<td>41.82</td>
<td>0.00</td>
</tr>
<tr>
<td>Wood waste, bottom ash from burning coal</td>
<td>2.23</td>
<td>281.95</td>
<td>33.33</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2.23</td>
<td>281.95</td>
<td>33.33</td>
</tr>
</tbody>
</table>
Sustainability Report 2018

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ENVIROMENTAL PERFORMANCE OF PJSC ROSTELECOM’S VEHICLES AND PERFORMANCE IMPROVEMENT INITIATIVES IN 2018

<table>
<thead>
<tr>
<th>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>0</td>
<td>0</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>3,964</td>
<td>3,898</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>1,488.79</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>1,325.64</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>18,956.30</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>4503</td>
<td>2,145</td>
</tr>
<tr>
<td>ROSTELECOM’S EXPENDITURE ON OCCUPATIONAL HEALTH AND SAFETY IN 2016–2018, RUB MILLION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>Expenditure on occupational health and safety</td>
<td>50.6</td>
<td>64.0</td>
<td>69.7</td>
</tr>
</tbody>
</table>

Employees

ROSTELECOM’S AVERAGE HEADCOUNT BY EMPLOYMENT TYPE IN 2016–2018, PEOPLE

<table>
<thead>
<tr>
<th></th>
<th>2016 (as at 31 December)</th>
<th>2017 (as at 31 December)</th>
<th>2018 (as at 31 December)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rostelecom’s headcount</td>
<td>128,584</td>
<td>128,584</td>
<td>128,584</td>
</tr>
<tr>
<td>Indefinite contract</td>
<td>101,488</td>
<td>101,488</td>
<td>101,488</td>
</tr>
<tr>
<td>Fixed-term contract</td>
<td>6,442</td>
<td>6,442</td>
<td>6,442</td>
</tr>
<tr>
<td>Full-time</td>
<td>103,250</td>
<td>103,250</td>
<td>103,250</td>
</tr>
<tr>
<td>Part-time</td>
<td>6,610</td>
<td>6,610</td>
<td>6,610</td>
</tr>
<tr>
<td>Under independent contractor agreements</td>
<td>21,834</td>
<td>21,834</td>
<td>21,834</td>
</tr>
</tbody>
</table>

ROSTELECOM’S EMPLOYEES BY FUNCTION IN 2016–2018, PEOPLE

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical team</td>
<td>93,291</td>
<td>92,471</td>
<td>89,234</td>
</tr>
<tr>
<td>Commercial team</td>
<td>28,101</td>
<td>26,703</td>
<td>24,772</td>
</tr>
<tr>
<td>Administrative team</td>
<td>10,939</td>
<td>9,858</td>
<td>3,347</td>
</tr>
<tr>
<td>Total</td>
<td>115,329</td>
<td>112,032</td>
<td>115,959</td>
</tr>
</tbody>
</table>

ROSTELECOM’S EMPLOYEES BY CATEGORY IN 2017–2018

<table>
<thead>
<tr>
<th></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>13,014</td>
<td>12,149</td>
</tr>
<tr>
<td>Top managers</td>
<td>99</td>
<td>88</td>
</tr>
<tr>
<td>Total</td>
<td>106,257</td>
<td>106,301</td>
</tr>
<tr>
<td>Other employees</td>
<td>112</td>
<td>115</td>
</tr>
</tbody>
</table>

Note: The “Rostelecom’s employees by category” table comprises data for Rostelecom, excluding subsidiaries and affiliates, as at 31 December 2018.
### Rostelecom's Employees by Category in 2016–2018

<table>
<thead>
<tr>
<th>Category</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>Total permanent</td>
<td>87%</td>
<td>13%</td>
<td>86%</td>
</tr>
<tr>
<td></td>
<td>66,919</td>
<td>5,777</td>
<td>66,123</td>
</tr>
<tr>
<td>Including new hires</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>124,365</td>
<td>13,067</td>
<td>124,493</td>
</tr>
</tbody>
</table>

### Employees by Age in 2016–2018

<table>
<thead>
<tr>
<th>Age Group</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>16–25</td>
<td>33,805</td>
<td>22,957</td>
<td>33,993</td>
</tr>
<tr>
<td>26–35</td>
<td>52,882</td>
<td>33,583</td>
<td>53,090</td>
</tr>
<tr>
<td>36–55</td>
<td>36,802</td>
<td>24,092</td>
<td>37,219</td>
</tr>
<tr>
<td>Over 56</td>
<td>12,802</td>
<td>8,624</td>
<td>12,926</td>
</tr>
<tr>
<td>Total</td>
<td>124,365</td>
<td>83,158</td>
<td>124,493</td>
</tr>
</tbody>
</table>

### Gender Distribution of New Hires in 2016–2018

<table>
<thead>
<tr>
<th>Gender Distribution of New Hires in 2016–2018, %</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>
</tr>
<tr>
<td>Men</td>
<td>49%</td>
<td>44%</td>
</tr>
</tbody>
</table>

### Age Distribution of New Hires in 2016–2018, Years

<table>
<thead>
<tr>
<th>Age Distribution of New Hires in 2016–2018, (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>Age 36–55</td>
<td>30%</td>
<td>28.30%</td>
</tr>
<tr>
<td>Age 26–35</td>
<td>35%</td>
<td>37.40%</td>
</tr>
<tr>
<td>Under 25</td>
<td>26%</td>
<td>32%</td>
</tr>
<tr>
<td>Over 56</td>
<td>6%</td>
<td>8.30%</td>
</tr>
</tbody>
</table>

### Share of New Hires in Total Headcount in 2016–2018, People

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></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>14,442</td>
<td>13,067</td>
<td>15,562</td>
</tr>
</tbody>
</table>

### Gender Distribution of New Hires in 2016–2018, People

<table>
<thead>
<tr>
<th>Gender Distribution of New Hires in 2016–2018, %</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>6,904</td>
<td>7,200</td>
<td>6,860</td>
</tr>
<tr>
<td>Women</td>
<td>7,148</td>
<td>6,773</td>
<td>7,388</td>
</tr>
</tbody>
</table>

### Share of New Hires in Total Headcount in 2016–2018, %

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></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>

### Sustainability Report 2018

- **Appendices**
- **Centre**
- **Production**
- **Total**
- **Region**
- **Sustainability Report 2018 CONTENTS**
- **Appendices**
- **Letter from the President**
- **Company Profile**
- **Building a Sustainable Environment**
- **Delivering High-Quality Services to Customers**
- **Fostering a Safe and Favourable Environment**
- **Stakeholder Engagement**
- **Appendices**

### 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>142,382</td>
<td>133,885</td>
<td>128,539</td>
</tr>
<tr>
<td>Rostelecom's average headcount (excluding subsidiaries and affiliates)</td>
<td>121,376</td>
<td>112,594</td>
<td>110,708</td>
</tr>
<tr>
<td>Average headcount of subsidiaries and affiliates</td>
<td>21,006</td>
<td>21,288</td>
<td>17,831</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>Centre</td>
<td>24,452</td>
<td>23,035</td>
<td>23,254</td>
<td>2,286</td>
<td>1,775</td>
<td>2,382</td>
<td>9.3%</td>
<td>7.5%</td>
<td>10%</td>
</tr>
<tr>
<td>Far East</td>
<td>7,016</td>
<td>6,328</td>
<td>6,071</td>
<td>497</td>
<td>354</td>
<td>456</td>
<td>10.2%</td>
<td>12.4%</td>
<td>12%</td>
</tr>
<tr>
<td>North-West</td>
<td>14,849</td>
<td>13,925</td>
<td>12,754</td>
<td>1,701</td>
<td>1,439</td>
<td>1,303</td>
<td>11.4%</td>
<td>10.9%</td>
<td>10%</td>
</tr>
<tr>
<td>Centre</td>
<td>13,512</td>
<td>14,060</td>
<td>14,846</td>
<td>1,917</td>
<td>1,315</td>
<td>1,757</td>
<td>12.3%</td>
<td>11%</td>
<td>12%</td>
</tr>
<tr>
<td>Centre</td>
<td>10,217</td>
<td>10,337</td>
<td>10,764</td>
<td>2,410</td>
<td>2,567</td>
<td>2,567</td>
<td>17.0%</td>
<td>16.8%</td>
<td>18%</td>
</tr>
<tr>
<td>Centre</td>
<td>19,087</td>
<td>16,644</td>
<td>15,181</td>
<td>1,368</td>
<td>1,257</td>
<td>2,557</td>
<td>8.9%</td>
<td>8.3%</td>
<td>17%</td>
</tr>
<tr>
<td>Centre</td>
<td>1,335</td>
<td>1,642</td>
<td>2,281</td>
<td>308</td>
<td>525</td>
<td>853</td>
<td>20%</td>
<td>27%</td>
<td>37%</td>
</tr>
<tr>
<td>Centre</td>
<td>250</td>
<td>244.4</td>
<td>157</td>
<td>107</td>
<td>61</td>
<td>47</td>
<td>43.3%</td>
<td>29%</td>
<td>27%</td>
</tr>
<tr>
<td>Centre</td>
<td>3,418</td>
<td>3,829</td>
<td>3,279</td>
<td>1,346</td>
<td>1,038</td>
<td>1,545</td>
<td>39.3%</td>
<td>31.9%</td>
<td>48%</td>
</tr>
</tbody>
</table>

| Total         | 121,376                   | 112,594                   | 110,708                   | 14,442                    | 13,067                    | 15,562                    | 11.4%                                         | 11.6%                                         | 11%                                           |
### 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>113,136</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 (6.5%)</td>
<td></td>
<td>4,330 (6.7%)</td>
<td></td>
<td>2,943 (8.11%)</td>
<td></td>
</tr>
<tr>
<td>Centre</td>
<td>2,763 (4.9%)</td>
<td></td>
<td>2,516 (4.33%)</td>
<td></td>
<td>3,035 (6.62%)</td>
<td></td>
</tr>
<tr>
<td>Far East</td>
<td>1,704 (8.0%)</td>
<td></td>
<td>1,687 (9.3%)</td>
<td></td>
<td>1,276 (9%)</td>
<td></td>
</tr>
<tr>
<td>North-West</td>
<td>2,580 (6.4%)</td>
<td></td>
<td>2,881 (6.78%)</td>
<td></td>
<td>3,035 (6.62%)</td>
<td></td>
</tr>
<tr>
<td>Siberia</td>
<td>2,269 (6.7%)</td>
<td></td>
<td>2,120 (7.65%)</td>
<td></td>
<td>2,589 (9%)</td>
<td></td>
</tr>
<tr>
<td>Ural</td>
<td>2,817 (7.3%)</td>
<td></td>
<td>3,002 (10.60%)</td>
<td></td>
<td>2,265 (14.37%)</td>
<td></td>
</tr>
<tr>
<td>South</td>
<td>2,958 (6.0%)</td>
<td></td>
<td>3,099 (7.50%)</td>
<td></td>
<td>3,341 (9.55%)</td>
<td></td>
</tr>
<tr>
<td>Headquarters</td>
<td>220 (6.4%)</td>
<td></td>
<td>567 (9.70%)</td>
<td></td>
<td>420 (10.41%)</td>
<td></td>
</tr>
<tr>
<td>Training and Production Centre</td>
<td>155 (42.9%)</td>
<td></td>
<td>91 (33.10%)</td>
<td></td>
<td>103 (35.70%)</td>
<td></td>
</tr>
<tr>
<td>Multifunctional General Service Centre</td>
<td>1,549 (23.7%)</td>
<td></td>
<td>1,269 (26.00%)</td>
<td></td>
<td>1,248 (5.36%)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>20,904 (6.89%)</td>
<td></td>
<td>21,011 (7.93%)</td>
<td></td>
<td>20,441 (8.64%)</td>
<td></td>
</tr>
</tbody>
</table>

### AVERAGE MONTHLY PAY OF ROSTELECOM EMPLOYEES IN 2016–2018, RUB THOUSAND

<table>
<thead>
<tr>
<th>Employee category</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.JSC Rostelecom</td>
<td>39</td>
<td>39</td>
<td>40</td>
</tr>
<tr>
<td>Rostelecom Group (including subsidiaries and affiliates)</td>
<td>40</td>
<td>44</td>
<td>46</td>
</tr>
</tbody>
</table>

### ROSTELECOM’S EMPLOYEE TRAINING COSTS IN 2016–2018, RUB THOUSAND

<table>
<thead>
<tr>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total employee training costs</td>
<td>452,665</td>
<td>463,570</td>
</tr>
<tr>
<td>Annual training cost per employee</td>
<td>3.6</td>
<td>3.5</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>531</td>
<td>748</td>
<td>576</td>
</tr>
<tr>
<td>Specialists</td>
<td>20,075</td>
<td>18,999</td>
<td>17,508</td>
</tr>
<tr>
<td>Total</td>
<td>20,169</td>
<td>19,747</td>
<td>18,084</td>
</tr>
</tbody>
</table>

### 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>246%</td>
<td>204%</td>
<td>304%</td>
<td>249%</td>
<td>305%</td>
<td>224%</td>
</tr>
<tr>
<td>Far East</td>
<td>305%</td>
<td>202%</td>
<td>249%</td>
<td>244%</td>
<td>430%</td>
<td>45%</td>
</tr>
<tr>
<td>Moscow</td>
<td>133%</td>
<td>123%</td>
<td>150%</td>
<td>159%</td>
<td>840%</td>
<td>1027%</td>
</tr>
<tr>
<td>North-West</td>
<td>327%</td>
<td>343%</td>
<td>315%</td>
<td>386%</td>
<td>384%</td>
<td>159%</td>
</tr>
<tr>
<td>Siberia</td>
<td>27%</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>250%</td>
<td>305%</td>
<td>265%</td>
<td>27%</td>
<td>286%</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>113,136</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>
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 disclosed by the Company with sufficient completeness. Recommendations offered by the Board after the public assurance of PJSC Rostelecom's Sustainability Report 2018 were reflected in the Report for 2019. 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 strategies for responsible business practices in 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 centers, cloud computing facilities, 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 CSR activities and management. The Company has established a 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 stakeholders, 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 2020–2022, and social programmes, disclosing results of the Company’s health and safety efforts focused on both internal employees and contractors. Customer relations and feedback channels are also in focus. Other topics discussed in the Report include measures to enhance procurement transparency, supplier engagement procedures and practices, sustainable development in the supply chain, and Rostelecom’s memberships of international, national, and regional industry unions and associations. The document also describes the Company’s partnership with non-commercial organisations aimed at implementing socially significant initiatives, including the Digital Equality programme.

- Human rights. The Report discloses Rostelecom’s commitment to ensuring the human rights, highlighting the principles and mechanisms used to provide equal opportunities to employees across all gender and age groups and prevent discrimination in management decision-making. It provides information on ensuring respect for employees’ rights, the collective bargaining agreement, the Company’s methods of informing employees and contractors of its obligations, and relevant requirements set for its business partners. According to the document, Rostelecom develops procedures and training, monitors and assesses progress, and creates feedback channels. The Report includes information on the Company’s nationwide project for bridging the digital divide, which enables people to access high-quality digital services wherever they may live.

- Preservation of environment. The document discloses the Company’s environmental impact indicators and their changes over a few years. It describes how the implementation of the Company’s Environmental Policy aimed at mitigating its environmental impact. The Report provides information on environmental risk management and environmental training of managers and employees. It also discloses data on the Company’s environmental protection investments and outlines the key environmental projects undertaken in 2018. PJSC Rostelecom’s environmental management system is reported to have successfully passed an external certification audit for compliance with GOST 20000-82. Another topic discussed by the Report is environmental operational efficiency and the environmental performance metrics, including the Company’s performance in terms of energy efficiency. The Report also presents information on the environmental protection initiatives and projects undertaken by the Company in 2018, including the implementation of Rostelecom’s Energy Policy, which includes measures to enhance public reporting and its commitment to transparency and openness.

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 performance in compliance with the principles outlined in the Social Charter of Russian Business and discloses its 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 2019. 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 strategies for responsible business practices in 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 centers, cloud computing facilities, 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 CSR activities and management. The Company has established a 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 stakeholders, 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 2020–2022, and social programmes, disclosing results of the Company’s health and safety efforts focused on both internal employees and contractors. Customer relations and feedback channels are also in focus. Other topics discussed in the Report include measures to enhance procurement transparency, supplier engagement procedures and practices, sustainable development in the supply chain, and Rostelecom’s memberships of international, national, and regional industry unions and associations. The document also describes the Company’s partnership with non-commercial organisations aimed at implementing socially significant initiatives, including the Digital Equality programme.

HUMAN rights. The Report discloses Rostelecom’s commitment to ensuring the human rights, highlighting the principles and mechanisms used to provide equal opportunities to employees across all gender and age groups and prevent discrimination in management decision-making. It provides information on ensuring respect for employees’ rights, the collective bargaining agreement, the Company’s methods of informing employees and contractors of its obligations, and relevant requirements set for its business partners. According to the document, Rostelecom develops procedures and training, monitors and assesses progress, and creates feedback channels. The Report includes information on the Company’s nationwide project for bridging the digital divide, which enables people to access high-quality digital services wherever they may live.

PRESERVATION of environment. The document discloses the Company’s environmental impact indicators and their changes over a few years. It describes how the implementation of the Company’s Environmental Policy aimed at mitigating its environmental impact. The Report provides information on environmental risk management and environmental training of managers and employees. It also discloses data on the Company’s environmental protection investments and outlines the key environmental projects undertaken in 2018. PJSC Rostelecom’s environmental management system is reported to have successfully passed an external certification audit for compliance with GOST 20000-82. Another topic discussed by the Report is environmental operational efficiency and the environmental performance metrics, including the Company’s performance in terms of energy efficiency. The Report also presents information on the environmental protection initiatives and projects undertaken by the Company in 2018, including the implementation of Rostelecom’s Energy Policy, which includes measures to enhance public reporting and its commitment to transparency and openness.

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, Rostelecom cooperates with federal and regional authorities and non-commercial organisations. Data on Rostelecom’s costs related to these topics 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 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 to these projects is also disclosed. Yet another topic covered by the Report is the Company’s volunteer activities.

The Report is prepared in compliance with international standards – the GRI Guidelines and the AWDG Stakeholder Engagement Standard (SE) – which makes the information provided therein easily comparable to the one contained in reports compiled by other companies. The Company’s strategy and performance is presented in the context of the Company’s national, regional, and global efforts in different industries and sectors.

PJC 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.
The Report also describes Rostelecom's engagement with business sustainability development. It recommends including significant details on the economic aspect of sustainable development. It recommends including significant information on the topics into future reports, providing links to sources that contain more information on the topic (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.

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.

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.

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 RUSC Rostelecom's Sustainability Report 2018 has passed the public assurance process.

The RSPP Board on Non-Financial Reporting.

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 RUSC 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 RUSC Rostelecom's structure in line with its IFRS financial statements to make it more transparent and straightforward.

Appendix 8. Feedback Questionnaire

Dear reader!

You have just read RUSC Rostelecom's Sustainability Report 2018. We strive to maintain 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  
- 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:
Appendices

<table>
<thead>
<tr>
<th>General impression</th>
<th>excellent</th>
<th>good</th>
<th>satisfactory</th>
<th>unsatisfactory</th>
<th>not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completeness of the information you are interested in</td>
<td>excellent</td>
<td>good</td>
<td>satisfactory</td>
<td>unsatisfactory</td>
<td>not sure</td>
</tr>
<tr>
<td>Accuracy and objectivity of information</td>
<td>excellent</td>
<td>good</td>
<td>satisfactory</td>
<td>unsatisfactory</td>
<td>not sure</td>
</tr>
<tr>
<td>Clarity and ease of understanding of the information</td>
<td>excellent</td>
<td>good</td>
<td>satisfactory</td>
<td>unsatisfactory</td>
<td>not sure</td>
</tr>
<tr>
<td>Structure and convenience of information search</td>
<td>excellent</td>
<td>good</td>
<td>satisfactory</td>
<td>unsatisfactory</td>
<td>not sure</td>
</tr>
<tr>
<td>Layout and design</td>
<td>excellent</td>
<td>good</td>
<td>satisfactory</td>
<td>unsatisfactory</td>
<td>not sure</td>
</tr>
</tbody>
</table>

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
