Condensed
Annual Report 2017

Open Joint Stock Company
Russian Railways
Agenda

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Open Joint Stock Company Russian Railways is Russia’s largest railway company engaged in owning and building public railway infrastructure. The Company ranks among the world’s leading railway carriers by freight and passenger transportation volumes and length of the railway infrastructure network.

Russian Railways provides a full range of services embracing freight operations, locomotive traction and infrastructure, rolling stock repairs, long-haul and suburban passenger transportation, container solutions, logistics, engineering, R&D and other services. The Russian Federation is the founder and sole shareholder of Russian Railways.

Russian Railways today

Owner of the world’s third longest railway network
The operational length of Russian Railways’ infrastructure network stands at 85.5 thousand km, more than twice the length of the equator. Russian Railways is the second largest company globally by length of electrified lines (43.76 thousand km). It’s the world’s third longest railway network after the USA and China.

Unique and highly diversified group
Russian Railways owns railway infrastructure and rolling stock to transport freight and passengers, provide transportation, logistics, terminal, warehousing, and freight forwarding services. The Company carries over 1.2 billion tonnes of freight and over 1.1 billion of passengers annually.

Driving force of Russia’s business community
With presence in 80 out of Russia’s 85 regions, the Company provides almost nationwide coverage to ensure reliable and safe transportation of natural resources, equipment, and other critical supplies for national industries.

Prominent player in global railway market
The Company has partnerships with China, South Korea, Kazakhstan, Poland, Germany and other nations to develop transit routes through Russia. Russian Railways is also building and upgrading railway infrastructure in Serbia and a number of other countries.

Unprecedented expertise in large-scale projects
The Russian Railways 2017 investment programme exceeded RUB 470 bn, or ca. 3% of the total capex of Russian businesses.

Major taxpayer
In 2017, the Company paid RUB 310.9 bn in taxes and insurance contributions.

No. 1 globally by energy efficiency of freight services
The Company is the global leader in terms of efficiency of freight transportation.

Russia’s largest employer
As at the end of 2017, Russian Railways had a headcount of 755 thousand people. The Company employs almost 1% of Russia’s total workforce.
Operating highlights

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Unit of measurement</th>
<th>2016/2017</th>
<th>Change</th>
</tr>
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<tr>
<td>Handling</td>
<td>mt</td>
<td>2017</td>
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<td></td>
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<td>2016</td>
<td>1,238.3</td>
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<tr>
<td>Average service speed of freight train⁵</td>
<td>km/h</td>
<td>2017</td>
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<td></td>
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<td>2016</td>
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<td>Operating speed of Freight train</td>
<td>km/h</td>
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<td></td>
<td></td>
<td>2016</td>
<td>66.7</td>
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<tr>
<td>Average daily performance of freight locomotive</td>
<td>thousand gross tkm</td>
<td>2017</td>
<td>3,135.0</td>
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<td></td>
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<tr>
<td>Freight car turnaround</td>
<td>day</td>
<td>2017</td>
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<tr>
<td>Average weight of freight train</td>
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<td>2017</td>
<td>6,063.0</td>
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<tr>
<td></td>
<td></td>
<td>2016</td>
<td>5,764.0</td>
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<tr>
<td>Loaded freight car delivery speed</td>
<td>km/day</td>
<td>2017</td>
<td>367</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2016</td>
<td>361</td>
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<tr>
<td>Growth in labour productivity</td>
<td>%</td>
<td>2017</td>
<td>189.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2016</td>
<td>185.4</td>
</tr>
</tbody>
</table>

Notes:
- Loading refers to "loaded freight turnover".
- Operating refers to "empty freight turnover".
- Based on the DO-10VTs reporting form.

1 Hereinafter referred to as "loaded freight turnover".
2 Hereinafter referred to as "empty freight turnover".
3 Based on the DO-10VTs reporting form.

2017 performance

- **Loaded freight turnover**: RUB 479.5 bn (+27.4% y-o-y)
- **The number of transported passengers at eight-year high**: 1,117.9 million passengers (+7.8% y-o-y)
- **Operating highlights**:
  - Average service speed of freight train: 3,9 km/h (+0.3 100.7)
  - Operating speed of freight train: 3,0 km/h (+0.3 100.6)
  - Average daily performance of freight locomotive: 2,491.9 thousand gross tkm (+38.0 101.8)
  - Freight car turnaround: 0.68 day (+0.6 104.5)
  - Average weight of freight train: 93.5 t (+35.0 100.9)
  - Loaded freight car delivery speed: 101.4 km/day (+1.0 100.3)
  - Growth in labour productivity: 109.2 % (+3.8 pp)

Concise Annual Report 2017
By the end of the 19th century, Russia had a railway construction and management system in place. In 1893, a general freight transportation fare was introduced, followed by a common passenger fare in 1894. These developments helped improve passenger and freight turnover. Also, railway network expansion would be impossible without a strong domestic industry for locomotive and railcar construction and rail rolling mills.

1898
Steam locomotive

2017
Modern freight train

3,277 m poods, equal to 52 mt of freight carried in one year

1,384 mt of freight carried in 2017

Source: Statistical digest “Transportation of Freight by Railway – 1901 Results”
30 October 1837 is the official opening date of the Tsarskoye Selo Railway in St Petersburg. It was a short line running for a little longer than 26 km with only one 8-carriage train hauled by a steam locomotive. However short, this line became an important landmark in the history of transport as an indication of the overall feasibility of construction and year-round operation of railways in the Russian climate.

This was the first government-owned main line railway in Russia and the first step in building a nationwide railway network.

In 2009, regular high-speed service was launched between Moscow and St Petersburg. Today, the route has an average of 14 pairs of high-speed trains each day.

St Petersburg–Moscow

Launch of service on the Nikolaev (currently October) Railway connecting St Petersburg and Moscow.

1851

4 trains a day

Passenger train with steam locomotive

This was the first government-owned main line railway in Russia and the first step in building a nationwide railway network.

2017

64–84 trains a day

Sapsan high-speed train

650 km

main line length

3 h 34 min

travel time
The Trans-Siberian Railway is a network of railways connecting Moscow with the largest industrial cities in Russia's East Siberia and Far East regions. Its construction started in 1891, with regular service launched in July 1903.

Freight train

Moscow–Vladivostok

In 2014, the Government of the Russian Federation approved a project to upgrade the Baikal-Amur and Trans-Siberian Railways. The total investment in the project will reach RUB 562.4 bn by 2019, including RUB 102.3 bn allocated directly from the government budget, RUB 150 bn sourced from the National Wealth Fund and another RUB 310.1 bn contributed by Russian Railways.

Express train

9,237 km main line length

6 days travel time

Company profile

Messages from Management

Strategic report

Performance overview

Sustainable development

Corporate governance

180 years of Russian railways' history
MESSAGES FROM MANAGEMENT

Board of Directors Chairman Letter

Dear Partners and Colleagues,

In 2017, Russian Railways delivered against its key objectives, meeting financial and operating targets by demonstrating considerably higher freight turnover, and transit and container transportation. The Company’s revenue exceeded RUB 1.69 trillion, with a record-high volume of handling operations of over 1,260 mt. Passenger transportation volumes also saw a strong rise as more than 1.1 bn passengers travelled with Russian Railways during the year.

The Russian Railways’ 2017 investment programme exceeded RUB 470 bn. In line with the approved schedules, the Company implemented a number of large-scale projects, including development of railway infrastructure of the Moscow Transport Hub, expansion of the Baikal-Amur and Trans-Siberian main lines, improvement of infrastructure serving the ports on the Azov and Black Seas and the North-Western basin, and launch of train service on the new Prokhorovka–Zhuravka–Chertkovo–Bataysk line.

The reliability and consistent quality proven by a variety of projects under our belt are the cornerstone of success and competitive power of Russian Railways domestically and globally. One of the drivers behind the Company’s solid performance has been effective coordination among the Board of Directors, its committees, and executive management.

The 2017 results came amid rapid changes in technologies, products and services that railways across Russia increasingly benefit from.

The new services offered to shippers and passengers, coupled with development and launch of new technologies, take railway services to a whole new level.

These tasks need to be given priority in the draft Long-Term Development Programme of Russian Railways until 2025.

In line with the Company’s development goals outlined above, at the end of 2017, the Government of the Russian Federation approved its vision of long-term tariff regulation for railway services.

The Company’s employees also remain a top priority. The railway industry provides jobs to over one million people. Today’s generation of railway professionals stay true to the great traditions of the industry, above all the ability to think big and bring the most powerful ideas to life.

This is the only way to create a solid platform for even more ambitious projects going forward.

Arkady Dvorkovich
Chairman of the Russian Railways
Board of Directors

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MESSAGES FROM MANAGEMENT

Management Board Chairman Letter

Dear Partners and Colleagues,

The year of 2017 was a special year for Russian Railways. 180 years ago, in 1837, Russia’s first railway connecting St Petersburг and Tsarskoye Selo became operational.

Throughout its history, the industry has been consistently accumulating the latest engineering solutions, innovative management and operational approaches, and professional competencies. Dedication to servicing the country and its people is what makes railway professionals stand out. These fine traditions carry on today, with Russian Railways ranking among the world’s leaders by key operational metrics, including traffic density, transportation volume, service speed, energy efficiency, and environmental performance.

The commitment and performance of many thousands of the Company’s employees helped deliver a successful year of 2017 and solid financial results. Russian Railways generated close to RUB 1.7 trillion in income, and net profit under the Russian Accounting Standards reached RUB 17.5 bn, a 2.7x increase y-o-y.

In response to passenger demand, we increased the advance booking horizon for our tickets. Tickets can now be purchased 90 days ahead of the travel date, which gives passengers more time to plan their journeys and vacations.

We saw a marked rise in demand for our day and high-speed trains, with Sapsan, Allegro, Strizh, and Lastochka all increasingly popular. We continue to make consistent efforts to provide multimodal solutions, launching over 70 routes with combined train & bus service.

Digital technologies are rapidly becoming an integral part of the railway experience. WiFi in trains and at train stations, mobile apps, new methods of payment, e-tickets, multimedia portals in trains, and reward programmes are all a reality today.

One of the major contributors to our strong performance were large-scale initiatives to upgrade the infrastructure. The Russian Railways 2017 investment programme exceeded RUB 470 bn, and the Company was fully on track with its priority projects to improve railway infrastructure that serve the ports of the Azov and Black Sea basin, develop the Moscow Transport Hub, and upgrade the Baikal–Amur and Trans-Siberian main lines.

The service on the new Zhuravka–Millerovo line was launched one year ahead of schedule. These initiatives are all part of our work to enhance Russia’s transportation backbone as an impetus for the country’s development going forward.

The resolutions made by the Government to introduce a 2% target investment surcharge to clear infrastructure restrictions enabled us to expand our infrastructure overhaul programme by 25%. The surcharge was secured by our commitment to improve the key technological metrics – and this is precisely what we did.

Throughout 2017, we remained focused on sustainable cost management while also improving efficiency across the board. As a result, we managed to cut costs by RUB 67 bn and curb the growth in transportation costs at just 0.9%.

We are proud to report our achievements in labour productivity, which improved by more than 5% in 2017 and by a stunning 45% over the last six years. In 2017, we also introduced two rounds of salary rises for our employees in line with the inflation rate. The Company fully honoured its commitments under the Collective Bargaining Agreement, one of the best ones in Russia.

2017 was a Year of the Environment in Russia, and as the largest infrastructure company, we were actively involved, allocating more than RUB 5 bn to the preservation and restoration of the environment. Our efforts received strong public recognition: Russian Railways won the 13th All-Russia Environmental Leader Award 2017 in the Environmental Responsibility category.

Oleg Belozerov
CEO and Chairman of the Management Board

Russian Railways

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Oleg Belozerov
CEO and Chairman of the Management Board

Russian Railways
STRATEGIC REPORT

Expanding horizons

The Company is working on large-scale railway projects of national significance aiming to boost the Russian economy, eliminate infrastructure constraints, and improve transportation safety, speed and reliability.

The expansion and upgrade of railway infrastructure is indispensable for the balanced economic development of a nation, establishment of the domestic production base, unleashing the industrial potential, promotion of international economic relations, and the country’s territorial integrity and security. Implementation of the investment programme is one of the key tools to deliver on the Company’s strategic goals and objectives.

The Company’s strategic investments will primarily target railway development projects of national significance. In the long run, an increase in the freight volumes and expansion of the cargo base are impossible without comprehensive solutions to enhance the throughput and carrying capacity of the railway infrastructure.

In the near term, Russian Railways’ top priority will be to ensure accelerated development of the railway infrastructure. High-speed and ultra high-speed rail transportation also needs to be developed at a rapid pace, as by 2025 the annual passenger transportation is expected to come close to 25 million people.

In addition to the railway infrastructure, the Company will focus its investment efforts on the replacement of fixed assets, with track renewal, upgrade of automation, telematics and power supply equipment, and other work slated for completion.

In 2017, the Company presented its long-term development programme until 2025. Total railway investments under this programme are set to exceed RUB 7.5 trillion by 2025. Russian Railways’ mid-term investment programme for 2018–2020 is viewed as the first stage of the broader investment push under the long-term development programme.

In 2018, Russian Railways’ investments will total RUB 549.6 bn, including RUB 211.2 bn (approximately 38% of the total investment programme) allocated to fund ten projects launched at the instruction of the President and the Government of the Russian Federation.

In the first half of 2018, Russian Railways will fine-tune its investment projects taking into account the new goals set by the Russian President in his Address to the Federal Assembly on 1 March 2018.

An additional RUB 99.6 bn is earmarked for safety-related projects in 2018 to ensure life safety (including transportation and fire safety, upgrade of civil defence facilities), guarantee reliability of processes and operations, enhance traffic safety and maintain the existing transportation capacities.

The total amount allocated in 2018 under Russian Railways’ investment programme to deal with infrastructure bottlenecks will equal RUB 108.3 bn.

The Company is planning to roll out projects designed to enhance transportation accessibility in Russia, including by developing suburban passenger railway infrastructure and renovating train stations from the long-haul network. The funds earmarked for such projects in 2018 total RUB 8.6 bn.

The Company’s initiatives to upgrade rolling stock seek to reduce wear and tear, increase performance and boost safety of the rolling stock, with RUB 102.3 bn allocated for these purposes in 2018. Further RUB 8.7 bn will be provided to finance other projects, including those focusing on resource-saving technologies and social improvements.

RUB 549.6 bn
allocated under Russian Railways’ Investment Programme in 2018
High-potential projects

- Upgrade of the Baikal-Amur and Trans-Siberian Railways
- Development and renovation of the railway infrastructure serving ports of the Azov and Black Seas
- Development of the Moscow Transport Hub (MTH)
- Upgrade of the railway infrastructure serving ports of the North-Western basin
- Construction of the Moscow-Kazan High-Speed Railway
- Development of the Krasnoyarsk Railway’s Mezhdurechensk–Tayshet section
- Development of diametrical intracity rail routes within the MTH
- Development of the Northern Latitudinal Railway
- Construction of a bypass at the Saratov Transport Hub
- Construction of the Selikhin–Nysh railway line with a passage across the Nevelsky Strait
- Electrification of the Rtishchevo–Kochetovka section
- Electrification of the Ozherelye–Uzlovaya–Yelets section
- Development of the Perm Railway Hub and the construction of a river crossing
- Development of the Perm–Solikamsk connection

For more details see the annual report website at http://ar2017.rzd.ru/en
Mission
The mission of the Russian Railways Group is to develop an efficient transportation business that will be competitive on the Russian and international markets and focus on effectively meeting the Group’s objectives as a national freight and passenger carrier and owner of the public railway infrastructure.

Development Strategy until 2030
The Russian Railways Group’s 2030 Development Strategy (“Russian Railways’ Strategy”) sets out the Group’s goals and objectives, defines its key priorities and describes long-term development projects. The Strategy was approved by the Russian Railways’ Board of Directors in December 2013. Accomplishment of the Group’s mission will rely on the achievement of the 2030 strategic goals in five focus areas.

Transportation and logistics services
The strategic priority for development in this focus area is to build a diversified product portfolio shifting the focus from transportation services to comprehensive door-to-door solutions, consistent expansion of the offering to include 2PL, 3PL and 4PL services, and creation of global logistics chains.

- Maintain leadership in Europe’s rail freight transportation, enhance the efficiency of transport to customers, and grow freight shipments by 500–800 mt by 2030
- Become one of Europe’s top five companies in terms of logistics volumes and increase the share of transportation and logistics services in the Group’s portfolio to 25%
- Improve customer satisfaction by enhancing the quality of services while also maintaining competitive transportation costs
- Provide high-quality services for the global supply chains of major Russian and international customers and expand the transportation and logistics business in Eurasia

Passenger transportation
The strategic priorities for development in this focus area are to streamline the route network and train schedules, increase speeds, use cutting-edge rolling stock, improve the product offering, digitalise customer services and business processes, and enhance the quality of traditional on-train and other related services. Another key objective is to expand the operating domain of high-speed and ultra high-speed transportation between the country’s largest metropolitan areas leveraging efficient state-of-the-art solutions.

- Maintain the existing share in Russia’s overall passenger turnover, increase passenger turnover by 1.8–2.2 times on suburban routes and by 1.3–1.7 times on long-haul and interregional routes by 2030
- Develop high-speed and ultra high-speed transportation and increase the share of passengers using high-speed services to 20% of total passenger turnover by 2030

Railway transportation and infrastructure
In addition to the railway infrastructure, this focus area covers transportation management, operating and traction maintenance units. The Company’s strategic priorities in developing infrastructure are defined by its natural monopoly status and include cost cutting, unlocking of the potential to create new transportation and logistics products, upgrade of the existing network, and construction of additional profitable main tracks to meet the growing transportation needs. The need to maintain service availability to the general public, comply with government regulations on natural monopolies and provide equal opportunities to consumers distinguishes this focus area from the others.

- Maintain global leadership in efficiency, safety and the quality of infrastructure operation
- Ensure consistent asset upgrade through cutting-edge technologies and solutions relying on the efficient life cycle cost management and availability/reliability of fixed assets

International operations
The strategic priorities in this focus area are to consolidate and enhance the Group’s presence in the international railway engineering and infrastructure construction market, and set the stage for expansion of the Group’s other businesses in the markets where it operates as a contractor for the construction of infrastructure facilities. Growth in this area is expected to rely on unique competencies in the design and construction of railway facilities, development of sophisticated infrastructure and transportation management systems, transportation management, and railway economics and finances.

- Become one of the leading global infrastructure construction companies
- Build a long-term order portfolio and ensure implementation excellence

Social policy
Russian Railways’ employees are the Company’s key asset instrumental in achieving its long-term growth objectives and securing a strong competitive edge. Development in this focus area builds on the unbiased assessment of added value created through employee support initiatives and efficient management of resources to provide market services. This focus area also covers social and public policies of the Group stretching beyond the workforce matters.

- Make it to the top five of Russia’s most attractive employers
- Engage the top talent by offering competitive salaries, better working conditions and best-in-class social benefits
Long-Term Development Programme until 2025

The Long-Term Development Programme of the Russian Railways Group and its subsidiaries and affiliates running until 2020 was drafted as required under Directives of the Government of the Russian Federation issued for the official representatives of the Russian Federation to provide guidance on participation in meetings of the boards of directors (supervisory boards) of joint-stock companies included in a special list approved by the Government, with Russian Railways’ Board of Directors giving the Programme a preliminary go-ahead in October 2014. The Programme was then revised in accordance with Plan No. 747 for Interaction between the Government of the Russian Federation Expert Council and Russian Railways dated 01 June 2017 and new directives of the Russian Government.

On 30 June 2014, Russian Railways’ Board of Directors approved (Minutes No. 15) and made part of the incentive system for the Company’s Management Board.

Russian Railways’ KPI targets for 2017 were approved by the Company’s Board of Directors on 14 November 2017 (Minutes No. 12).

Key performance indicators

On 30 June 2014, Russian Railways’ KPIs were expanded to include such items as Reduction of Operating Costs (Expenses) and Russian Railways Group’s ROIC (Return on Invested Capital) for Unregulated Types of Activities.

Russian Railways’ KPIs were approved by the Company’s Board of Directors on 30 June 2014 (Minutes No. 15) and were made part of the incentive system for the Company’s Management Board.

Russian Railways’ KPI targets for 2017 were approved by the Company’s Board of Directors on 14 November 2017 (Minutes No. 12).

Development prospects in 2018

The Company’s development prospects were assessed taking into account the following key objectives for 2018:

1. Ensure strict discipline in adhering to the Company’s financial plan and investment programme based on Russian Railways’ Long-Term Development Programme until 2025, including by:
   - maximising the cargo volumes to improve the freight structure (in terms of transported items) and unlock the network’s transport potential;
   - launching comprehensive transportation products and improving the efficiency of terminal, warehousing, transportation, logistics, and freight forwarding operations;
   - improving the efficiency and increasing passenger transportation and providing infrastructure operation;
   - boosting performance in the branches and subsidiaries of Russian Railways in line with the Group’s strategic objectives;
   - optimising the use of traction resources, including by streamlining the locomotive fleet structure, decreasing the share of nonoperable locomotives and improving the technical availability factor;
   - ensuring sustainable use of infrastructure through healthy capacity utilisation and balanced trackwork schedules;
   - developing operating domain technologies to manage transportation and automation systems to control traffic;
   - improving procurement efficiency and enhancing supplier relations;
   - improving the property management efficiency.

2. Meet targets for 2018: projected handling of 1,299.2 mt (+3% against the target) and freight turnover of 3,302.1 bn tkm (+3.9% y-o-y).

3. Increase labour productivity by 5% through streamlined labour organisation, alignment of average headcount with the actual workload, and implementation of organisational, technical and process improvement initiatives.

4. Develop key approaches to the new tariff system and work with the federal executive authorities to push through Russian Railways’ proposals on tariff regulation improvements.

5. Streamline interaction with other transport market players. Increase the share of scheduled freight shipments, improve the reliability and speed of loaded freight railcar deliveries, and develop end-to-end services with competitive prices and quality.

6. Develop and implement comprehensive marketing solutions to offer new passenger transportation and railway station services and ensure uninterrupted transport availability, including during 2018 FIFA World Cup™.

7. Develop and launch digital services as part of the Dijital Railway project to improve operating and financial efficiency.

8. Maintain a dialogue with the federal executive authorities on implementation of critical infrastructure projects, organisation of suburban passenger services, and reimbursement of lost passenger transportation and infrastructure operation income.

9. Ensure traffic safety and hazard-free operation of Russian Railways’ infrastructure facilities and rolling stock by applying the principles of continuous improvements and risk management in railway transportation processes.

10. Pursue a balanced social and HR policy and launch consistent awareness campaigns to improve staff performance and enhance employee engagement.

11. Strengthen and expand presence in the Eurasian transport market and roll out initiatives aimed at boosting the number of engineering and construction projects abroad.

12. Launch initiatives facilitating the creation of an integrated network of high-speed and ultra high-speed railway transport in Russia.
Business model

GOVERNMENT

Business lines

- Freight transportation
  - 1,938 million
  - 3,177 billion
  - 164 thousand

- Passenger transportation
  - 1,118 million
  - 2,399 thousand
  - 15 thousand

- Logistics services
  - Subsidiaries of the Federal Freight Company (railway freight transportation)
  - Subsidiaries of the Federal Passenger Company (long-haul routes)

- Other businesses
  - RBC-1, RBC-2, RBC-3 (railcar repair companies)

- Subsidiaries
  - GEFCO (Europe’s top-5 logistics operator)
  - UTLC (transit railway container services)
  - RZD Logistics (the largest multimodal logistics operator in the CIS and the Baltics)

- Market-based pricing
  - Use of tariff corridor in freight transportation, freight turnover
  - Use of tariff corridor in passenger transportation

- Staff
  - 911 thousand employees

- Innovations

PRICES

- Regulated tariffs
  - Freight transportation (other than transit through Russia)
  - III and IV class long-haul passenger transportation

- Market-based pricing
  - Use of tariff corridor in freight transportation, freight turnover
  - Use of tariff corridor in passenger transportation

- Staff
  - 911 thousand employees

INVESTMENT ACTIVITIES

- Financing of capital (through Government allocated resources, the Company’s own funds and borrowings), including
  - RUB 318 bn to purchase locomotives
  - RUB 8 bn

OPERATING ACTIVITIES

- Payroll expenses
  - Including salaries, pension plan payments, contributions under the Collective Bargaining Agreement, loan expenses, bonuses, voluntary health insurance payments
  - RUB 555 bn

- Tax expenses
  - Including personal income tax, VAT, insurance contributions, corporate income tax and other
  - RUB 352 bn

- Operating expenses
  - RUB 244 bn

FINANCIAL ACTIVITIES

- Debt service (interest paid)
  - RUB 77 bn

- Dividend payouts (with the Russian Federation as the beneficiary)
  - RUB 5 bn

VALUE CREATION

- The Group is implementing large-scale railway development projects of national significance
  - For more details see the Expansion Horizons and Investment Activities sections

- Russian Railways participates in the Digital Economy of the Russian Federation programme
  - For more details see the Innovation Driven Development section

- The Group is one of Russia’s major taxpayers
  - For more details see the HR Management section

- Russian Railways develops and maintains Russian railway infrastructure
  - For more details see the Railway Transportation and Infrastructure section

- The Company provides comprehensive freight transportation services leveraging the advanced 2PL, 3PL and 4PL technologies
  - For more details see the Analysis of Operating Results section

- Russian Railways maintains leadership in energy efficiency among global railway companies
  - For more details see the Sustainable Development section

- The Group is implementing an Energy Efficiency Programme seeking to reduce the consumption of energy
  - For more details see the Sustainable Development section

- The Company ensures uninterrupted and efficient operation of its facilities offering high-quality services across its consumer base
  - For more details see the Railway Transportation and Infrastructure section

- The Company is a responsible borrower and bond issuer
  - For more details see the Securities section

- The Group’s dividend policy seeks to protect the shareholder rights as prescribed by the applicable laws of the Russian Federation
  - For more details see the Securities section
PERFORMANCE OVERVIEW

Market overview
Russian economy in 2017

In 2017, the economic situation in Russia improved. The country's GDP grew by 1.5% following a two-year decline (-0.2% in 2016 and -2.3% in 2015). The return to growth was driven by increasing oil prices and quick expansion of global economy and trade. It stands to note that the Russian economy grew having due to a number of challenges, including international sanctions, modest public spending and persistently high real interest rates.

Strong domestic investment and consumer demand was an important driver behind the economic recovery. In 2017, capital investments in Russia added 4.4% in annual terms (compared to a 0.2% decline in 2016).

External demand – a key factor for the Russian economy – began to play an even more crucial role. In 2017, Russian exports grew by 25.3% after losing 17.4% in 2016 (largely due to the price environment in global commodity markets), with certain export items also enjoying an increase in terms of volumes.

Freight turnover

According to the Russian Federal State Statistics Service, in 2017, freight turnover in Russia increased by 5.4% y-o-y to 5,479.3 bn tkm.

Growth was reported across transport modes, the sole exception being inland waterways (-4%). Railway freight turnover added 6.4%, while air transport soared the highest increase of 15.4%.

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For reference: share of railway transport excluding pipelines 86.5 87.1

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In 2017, Russia's passenger turnover increased by 9% y-o-y to 499.1 bn pkm1, including:

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Transport industry in Russia

In 2017, the Russian transport industry was riding the wave of national economic revival and improvements in global markets, both of which contributed to the rise in domestic and external demand for transportation services. Freight transportation volumes showed y-o-y growth across transport modes (excluding sea and inland waterways) bespeaking competition-driven structural changes.

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In 2017, international freight transportation volumes increased as Russia started to reclaim its position in global trade. The

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Russian Railways

Concise Annual Report 2017

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Analysis of operating results

Transportation and logistics
This business line focuses on transportation and infrastructure operation, including operation of rolling stock, creation of logistics chains with varying degrees of complexity (i.e., those involving several types of transport), contract logistics, warehousing, and transit freight shipments via international transport corridors.

KEY ACHIEVEMENTS IN 2017

- 1,261.3 mt of freight (or an average of 3,455.7 kt per day) were handled in 2017, up 3.2% y-o-y. The strongest growth was in shipments of timber (up 1.1 mt, or 2.0%), hard coal (up 29.9 mt, or 9.1%) and fertilizers (up 3.6 mt, or 6.8%).
- The average haul for loaded freight cars increased by 36 km, or 2.0% y-o-y, to 1,800 km.
- The services launched by Russian Railways – Freight Express, RZD Express and Smart Logistics (container-based transportation of cargoes to and customers using low-capacity road vehicles) – received positive feedback from shippers.
- Launch of the Grain Express service enabling grain-loaded trains to proceed to their final destination with no yard operations in transit helped decrease railcar turnaround by an average of 4.5 days.
- On 1 April 2017, the Freight Transportation electronic trading platform was launched.
- In 2017, GEFCO launched the first container train service between Wuhan (China) and Dourges (France).
- UTLC launched a new transit container service along the China-Europe-China axis leveraging the capacities of the Kaliningrad Railway.
- The services launched by Russian Railways – Freight Express, RZD Express and Smart Logistics (container-based transportation of cargoes to and customers using low-capacity road vehicles) – received positive feedback from shippers.

Freight transportation using Russian Railways’ infrastructure

<table>
<thead>
<tr>
<th>Key freight transportation results</th>
<th>Items</th>
<th>Measurement unit</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>Value % vs 2016</th>
<th>% vs 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handling</td>
<td>mt</td>
<td>1,236.8</td>
<td>1,226.9</td>
<td>1,214.5</td>
<td>1,222.3</td>
<td>1,261.3</td>
<td>+3.2%</td>
<td>+2.0%</td>
<td></td>
</tr>
<tr>
<td>daily average</td>
<td>kt</td>
<td>3,388.5</td>
<td>3,361.5</td>
<td>3,327.3</td>
<td>3,339.5</td>
<td>3,455.7</td>
<td>+3.5%</td>
<td>+2.0%</td>
<td></td>
</tr>
<tr>
<td>Total freight turnover, including</td>
<td>bn tkm</td>
<td>2,813.1</td>
<td>2,954.6</td>
<td>2,954.9</td>
<td>2,997.8</td>
<td>3,176.7</td>
<td>+6.0%</td>
<td>+12.9%</td>
<td></td>
</tr>
<tr>
<td>loaded freight turnover</td>
<td>bn tkm</td>
<td>2,196.2</td>
<td>2,238.6</td>
<td>2,308.4</td>
<td>2,342.6</td>
<td>2,491.9</td>
<td>+6.4%</td>
<td>+13.5%</td>
<td></td>
</tr>
<tr>
<td>empty freight turnover</td>
<td>bn tkm</td>
<td>616.9</td>
<td>655.0</td>
<td>650.1</td>
<td>655.2</td>
<td>684.8</td>
<td>+4.5%</td>
<td>+11.0%</td>
<td></td>
</tr>
<tr>
<td>Share of shipments delivered within required (contractual) period</td>
<td>%</td>
<td>77.5</td>
<td>87.1</td>
<td>92.9</td>
<td>96.1</td>
<td>96.7</td>
<td>+0.6 pp</td>
<td>+19.2 pp</td>
<td></td>
</tr>
<tr>
<td>Average loaded freight car delivery speed</td>
<td>km/day</td>
<td>429</td>
<td>327</td>
<td>372</td>
<td>380.5</td>
<td>386.4</td>
<td>+1.6%</td>
<td>+55.2%</td>
<td></td>
</tr>
</tbody>
</table>

Given its close ties with major manufacturers, Russian Railways’ performance reflects general situation in the Russian economy. According to the Russian Federal State Statistics Service, the Industrial Production Index closed the year at 1.0%. 1,261.3 mt of freight, or an average of 3,455.7 kt per day, were handled by Russian Railways (up 3.2% vs 2016). The growth came primarily from increases in shipments of hard coal, chemical and mineral fertilizers and grain.

Handling

<table>
<thead>
<tr>
<th>Handling volumes in 2013–2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Items</td>
</tr>
<tr>
<td>1,236.8</td>
</tr>
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</table>

Handling by transportation type

<table>
<thead>
<tr>
<th>Items</th>
<th>2016</th>
<th>2017</th>
<th>Change in volume, %</th>
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<tr>
<td>mt</td>
<td>share, %</td>
<td>mt</td>
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</tr>
<tr>
<td>Handling</td>
<td>1,223.3</td>
<td>100.0</td>
<td>1,241.3</td>
</tr>
<tr>
<td>Domestic services</td>
<td>785.6</td>
<td>64.3</td>
<td>791.5</td>
</tr>
<tr>
<td>Export, including</td>
<td>428.3</td>
<td>35.0</td>
<td>460.0</td>
</tr>
<tr>
<td>via ports</td>
<td>273.3</td>
<td>22.4</td>
<td>291.2</td>
</tr>
<tr>
<td>via border crossings</td>
<td>155.0</td>
<td>12.7</td>
<td>168.8</td>
</tr>
<tr>
<td>Import and transit</td>
<td>8.4</td>
<td>0.7</td>
<td>9.8</td>
</tr>
</tbody>
</table>

In 2017, growth was recorded across transportation types, with domestic and export handling volumes having increased by 0.8% (to 791.5 mt) and 7.4% (to 460.0 mt), respectively. As a result of strong growth in export shipments, the share of domestic services in handling volumes decreased from 64.3% to 62.8%, while the share of exports moved up from 35.0% to 36.5%. Shipments of hard coal, bulk oil, construction materials and ores made up the largest part of handling volumes, with their aggregate share amounting to 66.4%.
In 2017, handling volumes also showed growth across tariff classes. Class I, Class II and Class III freight shipments increased by 24.3 mt (3.3%), 11.0 mt (3.1%) and 3.8 mt (3.0%), respectively. The best performing Class I cargo types were hard coal (up 9.1%, or 29.9 mt), industrial commodities (up 4.3%, or 1.5 mt) and timber (up 2.5%, or 1.1 mt), while handling of construction cargoes reduced by 5.7%, or 8.1 mt. In Class II, significant increases were delivered by fertilisers (up 6.8%, or 3.6 mt), grain (up 16.4%, or 3.1 mt) and containerised cargoes (up 11.5%, or 2.9 mt). Ferrous metals led the pack in Class III (up 2.8%, or 2.0 mt).

Low-margin cargoes dominated the freight shipment structure with a share of 60.2% in 2017, while mid- and high-margin cargoes accounted for 29.3% and 10.4%, respectively.

In 2017, loaded freight turnover in the railway segment grew by 6.4% to 2,491.9 bn tkm. Total freight turnover (including the empty run of third-party cars) within Russian Railways' infrastructure increased by 6.0% y-o-y to 3,176.7 bn tkm, with empty turnover gaining 4.5% y-o-y to reach 684.8 bn tkm. Growing transportation volumes (primarily, coal shipments) were the main driver behind the rise in freight turnover. The 2.0% increase in the average haul also contributed to the positive result.

In 2017, loaded freight turnover reached 2,491.9 bn tkm, the highest level in Russia's modern history.

In terms of cargo types, coal's share grew the most – up 2.3 pp to 43.1%, while the share of oil and oil products dropped by 1.3 pp to 15.7% and that of mineral and construction cargoes decreased by 0.5 pp to settle at 8.3%.

The share of coal, oil and oil products, fertilisers, iron and construction cargoes, and other types of ore accounted for 43.1%, 16.7%, 6.4%, 6.0%, and 3.8%, respectively.

In terms of transportation types, domestic, export, import and transit lines registered increases of 2.4% (to 999.7 bn tkm), 8.0% (to 1,334.4 bn tkm), 18.6% (to 99.4 bn tkm) and 26.8% (to 58.3 bn tkm), respectively.

These changes further reduced the share of domestic shipments and increased the share of exports in overall loaded freight turnover. Over the past six years, the share of exports in freight turnover rose by 5.3 pp to come in at 53.6% in 2017, while the share of domestic shipments moved down to 40.1%.
### Performance of Russian Railways’ major transportation and logistics subsidiaries

**Federal Freight Company**

Federal Freight Company (FFC) is a network-wide operator of freight rail rolling stock. The company is a subsidiary of Russian Railways and one of the largest freight railway operators in Russia. FFC runs 15 branches and transport service agencies and has representative offices in Moscow and Kazakhstan.

In 2017, FFC maintained its leadership by:
- the share in freight turnover (15.5%);
- the average annual size of fleet under management (153,700 units);
- the share in the Russian railway fleet (14.2%).

**United Transport and Logistics Company**

United Transport and Logistics Company (UTLC) provides transit railway container services on the China / Southeast Asia – EU route operating within the 1,520 mm track gauge network.

In 2017, UTLC operated on 107.2 Mt of cargoes (vs 102.3 Mt in 2016, up 4.8%) as part of its core operations. Transit container volumes amounted to 175,750 TEU, up 74% y-o-y. By the end of 2017, UTLC operated on 51 regular routes as compared to 19 routes at the beginning of 2016. Overall, UTLC accounted for 84% of container volumes transported via the East-West transport corridor along the China-Europe-Asia axis.

**GEFCO**

GEFCO (France), Russian Railways’ Group’s logistics subsidiary, is a global provider of logistics solution services. Its operations cover over 150 countries making GEFCO one of the top 10 logistics operators in Europe.

In partnership with Russian Railways, GEFCO is implementing several projects to improve efficiency of the Group’s supply chains and use assets for joint activities. For example, in 2017, it transported polyester granulate from China to Gazprom via the East–West transport corridor along the China-Europe-Asia axis.

In 2017, the company’s revenue totalled RUB 13,902 bn (up 67% y-o-y), while its net profit from core operations grew by 108% to RUB 1,082 bn.

For more details see the company’s website at: http://ru.railfgk.ru

### Improving the quality of transportation services

The Group’s key priority in the freight transportation segment is to attract additional cargo volumes and expand the range of logistics products available to the customers. In order to deliver on these objectives, the Group launched three new services: Scheduled Freight Traffic, Freight Express and Grain Express.

In 2017, the EAEU member states made further amendments to the effective customs laws, including those regulating customs administration and controls and railway freight transportation procedures. The Group’s involvement in this legislative work will help protect Russian Railways’ interests while also making its services more attractive for the forwarders, shippers and consignees.

Creation of the Freight Transportation electronic trading platform (FT ETP) came as a landmark event of 2017, as it helped integrate transportation, rolling stock supply, terminal, warehousing and logistics services of Russian Railways’ subsidiaries into a single marketplace and increase the number of SME customers.

### FT ETP progress in 2017

Key achievements of 2017:
- FT ETP Service Terms approved;
- 1,851 users registered;
- nine operators added (FFC, NefteTransService, Rusagrotrans, E.S.A.Trans, UniTrans, UTLC, UTLC UniTrans, TED-O, Gazpromtrans and RefService);
- 9,138 orders registered;
- RUB 2.86 bn received in order payments.

In 2018, the FT ETP will see further improvements as regards approval of orders for exports through sea ports, registration and payment of orders for transit or export services by the largest freight forwarders of the bordering countries, and trading in bids to supply rolling stock for certain routes.

### Terminal, warehousing and freight forwarding services

In 2017, the Central Directorate for Management of the Terminal G Warehouse Complex (Russian Railways’ subsidiary) handled 107.2 Mt of cargoes (up 102.3 Mt in 2016, up 4.8%) as part of its core operations.

At Kantemirovka and Rossosh stations, 329.7 kt of freight traffic, Freight Express and Grain Express.

At Dzerzhinskaya-Novaya station, transshipment of coal products from China axis was serviced at the Chernyakhovsk freight yard. At Darwin, 329.7 kt of freight have been handled at the station.

In 2017, Russian Railways sought to arrange the delivery of fish products from the Far East to the European part of Russia and develop the infrastructure required for refrigerator trains to run between Vladivostok and Moscow. Container sites were upgraded at Artym-Primorsky I (Primorye Territory) and Kuntsevo II (Moscow) stations.

The Company was also running a programme to create a network of prefabricated warehouses and develop unit load handling competencies within the Group. In 2017, prefabricated warehouses with a total floor area of 14.4 thousand m² were installed at freight yards in St. Petersburg, Volgograd, Rostov-on-Don, Barnaul, Tамбов, Tomsk and Belgorod.
Focus areas for the Company’s cooperation with shippers in 2018 could include:
- a new technology to optimise empty runs and improve railcar performance;
- an updated methodology to estimate railcar turnarounds for nonpublic routes;
- planning horizon improvements for long-term contracts;
- upgrades of shippers’ industrial rail transport;
- enhanced dialogue between Russian Railways’ clients and service personnel;
- attractive conditions for shippers to encourage private investments in public railway infrastructure;
- shorter delivery times;
- a stable mutually beneficial long-term cooperation framework.

New hi-tech export products, such as shipments with fixed departure and arrival times, gained particular traction as they help shippers optimise their transportation expenses by cutting costs, avoiding fines and demurrage charges, reducing inventories at ports and production facilities, and boosting sales in external markets.

In 2017, Russian Railways became more transparent, open and accessible, while its customer focus grew sharper and was easier to grasp.

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Key achievements in 2017

- In 2017, passenger transportation volumes reached an eighth-year high of 1,117.9 million people (up 7.8% y-o-y), with both suburban and long-haul routes contributing to the growth.
- The volumes of suburban transportation expanded by 8.6% to 1,015.7 million people, while those in the long-haul segment increased by 0.8% to 102.2 million people.
- On 14 December 2017, the Moscow Central Circle (MCC) set a new record with over 430,000 people transported. In 2017, the MCC transported a total of 110.8 million passengers—a 4.1-fold increase compared to 2016 (27.16 million).
- For the second year running, the Company offered, at its own expense, special prices on tickets for children aged between 10 and 17. In 2017, 180 scheduled runs were made by “children’s” trains, with over 450,000 children transported in organised groups.
- Starting December 2017, long-haul tickets can be bought 90 days in advance (vs 60 days previously) to facilitate travel and holiday planning.
- The RZD Bonus loyalty programme attracted 36% more participants, increasing their number to 3 million people who made ca. 14.3 million travels. The 2017 income from banking and non-banking partners stood at RUB 103.7 m and RUB 1.47 m, respectively.
- Russian Railways also launched a family-friendly version of the RZD Bonus programme enabling all family members to have their bonus points credited to a single account.
- FPC added 3,442 high-speed scheduled runs (up 76.1% y-o-y), with the associated passenger transportation witnessing a 1.8x rise. Overall, high-speed and ultra high-speed trains (FPC, Sapsan, Allegro) transported ca. 12.4 million people (up 35% y-o-y).
- Multimodal suburban transportation gained further traction as over 70 train/bus routes were launched in 2017. Rollout of the Innovative Mobility platform in 2018 will enable passengers to build efficient routes, calculate the price of door-to-door travel, and manage trips through a single user interface.

Efforts aimed at boosting the company’s market position

Russian Railways currently focuses on infrastructure development to access major ports and extension of the throughput and carrying capacities of the Eastern Operating Domain.

Olég Belozerov, the CEO of Russian Railways, has been pursuing a policy of openness and customer-oriented approach. In 2017, the monopoly launched a public discussion of its new pricing policy.

The newly adopted Risk Management Policy will also have a positive impact on the operating results.

In 2017, subsidiaries’ dividend transfers to the parent Company hit a record high of RUB 21.2 bn. Revenue increased by 6.7% y-o-y. Russian Railways has also been actively offering instruments in both local and foreign currencies, meeting all the capital market requirements and consistently improving credit ratings from the international rating agencies.

The Company’s active involvement in international railway infrastructure projects is also set to have a positive impact on its results.

Approval of the Group’s financial plan and investment programme for 2018 by the Consumer Council on Operations of Russian Railways and its Subsidiaries and Affiliates helped the management convince the Russian Government to accept the well-informed decisions made by the Company. In addition, the Government issued an order establishing a long-term tariff regulation system—a win-win solution for the monopoly and its clients.

On its results.

- Customer satisfaction in the long-haul and suburban transportation segments stood at 81.6 pp (vs 77.7 pp in October 2016) and 78 pp (vs 76.3 pp in October 2016), respectively.

Passenger transportation

Development of new attractively priced products and services and enhancement of the railway competitiveness against air and road transport are some of the Company’s priorities in this business line.

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PREPARATIONS FOR THE 2018 FIFA WORLD CUP™

In 2017, four Russian cities (Moscow, St Petersburg, Kazan and Sochi) hosted FIFA Confederations Cup. For the first time in the event’s history, the Government allocated additional trains enabling fans to travel free of charge.

During the matches, security was tightened at all railway stations. Quick response teams were deployed with employees of Russian Railways and Transport Directorate 2018, representatives of law enforcement agencies and managers of volunteer organisations as their members. Volunteers and employees of Transport Directorate 2018 were there to help fans find their way around the railway station and board additional trains.

First-hand experience dealing with massive passenger flows during the Confederations Cup proved to be a valuable asset in planning passenger transportation for the 2018 FIFA World Cup™. The event will be hosted between 14 June and 15 July by 11 Russian cities (Kaliningrad, St Petersburg, Moscow, Nizhny Novgorod, Yekaterinburg, Kazan, Samara, Saransk, Sochi, Rostov-on-Don and Volgograd), with the long-haul transportation alone expected to exceed 2.6 million people.

444.6 thousand fans will be able to travel free of charge on Russian Railways’ additional trains, with 728 runs scheduled to that end. A total of 75 trains (1,176 railcars) will be allocated to transport football fans.

Railway stations in host cities have been equipped with additional lockers, directional signs, dynamic digital displays, WiFi hotspots and iBeacon mobile navigation systems to be then integrated into a single customer mobile app developed by Russian Railways. Furthermore, additional screening equipment has been installed at station entrances to ensure smooth passenger flows and avoid congestion.

Passenger transportation in 2017

In the long-haul segment, the Group seeks to provide all Russian regions with affordable passenger transportation alternatives. High-speed and ultra high-speed transportation developments are underway to encourage travel between major metropolitan areas. In the suburban segment, Russian Railways focuses on developing an affordable high-speed alternative to personal cars and public buses in large metropolitan areas.

Russian Railways’ passenger transportation highlights

For the first time in the last eight years, passenger transportation in 2017 exceeded 1.1 billion people posting a growth of 7.8% y-o-y. Both suburban and long-haul transportation volumes were on the rise.

Suburban passenger transportation

Suburban transportation services are provided by 25 suburban passenger companies (SPC), with Russian Railways, regional bodies of executive power, private investors and Aeroflot among the co-founders.

Suburban passenger turnover rose by 2.8% y-o-y to 31.9 bn pkm. In 2017, 1,015.7 million passengers were transported by rail, up 80.9% y-o-y, with 15 out of 25 carriers generating higher income as compared to 2016.

SPC performance in 2017

Suburban passenger companies’ income from passenger transportation totalled RUB 65.4 bn, up RUB 11.7 bn, with 15 out of 25 carriers generating higher income as compared to 2016.

Transportation expenses amounted to RUB 72.4 bn, up 7% y-o-y. Due to the failure of Russian regional governments to fully reimburse the operators’ lost income, as at 31 December 2017, suburban passenger companies had accrued payables totalling RUB 44.0 bn (including RUB 39.5 bn owed to Russian Railways). In 2017, aggregate net profit of SPCs (including Central SPC) reduced to RUB 284.6 m vs RUB 1.92 bn in 2016.

Moscow Central Circle performance in 2017

By the end of 2017, the number of passengers serviced by the Moscow Central Circle (MCC) on a daily basis saw a 1.6x increase, as the time interval between trains shrank to 5 minutes. On 14 December, a new record was set with over 430,000 people transported. In 2017, the MCC transported a total of 120.2 million people – a 4.1x fold increase compared to 2016 (27.16 million).

Progress on multimodal hubs in 2017

Creation of transport interchange hubs giving railway passengers an opportunity to switch to a different transport mode is the most successful approach to the integration of urban passenger systems. Such hubs are designed to ensure seamless passenger experience and efficiency of the transportation systems both in terms of technology and economics.

Pursuant to a trilateral agreement signed by the Ministry of Transport and Roads of the Nizhny Novgorod Region, Russian Railways and Volga-Vyatka SPC, works were launched in 2017 to build the Kanavinsky transport interchange hub, a facility included in the Infrastructure Programme for Hosting of the 2018 FIFA World Cup™.

Passenger transportation in 2017

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Long-haul passenger transportation

In 2017, Russian Railways saw a long-haul passenger turnover of 80.1 bn pkm, or 97.4% vs 2016. A decrease in the turnover was driven by a slump in the distance travelled. The number of passengers transported stood at 102.2 million.

The following carriers are responsible for long-haul transportation:

The share of long-haul transportation services provided by Russian Railways’ subsidiaries and affiliates was as high as 94.9% of the passenger turnover. Trains made up by Federal Passenger Company accounted for 50% of total passenger turnover, with another 4.6% and 0.3% attributable to trains made up by foreign railways and other subsidiaries and affiliates of Russian Railways, respectively. Russian Railways accounts for 3.7% of passenger turnover, while the share of independent carriers stands at 1.4%.

Federal Passenger Company’s performance

In 2017, Federal Passenger Company’s passenger turnover totalled 87.0 bn pkm, down 2.8% y-o-y.

For the trains made up by Federal Passenger Company, passenger turnover along the route was 82.8 bn pkm, down 2.7% y-o-y (including 26.3 bn pkm, or up 6.4% y-o-y in the deregulated segment, and 54.6 bn pkm, or down 7.4% y-o-y in the regulated segment).

The reporting year saw over 95 million passengers transported by the Company. In 2017, Federal Passenger Company’s passenger turnover from core operations amounted to RUB 216.2 bn (up 7.5%), including RUB 193.7 bn from passenger transportation (up 7.5%).

Higher income from passenger transportation compared to the previous year is due to:
- tariff indexation by 3.9% in the regulated segment;
- VAT rate reduction from 10% to 0%.

Operating expenses and net profit for the year also went up from RUB 207.1 bn and RUB 5.3 bn in 2016, respectively.

In 2017, Federal Passenger Company’s performance

As at 31 December 2017, the fleet of Federal Passenger Company featured 297 double-decker railcars. In 2017, double-decker trains transported over 3.3 million passengers (up 24.4% y-o-y), or 3.7% of total volumes transported by trains of Federal Passenger Company.

By December 2017, Federal Passenger Company had 27 five-car Lastochka trains in lease. In the reporting year, high-speed Lastochka trains transported over 4.8 million passengers (up 47.5% y-o-y), or 5.3% of total volumes transported by trains of Federal Passenger Company.

In 2017, the fleet of Federal Passenger Company featured 100 railcars making up high-speed Sapsan trains. These trains operating on Moscow–Nizhny Novgorod and Moscow–Berlin routes transported some 1.2 million passengers (down 4.8% y-o-y).

Improving the efficiency of infrastructure

To make freight transportation more effective and efficient, the Company delivered against the following qualitative targets for utilising the rolling stock:
- the service speed of a freight train, including along rail yards, was 40.7 km/h; 1.2% above the target and up 0.7% y-o-y;
- the average weight of a freight train was 4,041 t; 0.6% above the target and up 0.9% y-o-y;
- average daily productivity of a freight train locomotive stood at 2,135 thousand gross tkm, 1.1% above the target and up 1.8% y-o-y;
- downtime of locomotive crews fell by 3% y-o-y to 15.3 million hours, including a 2.7% reduction of downtime in freight transportation to 12.9 million hours.

The reporting year saw the Company switch to the purchase of locomotives under life cycle contracts.

The Company repaired 5,735.2 km of tracks (100% of the annual target), with key repair activities completed across all railways.

Process disruptions across the railway network caused by branches fell by 33.8% to 396,500 cases.

Railway transportation and infrastructure

The railway transportation and infrastructure segment covers core business units engaged in railway transportation management, maintenance and development of infrastructure and locomotive fleet. The Company’s operating financial performance is directly linked to their efficiency, effectiveness and technical cooperation.

Anatoly Krasnoshechev
First Deputy CEO

KEY ACHIEVEMENTS IN 2017

- In 2017, the average loaded freight car delivery speed went up by 1.6% to 396.6 km/day.
- Downtime of locomotive crews fell by 3% y-o-y to 15.3 million hours, including a 2.7% reduction of downtime in freight transportation to 12.9 million hours.
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Repairs and upgrade of infrastructure in 2017

In 2017, the Company carried out all types of repairs to renovate 5,793.2 km of tracks (100% vs the target), down 3.8%, or 227.8 km y-o-y.

Some 2,553.5 km of tracks (100% vs the target) saw an upgrade. The Company laid 2,556 sets of turnouts (100% vs the target), overhauled 1,155.5 km with used materials, performed full replacement and intermediate overhauls of 1,706.1 km of tracks between full overhauls. A total of 99 engineering structures (bridges, pipelines and tunnels) and 15 km of roadbed were repaired, and 136.6 km of the total length of overhead lines were reconstructed. The electrification and electricity supply costs amounted to RUB 10.53 bn (96% vs the target).

With regard to transportation overhauls, the Company put into operation 387 out of 388 facilities.

Effective management of the freight car fleet

To improve the effectiveness of rail transportation, Russian Railways is rolling out the Single Network Operating Procedure (SNOP). The SNOP is used to introduce technical standards for transportation, manage traffic, locomotives and locomotive crews, and provide information support, while also serving as a basis to formalise interactions between the Company’s branches.

As part of its effort to develop the railcar fleet and boost its performance, the Company reduced the need for rolling stock by 25%. Scheduled rolling stock repairs were cut by 40%.

Also, the Company improved the on-time performance of its freight trains and keeps consistently increasing the number of freight trains that use allocated train paths.

Foreign projects and international cooperation

Russian Railways operates in Europe, Asia, Africa, and Latin America. Its key business lines abroad include logistics, passenger and freight transportation on international and transit routes, engineering and management of railways, machine building, and personnel training.

In 2017, the Company’s foreign operations saw a number of significant transformations. We adopted a new management concept to establish Russian Railways as a global player with a strong foothold in overseas markets. To this end, we approved the Foreign Operations Strategy of Russian Railways Group until 2025. We succeeded in expanding our international footprint and strengthening our positions abroad by entering new markets, such as India and some countries in Latin America and Southeast Asia.

KEY ACHIEVEMENTS IN 2017

- A second track of the Belgrade–Pancevo railway line and six Serbian sections of the Pan-European Corridor X were build and electrified under the agreement between RZD International and Serbian Railways.
- RZD International and the Union of Railways of Cuba signed a feasibility study agreement to upgrade the Nagpur–Secunderabad railway line.
- RZD International and the Union of Railways of Cuba signed a contract agreement to restore and upgrade the railway infrastructure of Cuba, and a memorandum of strategic partnership.
- A feasibility study summary on creating a new transportation corridor to Bratislava and Vienna was prepared and published.
- Russian Railways and Ferrovie dello Stato Italiane signed a memorandum of understanding to establish a legal framework for the international transportation of goods using electronic documents.
- Russian Railways and China Railway entered into an agreement on electronic data exchange.
- A septilateral agreement was signed by the railway operators of China, Belarus, Germany, Kazakhstan, Mongolia, Poland and Russia, under which Russian Railways is taking a set of measures to increase the speed of container trains.

Traction stock in 2017

As at the end of 2017, the operating locomotive fleet4 of Russian Railways comprised 14,306 units, including:

- 7,568 freight train locomotives;
- 1,761 service train locomotives;
- 1,588 passenger train locomotives;
- 3,389 locomotives involved in special and other shunting operations.

As at the end of 2017, the active3 locomotive fleet of Russian Railways comprised 9,972 units, including:

- 5,402 freight train locomotives;
- 774 passenger train locomotives;
- 930 service train locomotives;
- 2,816 locomotives involved in special and other shunting operations.

In 2017, Russian Railways purchased 459 locomotives:

- 220 electric locomotives, including 21 passenger and 199 freight locomotives;
- 239 diesel locomotives, including 19 passenger, 86 freight and 134 shunting locomotives.

Improving locomotive utilisation

One of the focus areas for the Company is the replacement of locomotives and alignment of their types across operating domains. In 2017, the Company reprogrammed 54 locomotives (340 electric locomotives and 201 diesel locomotives).

The reporting year saw the Company switch to the purchase of locomotives under life cycle contracts. These provide for the purchase, maintenance, repair, and disposal (if needed) of products, and offer the following benefits:

- a single centre of responsibility for the technical condition of the locomotive, from commissioning to exclusion from the inventory fleet;
- manufacturer’s motivation for improving the quality of design and manufacture;
- lifetime guarantees;
- lower organisational costs associated with the interaction of the parties;
- sustainability high quality of service as service payments are directly linked to the condition of the locomotive;
- shared commercial interests of the locomotive supplier and Russian Railways in providing locomotives to transport the required cargo volumes.

Efforts to introduce and maintain the cooperation with a locomotive supplier in a specific region have led to an increase in the number of locomotives provided from a single manufacturer.

Effective management of the freight car fleet

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As part of its effort to develop the railcar fleet and boost its performance, the Company reduced the need for rolling stock by 25%. Scheduled rolling stock repairs were cut by 40%.

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1. Replaces the replacement of rail skeletons with a thicker or a less worn out one assembled from used materials only or from used and new materials.
2. Operations locomotive fleet is the fleet involved in all types of transportation-related and technical operations, including the standby fleet.
3. Active locomotive fleet is the fleet directly involved in transportation and operated by locomotive crews.
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Over the year, the Company’s Management Board approved the Foreign Operations Strategy of Russian Railways Group until 2025 to transform Russian Railways from a major domestic player into a global full-service company capable of addressing external challenges promptly and efficiently.

The Strategy sets forth the following fundamental principles and approaches:

- development of an expert-oriented portfolio featuring turnkey projects, including engineering and construction, transportation, logistics, transit shipments, management of railway facilities, personnel training and education, supply of railway equipment, designing of financial solutions and supply/development of IT products;
- commercialisation of the Company’s R&D potential, best practices and competencies in foreign markets;
- training of personnel engaged in international projects, structural transformation of foreign branches and general representative offices of Russian Railways;
- expansion of the Group’s footprint and scale of operations through diversification, mergers and acquisitions, alliances and consortia.

In 2018, the Company plans to further expand its portfolio of overseas projects and keep collaborating with international organisations to increase transportation volumes via international transport corridors.

Foreign operations and key international projects

Cooperation with CIS and Baltic states within the 1,520 mm gauge network

Russian Railways works to strengthen cooperation with railway operators of CIS and Baltic states, its key partners within the 1,520 mm gauge network, among other things by participating in the meetings of the Council for Rail Transport of the Commonwealth Member States.

The Company continues to honour its commitments under a concession agreement to manage the Armenian Railways as part of the South Caucasus Railway. Since its signing, the infrastructure and the rolling stock of South Caucasus Railway have seen major renovation and upgrade, including the repairs of over 640 km of tracks, 400 km of overhead lines, some 50 railway crossings, 50 substations, 40 bridges and other facilities. Russian Railways carried out repairs to extend service life of 700 freight cars and purchased 60 railcar rolling stock units and 35 maintenance vehicles.

One of the key parts of the East–West route is the Mongolian-based Ulanbaatar Railways. Russian Railways that holds a 50% stake in the company under a trust management agreement pays close attention to its development. Following the expansion of its throughput and carrying capacities in 2017, Ulanbaatar Railways set a record by transporting 22.7 mt of cargo and increasing transit throughput and carrying capacities in 2017, Ulaanbaatar Railways.

Cooperation with Asia-Pacific countries

In the reporting year, the Company signed a number of important agreements and memoranda with Asia-Pacific countries, primarily with China. Russian Railways and the Ministry of Health, Labour and Welfare of Japan signed a feasibility study agreement for a Russian-Japanese centre for preventive medicine and diagnostics to be set up in Khabarovsk. In addition, Russian Railways and Samsung (South Korea) agreed to partner in developing container transportation of cargo via the East–West route to the Eastern European facilities.

One of the most important projects of the year was cooperation with Korea. In November, Russian Railways and Samsung (South Korea) agreed to partner in developing container transportation of cargo via the East–West route to the Eastern European facilities.

Cooperation with Europe

In 2017, the Company strengthened its cooperation with leading railway operators in Western Europe. In November, Russian Railways and Deutsche Bank AG signed an agreement to cooperate in the field of research, education, professional development and youth exchange programmes.

Cooperation with International Organisations

In 2017, total revenue of the key companies that are part of the Group’s international division (RZD International, RasonCenTrans, South Caucasus Railway, GEFCO and UTLC) exceeded RUB 314 bn.

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As part of cooperation with BRICS, Russian Railways and the New Development Bank signed a memorandum on the development of high-speed railway transportation in Russia and implementation of Russian Railways’ infrastructure projects abroad. In addition, a road map for cooperation with Transnet (South Africa) was drafted and approved under the auspices of the BRICS Business Council.

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Traffic safety

Russian Railways’ strategy for Guaranteed Transportation Safety and Reliability (the “Strategy”) primarily seeks to ensure uninterrupted transportation, with a focus placed on enhancing the reliability and safety of equipment and infrastructure, and minimising traffic accidents.

2017 saw the number of traffic accidents and incidents involving the Company’s railway infrastructure fall 27% against 2016 (3,709 vs 5,048), including an 11% decrease in accidents caused by Russian Railways (3,579 vs 2,770). The reduction was due to the company-wide implementation of a roadmap that defines the general framework and requirements to ensure safe traffic using the Company’s infrastructure, including effective preventive measures.

Our strategic priority is to achieve the level of safety that will reinforce our positions as a global leader providing safe and reliable infrastructure and services.

In the reporting year, we achieved our safety targets at 110%, with 1.174 actual accidents vs the target 1.3 per million train kilometres by making sure that all participants complied with requirements and used the best available practices. Our 2017 investments in the project to boost safety performance totalled RUB 3.12 bn.

Transportation Security project

To mitigate the risk of unauthorised interference in railway operations, Russian Railways continued with its Transportation Security project in line with Federal Law No. 16-FZ On Transportation Security dated 9 February 2007. In particular, we ran a number of initiatives to protect railway facilities against illegal acts, with a key focus on better security of infrastructure and services.

In 2017, we organised security at 6,664 facilities, up 6% against the previous year, enrolling 403 dedicated departmental guard units, in line with 2016. Compared to the previous year, the number of key facilities to be protected by the guard units from the Departmental Security Service of the Railroad Transport, and facilities featuring transportation security equipment increased by 2% and 6.8% to 1,704 and 1,834, respectively. Security funding grew by 2.8% to RUB 19.2 bn.

Investment activities

In the reporting year, the Company’s Board of Directors approved the investment programme for 2017.

Its focus areas include:

→ projects in pursuance of instructions of the President and the Government of Russia;
→ railway infrastructure development projects;
→ ensuring safety and reliability of processes and operations;
→ eliminating infrastructure constraints;
→ rolling stock renewal;
→ projects to enhance transportation accessibility in Russia;
→ other areas, including resource-saving technologies, R&D and social development.

Investment planning embraces several stages:

1. Create a general plan for railway network development using the input-output balance model and define priorities.

Intersectoral and interregional balancing of freight transportation is key to determining potential freight volumes and main destinations. The balance model requires transitioning from the macroeconomic forecasts of the Russian Ministry of Economic Development to forecasting interregional transportation flows using development programmes and strategies for specific industries, regions, and companies. Forecasts should also take into account development plans for related transportation means such as sea ports.

Projected freight volumes serve as a basis to define and substantiate initiatives to develop railway infrastructure, in particular as part of the general railway network development plan until 2020 and 2025. The plan is designed to identify and eliminate a number of inherent bottlenecks that impede further development of railway infrastructure.

In determining priority growth and upgrade projects in the mid term, the Company relies on long-term targets set out in the general plan and the growth pace of freight volumes.

2. Determine sources of funding for the investment programme as part of the financial plan.

The Company’s investment projects are split into three categories based on the payback period and economic performance.

The first category includes projects with a payback period of 10–15 years financed from the Company’s cash flow and borrowed funds, providing that its leverage remains at an acceptable level.

The second category covers projects with a payback period of 15–30 years that cannot be financed from debt as it is not available on the market for the required term. Currently, all investment projects in this category are financed through infrastructure bond issues.

The third category is projects that do not pay back and are financed from the state budget only, including:

→ upgrade of railway infrastructure of the Baikal-Amur and Trans-Siberian main lines;
→ development and renovation of the railway infrastructure that serves ports of the Azov and Black Seas;
→ development of the Moscow Transport Hub;
→ construction of the Moscow–Kazan High-Speed Railway;
→ infrastructure expansion and upgrade as part of the Northern Latitudinal Railway project.

3. Submit projects for review and prioritisation by the Company’s Expert Council for Investment Projects and the Investment Committee based on the available sources of funding.

After defining railway development priorities, the Expert Council for Investment Projects (the “Expert Council”) and the Investment Committee optimise project parameters.

The Expert Council performs an in-depth analysis of projects prior to their review by the Investment Committee, which includes the assessment of technical and operating solutions and selecting the best ones in terms of efficiency and feasibility.

The Investment Committee makes decisions on the project priority that serve as a basis for a three-year investment programme submitted to the Company’s Board of Directors and the Russian Government for review.
Investment highlights in 2017

In 2017, Russian Railways’ investment expenses stood at RUB 4,795.5 bn, including:
- RUB 379.5 bn using the Company’s own cash;
- RUB 87.0 bn in government support;
- RUB 2.1 bn in external funds;
- RUB 14.9 bn in capitalised interest.

In 2017, the remaining RUB 3.0 bn of net profit for 2016 retained after dividend payouts and mandatory contributions was used to finance the comprehensive upgrade of the Mongol–Elista–Kazan–Moscow section and railway infrastructure serving ports on the Gulf of Finland’s southern shores as part of the programme to develop and renovate the railway infrastructure serving ports of the North-Western basin.

In 2017, the Company’s investment programme focused on nationwide projects launched in line with instructions of the Russian President and the Government and supported by the state budget:
- development of railway infrastructure in the Eastern Operating Domain;
- development of the Moscow Transport Hub; and
- upgrades of the Russia–Belarus and Russia–Kazakhstan borders.

In 2017, the Company embarked on a comprehensive programme to develop and renovate the railway infrastructure serving ports of the North-Western basin.

Russian Railways also proceeded with the throughput capacity expansion, including at the Tobolsk–Surgut–Koryakovo section, upgrade and reconstruction of engineering structures, construction of second tracks, and upgrade of marshalling yards.

We put into operation fixed assets for a total of RUB 400.5 bn, including:
- 131 km of new and second tracks;
- 170.1 km of station tracks;
- 50.8 km of electrified lines;
- 2,533.5 km of renovated tracks;
- 459 purchased locomotives;
- 155 railcar rolling stock units.

Government support was provided to the following projects in 2017:

- **Upgrade of the Baikal–Amur and Trans-Siberian Railways**

Since 2013, Russian Railways has been taking a series of priority measures to develop Trans-Baikal and Far Eastern railways, which include eliminating bottlenecks and boosting freight transportation volumes to 68.8 mtpa by 2020 against 12%

In 2017, the Eastern Operating Domain saw the construction and commissioning of:
- two sections (Sakhalin–Mongol–Elista–Kazan) with a total length of 50.9 km;
- 56.7 km of station tracks;
- 158 interlocked turnouts;
- and renovation of 43.1 km of overhead lines and 610.5 km of roadbed.

- **Upgrade of the Meshchuresenskh–Tayshet section**

The project will enable the Company to accommodate larger cargo volumes by 2020, primarily by transporting 15 mtpa of cargo on the Kysyl–Kuragino railway currently under construction. This includes 12 mtpa of coal to be delivered from the Elginsk coal mine to Far Eastern ports.

The project provides for a full range of measures to expand throughout capacity, including:
- construction of additional 115 km of main tracks, two passing tracks, and a new Avda–Gremadalskaya crossover track;
- upgrade of the second Dalailovsky Tunnel;
- development of stations;
- enhancing power supply at the Abakan–Kuragino, Kuragino–Sayunskaya and Uyan–Tayshet sections.

Under the project, 2017 saw the construction of
- 8.4 km of station tracks;
- 20 interlocked turnouts;
- upgrade of 18.5 km of overhead lines, and commissioning of a signalling centre.

- **Development and renovation of the railway infrastructure serving ports of the Azov and Black Seas**

This project seeks to eliminate current infrastructure bottlenecks that limit maximum transportation volumes available to a variety of industries.

In 2017, the infrastructure serving ports of the Azov and Black Seas saw the commissioning of:
- 68.8 km of the second main tracks, including 17.6 km at the Porsoshkinsaya – 4 km section, 20.1 km at the Remontnaya–Gashun section, and 30.9 km at the Yuryevsky–Krasnoy Selo–Staroittosvor section;
- 309.8 km of automatic block signalling units;
- 23.1 km of station tracks;
- 172 interlocked turnouts;
- 131.3 km of upgraded overhead lines.

- **Development of the Moscow Transport Hub’s railway infrastructure**

The project seeks to boost traffic and carrying capacities of the railway infrastructure to cater to the increasing number of passengers that use the Moscow Transport Hub. The reporting year saw the completion of:
- six new stations (Zaitsevka, Sergeevka, Sokhranovka, Kuteynikovo, Voinishino, Kolodezi);
- upgraded Biochenovka and Zhuravino stations; and
- three trackage substations; and
- two upgraded trackage substations.

- **Construction of the Prokhorovka–Zhuravko–Bataisk line**

The project to construct a 136.9 km long Zhuravko–Mikeros line aims to provide uninterrupted and safe south-bound transportation of cargo and people by eliminating any external factors.

This is in furtherance of Decree No. 196 of the President of the Russian Federation dated 17 April 2015 On the Construction of the Two-Track Electrified Zhuravko–Mikeros line.

In 2017, the Company completed the construction of the 137.5 km long Zhuravko–Mikeros line. Based on Order No. 472 of the Federal Agency for Rail Transport (Roszheldor) dated 6 December 2017, the Company put into operation:
- six new stations (Zaitsevka, Sergeevka, Sokhranovka, Kuteynikovo, Voinishino, Kolodezi);
- upgraded Biochenovka and Zhuravino stations; and
- three trackage substations; and
- two upgraded trackage substations.

- **Construction of the Moscow–Kazan High-Speed Railway**

As per the Government’s instructions and schedule for the Moscow–Kazan High-Speed Railway Construction approved by Order No. 5 of the Russian Government dated 13 January 2016, the reporting year saw the completion of design and support activities and state expert appraisal of the design documents.

The full version of Russian Railways’ investment programme and progress reports are available at

**EURASIA HIGH-SPEED RAILWAY ROUTE**

**Design highlights:** Key parameters of the Moscow–Kazan high-speed railway

- **Length:** 783 km
- **Passenger transportation:** 7 Russian regions
- **Minimum travel time with stops:** 3.17 hours
- **The Moscow-Kazan high-speed railway will have:**
  - 212 bridges
  - 17 overpasses
  - 124 flyovers

**Total length:** 9.5+ thousand km

**Total GDP growth:** RUB 22.3+ trillion (in prices for the respective period)

**Cargo transportation:**
- **8.5+ mt**
- **Estimated growth annually:** 3.4%

**Travel time from Beijing to Berlin:** 2–3 days

**Cargo transportation routes by 2030**
- **20.5+ million people**

**Revenue:**
- **8.5+ trillion (in prices for the respective period)**

**Train stations:** 16

**Service speed:** 360 km/h

**Main tracks constructed using ballastless technology:**

**Wildlife crossings:** 89 km

**Protective screens:** 1,480 km

**Russian Railways**

**Concise Annual Report 2017**

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**Eurasia project**

**Existing high-speed railways in Europe and China**

**2.3+ thousand km**

- Length of the Russian section

**9.5+ thousand km**

- Total length

**RUB 22.3+ trillion**

- Total GDP growth in 2018–2041 (in prices for the respective period)

**2–3 days**

- Travel time from Beijing to Berlin

**RUB 4.7 trillion**

- Additions to state budget revenues by 2041 (in prices for the respective period)

**RUB 20.5+ trillion**

- Passenger transportation by high-speed railway routes by 2023 (in prices for the respective period)

**90%**

- Main tracks constructed using ballastless technology
In 2017, Russian Railways updated its Comprehensive Innovative Development Programme up to 2020 (the “CIDP”), with the Board of Directors approving the priority action plan for innovation-driven growth of the Company under the said programme for 2018–2019. Russian Railways’ 2017 R&D capex amounted to RUB 942.5 m.

The projects and initiatives under the CIDP are broken down by the focus area of R&D and innovation-driven development, the Company’s core operations and innovation types. Key drivers of innovative development are as per the CIDP include:

- Quality, Reliability, Safety: integration of R&D initiatives and innovation projects aimed at increasing customer satisfaction with Russian Railways Group’s transportation and logistics services;
- Promising Technologies: R&D initiatives and innovation projects that aim to boost the Company’s competitive strength in the technological domain by launching new or significantly improved transportation and logistics services, and renovating or upgrading the rolling stock, infrastructure, and transportation equipment and technologies so that they can rival the best globally available offerings;
- Innovation Ecosystem and R&D Facilities: a group of initiatives aiming to unlock the R&D and innovation potential and bolster cooperation in the relevant areas to ensure fast and effective development of the Group in the realm of R&D;
- Efficiency and Sustainable Use of Natural Resources: R&D and innovation initiatives and projects to reduce the consumption of resources, increase labour productivity and promote sustainability across the Group’s business units, subsidiaries and affiliates;
- HR and OHS: all R&D and innovation projects seeking to substantially improve working conditions and occupational health metrics across the Group, and also to build professional competencies that meet Russian Railways’ development goals;

The programme outlines five basic areas for development of the digital economy until 2024. These include regulation, personnel, research and technology, IT infrastructure and cybersecurity.

Russian Railways is already implementing several innovative projects under the programme, with designated parts of the network, including the October Railway and the Eastern Operating Domain, having launched sub-projects of the Intelligent Railway.

Digital Railway project

As part of the Digital Economy of the Russian Federation programme, Russian Railways developed and approved an Implementation Concept for the Digital Railway Comprehensive R&D Project.

Innovative technologies were already used to upgrade the Elrosh hardware and software system for forecasting train traffic through simulation modelling. Digital technologies also help improve information exchange with ports and develop electronic workflows (for both internal processes and external exchanges with customs authorities and other transportation participants).

RUSSIAN RAILWAYS’ CONTRIBUTION TO THE DIGITAL ECONOMY OF THE RUSSIAN FEDERATION PROGRAMME

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In 2017, Russian Railways managed to increase its passenger transportation income by 28.6% year-on-year. This growth was achieved through the implementation of various strategies, including the expansion of high-speed and ultra-high-speed services, such as the Sapsan and Lastochka trains. The Company also focused on improving service quality, with an increased share of low-margin cargoes and a reduced share of export volumes. Sales profit for the year increased by 19.5% and amounted to RUB 140 bn.

In 2017, income from freight transportation grew 7.8% and reached RUB 1,193.6 bn. An additional RUB 74.9 bn came from a 6% increase in freight turnover, while 6% freight tariff indexation yielded another RUB 73.9 bn. The following trends in freight shipment structure persisted in 2017:
- increased share of low-margin cargoes;
- increased share of export volumes;
- higher share of (ton-km) cars (with a high revenue rate) and lower share of tanks (with a high revenue rate) on the empty runs.

Income from long-haul passenger transportation
Income from long-haul passenger transportation in the high-speed and ultra high-speed segment (Sapsan, Lastochka and Allegra) increased by 15.5% to RUB 17.3 bn in the reporting year. Additional trains on the St. Petersburg – Moscow route brought about a passenger turnover increase of 3.3%, helping the Company to exceed its income target by 5.8%. Other income drivers in the long-haul passenger transportation segment included the Company’s successful marketing and tariff strategy for Sapsan trains and higher ticket accessibility. By the end of 2017, eight in ten Sapsan tickets were being bought online, while the overall number of Sapsan passengers had grown by 6.1% year-on-year.

Income from suburban passenger transportation
In 2017, income from transportation services provided by Russian Railways within the Moscow Central Circle amounted to RUB 4.6 bn.

Income from infrastructure operation
Income from infrastructure operation grew by 3% to RUB 107.8 bn. The infrastructure operation target for 2017 was exceeded by 0.2%, or by RUB 0.2 bn.

Income from provision of locomotive traction
Income from provision of locomotive traction grew by 2.3% to RUB 11.2 bn, missing the target by RUB 0.4 bn (-3.1%) due to a reduced volume of provided services.
Transportation expenses

In 2017, transportation expenses amounted to RUB 1,381.8 bn, 0.7% (or RUB 9.7 bn) below the target and 6.6% above the 2016 level.

Breakdown of transportation expenses

<table>
<thead>
<tr>
<th>Items</th>
<th>2016 Actual</th>
<th>2017 Actual</th>
<th>Change, 2017A/2016A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation expenses</td>
<td>1,296.2</td>
<td>1,381.8</td>
<td>85.5</td>
</tr>
<tr>
<td>Payroll expenses</td>
<td>400.7</td>
<td>425.0</td>
<td>24.3</td>
</tr>
<tr>
<td>Social expenses</td>
<td>110.8</td>
<td>119.9</td>
<td>8.3</td>
</tr>
<tr>
<td>Material expenses</td>
<td>452.3</td>
<td>466.9</td>
<td>14.6</td>
</tr>
<tr>
<td>- materials</td>
<td>61.7</td>
<td>65.6</td>
<td>3.9</td>
</tr>
<tr>
<td>- fuel</td>
<td>78.7</td>
<td>88.4</td>
<td>9.6</td>
</tr>
<tr>
<td>- including for train traction</td>
<td>68.5</td>
<td>76.9</td>
<td>8.4</td>
</tr>
<tr>
<td>- electricity</td>
<td>138.0</td>
<td>156.2</td>
<td>18.2</td>
</tr>
<tr>
<td>- including for train traction</td>
<td>121.4</td>
<td>138.6</td>
<td>17.2</td>
</tr>
<tr>
<td>- other material expenses</td>
<td>173.9</td>
<td>186.8</td>
<td>12.8</td>
</tr>
<tr>
<td>Depreciation</td>
<td>190.3</td>
<td>202.7</td>
<td>29.9</td>
</tr>
<tr>
<td>Other expenses</td>
<td>142.1</td>
<td>120.1</td>
<td>-21.9</td>
</tr>
</tbody>
</table>

Cost optimisation

To ensure a balanced financial performance, Russian Railways strives to enhance its internal efficiency.

In 2017, the Company implemented a number of important optimisation initiatives that brought about cost savings of RUB 87 bn, including RUB 36 bn in the Company's branches.

Savings from the use of tender procedures in the reporting year amounted to RUB 7.3 bn.

In addition, in 2017, the Company achieved success in its negotiations with the federal authorities and reduced its property tax costs by approximately RUB 12.8 bn by agreeing an unchanged 1% property tax rate on the railway infrastructure as opposed to the previously planned rate of 1.6%. On top of that, lease payments for maintenance vehicles were reduced as a result of their early buyout in the amount of RUB 18.6 bn.

Income from other operations

In 2017, profit from other operations increased by 6.7% to RUB 28.2 bn, while income from other operations rose by 7.1% to RUB 204.0 bn.

Breakdown of income from other operations, RUB bn

<table>
<thead>
<tr>
<th>Items</th>
<th>2016</th>
<th>2017</th>
<th>Change, 2017A/2016A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lease of locomotives and services for FPC</td>
<td>20.3</td>
<td>20.9</td>
<td>6.6</td>
</tr>
<tr>
<td>Lease of rolling stock and equipment</td>
<td>10.2</td>
<td>15.4</td>
<td>52</td>
</tr>
<tr>
<td>Lease of RRC 1</td>
<td>7.3</td>
<td>14.7</td>
<td>99</td>
</tr>
<tr>
<td>Lease of services for SPC</td>
<td>7.1</td>
<td>10.7</td>
<td>51</td>
</tr>
<tr>
<td>Additional customer services</td>
<td>6.0</td>
<td>10.1</td>
<td>68</td>
</tr>
<tr>
<td>Lease of property</td>
<td>5.2</td>
<td>6.5</td>
<td>21</td>
</tr>
<tr>
<td>Sale of scrap metal</td>
<td>4.7</td>
<td>2.9</td>
<td>-33</td>
</tr>
<tr>
<td>Power transmission via Russian Railways' networks</td>
<td>5.1</td>
<td>1.9</td>
<td>-69</td>
</tr>
<tr>
<td>Sale of fuel and other products</td>
<td>5.2</td>
<td>1.4</td>
<td>-74</td>
</tr>
<tr>
<td>Social services</td>
<td>5.0</td>
<td>0.7</td>
<td>-86</td>
</tr>
<tr>
<td>Construction of infrastructure facilities</td>
<td>5.2</td>
<td>1.0</td>
<td>-88</td>
</tr>
<tr>
<td>Passenger services at railway stations</td>
<td>1.5</td>
<td>6.0</td>
<td>318</td>
</tr>
<tr>
<td>Accounting services</td>
<td>1.2</td>
<td>1.9</td>
<td>61</td>
</tr>
<tr>
<td>Chemical analyses and metrology</td>
<td>0.7</td>
<td>1.4</td>
<td>100</td>
</tr>
</tbody>
</table>

Other income and expenses

In 2017, other income totalled RUB 163.2 bn, while other expenses amounted to RUB 250.8 bn, with the financial result coming in at – RUB 87.6 bn.

Changes in other income and expenses in 2016–2017, RUB bn

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2016</th>
<th>2017</th>
<th>Change, 2017/2016, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Result from other income and expenses</td>
<td>-73.6</td>
<td>-87.6</td>
<td>-14.9</td>
</tr>
<tr>
<td>including the key items:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- sale of assets</td>
<td>0.6</td>
<td>2.1</td>
<td>137</td>
</tr>
<tr>
<td>- including sale of shares</td>
<td>0.0</td>
<td>0.8</td>
<td>88</td>
</tr>
<tr>
<td>- dividends</td>
<td>4.0</td>
<td>21.2</td>
<td>430</td>
</tr>
<tr>
<td>- property contributions to charity capital</td>
<td>0.0</td>
<td>0.1</td>
<td>100</td>
</tr>
<tr>
<td>- interest receivable</td>
<td>9.2</td>
<td>2.7</td>
<td>-65</td>
</tr>
<tr>
<td>- FX effect</td>
<td>18.8</td>
<td>-4.9</td>
<td>-25.7</td>
</tr>
<tr>
<td>- change in provisions</td>
<td>-7.0</td>
<td>-11.3</td>
<td>-43</td>
</tr>
<tr>
<td>- government support and compensations pertaining to state regulation of prices and tariffs</td>
<td>2.1</td>
<td>3.2</td>
<td>52</td>
</tr>
<tr>
<td>- interest payable, excluding capitalised interest</td>
<td>-64.2</td>
<td>-55.2</td>
<td>9.0</td>
</tr>
<tr>
<td>- guarantees under the Collective Bargaining Agreement for the Company's employees, their families and retirees</td>
<td>-26.9</td>
<td>-23.6</td>
<td>3.3</td>
</tr>
</tbody>
</table>

Taxes and insurance fees

The total amount of taxes and insurance fees accrued for 2017 stood at RUB 313.3 bn.
Debt policy

Russian Railways uses borrowings to ensure financing of the Company’s investment and operating activities. The Company uses long-term loans to fund strategically important and commercially viable investment projects, while short-term loans provide flexibility in managing the current liquidity.

Loan portfolio performance in 2017

In 2017, the Company’s medium and long-term borrowings totalled RUB 244.8 bn. The loans were largely raised through unsecured public debt instruments held by Russian and foreign investors. Russian Railways repaid a total of RUB 129.2 bn of medium- and long-term debt in the reporting year. The Company’s loan portfolio was significantly impacted by the appreciation of the rouble causing revaluation of the FX-denominated debt and reduction in its rouble equivalent at year-end.

In addition, the Company drew down bilateral short-term (from several days to 1 year) bank loans throughout the reporting year for the day-to-day management of liquidity and refinancing of liabilities. As at the end of 2017, short-term liabilities stood at RUB 58.5 bn.

In the reporting year, the Company’s total debt grew by 16.8% to RUB 1,075.5 bn, including a 17.1% increase in the principal debt to RUB 1,060.2 bn.

Loan portfolio structure and debt policy

As at 31 December 2017, the loan portfolio of Russian Railways was as follows:

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2017 value</th>
<th>Threshold</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share of FX-denominated debt</td>
<td>35%</td>
<td>Below 40%</td>
<td>FX-denominated debt in the Company’s loan portfolio creates risks associated with FX fluctuations. However, the interest rate on FX-denominated loans is much lower than on rouble loans. It is, therefore, the debt policy’s primary objective to find balance between the FX and rouble-denominated loans.</td>
</tr>
<tr>
<td>Short-term debt</td>
<td>12%</td>
<td>Below 15%</td>
<td>Short-term obligations in the loan portfolio offer greater flexibility in managing the portfolio.</td>
</tr>
<tr>
<td>Average maturity</td>
<td>8 years</td>
<td>7–10 years</td>
<td>The Company works to increase and maintain the average maturity of the loan portfolio that would be consistent with the long payback period of the investment projects financed by such loans.</td>
</tr>
</tbody>
</table>

Consolidated IFRS financial statements of the Russian Railways Group for 2017

In 2017, the Company for the first time introduced a mid-term IFRS financial plan for 2018–2020 within the consolidation perimeter of the financial statements (ca. 190 companies, including international) applying transformation methodology to the target numbers produced under Russian standards.

In 2017, the aggregate income of Russian Railways grew by 5.6% y-o-y to RUB 2,252 bn (RUB 2,133 bn in 2016). Operating expenses dropped by 2.2% driving a net profit of RUB 139.7 bn (RUB 10.3 bn in 2016).

The Group’s revenue was mainly attributable to income from freight transportation and infrastructure going up by 9.5% y-o-y to RUB 1,449 bn. Income from logistics services amounted to RUB 345 bn, including on the back of growing currency proceeds of logistics company GEFCO. This segment’s income accounts for ca. 15.3% of the Group’s aggregate revenue.

In 2017, EBITDA went up by 11.8% to RUB 496 bn. EBITDA margin increased to 24.7% against 23.6% in 2016 on the back of growing income coupled with lower operating expenses resulting from efficiency improvement efforts. Net debt / EBITDA stood at 1.97x.

Net profit EBITDA Net debt / EBITDA EBITDA margin

RUB 139.7 bn RUB 496 bn 1.97x 24.7%

1.36x higher y-o-y vs 1.94x in 2016
+11.8% y-o-y +1 pp y-o-y

+ The consolidated IFRS financial statements of Russian Railways and its subsidiaries for 2017 and the auditor report are available on Russian Railways’ website at: http://eng.rzd.ru/statistics/en?STRUCTURE_ID=4224
In 2017, Russian Railways made a number of significant transactions in global capital markets.

In late February, the Company successfully placed 7-year US dollar-denominated 4.797% Eurobonds in the amount of USD 500 m. In the same month, Russian Railways accessed the syndicated loan market for the first time in nine years, raising USD 420 m under a 5-year unsecured syndicated loan agreement. The record-low rates offered to the Company as compared to similar recent-market transactions in global capital markets.

In March 2017, Russian Railways accessed the syndicated loan market for the first time in nine years, raising USD 420 m under a 5-year unsecured syndicated loan agreement. The record-low rates offered to the Company as compared to similar recent-market transactions in global capital markets.

In 2017, Russian Railways replaced its FX-denominated Eurobonds with new long-term borrowings, including a number of international transactions in Q1. The weighted average interest rate across the portfolio decreased from 7.7% to 6.2% (a 1.5 pp decline). The weighted average interest rate across the portfolio decreased from 7.7% to 6.2% (a 1.5 pp decline).

The weighted average interest rate across the portfolio decreased from 7.7% to 6.2% (a 1.5 pp decline). The major part of the loan portfolio is comprised of local bonds (46.1%). Other bonds (26.3%) are sold to the state funds (the Pension Fund of the Russian Federation and the National Wealth Fund) in the form of long-term infrastructure bonds issued in 2013–2015 for a period of 15 to 30 years. A substantial part (40.6%) is represented by 4–20 year Eurobonds in different currencies (RUB, USD, EUR, CHF, GBP).

The major part of the loan portfolio is comprised of local bonds (46.1%). Other bonds (26.3%) are sold to the state funds (the Pension Fund of the Russian Federation and the National Wealth Fund) in the form of long-term infrastructure bonds issued in 2013–2015 for a period of 15 to 30 years. A substantial part (40.6%) is represented by 4–20 year Eurobonds in different currencies (RUB, USD, EUR, CHF, GBP).

The weighted average interest rate across the portfolio decreased from 7.7% to 6.2% (a 1.5 pp decline). As the maturity dates of the respective obligations approach, the Company replaces them with new long-term borrowings and determines their optimal maturity subject to the existing repayment schedule to keep the share of short-term liabilities below 15%.

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Local capital market
In 2017, the Company placed six successful rouble bond issues raising capital in the local market, with each placement consecutively achieving a lower rate. The weighted average rate for the new issues stood at 8.4%. The latest public transaction (Series 30 secondary placement) was made last November at 7.65%. In 2017, the Company placed a 9-year 8.5% issue for RUB 15 bn with one of the longest maturities.

The aggregate proceeds were partly used to replace costly 11% bonds. The plans to replace the expensive securities issued amid the peak yields of 2015 prompted Russian Railways to exercise its right to buy back Series BO04 11.65% bonds for RUB 15 bn, Series BO08 11.44% bonds for RUB 20 bn and Series BO03 11.75% bonds for RUB 15 bn.

Share capital
Russian Railways has been included in the list of strategically important companies approved by the Decree of the President of the Russian Federation No. 1009 dated 4 August 2004. As at the end of 2017, the Company’s charter capital amounted to RUB 2,212,328,795,000. It is comprised of 2,162,223,795 ordinary registered shares with a nominal value of RUB 1,000 each and 50,000,000 preference registered shares with a nominal value of RUB 1,000 each.

Dividend policy
Russian Railways’ dividend policy is based on the balance of interests of the Company and its shareholders and seeks to:

⇒ improve the Company’s investment appeal,
⇒ protect shareholder rights as prescribed by applicable Russian laws.

Distribution of the 2016 net profit
In 2016, Russian Railways earned RUB 6.5 bn in net profit. Pursuant to Clause 42, Section 6 of the Company’s Charter, RUB 875 m, or 5% of net profit for the reporting period, are to be allocated to reserve capital. In 2016, Russian Railways' charter capital was increased by a total of RUB 67,203,584,000, including RUB 24,981,693,000 contributed in December 2016 and RUB 42,941,891,000 contributed in 2017. In 2017, a total of RUB 60,628,311,000 was contributed by the federal government, with an issue worth of RUB 42,941,891,000 registered in the same year. An issue for the remaining RUB 17,686,420,000, which were contributed in December 2017, was registered in 2018.

The following amounts were allocated to dividend payments for 2016:

⇒ RUB 5 m, or 0.01% of the nominal value (RUB 50,000 m) of preference shares, payable to preference shareholders;
⇒ RUB 5,142 m, or 50% of the IFRS net profit, payable to ordinary shareholders.

In 2017, the Company raised a total of ca. RUB 90 bn in the local capital market.


Net profit distribution in 2012–2016, RUB bn

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Net profit</td>
<td>14.110</td>
<td>0.740</td>
<td>-44.078</td>
<td>0.318</td>
<td>6.500</td>
</tr>
<tr>
<td>Reserve capital</td>
<td>0.706</td>
<td>0.037</td>
<td>0.000</td>
<td>0.016</td>
<td>0.325</td>
</tr>
</tbody>
</table>
| Dividends accrued on:
  ordinary shares            | 0.000 | 0.185 | 0.045  | 0.302 | 5.147 |
  preference shares           | 0.000 | 0.185 | 0.045  | 0.287 | 5.142 |
| Distribution guidance for the 2017 net profit

In 2017, Russian Railways earned RUB 17.5 bn in net profit. Pursuant to Clause 42, Section 6 of the Company’s Charter, RUB 875 m, or 5% of net profit for the reporting period, are to be allocated to reserve capital. The ordinary shareholders will be paid dividends for 2017 in accordance with the Russian Government’s directive. The preference shareholders will be paid RUB 5 m, or 0.01% of the nominal value (RUB 50,000 m) of preference shares, in dividends for 2017.

Ratings agencies and investors
In 2017, global rating agencies improved their outlook on Russia’s sovereign ratings on the back of stronger macroeconomic data and growing international investor confidence in its economy. Standard & Poor’s and Fitch revised their outlooks from “stable” to “positive”, while Moody’s improved its outlook from “negative” to “stable”. In line with their policies, the agencies continued the sequence of positive rating actions reviewing the ratings of some quasi-sovereign issuers, including Russian Railways.

Russia’s and Russian Railways’ credit ratings as at the end of 2017

<table>
<thead>
<tr>
<th>Issuer</th>
<th>Agency</th>
<th>Rating</th>
<th>Outlook</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russia</td>
<td>Standard &amp; Poor’s</td>
<td>BB+</td>
<td>Positive</td>
</tr>
<tr>
<td></td>
<td>Moody’s</td>
<td>Ba1</td>
<td>Stable</td>
</tr>
<tr>
<td></td>
<td>Fitch</td>
<td>BBB-</td>
<td>Positive</td>
</tr>
<tr>
<td>Russian Railways</td>
<td>Standard &amp; Poor’s</td>
<td>BB+</td>
<td>Positive</td>
</tr>
<tr>
<td></td>
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<tr>
<td></td>
<td>Fitch</td>
<td>BBB-</td>
<td>Positive</td>
</tr>
<tr>
<td></td>
<td>ACRA</td>
<td>AAA(RU)</td>
<td>Stable</td>
</tr>
<tr>
<td></td>
<td>RAEX</td>
<td>ruAAA</td>
<td>Stable</td>
</tr>
</tbody>
</table>

In early 2018, Moody’s and Standard & Poor’s upgraded Russian Railways’ ratings on the back of previous year’s improvements in macroeconomic conditions and investment climate in Russia.

In the reporting year, the Company’s ratings were in line with Russia’s sovereign ratings at “BB+” (Standard & Poor’s, outlook positive), “Ba1” (Moody’s, outlook stable) and “BBB-” (Fitch, outlook positive).

Aside from global agencies, in Q4 2017, ACRA and RAEX assigned Russian Railways the highest “ААА(RU)” and “ruAAA” ratings, respectively, both outlooks stable.
Russian Railways is committed to the UN Global Compact, the largest international initiative in social responsibility, and is a member of the National Network of the Participants to the Global Compact for Implementing the Principles of Responsible Business in Corporate Practice Association. The Company complies with the principles of socially responsible business practices enshrined in the Social Charter of the Russian Business adopted by the Russian Union of Industrialists and Entrepreneurs. The Company's main regulations in the area of social responsibility include the Corporate Social Responsibility Code of Russian Railways, the Collective Bargaining Agreement for 2017–2019, and the Industry Agreement for Railway Transportation Organisations for 2017–2019.

**Stakeholder engagement**

**Stakeholders**

**Interaction formats and mechanisms**

**Staff**
- Collective Bargaining Agreement
- Social partnership
- Training and education
- Management functions and talent pool programme
- Conflict resolution procedures
- Healthcare benefits for employees and their families
- Private pension plans

**Educational institutions**
- Sponsored admission arrangements
- Benefits for children of Russian Railways' employees
- Joint academic and cultural events
- Input to the work of educational institutions from Russian Railways' employees
- Educational programmes for children and youth

**Shareholders and investors**
- Dividends
- Road shows
- Regular investor meetings
- Reporting
- Participation of the Company’s management in industry conferences
- Investor days

**Government authorities**
- Implementation of socially important projects
- Mid-term social and economic cooperation agreements with the regional authorities of the Russian Federation
- Transport coordination councils
- Expert support to members of the State Duma and the Federation Council
- Events and activities in line with the legislative work schedule of the State Duma and the Federation Council and legislative initiatives of the Russian Government

**Local communities across the Company’s footprint**
- New jobs
- Social and economic cooperation agreements
- Procurement from local small and medium-sized businesses
- Support of culture and sports
- Charity

**Mass media and non-governmental organisations**
- Press releases covering Russian Railways’ operations
- Replies to media enquiries
- Press conferences, briefings, management interviews
- Site visits for journalists to cover events attended by the Company’s management, as well as progress of investment projects, and other corporate activities
- Accompanying journalists during photo and video tours at infrastructural facilities

**Passengers**
- Train station services
- Transportation services
- Catering services on board
- Unified Information Service Centre
- Mobile app
- Russian Railways website
- Surveys on http://fpc.ru/presentation/FPC/Opros201603/Akasha.htm?/ and on Sapsan trains
- Passenger satisfaction surveys: Russian Public Opinion Research Centre (VCIOM), Company surveys

**Freight transportation clients**
- Basic freight transportation services
- Transportation and logistics services
- Unified Freight Transportation Call Centre, part of Russian Railways Unified Information Service Centre
- Enquiries via RZD Cargo mobile app
- Freight section of the Russian Railways website
- Sales offices
- Client satisfaction surveys: Russian Public Opinion Research Centre (VCIOM), RZD-Partner

**Sustainable Development**

As one of the major and systemically important elements of the national economy, the crucial link of the country’s transportation system and employer to 755,000 people, Russian Railways maintains a priority focus on compliance with the sustainable development principles and social responsibility towards employees, community and the state.

Dmitry Shakhanov
Deputy CEO for HR and Social Policy

Russian Railways adheres to the principles of corporate social responsibility and implements a social policy focused on effective employee relations. People are the priority. Our employees are the primary driver of Russian Railways’ performance and competitiveness. Ultimately, they are the ones who create the Company’s market value. That is why attracting qualified talent across all lines of Russian Railways’ operations and motivating them to work productively and efficiently are the most important objectives of our social policy.
**HR management**

Human capital is the greatest asset of Russian Railways. The Company's HR policy focuses on hiring, retaining, and developing employees as well as ensuring their social stability.

**Employees structure**

The Company continues to maintain a well-balanced and stable personnel structure. As at 31 December 2017, Russian Railways had 795,000 employees, down 2.5% y-o-y. The Company’s effective social and HR policy helped it to cut personnel turnover rate by 0.8 pp to 6.7%. With social responsibility and the need to retain skilled employees staying high on the agenda, lower headcount was driven by natural employee attrition, retirements, temporary and seasonal employment, redistribution of personnel between divisions and proactive personnel retraining.

**Workforce analysis**

**Staff composition is well-balanced**

**Optimal age structure reached and maintained**

**The share of employees with higher education is increasing**

**Employee training and development**

Russian Railways prioritises personnel training, retraining, education and professional development across all employee categories. In 2017:

- over 46,000 workers were trained in key professions;
- over 25,000 workers were trained in their first profession;
- over 13,000 people were trained in their second profession;
- more than 165,000 employees upgraded their skills.

The Company has put in place and successfully develops more than 165,000 employees upgraded their skills.

13,000 people were trained in their second profession;

over 25,000 workers were trained in their first profession;

over 46,000 workers were trained in key professions.

**Education**

- Higher education 31.3%
- Secondary vocational education 27.5%
- Other* 41.1%

**Gender structure**

- Management 31.3%
- Office workers 68.7%

**Employee healthcare**

In 2017, the Board of Directors approved the Conceptual Framework for the Reform of Healthcare Facilities of Russian Railways until 2020 aimed at maintaining and developing the system of high-quality healthcare services under voluntary health insurance (VHI) plans. Maintenance costs for cultural, sports, health, and recreation facilities accounted to RUB 1.9 bn.

The Company’s healthcare services are also an essential component of train traffic safety with more than 1.6 million mandatory pre-trip medical check-ups conducted each year.

**Private pension plans**

Russian Railways has been developing a corporate pension system based on shared employee/employer contributions to the employee’s future pension. The private (corporate) pension is an additional measure of social support to workers; its strategic goal is to ensure a replacement rate of at least 40% of employee’s lost earnings. More than 596,700 Russian Railways’ employees have pension plans with Blagosostoyanie Private Pension Fund; 304,400 former railway workers draw a private pension. In 2017, pensions were granted to 17,500 Russian Railways’ employees.
### Occupational safety

Russian Railways has put in place an effective and continuously evolving occupational safety management system. Through sustained efforts aimed at its improvement in 2003–2017, the Company secured a 6.2x decrease in the number of workplace injuries bringing it down to 182 in 2017. In the same period, the number of fatalities saw a 5.6x drop and totalled 26.

According to the data of the Russian Ministry of Labour and Social Protection for 2016, the workplace injury frequency rate at Russian Railways was 4.3 times lower than the Russian average (0.3 vs 1.3), whereas the Company’s fatal injury frequency rate outperformed the national average by a factor of 1.6 (0.038 vs 0.062). In 2017, the number of Russian Railways’ employees who suffered workplace injuries decreased by 16.7% to 0.25 and the fatal injury frequency rate – by 5% to 0.036.

In 2017, the Company spent a total of RUB 20.1 bn on occupational health and safety improvement initiatives. As at 31 December 2017, Russian Railways had 344,000 jobs on its payroll, including 88,000 (26%) positions with hazardous working conditions. In 2017, the Company implemented a work environment improvement project targeting 37,000 positions and reduced the number of jobs with hazardous working conditions by 7,000.

### Environmental protection

2017 was a Year of the Environment in Russia. In the reporting year, Russian Railways focused on the reduction of its environmental impact, introduction of advanced technologies, elimination of accumulated environmental damage, raising of environmental awareness, and preservation of specially protected natural areas.

In 2017, the Company spent RUB 5 bn on environmental protection initiatives.

Russian Railways Group promotes recycling of paper, cardboard, plastic and glass. In 2017, over 1.5 kt of waste paper, 32 t of glass, 27 t of plastic and 150 kg of batteries were collected and sent for treatment and recycling in 73 regions of the Russian Federation, with the overall economic effect exceeding RUB 6.3 m.

In 2017, the Group also reduced emissions of harmful substances by 4.5% to 63.8 kt, and cut wastewater discharges into surface water bodies by 6.5% to 6.36 million m³. Waste utilisation in internal processes across the Company’s facilities amounted to 247,245 kt in 2017 – a 2.7x decrease y-o-y. Over the year, some 8,453 kt of waste were processed at the Company’s facilities.

### Resource and energy efficiency

Russian Railways maintains leadership in energy efficiency and environmental friendliness among global freight and passenger railway companies. Russia ranks first globally in terms of energy efficiency in rail freight transportation outperforming all of the European railways combined, as well as railways in China, Japan, India and the USA. As regards energy efficiency in passenger transportation, Russia comes in fourth after India, China, and Japan.

As part of the Resource Efficiency Programme, 1,700 pieces of resource and energy saving equipment were installed in 2017 for a total amount of RUB 2.3 bn.

In 2017, total energy and fuel savings amounted to 6,983 TJ, or RUB 4,703 bn. With the target exceeded by 28.1%, this was one of the Company’s best energy saving results since 2010.

Overall, improvements in transportation efficiency in 2017 brought about savings of 4,050.3 TJ (or RUB 3,437.6 m), while streamlined energy use in stationary power generation and other non-traction segments saved another 2,932.7 TJ (or RUB 1,265.9 m).

In 2017, the Company won the 13th All-Russia Environmental Leader Award in the Environmental Responsibility category.

In 2017, the Group also reduced emissions of harmful substances by 4.5% to 63.8 kt, and cut wastewater discharges into surface water bodies by 6.5% to 6.36 million m³. Waste utilisation in internal processes across the Company’s facilities amounted to 247,245 kt in 2017 – a 2.7x decrease y-o-y. Over the year, some 8,453 kt of waste were processed at the Company’s facilities.

According to the UIC-IEA Railway Handbook on Energy Consumption and CO₂.
Russian Railways is gradually implementing an organisational reform to upgrade the Group’s corporate governance system.

The Russian Government Expert Council suggested seven criteria to assess compliance of state-owned companies’ charters and regulations on the board of directors with key recommendations of the Corporate Governance Code:

- powers of the board of directors in relation to control over the company’s management;
- powers of the board of directors in relation to transactions made by controlled entities;
- powers of the board of directors in relation to the governance bodies of controlled entities;
- right of the board members to access documents and information of the company and its controlled entities;
- matters pertaining to the board members’ conflicts of interests;
- matters to be decided on by meetings held in person;
- matters to be decided on by a simple majority of votes cast by board members.

Once the Company’s Charter and Regulation on the Board of Directors are amended, Russian Railways will meet six of these criteria. The seventh criterion (competence of the board of directors to establish the company’s sole executive body) cannot be satisfied as the establishment of Russian Railways’ sole executive body is governed by Federal Law No. 29-FZ On the Specifics of Administration and Disposal of Railway Transport Property dated 27 February 2003, which delegates the powers of appointing or dismissing the Chief Executive Officer – Chairman of the Management Board of Russian Railways to the Government of the Russian Federation.

In 2017, Russian Railways drafted amendments to the Company’s Charter and Regulation on the Board of Directors to embrace recommendations of the Corporate Governance Code. These amendments are expected to be approved in 2018.

The corporate governance system put in place for the Company’s subsidiaries and affiliates enables Russian Railways Group to:

- implement Russian Railways’ policies (including the dividend one) in relation to its subsidiaries;
- appoint members of the subsidiaries’ management and supervisory bodies;
- oversee business planning and business activities of subsidiaries and affiliates;
- oversee divestment of non-core business activities held by Russian Railways’ subsidiaries;
- stay in touch with the shareholders and investors and protect the rights of minority shareholders, including in the context of transactions to buy or sell stakes in the subsidiaries and affiliates;
- balance the goals of Russian Railways Group and strategic business lines of the Group’s companies.

Russian Railways’ corporate governance system employs the following best practices:

- independent directors are engaged to sit on the boards of directors at Russian Railways and its subsidiaries. There are three independent directors sitting on the Board of Directors at Russian Railways;
- following the annual general meetings of shareholders held in 2017, independent directors were elected as board members at 12 of the Group’s largest subsidiaries;
- agenda items are previewed by committees of the board of directors. Russian Railways’ Board of Directors has four committees: Audit and Risks Committee, Personnel and Remuneration Committee, Strategic Planning Committee and Priority Investment Projects Committee;
- boards of directors of Russian Railways Group’s 26 major subsidiaries had relevant board committees in place;
- most of the Corporate Governance Code adoption initiatives were implemented by Russian Railways’ subsidiaries in 2015–2017;
- a treasury control system was put in place to exercise control over the Group’s subsidiaries.
General Meeting of Shareholders


In 2017, one Annual General Meeting of Shareholders and 13 Extraordinary General Meetings of Shareholders were held.

The Annual General Meeting of Shareholders (Order No. 1395-r of the Government of the Russian Federation dated 30 June 2017) adopted the following resolutions:
- approval of the annual report, balance sheet and income statement for 2016;
- distribution of profit based on the year's financial performance;
- allocation of funds to pay dividends to the holders of Russian Railways' ordinary shares based on performance in 2016 and remuneration to members of Russian Railways' Board of Directors and Audit Commission;
- determination of size of Russian Railways' Board of Directors and Audit Commission and appointment of their members, approval of the 2017 auditor.

The Extraordinary General Meetings of Shareholders adopted the following resolutions:
- increase of the charter capital, amendment of Russian Railways' Charter and its appendices;
- amendment of Russian Railways' Regulations on the Board of Directors, Management Board, Audit Commission and Appointment of the Chief Executive Officer – Chairman of the Management Board.

Board of Directors


The key objective of the Board of Directors is to pursue a policy that supports the Company's robust growth, improves the sustainability of its operations, and increases profitability. The Board also determines the Company's business priorities, approves its long-term plans and core programmes, including the budget and the investment programme, and defines general principles of, and approaches to, risk management in the Company.

In line with international corporate governance practices, independent directors have been elected to the Board of Directors of Russian Railways since 2008. The Board of Directors regularly reviewed procurement reports for 2016 and 2017, as well as reports on the allocation of funds for charity and sponsorship activities.

The Russian Railways Board of Directors supervises the Company's corporate governance practices.

Pursuant to the Company's Charter, the Board of Directors plays a key role in decision-making with respect to core subsidiaries.

In the reporting year, the Board of Directors carried out the following activities in relation to the subsidiaries that are part of its decision-making scope as per the Charter:
- reviewed budget implementation reports for 2016;
- defined the position of Russian Railways and its representatives at meetings of the boards of directors of the Company's subsidiaries and affiliates:
  - budget implementation for 2016;
  - approval and adjustment of the 2017 budget;
  - election of the sole executive body;
  - approval of the agenda for General Meetings of Shareholders and meetings of the boards of directors of the Company's subsidiaries and affiliates.

In 2017, pursuant to the resolution of the Russian Railways General Meeting of Shareholders (Order No. 1395-r of the Russian Government dated 30 June 2017), the number of the Board members was increased to thirteen as Nikolay Podguzov and Alexey Tyudynov left the Board and new members were elected:
- Stanislav Voskresensky – Acting Governor of the Ivanovo Region;
- Alan Lushnikov – Deputy Minister of Transport of the Russian Federation;
- Valery Naisar – CEO of RosaKhutor.

On 11 September 2017, the Board of Directors resolved to elect Arkady Dvorkovich to the post of Chairman of the Russian Railways Board of Directors.

The current Russian Railways Board of Directors consists of thirteen members, including three independent directors.

Representatives of the Russian Federation:
- Arkady Dvorkovich
- Oleg Belozerov
- Grigory Bereskin
- Stanislav Voskresensky
- Kirill Dmitriev
- Andrey Ivanov
- Alan Lushnikov
- Hartmut Mehdorn
- Valery Naisar
- Alexander Ryazanov

Independent directors:
- Sergey Nedoroslev
- Vasily Sidarov
- Sergey Stepashin

Members of the Board of Directors hold no stakes in the charter capital of Russian Railways.

Biographies of members of the Board of Directors are available on the annual report’s website at http://ar2017.rzd.ru/en
Remuneration of the Board of Directors members

In 2017, the Annual General Meeting of Shareholders of Russian Railways adopted a resolution to pay remuneration to members of the Board of Directors for 2017 in the amount recommended by the Board in its resolution dated 5 June 2017 and in the manner prescribed by the Regulation on Remuneration and Compensation Paid to Members of the Russian Railways Board of Directors.

Pursuant to the Regulation developed in line with the recommendations of the Federal Agency for State Property Management and the Corporate Governance Code, remuneration is calculated using a formula based on the basic component of remuneration (which amounts to RUB 220,000) and depends on the performance of the Board of Directors members in Board meetings. For performing additional functions, Board members are paid additional remuneration calculated as the basic portion of remuneration multiplied by the following ratios:

- 3 – for the Chairman of the Board of Directors (excluding individuals who perform the functions of the Chairman of the Board of Directors in his absence);
- 2 – for a member of the Board of Directors who performs the functions of a member of a Board committee;
- 1.5 – for a member of the Board of Directors who performs the functions of a member of a Board committee.

Additional remuneration for participation in the work of committees is paid subject to the member of the Board of Directors personally attending (producing a written opinion for) at least 75% of the in-person committee meetings held over the course of the corporate year.

If a member of the Board of Directors performs the functions of a member and/or the chairman of a committee under the Board of Directors on more than one committee, additional remuneration is paid for the functions performed on each committee.

The Regulation does not apply to members of the Board of Directors who are members of the executive bodies of Russian Railways or who are restricted or prohibited from receiving any remuneration from commercial organisations by the laws of the Russian Federation.

The Russian Railways Annual General Meeting of Shareholders resolved to allocate a total of RUB 43,300,000 in remuneration to members of the Russian Railways Board of Directors.

For the purposes of preliminary consideration of the most important matters and preparation of relevant recommendations, the Russian Railways Board of Directors has set up the following committees:

1. Personnel and Remuneration Committee;
2. Priority Investment Projects Committee.

The committees are elected by the Russian Railways Board of Directors and act in accordance with the regulations on the committees approved by the Company's Board of Directors.

Vasily Gorev has been the Corporate Secretary of Russian Railways since September 2015.
Internal audit and control system

Audit Commission


The Audit Commission is responsible for:

- auditing the Company’s business operations for any given year and at any time if it thinks fit or as requested by the Company’s Board of Directors or requested by the shareholder;
- auditing and reviewing the Company's financial and solvency position, systems for internal control and management of financial and operational risks, asset liquidity and debt to equity ratio;
- verifying the accuracy of the Company’s annual report, annual financial statements and other disclosures or financial documents;
- checking any business-related resolutions adopted by the Chief Executive Officer – Chairman of the Management Board, the Board of Directors and the Management Board of the Company for compliance with the Charter and resolutions of the General Meeting of Shareholders.

Remuneration of the Management Board members

The remuneration system for members of the Russian Railways Management Board, which was approved by the Company’s Board of Directors, was designed to improve the effectiveness of the individual and collective work of the Management Board members in the short and long term, as well as to provide incentives for the successful performance of Russian Railways as a single economic entity.

Executives are entitled to bonuses for annual results based on the fulfilment of key performance indicators (KPI) and a performance assessment of the Management Board and Russian Railways as a whole.

In 2017, the remuneration of the members of the Russian Railways Management Board amounted to RUB 1,268 m (on a comparable basis and net of severance payments – RUB 1,177 m).

Members of the Russian Railways Management Board

<table>
<thead>
<tr>
<th>No.</th>
<th>Full name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Oleg Belozerov</td>
<td>CEO, Chairman of the Management Board</td>
</tr>
<tr>
<td>2</td>
<td>Anastasiy Krasnovich</td>
<td>First Deputy CEO</td>
</tr>
<tr>
<td>3</td>
<td>Vadim Mikhailov</td>
<td>First Deputy CEO</td>
</tr>
<tr>
<td>4</td>
<td>Alexander Malinov</td>
<td>First Deputy CEO</td>
</tr>
<tr>
<td>5</td>
<td>Elena Kharitina</td>
<td>Chief Accountant</td>
</tr>
<tr>
<td>6</td>
<td>Sergey Krashenik</td>
<td>Deputy CEO, Chief Engineer</td>
</tr>
<tr>
<td>7</td>
<td>Oleg Yakushev</td>
<td>Deputy CEO, Head of the Directorate of Traction</td>
</tr>
<tr>
<td>8</td>
<td>Germaniya Verkhovskaya</td>
<td>Deputy CEO, Head of the Central Directorate of Infrastructure</td>
</tr>
<tr>
<td>9</td>
<td>Petr Polyakov</td>
<td>Deputy CEO, Head of the Directorate of Traffic Management</td>
</tr>
<tr>
<td>10</td>
<td>Petr Katozy</td>
<td>Deputy CEO, Head of the Moscow Transport Hub Development Centre</td>
</tr>
<tr>
<td>11</td>
<td>Anastasiy Medvedeyev</td>
<td>State Secretary, Deputy CEO</td>
</tr>
<tr>
<td>12</td>
<td>Vyacheslav Fedorov</td>
<td>Deputy CEO</td>
</tr>
<tr>
<td>13</td>
<td>Andrey Starov</td>
<td>Deputy CEO</td>
</tr>
<tr>
<td>14</td>
<td>Oleg Tom</td>
<td>Deputy CEO</td>
</tr>
<tr>
<td>15</td>
<td>Nikolay Fedoseyev</td>
<td>Deputy CEO</td>
</tr>
<tr>
<td>16</td>
<td>Anastasiy Chabunin</td>
<td>Deputy CEO, Director for Internal Control and Audit</td>
</tr>
<tr>
<td>17</td>
<td>Sergey Shevchik</td>
<td>Deputy CEO, Head of Traffic Safety</td>
</tr>
<tr>
<td>18</td>
<td>Dmitriy Shakhovskiy</td>
<td>Deputy CEO</td>
</tr>
<tr>
<td>19</td>
<td>Olga Gnedkova</td>
<td>Director of economics and finance</td>
</tr>
<tr>
<td>20</td>
<td>Vadim Bynkov</td>
<td>Head of the Legal Department</td>
</tr>
<tr>
<td>21</td>
<td>Valentin Gapunovich</td>
<td>Senior Advisor to the CEO</td>
</tr>
</tbody>
</table>

Internal control and audit

Russian Railways has an internal control system in place. Russian Railways’ internal control system leverages the most up-to-date organisational and methodological framework and best international and national professional practices, operating in full compliance with the ethical standards applied by the internal audit and control functions in the Russian and global business communities.

The main objectives of the internal control system are:
- to ensure the efficiency and robustness of business operations;
- to safeguard assets and use resources in a cost effective manner;
- to identify and manage risks;
- to ensure the accuracy and completeness of financial (accounting) and other types of statements;
- to ensure compliance with the laws and regulations of the Russian Federation and by-laws of Russian Railways.

The internal control system focuses on the business operations of Russian Railways’ units and the Company’s business processes.
The Zheldorkontrol Internal Control Centre is responsible for auditing the business operations of Russian Railways’ units, performing follow-up controls and providing Russian Railways’ management with reliable information about the business operations of the Company’s units.

The Zheldoraudit Internal Audit Centre, a structural unit of Russian Railways, is in charge of internal audit. The objective of the internal audit function is to provide the Board of Directors and executive governance bodies with independent and objective information about the business operations, reliability and effectiveness of the risk management and internal control systems and corporate governance practices adopted by the Company and its subsidiaries.

The auditor of the Company’s IFRS consolidated financial statements is Ernst & Young LLC.

In accordance with Order No. 1395-r of the Russian Government dated 30 June 2017, Ernst & Young LLC was approved as the auditor of Russian Railways’ financial (accounting) statements for 2017 under the Russian Accounting Standards. The annual remuneration of Ernst & Young under the contract dated 8 August 2017 stands at RUB 25.06 m (including VAT of RUB 3.96 m).

The conflict of interest procedures for the members of Russian Railways’ Board of Directors are outlined in the Regulation of the Board of Directors of Russian Railways. Pursuant to this Regulation, the members of the Company’s Board of Directors, acting reasonably and in good faith, are expected to make decisions considering all available information, in the absence of a conflict of interest. The members of the Company’s Board of Directors may not use their official position and information about their participation in the governance bodies of legal entities, in which they have an interest, including by way of resignation from any such entities in which they have an interest, and about an intention to establish or hold interest in any entities competing with Russian Railways, as well as about their participation in the governance bodies of legal entities, in which they have or may have a direct or indirect influence, such as 20 or more percent of voting shares (interests, stakes), as well as about their participation in the governance bodies of legal entities, in which they may be considered as interested parties, and about an intention to establish or hold interest in any entities competing with the Company.

The Zheldorkontrol Internal Control Centre monitors and ensures that the members of the Board of Directors refrain from doing anything which triggers or may trigger a conflict between their interests and those of the Company.

The risk management system seeks to:
- ensure uninterrupted operations of Russian Railways by limiting its exposure to negligible external and internal factors;
- provide a reasonable level of assurance about achieving the target benchmarks envisaged by the bylaws of Russian Railways in the view of the Company’s exposure to the external and internal factors;
- promote harmonisation based on a common methodology and unified principles taking into account the interconnectedness of risks, their mutual influences and possible implications;
- ensure integration of risk management practices as an essential part of all management processes, including strategic and operational planning;
- provide continuity by conducting regular monitoring and updating inputs for Russian Railways’ risk management system;
- cover all business lines by integrating risk management procedures in all functional areas of the Company’s operations, including as part of the Company’s process approach to management;
- strive for a reasonable balance between criteria determining the risk response, including the balance between potential losses and growth opportunities on the balance between risk management costs and potential damage caused by a risk.

The following external risks may have the greatest impact on the Company’s performance:
- weaker macroeconomic environment as compared to the outlooks embedded in the Long-Term Development Programme of Russian Railways;
- insufficient indexation of tariffs against growing prices for products consumed by Russian Railways;
- no government resolutions on long-term financing of the railway transport development or a failure to implement such resolutions;
- liberalisation of the freight and passenger transportation markets.

To prevent these risks and timely respond to them, Russian Railways stays in regular contact with the Government and key customers keeping them informed about potential adverse effects of the adopted decisions. To mitigate potential risk impacts, Russian Railways enhances its customer focus and the quality of its services while also running an efficiency improvement programme.
<table>
<thead>
<tr>
<th>Risk category</th>
<th>Risk description</th>
<th>Probability</th>
<th>Impact</th>
<th>Mitigants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Macroeconomic</td>
<td>Weaker than forecasted macroeconomic performance</td>
<td>20–50%</td>
<td>4</td>
<td>Implementing a set of efficiency improvement measures such as enhancing energy efficiency, introducing resource-saving technologies, curtailing price growth, and launching various organisational and technical initiatives.</td>
</tr>
<tr>
<td></td>
<td>Insufficient indexation of tariffs against growing prices for products consumed by Russian Railways</td>
<td>20–50%</td>
<td>4</td>
<td>Keeping in constant touch with the Government and key customers to provide the stakeholders with complete and objective information about potential adverse effects of the adopted decisions for Russian Railways. Implementing a set of efficiency improvement measures.</td>
</tr>
<tr>
<td>State regulation</td>
<td>No government resolutions on long-term financing of the railway transport development or a failure to implement such resolutions</td>
<td>20–50%</td>
<td>3</td>
<td>Searching for alternative sources of financing. Optimising technical solutions for capital investment projects. Breaking down projects into stages with their subsequent implementation in the order of priority.</td>
</tr>
<tr>
<td></td>
<td>Changes in the regulatory framework, including regulations providing support to other transport modes and weakening the competitiveness of railway transport</td>
<td>20–50%</td>
<td>3</td>
<td>Keeping in constant touch with the Government and key customers to provide the stakeholders with complete and objective information about potential adverse effects of the adopted decisions for Russian Railways.</td>
</tr>
<tr>
<td></td>
<td>Liberalisation of the railway passenger transportation market</td>
<td>S–20%</td>
<td>4</td>
<td>Submitting timely proposals on regulatory amendments to the Government with a detailed explanation of economic and safety concerns and best global practices behind them.</td>
</tr>
<tr>
<td></td>
<td>Liberalisation of the railway freight transportation market</td>
<td>S–20%</td>
<td>4</td>
<td>Submitting timely proposals on regulatory amendments to the Government with a detailed explanation of economic and safety concerns and best global practices behind them.</td>
</tr>
<tr>
<td>Market</td>
<td>Significant changes in cargo types and transportation routes versus the forecast</td>
<td>S–10%</td>
<td>2</td>
<td>Building long-term relations with customers and improving consumer feedback strategies. Enhancing market flexibility and expanding business in deregulated segments. Strengthening logistics capacities to satisfy customer demand for comprehensive services.</td>
</tr>
<tr>
<td></td>
<td>Aggressive pricing policies from operators of other transport modes</td>
<td>S–20%</td>
<td>3</td>
<td>Building long-term relations with customers and improving consumer feedback strategies.</td>
</tr>
<tr>
<td>Investment</td>
<td>Insufficient investment in infrastructure development</td>
<td>S–20%</td>
<td>4</td>
<td>Optimising technical solutions. Breaking down projects into stages with their subsequent implementation in the order of priority.</td>
</tr>
<tr>
<td></td>
<td>Failure to comply with the investment programme implementation schedule</td>
<td>S–20%</td>
<td>2</td>
<td>Improving the management framework and project management competencies. Breaking down implementation plans into project roadmaps.</td>
</tr>
<tr>
<td>Tax</td>
<td>Higher tax burden driven by tighter fiscal policies in Russia amidst social and economic uncertainties</td>
<td>20–50%</td>
<td>4</td>
<td>Staying in constant contact with the federal and regional tax authorities.</td>
</tr>
<tr>
<td>R&amp;D and technology</td>
<td>Weaker competitiveness of the railway transport due to a technology gap with other modes of transport</td>
<td>S–20%</td>
<td>3</td>
<td>Implementing the Comprehensive Innovative Development Programme of Russian Railways Group for 2016–2020.</td>
</tr>
<tr>
<td></td>
<td>Underperformance in adoption and utilisation of innovative R&amp;D solutions</td>
<td>S–20%</td>
<td>2</td>
<td>Conducting timely overhauls, upgrades and reconstruction of infrastructure facilities, performing repairs and maintenance on the rolling stock. Implementing the investment programme.</td>
</tr>
<tr>
<td>Technology (internal)</td>
<td>Poorer traffic safety due to: a) deterioration in rolling stock reliability; b) deterioration in infrastructure reliability</td>
<td>S–20%</td>
<td>2</td>
<td>Conducting timely overhauls, upgrades and reconstruction of infrastructure facilities, performing repairs and maintenance on the rolling stock. Implementing the investment programme.</td>
</tr>
<tr>
<td></td>
<td>Insufficient cooperation with global railway engineering leaders</td>
<td>S–20%</td>
<td>2</td>
<td>Conducting timely overhauls, upgrades and reconstruction of infrastructure facilities, performing repairs and maintenance on the rolling stock. Implementing the investment programme.</td>
</tr>
<tr>
<td>Technology (external)</td>
<td>Steeper debottlenecking at associated transport facilities (port capacities, warehouse terminals) versus the forecasts contained in the Company’s investment programme</td>
<td>S–20%</td>
<td>2</td>
<td>Conducting timely overhauls, upgrades and reconstruction of infrastructure facilities, performing repairs and maintenance on the rolling stock. Implementing the investment programme.</td>
</tr>
<tr>
<td></td>
<td>Failure to meet the freight transportation market needs due to the inefficient freight railcar fleet</td>
<td>S–20%</td>
<td>3</td>
<td>Cooperating with rolling stock operators to improve railcar fleet management efficiency.</td>
</tr>
</tbody>
</table>

* From the point of view of achieving the Company’s objectives:
  - 1 – low threat
  - 2 – could have impact if combined with other adverse factors
  - 3 – high impact
  - 4 – could lead to failure to achieve goals.
### Risks associated with dedicated business lines

<table>
<thead>
<tr>
<th>Business line</th>
<th>Risks</th>
<th>Mitigants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passenger transportation</td>
<td>• Risk of lower passenger turnover; higher service costs per pkm; lower than expected reimbursement of expenses and lost income by the federal and regional governments;</td>
<td>• Improving the tariff policy, using promo opportunities across passenger transportation segments; enhancing customer relations through the loyalty programme; improving train service schedules, including by offering faster train services; developing and promoting new routes; renewing the rolling stock; assessing progress on initiatives and targets envisaged by the Passenger Transport Service Improvement Programme for 2017–2019, enhancing passenger experience; monitoring and improving technical characteristics of the train station infrastructure and rolling stock on an ongoing basis; monitoring the quality of passenger services on an ongoing basis; enhancing personal and collective responsibility of the business line’s employees for traffic safety;</td>
</tr>
<tr>
<td>Freight transportation and logistics</td>
<td>• Flaunting global economy; geopolitical tensions; potential deterioration of the operational environment across Russian Railways’ network; discontinuation of incentive (subsidy) programmes targeting railway container shipments in China; rivalry with other transport modes and stronger competition in the railway container transportation market;</td>
<td>• Keeping in constant touch with the Government and key customers to provide them with complete and objective information about potential adverse effects of the adopted decisions for Russian Railways; enhancing customer focus and service excellence; building long-term relations with customers and improving consumer feedback strategies; – enhancing market flexibility and expanding business in deregulated segments; – extending the scope of flexible tariff policies; – strengthening logistics capacities to satisfy customer demand for comprehensive services; – searching for alternative sources of financing for the terminal infrastructure development projects; – taking consistent steps to develop the infrastructure of international transport corridors and boost container-based freight flows; – strengthening intermodal logistics capacities and boosting cooperation with seaports; – cooperating with rolling stock operators to improve railcar fleet management efficiency; – diversifying business through the use of Internet of Things and high-quality provider services;</td>
</tr>
<tr>
<td>Railway transportation and infrastructure</td>
<td>• Poorer safety; delivery delays; deficit of operable locomotive fleet; increasing number of technical failures;</td>
<td>• Rehabilitating and developing railway infrastructure; renewing the traction stock; switching to the purchase of locomotives under life cycle contracts;</td>
</tr>
<tr>
<td>International operations</td>
<td>• Waning presence in the global markets; insufficient competencies for tapping into future growth segments; stronger competition from foreign engineering companies;</td>
<td>• Participating in partnerships and consortiums; participating in joint projects with foreign companies having the required competencies; exchanging experience with the leading foreign manufacturers and R&amp;D institutions; training personnel to upgrade the existing and develop new competencies;</td>
</tr>
</tbody>
</table>

### Financial risk management

The Company lays a special emphasis on managing financial risks and insuring its property and liability. All related decisions are made by the Financial Risk Management Commission, a collective body comprised of dedicated department employees and headed by the First Deputy CEO of the Company.

#### Credit risks

To manage its credit risks, Russian Railways approved methods to calculate credit limits and regulatory documents governing operations with bank guarantees and sureties, including the unified corporate standard of Russian Railways Group for dealing with collateral instruments. The Company uses the credit limit calculation methods to assess financial institutions and calculate relevant credit limits so as to manage bank transactions involving deposits and bank guarantees based on the assessment of the respective financial institution.

In its dealings with the real sector companies, Russian Railways relies on a system of management standards that include standard terms of settlement with counterparties, provisional remedies, treasury control, limitation of receivables and payables, bank guarantees underpinning the parties’ commitment, proper performance (including over the warranty periods for supply contracts) and repayment of advances, and sureties from the parent companies. These tools help to protect Russian Railways against the risk of counterpart default (improper or delayed fulfilment of obligations). Financial institutions that issue bank guarantees and sureties are selected based on their credit record and existing credit limits.

#### Liquidity risk

The Company manages its liquidity based on the balance of payments, payment schedule and payment position as per the approved budgets. Depending on the current liquidity situation, the Company promptly raises or deposits funds under the best available market conditions.

#### Currency and interest risks

To assess this category of risks, the Company builds models and evaluates budget parameters factoring in potential volatility of the relevant market indicators.

Assessment of Russian Railways’ currency risks and selection of a currency risk management tool are based on the analysis of the Company’s foreign currency exposure. In order to estimate the foreign currency exposure, the Company’s operations are broken down into and analysed by investment, operating and financial activities. The amount and structure of the estimated foreign currency exposure have further implications for the Company’s borrowing policy and hedging approach.

#### Insurance

The Company insures its real estate, rolling stock, employees, liability of a railway infrastructure owner, carrier liability, and also liability of directors and officers working in the Company and its 73 subsidiaries and affiliates. 682 insurance claims were settled in the reporting year, with total insurance compensation exceeding RUB 1 bn.

To ensure a common approach to subsidiary insurance, in 2010, the Company put in place a single corporate framework for insuring subsidiaries and affiliates of Russian Railways.

As part of its ongoing push to improve the insurance of Russian Railways’ property and provide the strongest possible insurance coverage, the Company selected the most expensive and riskiest property items subject to insurance. The total value of these facilities exceeds RUB 407 bn. Each year, the Company purchases facultative reinsurance policies for said items from the leading global reinsurance companies, including Swiss Re, Munich Re, Allianz, Zurich Insurance Company, etc.

In 2017, key objectives in the realm of financial risk management included adjustment of the system to external pressures such as international sanctions, strong financial market volatility and increased uncertainty, and application of single financial risk management principles across the Group.
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