



Annual Report 2016

Focus on the customer

Open Joint-Stock Company  
Russian Railways



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# Message from the Chairman of the Russian Railways Board of Directors



**Dear Colleagues and Partners,**

When evaluating the performance results of Russian Railways in 2016, it is essential to note that the Company successfully met all of its primary objectives.

The effective cooperation and joint work of the Russian Railways Board of Directors, its committees and management enabled the Company to maintain positive dynamics in its key performance indicators. The Company's investment programme was fulfilled as planned in 2016 as was its financial plan. The effective management of financial resources helped to end 2016 with solid results and a profit, making it possible, among other things, to pay dividends to the federal budget.

The decisions made by the Government of the Russian Federation to support the Company's

activities serve as confirmation of its high appraisal of the work performed by Russian Railways. Amendments were made to the Tax Code to extend the zero VAT rate for suburban passenger transportation services and a zero VAT rate was also set for the long-haul transportation of passengers and baggage. The government's decisions as well as joint work with the country's regions made it possible to stabilise the situation in suburban transportation in 2016 and create a sustainable long-term model in this sector. In a difficult economic situation, the Company managed to overcome the negative trend

of declining freight transportation volume, while transportation costs only grew 0.8%.

The Government of the Russian Federation and the state authorities provided support to the Company in terms of the tariff policy as well. The key decisions made in this regard make it possible to move forward, balance the financial plan and work flexibly with the main partners of Russian Railways.

Major projects that aim to fulfil the instructions of the President and Government of the Russian Federation and increase the traffic and carrying

capacity of the country's railways were implemented on schedule.

The results achieved by the Company in 2016 do not mean there is no room or potential for further effective development. Keeping up with the latest trends on the transportation services market, the Company continues to develop as it utilises the best methods of corporate governance and control, optimises production processes and introduces advanced technologies.

The continuous development of the railway industry would be impossible without the active role of freight owners,

transport engineering enterprises, operator communities and other market participants. That is precisely why it is so important to make balanced decisions that equally meet the interests of all stakeholders.

I wish the Company's employees, the Board of Directors and management success in continuing down the path towards the sustainable long-term development of the railway industry.

**Arkady Dvorkovich**  
Chairman of the Russian Railways Board of Directors

# Message from the Chairman of the Management Board and President of Russian Railways



**Dear Partners and Colleagues,**

**For the Russian Railways Group, 2016 was marked by improvements in services for our customers.**

We set the goal of enhancing the quality of passenger service and doing this with our own resources. Work to improve our services as part of the 'Year of the Passenger programme enabled us to reverse the negative trend in transportation: 1.037 billion people used railway services, a 1.6% increase from 2015.

People began to travel more around the country, including to tourist destinations, which was particularly noticeable in summer traffic. For the convenience of passengers, we started offering ticket sales for all long-haul trains 60 days before departure. We have plans to increase this period to 120 days so that people can plan their trips in advance. We have not lost sight of passengers with physical disabilities and have created more comfortable conditions for them in trains and at train stations.

The situation in suburban transportation has stabilised and demand is growing for commuter trains within the city. The Moscow Central Ring project demonstrated the demand for such services in megacities

as Lastochka (Desiro RUS) trains transported more than 27 million people on the MCR by the end of the year. We are planning to develop a similar service in other major Russian cities. This is the contribution of railwaymen to the future of urban agglomerations.

Positive dynamics were seen in freight transportation volume, which totalled 1.222 billion tonnes in 2016. In terms of work with shippers, we are focusing on improving service, simplifying registration procedures and developing electronic document flows. Freight delivery speed, reliability and accuracy have all increased. Taking into account the situation on global markets, we offered more than 30 tariff incentives last year as a result of a mutually beneficial compromise.

Despite the significant changes in the freight transportation structure, we managed to fully balance the Company's financial results for the first time in 2016 without receiving government subsidies. This became possible due to meticulous work

to optimise costs, enhance workforce productivity, introduce resource-saving technologies and contain price growth for the products offered by Russian Railways.

Overall, costs were cut by RUB 103 billion in 2015-2016, which is comparable with the Company's monthly expenses.

Russian Railways met its payment obligations to the regional budgets and maintained its status as one of the country's key taxpayers. The Group's total taxes and insurance premiums amounted to RUB 430 billion in 2016, including RUB 161 billion to the regional budgets.

We will continue work to optimise costs, increase workforce productivity and modernise infrastructure.

The Russian Railways Investment Programme amounted to almost RUB 400 bln in 2016. Major projects to fulfil the instructions of the President and Government of the Russian Federation

are being implemented on schedule. Such projects include modernising the Baikal-Amur and Trans-Siberian Mainlines, upgrading approaches to ports, building the Zhuravka-Millerovo line and developing the infrastructure of the Moscow transportation hub. Preparations are under way for the construction of the first Russian high-speed railway Moscow-Nizhny Novgorod-Kazan.

It's important to note that our projects undergo multi-stage control with the active use of independent process and price audit procedures. The share of procurements from small and medium-sized businesses is increasing and exceeded 45% for the year (RUB 132.1 bln) despite a target of 18% (RUB 52.3 bln). In addition, Russian Railways drafted and began utilising anti-corruption measures in 2016 in accordance with legislation. A commission to settle conflicts of interests was also set up and starting functioning.

Russian Railways will continue its policy of improving the quality of services, cutting costs and ensuring a financial and technological balance. The Federal Antimonopoly Service has approved an additional 2% surcharge to the freight tariff for the major overhaul of infrastructure in 2017.

The year 2017 will be a special one for us: 180 years have passed since the opening of the first railway in Russia. The steel rails fundamentally changed our country in the nineteenth century and not only became a driver for economic development, but one of the symbols of Russia.

With respect for our history and traditions, we will continue work for the benefit of the country's economy. I am confident that together we will meet any challenges and do everything possible for the prosperity and dynamic development of our country.

**Oleg Belozеров**  
President of Russian Railways

# Achieving effective results

## Highlights of 2016

### Net profit

RUB **6.5** bln

A balanced financial result without government subsidies. Increase of RUB 6.2 bln versus the previous year.

### Labour productivity

**+5.4%**

Growth of 0.6 p.p. versus the previous year

### Growth in costs maintained at

**0.8%**

amidst 7.1% average annual inflation

### Key performance indicators of Russian Railways

Indicator	Measurement unit	2015	2016	Change vs. previous year	
				+/-	%
<b>Handling</b>	mln t	<b>1,214.5</b>	<b>1,222.3</b>	<b>7.8</b>	<b>100.6</b>
<b>Freight turnover, including</b>	bln tkm	<b>2,954.9</b>	<b>2,997.8</b>	<b>42.9</b>	<b>101.5</b>
excluding the empty runs of railcars of other owners <sup>1</sup>	bln tkm	2,304.8	2,342.6	37.8	101.6
empty railcars of other owners <sup>2</sup>	bln tkm	650.1	655.2	5.1	100.8
<b>Passenger turnover, including</b>	bln pass. km	<b>120.4</b>	<b>124.5</b>	<b>4.0</b>	<b>103.4</b>
long haul traffic	bln pass. km	89.5	93.5	3.9	104.4
suburban traffic	bln pass. km	30.9	31.0	0.1	100.4
<b>Passengers transported, including</b>	mln pass.	<b>1,020.4</b>	<b>1,037.0</b>	<b>16.6</b>	<b>101.6</b>
long haul traffic	mln pass.	97.9	101.4	3.5	103.6
suburban traffic	mln pass.	922.5	935.6	13.1	101.4
Average service speed of freight train	km/h	39.1	39.7	0.6	101.5
Loaded freight car delivery speed	km/day	371.5	380.5	9.0	102.4
Share of shipments delivered within required (contractual) period	%	92.9	96.1	3.2 p. p.	X
Growth in productivity for handling activities	%	4.8	5.4	0.6 p. p.	X
Net profit	RUB bln	0.3	6.5	6.2	-

## Key results

**2,997.8** <sup>↑+1.5%</sup>  
bln tkm

Freight turnover in 2016

**124.5** <sup>↑+3.4%</sup>  
bln pass. km

Passenger turnover in 2016

**1,037** <sup>↑+1.6%</sup>  
mln pass.

Passengers transported in 2016

### Passenger transportation

A total of 1.037 billion passengers were transported in 2016 (+1.6% versus 2015).

Passenger turnover increased by 3.4% in 2016 versus 2015, including by 4.4% in long haul traffic and 0.4% in suburban traffic, marking the first time growth has been seen since 2013 following a downward trend.

On 10 September 2016, passenger traffic began on the Moscow Little Ring Railway. More than 27.1 million passengers utilised this service in 2016, including more than 319,600 passengers on a single day (28 December).

A total of 10.2 million passengers were transported as part of the Daily Express programme in 2016 (+22% versus 2015).

Double-decker trains carried some 2.8 million passengers, a two-fold increase from 2015.

Rapid-transit trains transported 9.2 million passengers (+19.1% versus 2015), including 4.8 million passengers on Sapsan trains via the Moscow-St. Petersburg route (+37.7% versus 2015).

### Freight transportation

Freight shipments grew by 0.6% in 2016 with loaded freight turnover increasing by 1.6% versus 2015.

The average freight train service speed grew by 1.5% compared to the 2015 level.

Freight delivery speed increased by 2.4%. More than 22,800 freight trains were dispatched under 125 contracts as part of the 'Scheduled Transport' service. This service expanded in 32 geographical areas compared with 2015.

Some 400 trains were dispatched as part of the 'Freight Express' service (+47% versus 2015).

<sup>1</sup> Hereinafter referred to in the Annual Report as 'Loaded freight turnover'

<sup>2</sup> Hereinafter referred to in the Annual Report as 'Empty freight turnover'

# The city gets closer

The Moscow Central Ring (MCR) launched operations in September 2016. The MCR is meant to become an integral part of the city's modern transport system and distribute passenger traffic. MCR trains carried more than 27 mln passengers in 2016.



# The Moscow Central Ring launched operations in 2016

The MCR is being launched in phases. Thirty-one stations opened during the first two stages from 10 September to 8 November 2016. The new ring road offers the capital's residents and guests 15 transfer stations to the metro and 6 transfer stations to suburban trains. The opening of all planned transport interchange hubs in coming years will enable passengers to choose even more convenient routes and transfer to 18 metro stations and 9 radial routes of the Moscow Railway Hub. The "depressed" territories adjacent to the ring will be renovated, which will ensure the comprehensive development of the urban environment.



The semi-circular vestibule supported by facade supports resembles the huge Luzhniki sports arena.

**LUZHNIKI**  
Station



Aboveground transfer to **SPORTIVNAYA** station

Underground transfer to **LENINSKY PROSPEKT** station

**DELOVOY TSENTR**  
Station

**KUTUZOVSKAYA**

Enclosed transfer to **KUTUZOVSKAYA** station

**PLOSHCHAD GAGARINA**

**KRYMSKAYA**

**VERKHIYE KOTLY**

**ZIL**

**AVTOZAVODSKAYA**

**DUBROVKA**

**UGRESHSKAYA**

**NOVOKHOKHLOVSKAYA**

**NIZHEGORODSKAYA**

**ANDRONOVKA**

**SHOSSE ENTUZIASTOV**

Transfer to **FREZER** railway station

Aboveground transfer to **SHOSSE ENTUZIASTOV** station

**SOKOLINAYA GORA**

Aboveground transfer to **PARTIZANSKAYA** station

Enclosed transfer to **LOKOMOTIV** station

**BULVAR ROKOSOVSKOVO**

Aboveground transfer to **BULVAR ROKOSOVSKOVO** station



As of the end of 2016, the MCR operated 33 Lastochka trains and 67 ticket offices for the purchase of travel documents. There were 31 stations available to passengers with 15 stations offering transfers to metro lines and 6 to suburban railway stations.

The MCR carried 27,028,013 passengers over the period from 10 September to 31 December 2016.

Each seventh Moscow Railway suburban passenger train was used by the MCR.

Lastochka train pairs navigated the MCR each day with 6-minute intervals at rush hour



**31** stations  
Phase 1: opening of 26 stations  
Phase 2: opening of 5 stations

**54** km

**84** min

**134**



# Market overview

The improvement in the economic situation in the Russian Federation seen in 2016 against the backdrop of relative stabilisation in the global economy contributed to positive dynamics in freight and passenger transportation by Russian Railways, among other things. At the same time, the Company operates on the transportation market amidst significant competitive pressure from other types of transport.

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**5,180.3**  
bln tkm

freight turnover

**456.4**  
bln pass. km

passenger turnover



# Russian transport industry overview and key trends

Global economic growth slowed slightly in 2016 with a reversal in the downward trend, as evidenced by the improved situation in the second half of the year.

Positive changes also took place in the Russian economy in 2016. These results will serve as a basis for further improvements in the economic position of the Russian Federation.

## Key trends and changes in the global and Russian economies

According to the International Monetary Fund, global GDP growth slowed slightly to 3.1% in 2016 from 3.4% in 2015. However, forecasts from international expert organisations predict global economic growth will accelerate in 2017 and 2018.

The economic dynamics varied in countries around the world in 2016. In developed nations, GDP growth slowed to 1.6% from 2.1% in 2015. However, in certain leading economic centres growth accelerated over the course of the year. In the United States, GDP growth totalled

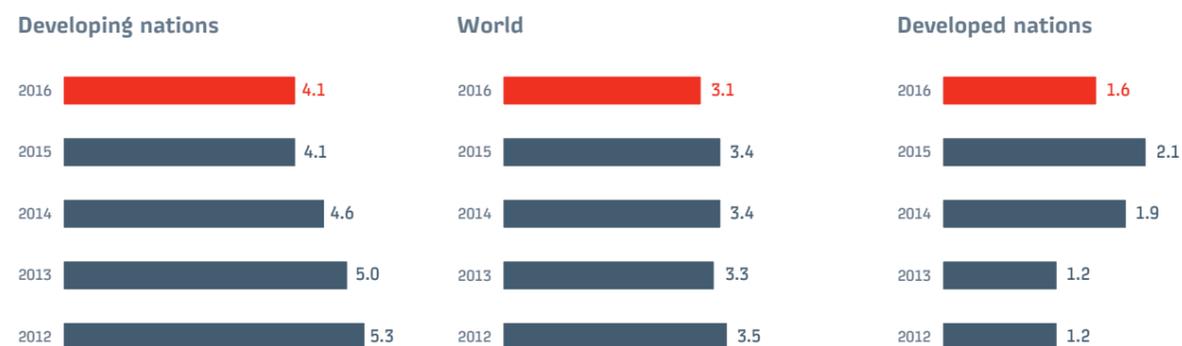
1.9% in annual terms in the fourth quarter versus 1.6% in the first quarter, while in the United Kingdom such growth was 2.2% and 1.8%, respectively. The continuation of stimulus and quantitative easing programmes in certain countries were of great importance for the economic dynamics of developed nations and the global economy.

In the group of developing nations, GDP growth totalled 4.1% in 2016, or the same as in 2015. This was facilitated by stimulus measures in China as a result of which this country's GDP growth did not slow

as much as anticipated as well as a decrease in the depth of GDP decline in Russia and Brazil.

The positive trends that have started taking hold in the global economy are confirmed by the dynamic growth on stock markets, which shows investors are confident about the prospects for global growth. The global economy was positively impacted by the decision of OPEC nations to reduce oil production, which led to growth in global oil prices and improved the situation in exporting countries.

GDP growth rates for the world, developed nations and developing nations in 2012-2016, % vs. previous year



The situation in the Russian economy improved in 2016 partly as a result of stability in the global economy, an increase in global prices for oil and other Russian exports as well as the economy's adaptation to difficult external conditions. Evidence that these processes intensified in the Russian economy in 2016 can be seen in the significant growth in the business activity index (PMI) in the services and manufacturing sector, which transitioned from recession to growth.

The depth of decline in Russian GDP decreased in 2016 and stood at 0.2% versus 2.8% in 2015. The economy gained some support from external demand, which resulted in exports declining at a less significant rate than in 2015.

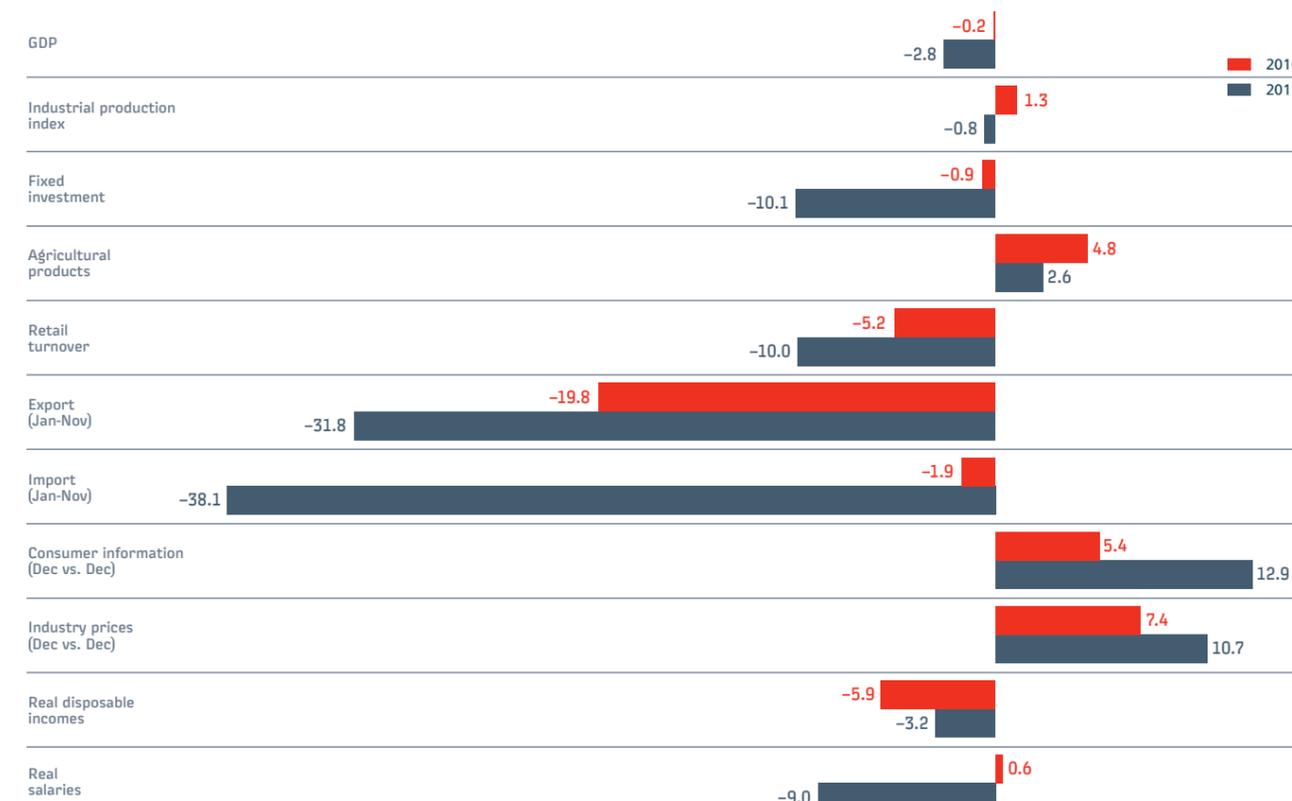
The improvement in the macroeconomic situation in Russia in 2016 was facilitated by industrial production dynamics, which were better than GDP dynamics. The industrial production index expanded 1.3% in 2016 following a decline of 0.8% in 2015. At the same time, the industrial sectors had different production growth rates. Whereas mineral resource output increased by 2.7%, the manufacturing sector saw less significant growth at 0.5%.

In these conditions, there was some improvement in investment activity indicators. The decline in fixed investment was 0.9% in 2016 compared to a decrease of 10.1% in 2015. The depth of decline in construction work decreased to 4.3% in annual terms in 2016 from 4.8% in 2015.

At the same time, a low level of consumer demand was seen in 2016. Retail turnover declined by 5.2% due to a decrease in real disposable incomes (by 5.9%) and the continued savings model of consumer behaviour.

A positive result of 2016 was a substantial slowdown in inflation, which has a positive impact on expectations among economic agents concerning the economy's prospects. Consumer price growth slowed to 5.4% in 2016 from 12.9% in 2015 (December vs. December).

Change in Russia's macroeconomic indicators in 2015-2016, % vs. previous



## Freight turnover

Freight turnover in Russia increased by 1.8% in 2016 compared with 2015 and totalled 5,180.3 bln tkm, according to the Russian State Federal Statistics Service.

Growth in freight turnover was seen in all types of transport.

Railway transport increased freight transport by 1.6%<sup>1</sup>.

Air transport saw the biggest increase in freight turnover for the year (+20.6%).

Railway transport accounted for 45.2% of freight turnover in the country's transport system (down by 0.1 p.p. from 2015, but up 2.4 p.p. from the pre-crisis level of 2008).

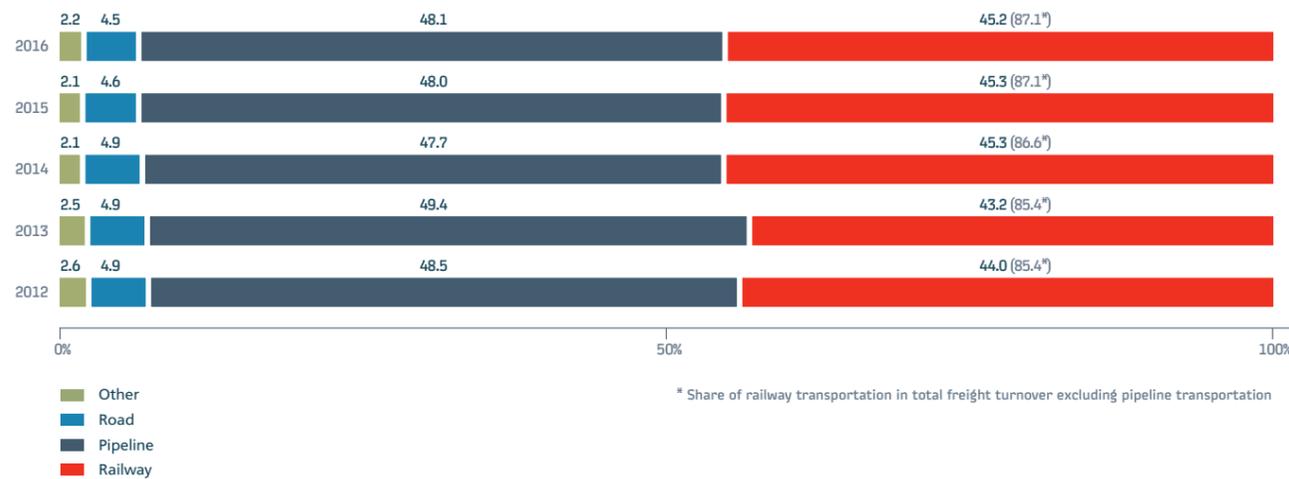
Excluding pipeline transportation, railway transport remained unchanged at 87.1% in 2016.

**5,180.3 bln tkm**  
freight turnover in Russia in 2016

### Freight turnover by transportation mode in 2016

Transportation mode	2016		Share of transportation mode in overall freight turnover, %	
	bln tkm	% 2015	2015	2016
<b>Freight turnover by type of transportation, including</b>	<b>5,180.3</b>	<b>1.8</b>	<b>100.0</b>	<b>100.0</b>
railway (loaded freight turnover)	2,342.6	1.6	45.3	45.2
road	234.5	0.8	4.6	4.5
sea	42.8	7.6	0.8	0.8
inland waterways <sup>2</sup>	64.7	3.4	1.2	1.3
air (transport aviation)	6.6	20.6	0.1	0.1
pipeline	2,489.1	1.8	48.0	48.1
Reference: share of railway transport excluding pipelines			87.1	87.1

### Structure of freight turnover by transportation mode, %



## Passenger turnover

Passenger turnover in Russia decreased by 1.9% in 2016 compared with 2015 and amounted to 456.4 bln pass. km<sup>3</sup>, including:

- railway – 124.5 bln pass. km,
- road – 16.6 bln pass. km,
- air – 215.3 bln pass. km.

Passenger turnover in the country declined in 2016 due to a decrease in air transportation (by 5.1%) and road transportation (by 1.0%).

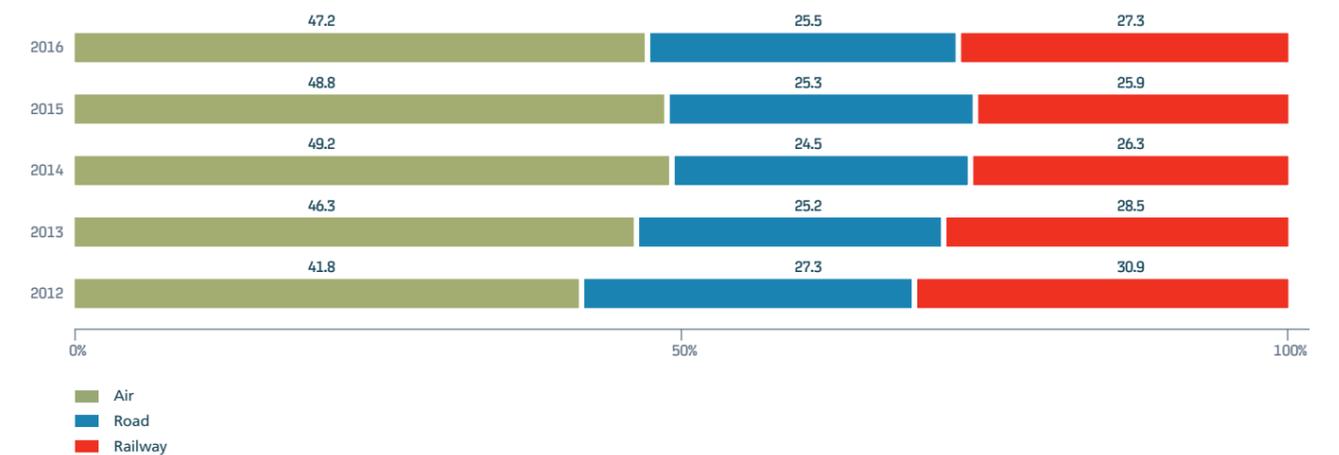
Road (bus) transportation makes up 25.5% of total passenger transportation (+0.2 p.p. versus 2015). Air transportation accounts for 47.2% of total public passenger turnover (–1.6 p.p. versus the 2015 level).

Railway passenger turnover increased by 3.4% versus the 2015 level, while its share of transportation expanded to 27.3% (by 1.4 p.p.).

### Passenger turnover by transportation mode<sup>3</sup>

Transportation mode	2016		Share of transportation mode in overall passenger turnover, %	
	bln pass. km	% 2015	2015	2016
<b>Passenger turnover via public transportation</b>	<b>456.4</b>	<b>-1.9</b>	<b>100.0</b>	<b>100.0</b>
railway <sup>4</sup>	124.5	3.4	25.9	27.3
road (buses)	116.6	-1.0	25.3	25.5
air (transport aviation)	215.3	-5.1	48.8	47.2

### Structure of passenger turnover by transportation mode, %



<sup>1</sup> Railway freight turnover according to reporting data of Russian Railways.

<sup>2</sup> Reference: freight shipments by sea and inland waterway transportation include shipments made under a freight shipment contract by the company's own vessels and/or leased (chartered) vessels (including vessels leased to foreign companies (charterers) based on time charter conditions sailing under the flag of the Russian Federation with the appropriate shipment documents.

<sup>3</sup> Excluding urban and water transportation modes.

<sup>4</sup> Passenger turnover according to reporting data of Russian Railways.

# Russian Railways in the railway industry

## Freight transportation

The Russian Railways Group's<sup>1</sup> share of transportation amounted to 12.7% in 2016.

Russian Railways (excluding S&A) saw its share of shipment volume on the Russian freight car handling market decline from 2.6% to 2.3% in 2016 compared with the previous year.

Russian Railways S&A accounted for 10.4% of shipment volume in 2016, down 0.8 p.p. compared with 2015.

The Russian Railways Group saw its share of overall freight turnover volume plummet from 78.2% in 2003 to 13.6% in 2016, while the share of freight turnover handled by privately owned railcars

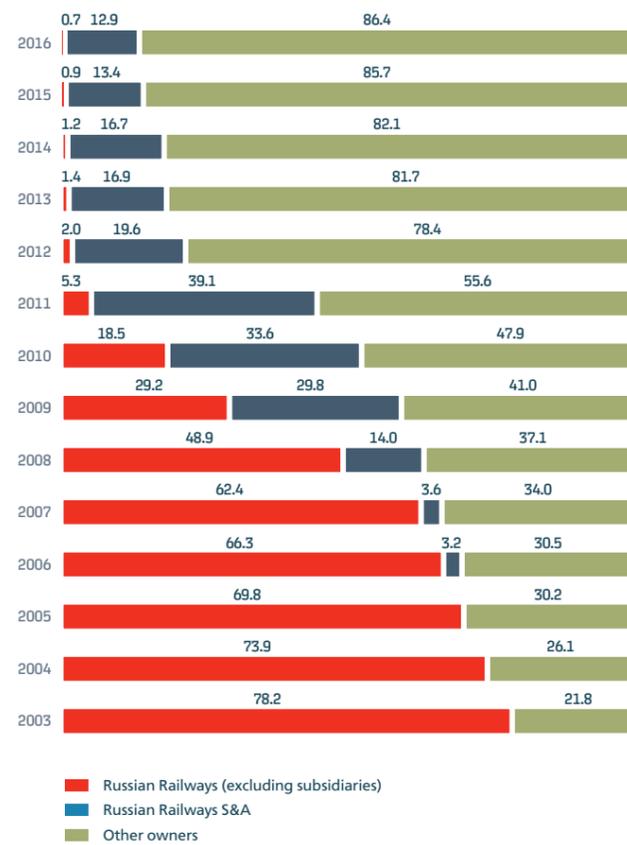
increased from 21.8% in 2003 to 86.4% in 2016.

The share of Russian Railways (excluding S&A) on the freight car handling market in terms of freight turnover volume decreased from 0.9% in 2015 to 0.7% in 2016.

Structure of Russian freight car handling market by transportation volume (in tonnes) in 2003-2016, %



Structure of Russian freight car handling market by freight turnover volume in 2003-2016, %



## Passenger transportation

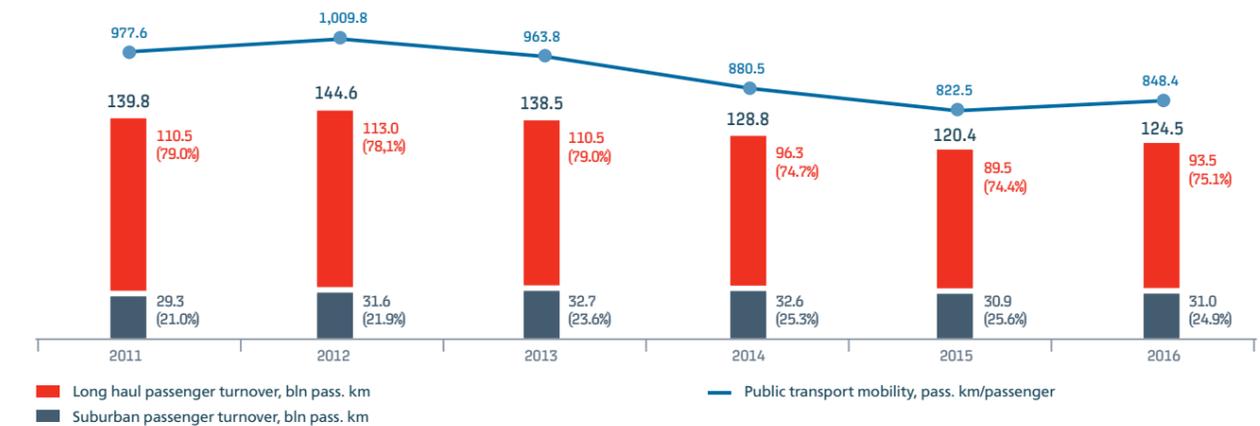
The share of Russian Railways S&A in long-haul passenger turnover declined to 95% (by 0.7 p.p.) in 2016. Private carriers maintained their share at 1.4%, while the proportion of passenger turnover handled by high-speed trains

(High-Speed Transportation Directorate – branch of Russian Railways) increased to 3.6% (by 0.7 p.p.).

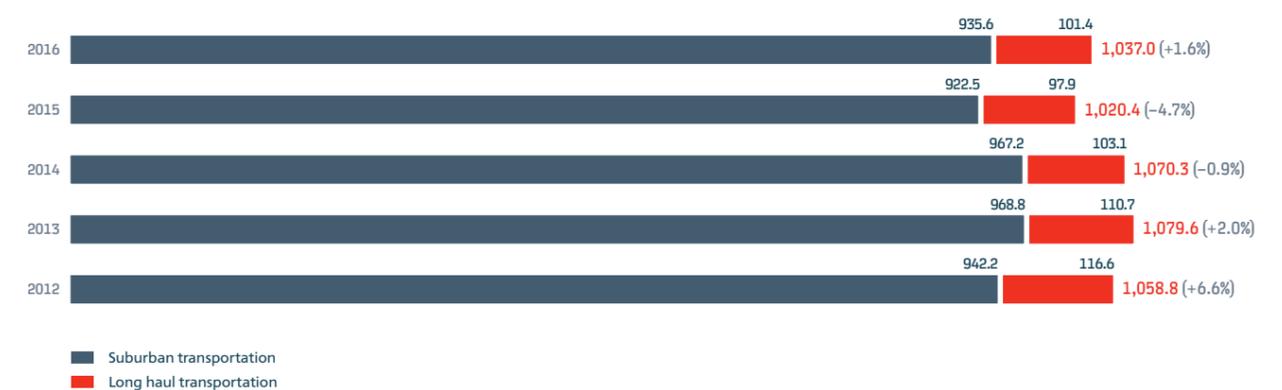
Suburban traffic makes up only 0.1% of the total suburban passenger transportation of Russian Railways, while

the Company's S&A account for 99.8% of such travel. Private carriers have a 0.1% share of this market. This ratio has remained unchanged on the suburban passenger transportation market for the last several years.

Passenger turnover via railway transportation and public transport mobility



Passengers carried by railway transportation using Russian Railways infrastructure, mln passengers



<sup>1</sup> Transportation volume in railcars of Russian Railways and its subsidiaries and affiliates (hereinafter SGA) (in 2012-2013 excluding Freight One and RusaGrotrans), in Russian Railways railcars leased by SGA and in railcars acquired from SGA and other owners.

# Tariff policy

Railway freight transportation tariffs were indexed at 9% in 2016.

## Principles of freight transportation tariff policy

Legislation defines the principles for government regulation and establishing a tariff policy for freight transportation with respect to natural monopolies. The Government of the Russian Federation adopts decisions and the federal executive authorities pass departmental regulations establishing the principles of government tariff regulation on the basis of federal laws.

The tariff regulation model for railway transportation transitioned to the establishment of a long-term tariff policy for public railway transportation services in 2014 in accordance with the decisions of the Government of the Russian Federation.

In accordance with the guidelines on the government regulation of tariffs for railway freight transportation services as well as the use of public railway infrastructure for freight transportation approved in 2013, a mechanism is being implemented to determine an economic substantiated level of tariffs for the long-term period of regulation using the method

of return on invested capital as regards transitioning to long-term tariff regulation.

The growth rates for railway freight shipments in 2014-2018 had been set with restrictions on tariff increases based on the inflation level of the previous year.

However, in 2014 the Government of the Russian Federation decided to keep tariffs on railway freight shipments at the 2013 level with their subsequent indexation in accordance with the actual inflation level for the previous year.

Thus, railway freight transportation tariffs were not indexed in 2014, but were indexed at 10% in 2015 and at 9% in 2016.

In 2016, when deciding on the indexation of the level of tariffs for freight rail transport, the rate of marginal growth in the effective yield rate of 7.5% was determined. In 2016, Russian Railways had growth in effective yield of 2.7% in terms of freight traffic. The slowdown in the yield growth rate led to a loss in revenue

for Russian Railways and a reduction in the overall tariff burden on the economy as a whole.

In addition, orders by the Russian Federal Antimonopoly Service made selective changes to Price List No. 10-01 that aims to ensure a balance in the Company's work in 2017.

These decisions envisage:

- the upward revision of reduction factors set depending on the transportation distance with respect to coal and iron ore;
- additional indexation of tariffs for the transportation of container freight;
- the unification of tariffs for the transportation of oil cargo with similar physicochemical properties in the same price range on the respective commodity markets.

## Tariff regulation of passenger transportation

### Suburban transportation

In accordance with clause 23 of the Rules for the Railway Transportation of Passengers, Baggage and Cargo Luggage, which were approved by Order No. 473 of the Russian Ministry of Transportation dated 19 December 2013, the following tariffs are in effect for suburban railway passenger transportation:

- zone tariffs – in the form of a fixed rate for a tariff zone;
- tariffs per km – in the form of a fixed rate per 1 km;
- combined tariffs – (amount of the fixed

rate per 1 trip for a certain tariff distance and when travelling above this tariff distance – payment at a fixed rate for each km).

The average tariff on the network was RUB 24.93 per 10 passenger km in 2016, a 7.7% increase over the tariff level of 2013, or RUB 1.78 per 10 passenger km.

To stabilise the situation and create a mechanism for subsidizing suburban transportation in 2016, Resolution No. 703 of the Government of the Russian Federation dated 21 July 2016 was adopted to require the Russian Federal Antimonopoly Service

to set a coefficient of 0.01 on the tariffs for infrastructure services in suburban passenger transportation with full compensation from the federal budget for losses in income by Russian Railways from the state regulation of tariffs for these services until 2030 inclusive.

Amendments were made to Part 2 of Chapter 21 of the Tax Code of the Russian Federation to establish a zero VAT rate for suburban railway passenger transportation services from 1 January 1 2015 until 31 December 2017.

### Long haul transportation

As of 1 January 2016, the existing tariffs in the regulated sector were indexed by Order No. 1227/15 of the Russian Federal Tariffs Service dated 10 December 2014:

- tariffs for travel in second-class sleeping railcars and sitting railcars were indexed at 4%;
- tariffs for passenger transportation using first-class rolling stock were indexed at 4%;
- tariffs for owned (leased) railcars that are part of long-haul trains were indexed at 4%;
- tariffs for the transportation of baggage and cargo luggage as well

as fees and charges for additional work (services) related to the transportation of baggage and cargo luggage were indexed at 4%;

- fees and charges for additional work (services) related to passenger transportation were indexed at 4%.

Under Order No. 103/16 of the Russian Federal Antimonopoly Service dated 4 February 2016, the following existing tariffs were also indexed starting from March 2016:

- tariffs for travel in second-class sleeping railcars and sitting railcars were indexed at 11.6%;

- tariffs for passenger transportation using first-class rolling stock were indexed at 11.6%;
- tariffs for the transportation of baggage were indexed at 11.6%.

The additional indexation is related to the reduction of the VAT rate in 2016 from 18% to 10% for long haul passenger and baggage transportation services. At the same time, the growth in the tariff burden for passengers was maintained at the level of 4%.



## Implementing the tariff policy in accordance with the international treaties of the Russian

According to existing regulatory documents, tariffs for cargo transit via the railways of the Russian Federation are set in accordance with the international treaties to which the Russian Federation is a party.

One such treaty is the Tariff Agreement of Railway Administrations (Railways) of CIS Member States dated 17 February 1993.

Tariffs for freight transit via the railways of Russia are set based on the rules and rates of the CIS Tariff Policy in effect as part of this agreement.

With the enactment on 1 January 2015 of the Eurasian Economic Union (EAEU) Treaty, which was signed by the presidents of Russia, Belarus and Kazakhstan in Astana on 29 May, freight transit via

Russia's railway network from Kazakhstan to Belarus and back as well as transit from Kazakhstan and Belarus to other countries via Russian ports takes place according to the unified tariff denominated in the national currency contained in Price List No. 10-01 "Tariffs for freight transportation and infrastructure services rendered by Russian railways".

## Tariff policy on transit freight shipments

In accordance with WTO requirements, the tariff policy of the railways of CIS member nations for international freight shipments involving Russian Railways contains only base transit tariff rates starting in 2014 and no longer includes descending indices and special rates.

Special tariff conditions for freight transit via Russia's railway network are established by the Russian Railways Management

Board and information about such rates is posted on the Company's official website.

In accordance with the Tariff Agreement of Railway Administrations (Railways) of CIS Member States dated 17 February 1993 and the Concept for Establishing a Coordinated Railway Transportation Tariff Policy for CIS Member States dated 18 October 1996, Russian Railways engaged in work to improve the tariff policy that

aims to preserve the existing and attract additional freight transport volume.

In particular, competitive tariffs were established for the 2016 freight year on the transportation of cotton, ferrous scrap, alumina, aluminium, non-ferrous metals, coal, mineral fertilisers, oil and oil products, raw sugar, sulphur as well as for contained-based freight transportation.

**The decisions to use the tariff corridor attracted 5.7 mln t of different freight to railway transportation in 2016.**

## Implementing a flexible tariff policy within the tariff corridor

Russian Railways is granted the right to modify tariffs for railway freight transportation services within certain price limits as part of international treaties that form the contractual basis for the Common Economic Space and subsequently the Eurasian Economic Union.

Improvements are continuously made to the mechanism for applying the tariff corridor. In particular, amendments were made in 2016 to the rules as regards reducing the lower boundary of the price limits to minus 25% for a distance of up to 3,000 km for freight of the first tariff

class and no restrictions on distance for freight of the second and third tariff classes (Order No. 270/16 of the Russian Federal Antimonopoly Service dated 18 March 2016).

In December 2016, the price limits were reduced to minus 50% for freight of the second and third tariff classes for all length of haul zones, and the validity of multipliers was increased until 2018 inclusive along with their simultaneous reduction from 1.134 to a level not exceeding 1.1 subject to the differentiation of the use of these coefficients by freight type depending

on the price situation on global markets (Orders No. 1756/16 of the Russian Federal Antimonopoly Service dated 13 December and No. 1833/16 dated 23 December 2016).

Having the ability to independently alter tariffs has proved to be highly effective for the Company with respect to attracting freight. In 2016 alone, railway transportation attracted 5.7 mln tonnes of various freight from alternative transportation modes due to the decisions to use the Transport Corridor.



# Strategy of Russian Railways

The mission of the Russian Railways Group is to effectively develop a transportation business that is competitive on the Russian and international markets and focuses on effectively meeting its objectives as a national freight and passenger carrier and owner of public railway infrastructure.

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The Russian Railways Board of Directors approved the Development Strategy of the Russian Railways Group until 2030 on 20 December 2013, which describes the goals and objectives of the Russian Railways Group as well as its key priorities and long-term development projects. The Long-term Development Programmes of Russian Railways and its subsidiaries and affiliates until 2020 were approved by the Board of Directors on 1 December 2014.



## Russian Railways Group's Long-term Development Programme until 2020

The Long-term Development Programme for the Russian Railways Group and its subsidiaries and affiliates until 2020 (hereinafter the LDP) was drafted as the first step towards implementing the Group's Development Strategy (tentatively approved by the Russian Railways Board of Directors in October 2014) in accordance with the Directives of the Government of the Russian Federation to representatives of the interests of the Russian Federation for participation in meetings of the boards of directors (supervisory boards) of joint-stock companies included in a special list approved by the Government of the Russian Federation. The goals and objectives of the LDP have been fully synchronised with the Russian Railways Group's Development Strategy.



Oleg Belozеров

“ The role of transportation as an essential component of economic growth is constantly increasing in the context of the global economy. A strategic priority of Russian Railways is to form balanced and effective transportation infrastructure, both for the sake of developing its Russian business as well as to improve the global competitiveness of international transportation corridors that pass through Russian territory.

In addition, the Russian Railways Board of Directors approved the LDP Audit Standard, which regulates the procedure for conducting such an audit (Minutes No. 25 dated 8 December 2014). Due to the absence of a duly approved LDP, no audit of its implementation was performed in 2016.

The LDP is currently being revised as part of Interaction Plan No. 456 dated 30 October 2015 between the Expert Council under the Government of the Russian Federation and Russian Railways. On the basis of this work and during the coordination of the LDP

by the federal executive authorities, the LDP will be submitted to the Russian Railways Board of Directors for approval in the prescribed manner.



# Brief description of the Development Strategy until 2030

## Strategic goals

The Russian Railways Group's mission aims to achieve the following strategic goals by 2030:



<ul style="list-style-type: none"> <li> To maintain leading positions in freight railway transportation in Europe, enhance the attractiveness of railway transportation for customers and increase freight shipments by 500–800 mln tonnes by 2030;</li> <li> To improve the customer satisfaction level by enhancing the quality of services while maintaining competitive transportation costs;</li> <li> To become one of the top five companies in Europe in terms of logistics business volume and increase the proportion of transportation and logistics services in the Group's business portfolio to 25%;</li> </ul>	<ul style="list-style-type: none"> <li> To provide efficient servicing for the global supply chains of major Russian and international customers and expand the transportation and logistics business on the Eurasian space;</li> <li> To maintain the existing proportion of passenger turnover via the Russian transportation system and increase suburban passenger turnover by 1.8–2.2 times and long-haul and interregional turnover by 1.3–1.7 times by 2030;</li> <li> To implement projects for the development of rapid-transit and high-speed transportation and ensure transportation at the new speed level makes up 20% of overall passenger turnover by 2030;</li> </ul>	<ul style="list-style-type: none"> <li> To become a top ten global company in terms of infrastructure construction and ensure the creation of a long-term order portfolio and the highest level of project implementation;</li> <li> To retain leading positions throughout the world as regards efficiency, safety and the quality of infrastructure services;</li> <li> To ensure the systematic upgrading of assets using innovative technologies and solutions based on the efficient management of the life cycle cost as well as the readiness and reliability of fixed assets;</li> </ul>	<ul style="list-style-type: none"> <li> To become one of the top five most attractive employers among major Russian companies and recruit the best specialists to work at the Group while guaranteeing a competitive salary, increased productivity, improved labour conditions and a modern social package;</li> <li> To prioritise 'green' technologies and ensure a 50% reduction in the environmental burden;</li> <li> To become one of the top five most attractive employers among major Russian companies and recruit the best specialists to work at the Group while guaranteeing a competitive salary, increased productivity, improved labour conditions and a modern social package.</li> </ul>
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## Key performance indicators

The Russian Railways Board of Directors on 30 June 2014 approved (Minutes No. 15) the Regulation on the Key Performance Indicators of Russian Railways (hereinafter the Regulation on KPI) in accordance with Directive No. 2759p-P13 of the Government of the Russian Federation dated 25 April 2014 and based on the Guidelines for Applying the Key Performance Indicators (approved by Order No. ISh-P13-2043 of the Government of the Russian Federation) dated 27 March 2014).

The Regulation on KPI includes two groups of indicators: financial (amount of dividends, EBITDA, EBITDA margin and revenue (collected)) and industry-related indicators (traffic safety level and work performed). The KPI stipulated in the Regulation serve as the basis for motivating members of the Russian Railways Management Board (approved by the Russian Railways Board of Directors on 30 June 2014).

Russian Railways approved the method for calculating the Russian Railways Group's return on invested capital (ROIC) for unregulated types of activities, which specifies the procedure for calculating the actual value of this indicator based on the consolidated IFRS financial statement, in accordance with the Guidelines for Applying the Key Performance Indicators (Directive No. 2759p-P13 of the Government

of the Russian Federation dated 25 April 2014). Work was performed in 2016 to update the methodology used to calculate this indicator taking into account the decisions of the Russian Railways Board of Directors dated 27 June 2016 (Minutes No. 12) and also taking into consideration that the methodology did not regulate the procedure for calculating the planned ROIC value for the future period.

## Main areas of development

The target business model ensures the balanced and interdependent development of the Russian Railways Group based on five key units: Transportation and Logistics, Passenger Transportation, Railway Transportation and Infrastructure, International Engineering and Transportation Construction, and Social Policy.

A strategic priority for the development of transportation and logistics is to establish a diversified product basket for the Russian Railways Group with a transition from providing mostly transportation services to providing freight owners with complex integrated door-to-door services and the formation of global logistics chains.

A strategic priority for passenger transportation is to expand the range of advanced transportation services offered to customers by accelerating and increasing multimodal transportation and improving the quality of traditional services in trains and areas related to transportation. One of the key objectives is to expand the operating domain of rapid-transit and high-speed transportation between the country's

largest metropolitan areas on the basis of modern efficient solutions.

The strategic priorities for the development of infrastructure are dictated by its status as a natural monopoly and include reducing infrastructure costs, broadening opportunities to create new transportation (freight and passenger) and logistics products (speed, reliability of infrastructure services, increasing carrying capacity), modernising the network and building profitable additional mainlines for growing transportation volumes.

Another strategic development priority is to consolidate and expand the Group's presence on the international railway engineering and transportation

construction market and lay the groundwork to expand the Group's other businesses on the markets where it operates as a contractor for the construction of infrastructure facilities.

The Russian Railways Group's Development Strategy is based on an understanding of the importance of the Group's team as a key asset that is capable of ensuring long-term development goals and the perception of the Group's social sphere as a significant competitive advantage. The Group's social and public policy pursued outside of the workforce is an integral component of this unit.



# Organisational model

## Organisational structure of the Russian Railways Group

The Company's existing organisational structure was formed as a result of the transition from the territorial principle of management to organising activities by business type. Its core components are the corporate centre and business units.

**Corporate centre** – the body of Russian Railways divisions that specialises in managing the Group as a set of business divisions. The Corporate Centre primarily performs the functions of strategic goal-setting as well as monitoring and coordinating the activities of business divisions.

The Corporate Centre includes:

- at the central management level: the Russian Railways Management Board, advisory bodies and administrative staff consisting of departments, offices and structural divisions of Russian Railways;

- at the regional management level: railways – branches of Russian Railways that perform the functions of Regional Corporate Governance Centres (RCGC).

**Business Division** – the part of the Company that handles specific types of business activities and has the property complex, specialised manufacturing and management technologies, personnel and management structure required to perform such activities.

Within the logic of the organisational structure adopted by the Group, business units are responsible for the results and effectiveness of business activities: branches, structural divisions and subsidiaries of Russian Railways. They are granted broad powers to make decisions on operational issues and determine ways to achieve the Company's development goals as well as financial and non-financial indicators,

including decisions on the development of production facilities and labour resources, and determining their own production, regional and organisational structure, among other things, in full compliance with corporate policies, norms, standards and regulations for interaction.

The management system for the organisational model of Russian Railways includes modern approaches: strategic management, a process approach, risk management and project management, among other things.

This has made it possible to implement a matrix-based management principle by balancing the functional (vertical) and regional (horizontal) approaches to managing the Company

## Functions of the core components of the Company's organisational structure

The functions of the core components of the Russian Railways organisational structure are carried out in accordance with the division of powers of the Company's management bodies and take into account the requirements of the Corporate Governance Code of the Russian Federation.

The Russian Railways Board of Directors manages the Company's activities within its scope of competence and pursues a policy focused on dynamic development and enhancing the sustainability and profitability of its work.

The Russian Railways president handles the day-to-day management of the Company's activities, except for matters that fall within the purview of the General Meeting of Shareholders and the Board of Directors, and performs the functions of the Company's CEO.

The Russian Railways Management Board, which consists of Russian Railways executives working on behalf of the Russian

Federation, considers proposals to identify priority areas of the Company's activities and future development plans, determines unified corporate policies, norms, rules and standards developed by the Corporate Centre and monitors their compliance and the achievement of the strategic goals of the Company's divisions throughout all chains of command.

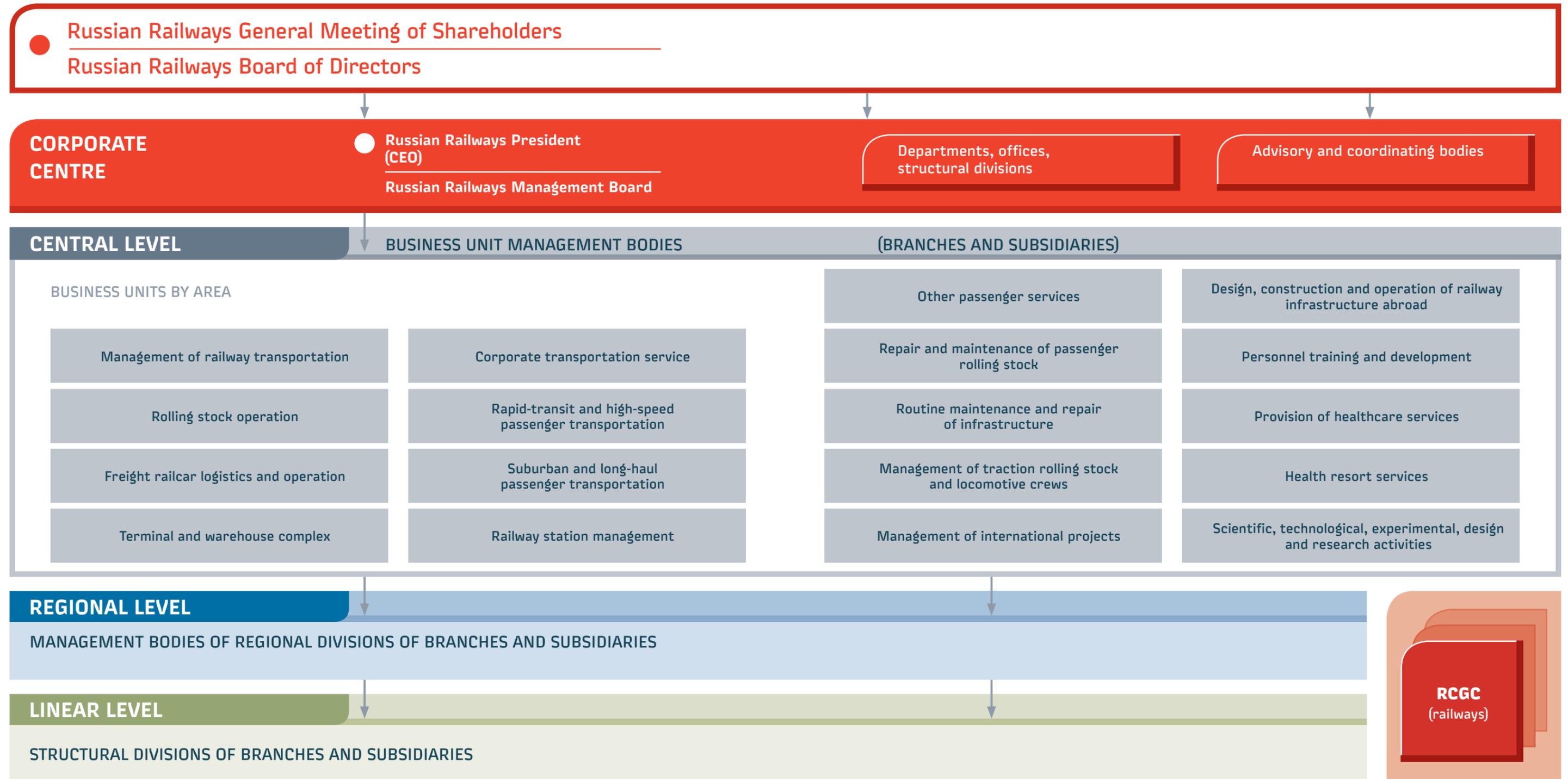
The Corporate Centre works out strategic decisions, develops unified corporate policies, norms, rules and standards based on these decisions in order to achieve them, monitors and analyses the execution of the strategic decisions and the achievement of the Company's goals, distributes the most important and limited resources, and also ensures branches interact amongst each other and with the "external environment" at all levels of management as well as the functioning of the monitoring system. In addition, the Corporate Centre organizes corporate governance and monitors subsidiaries and affiliates.

The Russian Railways Group's branches, structural divisions, subsidiaries and affiliates are responsible for the results and effectiveness of business activities. The responsible divisions are granted broad powers based on their functional affiliation (vice presidents and departments that oversee work) to make operational decisions and determine ways to achieve the Company's development goals as well as financial and non-financial indicators in full compliance with the corporate policies, norms, standards and regulations.

It is impossible to fully abandon the territorial approach to the Group's management: the Company's business network covers the entire territory of the Russian Federation and is a significant factor in the country's economic development. Given the geographical scale of the business network, it would be ineffective for Russian Railways to fully perform its management functions without the existence of regional management bodies.



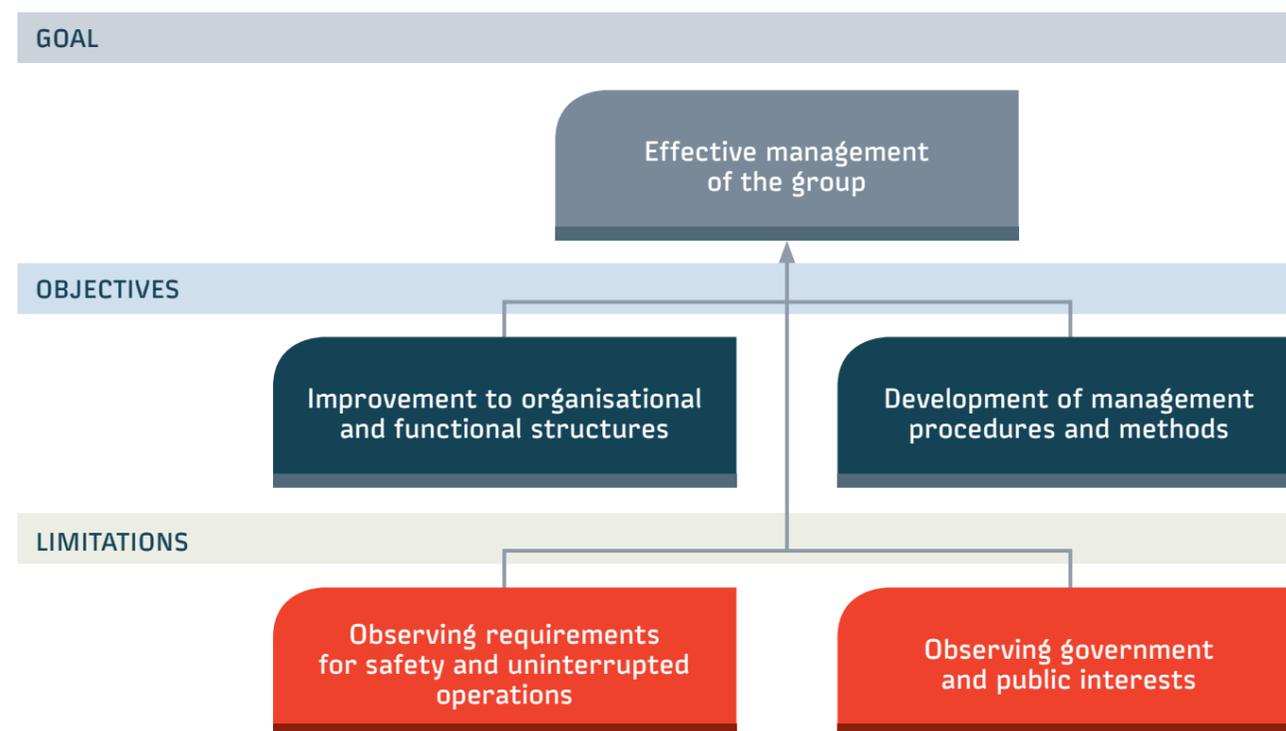
## Flowchart of the Russian Railways Group's organisational model



## Organisational development

The organisational development of the Russian Railways Group aims to ensure the effective management of the Company and its business network in a rapidly changing external environment by forming an effective management system and optimal organisational structure.

Flowchart of organisational development goals and objectives



Organisational development primarily involves the further development of a strong corporate hierarchy, including the Management Board, advisory councils, the management apparatus and its divisions. This hierarchy ensures the implementation of the development strategy, efficiency and traffic safety as well as the achievement of target operational parameters set by the Company.

Measures to develop the management system must comply with the principles of specialisation at the companies being managed (separating the management of a company as a whole and specific types of activities and business at the central and regional levels of management) and ensure a balance in the responsibility and powers of managers at all levels.

By organising management according to different areas – strategy, finances,

economics, property, innovations, and so on – and by the type of business activity – traction, infrastructure, passenger transportation, etc., the Company seeks to ensure the personal responsibility and motivation of managers for the business results and create additional incentive for them to perform systematic work to improve efficiency in each area of management and type of activity. Narrowing specialisation also aims to enhance the quality of planning and the effectiveness of monitoring and make it possible to simultaneously make improvements in different functional areas as well as production and technological sectors.

To put these principles into practice, the Company has organised regular work to improve the efficiency, completeness and quality of management and operational processes.

In terms of improving and developing the management system, the Company paid special attention in 2016 to defining and optimising the existing distribution of powers and responsibility among managers of the structural divisions of functional branches at all levels of management and introducing a process approach. The existing Organisational Development Programme of the Russian Railways Group has implemented a number of projects and measures that help to improve management quality and create the conditions required for increased efficiency.

The Company did not make any changes to the development strategy and Long-term Development Programme in 2016 compared with the previous year.

### Structural reforms after the reporting date

In accordance with a decision made by the Company's management, the oversight of transportation logistics and commercial activities has been transferred to the senior vice president for strategic development, economics and finance.

The position of a Russian Railways director of economics and finance has been introduced in the management structure in an effort to improve the Company's

activities in economics and finance. The director is directly in charge of the departments of corporate, treasury, economics, management accounting and reporting.

A number of operating units have been consolidated into a single Investment Department in order to improve the management structure of the Company's investment activities.

In an effort to improve the management structure in the planning and standardisation of logistics resources, the relevant functions have been assigned to the Economics Department.

The Company is working on creating remote infrastructure to improve the efficiency of low intensity railway sections.

# Risk management

The activities performed by Russian Railways in the process of achieving its goals are exposed to external and internal risks. Tracking and forecasting risks in financial, business and production activities is one of the Company's most important objectives.

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## Risk management system

The Regulation on the Risk Management System was approved by a decision of the Russian Railways Board of Directors on 7 December 2015. The regulation takes into account the recommendations of the Federal State Property Management Agency for the structure and content of internal documents that specify the risk management approaches of companies with state participation, including the formalisation of procedures used to determine preferred risk at the Company.

### The Regulation on the Risk Management System identifies:

- 1 the goals and objectives of the risk management system;
- 2 the principles for the operation of the risk management system;
- 3 the participants in the risk management process and their functions;
- 4 interaction within the risk management system;
- 5 the stages of the risk management process.

### Goals of the risk management system:

- To ensure the continuous and stable production operations of Russian Railways by limiting the degree of exposure to negative external and internal factors;
- To provide a reasonable level of assurance in achieving the targeted benchmarks envisaged by the regulatory documents of Russian Railways given the impact of external and internal factors.

### Primary objectives of the risk management system:

- to identify potential risk areas and assess the feasibility of preventing or minimising risks;
- balanced distribution and consolidation of regulatory powers and responsibility among participants in the Russian Railways risk management system;
- to identify the resources required to eliminate and minimise risks as well as their optimal distribution in accordance with the established regulations;
- to determine the cost impact of all significant risks on the financial and economic indicators of Russian Railways and build a response system during the Russian Railways Group's financial planning stage;
- to develop and assess the set of measures to prevent risk situations and minimise damage if they occur;
- to prevent risks based on their systematic forecasting and assessment.



## Principles for the establishment and operation of the risk management system

Russian Railways adheres to the following principles and approaches for the establishment and operation of the risk management system set forth in the conceptual risk management models of the Committee of Sponsoring Organisations of the Treadway Commission (COSO ERM Enterprise Risk Management. Integrated Framework), the international standard ISO 31000 “Risk Management. Principles and Guidelines” and the requirements of the relevant provisions of the Corporate Governance Code.

### COVERAGE OF ALL TYPES OF ACTIVITIES

- Introduction of risk management procedures in all functional areas of the Company’s activities, including as part of the procedural approach to management.

### INTEGRATION

- Risk management coordinated by risk owners and handled by employees in the process of implementing their job duties.

### BALANCE

- An objective balance of criteria when adopting decisions on risk response methods: choosing between possible losses and opportunities as well as between risk management costs and possible damages revealed as part of risk management.

### CONTINUITY

- Conducting regular monitoring and updates of information used in the Russian Railways risk management system.

### COMPLEXITY

- Risk management based on a common methodology and unified principles taking into account the systematic interconnection of risks, the nature of their mutual influence and possible consequences.

## Risk management methods employed

- avoidance of risk – avoiding steps and activities that may lead to a significant degree of adverse consequences;
- risk reduction – measures that aim to reduce the probability of risk and/or mitigate possible consequences of risk;
- risk distribution – reducing risk by transferring it to a third party (insurance, etc.);
- risk acceptance – covering possible losses from risk occurrence at its own expense.

## Measures to improve the risk management system

In August 2016, the Company established a separate structural division that is responsible for the development of the risk management system at Russian Railways and its subsidiaries – the Risk Management Development and Outsourcing Centre – which is tasked with identifying and achieving the development goals of the risk

management system of Russian Railways and its subsidiaries, providing methodological support and coordinating the work of the Company’s divisions in this area.

Work was continued in 2016 to improve the risk management regulatory framework at Russian Railways.

In particular, the Company adopted guidelines to assess corruption risks at Russian Railways as well as guidelines to build a risk matrix for the operation of railway transportation.



# Map of significant risks for the Russian Railways Group

Risk category	Risks
<b>External risks</b>	
<b>MACROECONOMIC</b>	<ul style="list-style-type: none"> <li>reduction in the volume of freight provided for railway transportation</li> <li>risk of unplanned fluctuations in transportation volumes exceeding the carrying capacity of certain railway sections</li> <li>deterioration in the structure of industrial and agricultural production shipped using railway transportation</li> <li>growth in prices for goods and services consumed by the Russian Railways Group</li> <li>decrease in the Company's income from passenger transportation due to a decline in the public's ability to pay</li> <li>decline in investment and business activity in industry and agriculture</li> <li>changes in the directions and distances of cargo flows</li> <li>tightening of tariff and non-tariff restrictions in foreign trade</li> <li>lack of government investments</li> </ul>
<b>MARKET</b>	<ul style="list-style-type: none"> <li>decrease in the Russian Railways Group's share of highly profitable segments of the transportation market</li> <li>growth in intra-industry and cross-industry competition</li> <li>risk of the quality and range of services not complying with new customer requirements</li> <li>advanced development of alternative types of transportation, including through the accelerated introduction of innovations</li> <li>establishment and full-scale operation of international corridors to bypass Russia</li> <li>lack of production capacity among product suppliers for the Russian Railways Group</li> </ul>

Risk category	Risks
<b>FINANCIAL</b>	<ul style="list-style-type: none"> <li>credit risks</li> <li>currency risks</li> <li>interest risks</li> <li>risk of liquidity loss</li> <li>downgrading of Russian Railways positions by international ratings agencies</li> <li>financial implications from property and liability risks</li> </ul>
<b>WORKFORCE RISKS</b>	<ul style="list-style-type: none"> <li>increased imbalances in the structure of the workforce represented on the market</li> <li>deterioration in the positions of Russian Railways on the labour market</li> <li>deterioration in the quality of the workforce</li> <li>reduction in the working population in remote regions due to the urbanisation of society</li> <li>risk of the diminished attractiveness of professions in the railway transportation industry</li> <li>increased competition for skilled personnel, including due to the deteriorating demographic situation in the country</li> </ul>
<b>REGULATORY RISKS</b>	<ul style="list-style-type: none"> <li>continued strict government tariff regulation</li> <li>stricter legislation (transportation, tax, environmental requirements, etc.)</li> <li>lack of legislative regulation for the activities rolling stock operators</li> </ul>
<b>POLITICAL</b>	<ul style="list-style-type: none"> <li>impact of international sanctions against the country's economy and activities of Russian Railways</li> <li>deterioration in intergovernmental relations</li> <li>local military operations</li> <li>terrorist impact on facilities of the Russian Railways Group</li> </ul>

Risk category	Risks
<b>MANMADE, NATURAL AND CLIMATIC</b>	<ul style="list-style-type: none"> <li>accidents at facilities that support the work of the Russian Railways Group</li> <li>manmade accidents on related types of transportation (primarily in seaport waters and on major highways)</li> <li>fires or natural disasters in areas where the Russian Railways Group operates</li> </ul>
<b>SCIENTIFIC, TECHNICAL AND TECHNOLOGICAL</b>	<ul style="list-style-type: none"> <li>use of new energy resources and energy-saving modes, technologies and materials on alternative types of transportation and when operating infrastructure facilities</li> <li>improving the carrying capacity of vehicles and vessels and their cargo delivery speed</li> </ul>
<b>INTERNAL RISKS</b>	
<b>PRODUCTION AND TECHNOLOGICAL</b>	<ul style="list-style-type: none"> <li>lag in infrastructure development compared with the increase in freight and passenger transportation</li> <li>disruptions in the organisation of freight delivery logistics schemes and empty rolling stock</li> <li>disruptions to the plan for making up trains and the train traffic schedule</li> <li>diminished efficiency from the use of rolling stock</li> <li>discrepancies in existing technological processes for organising transportation with the quality requirements for transportation services</li> <li>discrepancies in technological processes with traffic safety requirements</li> <li>diminished reliability of rolling stock, track facilities and structures</li> <li>disruption in the parameters of operations in the technological chain used to maintain the life cycle of a transportation service</li> </ul>
<b>TECHNICAL AND RESOURCE</b>	<ul style="list-style-type: none"> <li>continued high level of fixed asset deterioration</li> <li>breach of the deadlines and conditions for supplies of material resources</li> <li>risk of using substandard and incomplete information about consumers of the Russian Railways Group's services</li> <li>diminished reliability of technical equipment</li> <li>incompatibility of technical equipment and technologies in the transportation process</li> </ul>

Risk category	Risks
<b>INVESTMENT</b>	<ul style="list-style-type: none"> <li>incorrect substantiation and erroneous selection of new investment targets</li> <li>diminished return on investment and failure to ensure planned profitability from invested funds</li> <li>lack of clear guarantees for transportation volume from freight owners when implementing infrastructure investment projects</li> <li>risk of the failure to meet the parameters of the projects implemented (exceeding the budget, failure to meet deadlines or failure to achieve the project objective)</li> </ul>
<b>RISKS OF STRUCTURAL REFORMS</b>	<ul style="list-style-type: none"> <li>threat of a disruption to the technological processes of the Russian Railways Group and significant financial losses as a result</li> <li>threat of the loss of financial sustainability and the risk of bankruptcy of S&amp;A</li> <li>decrease in the profitability of the Russian Railways Group due to the uncompensated spin-off of highly profitable S&amp;A</li> <li>decline in asset value and capitalisation of the Russian Railways Group in the event of the ineffective work of S&amp;A</li> </ul>
<b>HUMAN RESOURCES</b>	<ul style="list-style-type: none"> <li>lack of compliance of the professional level of personnel with the requirements of the Russian Railways Group</li> <li>risk of a further increase in the number of employees approaching retirement age</li> <li>outflow of highly skilled personnel due to insufficient motivation and the decreased competitiveness of salaries for employees of the Russian Railways Group compared with other industries</li> <li>professional risks: injury or occupational disease</li> <li>risk of ineffective recruiting, placement and management of personnel</li> <li>violations of labour discipline</li> <li>deterioration in the corporate culture of employees</li> </ul>
<b>MANAGEMENT</b>	<ul style="list-style-type: none"> <li>reduced manageability of Russian Railways Group structures</li> <li>adoption of unsubstantiated management decisions</li> <li>failure to execute decisions by the required deadlines</li> <li>failure to achieve target economic and production performance results of the Russian Railways Group</li> </ul>

# Financial risks

The Company's Financial Risk Management Policy is the framework document of the financial risk management system.

## Financial risk management concept of the Company

Risk management principles

Management tools

**MANAGEMENT PROCESS**

- identification,
- analysis and assessment,
- adoption of decision (selection of risk management strategy),
- risk management,
- monitoring of results,
- assessment of effectiveness of financial risk management measures (self-diagnostics).

The centre for decision-making with respect to financial risk management is the Company's Financial Risk Management Commission – a collective body comprised of representatives from several departments chaired by the senior vice president for economics and finance. The Commission held 12 meetings in 2016.

## Types of financial risks

### Credit risks

- In order to manage credit risks, Russian Railways has approved methods for calculating credit limits and regulatory documents that govern work with bank guarantees and sureties, including the unified corporate standard of the Russian Railways Group for work with collateral instruments. Based on the credit limit calculation methods, the Company conducts an assessment of financial institutions and calculates the relevant credit limits to regulate transactions with banks involving deposits and the receipt of bank guarantees depending on the assessment of the condition of the corresponding financial institution.
- When interacting with companies in the real sector, Russian Railways employs a system of management standards that includes standard settlement terms with counterparties, interim measures, treasury control, rate setting of receivables and payables, commitment bank guarantees for the proper performance

of obligations (including over warranty periods for supply contracts), repayment of advances and sureties of parent companies in order to ensure that Russian Railways is protected against risks of counterparties failing to execute (improperly executing or late execution of) their obligations. Financial institutions that issue bank guarantees and sureties are selected taking into account credit history and the existing credit limits.

### Liquidity

- The Company performs operational management of liquidity based on the balance of payments, payment schedule and payment positions within

the limits of the approved budgets. Depending on current liquidity, the Company promptly attracts or deposits funds under the best

market conditions. Operational management of liquidity is performed based on the systems of Reuters and Bloomberg.

### Currency and interest risks

- In order to assess these risks, the Company utilises modelling and an assessment of budget parameters taking into account potential volatility in the relevant market indicators.
- The assessment of the currency risks faced by Russian Railways and the selection of a currency risk management tool is based on an analysis of the Company's foreign currency exposure.

In order to estimate foreign currency exposure, the Company's transactions are analysed and categorised in terms of investment, operating and financial activities. The amount and structure of the estimated foreign currency exposure impacts the Company's borrowing policy and determines the hedging approaches. The Company regularly reviews its foreign currency exposure and makes the relevant adjustments to manage foreign currency risks and the foreign currency

borrowing portfolio.

- The Company minimises its currency risks by reducing its foreign currency exposure, including by utilising derivative financial instruments.
- The interest risk is assessed based on an analysis of the volatility of floating interest rates and the corresponding effect on the borrowing portfolio of Russian Railways.

## Assessment of financial risk management mechanisms in the context of external sanctions

The financial risk management system in effect at Russian Railways has demonstrated its effectiveness amidst considerable external pressure (international sanctions, a high level of volatility on financial markets and a heightened level of uncertainty).

Last year the Company devoted special attention to assessing the credit risk of financial institutions that are counterparties of Russian Railways. Given the negative trends in the global economy and the Russian economy in particular as well as the growing

level of volatility on financial markets, the Company updated its model for assessing the credit risk of financial institutions (expanded its set of indicators and took a more conservative approach to assessment).



## Insurance

The Company has insurance for its real estate, rolling stock (locomotives, electric, rapid-transit and high-speed trains, freight and passenger trains) and employees, liability insurance as a railway infrastructure owner and carrier as well as liability insurance for the directors and officers of the Company in addition to 70 subsidiaries and affiliates.

A number of open competitions were held in 2016 and the following types of contracts were concluded:

- mandatory civil liability insurance for the owner of a hazardous facility for damages as a result of an accident at a hazardous facility;
- mandatory civil liability insurance for a carrier to passengers;
- voluntary medical insurance;
- personal insurance;
- accident and illness insurance;
- rolling stock insurance;
- property insurance;
- voluntary civil liability insurance of Russian Railways;
- liability insurance for the Company's directors and officers.

A total of 644 insurance claims were settled in the reporting year. Total insurance compensation received in 2016 amounted to more than RUB 703 mln.

In order to ensure a unified approach to organising insurance protection for subsidiaries, the Unified Corporate Framework of Insurance Protection for Subsidiaries and Affiliates of Russian Railways has been in effect since 2010. It establishes the general principles for organising the insurance protection of Russian Railways S&A, the procedure for the interaction of S&A with insurance market participants and the procedure for planning insurance protection as well as concluding and servicing insurance contracts in accordance with the legislation of the Russian Federation and the Group's regulatory acts.

As part of work conducted regularly to improve the parameters of the insurance protection of Russian Railways property and to ensure the highest level of insurance coverage, the most expensive and high-risk

facilities have been identified from among the overall number of the Company's insurable properties for which a separate limit has been set for a single insurance event in the amount of RUB 22.5 bln. The combined value of these facilities is more than RUB 390 bln. The Company performs work each year to provide special facultative reinsurance at leading foreign reinsurance companies. In particular, the reinsurance of risks for these facilities is provided by such major reinsurance companies as Swiss Re, Munich Re, Allianz and Zurich Insurance Company, among others.

**RUB 703 mln**  
total insurance compensation received in 2016



# Traffic safety

The main document reflecting the Company's long-term goals, objectives and obligations in traffic safety is the Russian Railways Group's Traffic Safety Policy, which was approved in December 2014. One of the mechanisms used in the Traffic Safety Policy is the Strategy for the Guaranteed Safety and Reliability of the Transportation Process at the Russian Railways Group, which is based on effective traffic safety management systems that rely on risk on management tools and the principles of a special safety culture.

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The basic principle underlying the Strategy is to ensure the stable operation of the transportation process with the given safety and reliability parameters. The primary aim of the Strategy is to achieve the target traffic safety indicators for all production complexes (enterprises) and, consequently, for the Russian Railways Group as a whole.



## Traffic safety

The main principle serving as the basis of the strategy for the guaranteed safety and reliability of the transportation process at the Russian Railways Group is to ensure the sustainable operation of the transportation process with the specified safety and reliability indicators aimed at achieving the target state.

The strategy identifies the objectives facing the Russian Railways Holding taking into account the goals for the guaranteed safety and reliability of the transportation process, specifically:

- improving the reliability and functional safety of the hardware that comprises infrastructure facilities and rolling stock;
- reducing the probability of traffic accidents;

- preventing injuries; reducing damage to the property of process owners in railway transportation and other losses;
- preventing adverse environmental effects.

The Company is implementing a set of measures to achieve the following goals:

- to maintain leading positions around the globe in terms of the safety of infrastructure services and the safety and reliability of all processes;
- to ensure a traffic safety level that is consistent with international and national requirements.

RUB **2.8** bln

spending on the Traffic Safety Programme in 2016

## Traffic safety results of 2016

The target traffic safety indicator for the Russian Railways Group had a value of 1.3 events (including maintenance organisations) per 1 mln train km in 2016 versus the planned level of 1.42 events (a decrease of 6.7%). The number of traffic safety violations committed on Russian Railways infrastructure decreased by 41% (from 5,047 to 8,521), including a 38% decrease of events through the fault of Russian Railways (1,767 versus 2,857).

Meanwhile, the number of violations increased by 25% at central multiple unit rolling stock directorates, by 2% in traffic management and by 5% on infrastructure due to their increase in track and facility offices by 38%, automation and telemechanic offices by 33% and mechanisation offices by 30% as well as by 20% at Transenergo.

The number of violations under the responsibility of the track repair directorates decreased by 26%, the traction rolling stock repair directorate - by 77% and the traction directorate - by 34%.

The railcar repair companies RRC-1, RRC-2 and RRC-3 committed 1,214 traffic safety violations in 2016, a 45% decrease (from 2,215 in 2015).

Third party organisations operating on Russian Railways infrastructure were responsible for most of the violations (65%), including Russian railcar repair and construction enterprises (1,715 violations); CIS and Baltic nation enterprises (609); railway equipment and system maintenance enterprises (346) and vehicle drivers (252).

Spending on the Russian Railways Group's Traffic Safety Programme totalled RUB 2.8 bln in 2016.

The internal efficiency of traffic safety investments was improved as part of the programme through the priority implementation of measures having the most significant key indicators.

An action programme to bring Russian Railways infrastructure into compliance with technical operating rules (TOR) was fulfilled at a rate of 108% in 2016: despite the plan to eliminate discrepancies with TOR requirements at 41,482 facilities, work was actually performed at 44,819 facilities. Total spending on these measures amounted to RUB 167.365 bln.

## Transportation Security project

In order to mitigate the risk of unauthorised interference in the operations of railway transportation, Russian Railways continued the implementation of the Transportation Security project in 2015 as part of the Russian Railways Investment Programme.

A range of measures was carried out in 2016 to protect railway transportation facilities against acts of unauthorised interference. Most of the measures aimed to enhance the protection of essential public railway transportation facilities, above all categorised infrastructure facilities and rapid-transit railway sections.

A total of 6,633 infrastructure facilities of Russian Railways were put under protection in 2016, a 0.7% increase from 2015, including 1,684 essential public railway transportation facilities

and 482 railway stations. The Company set up 403 specialised groups from railway transportation departmental security with more than 7,560 people to perform measures aimed at preventing unlawful acts on railways.

The following measures were conducted in the reporting year using the RUB 645.6 mln earmarked by Russian Railways:

- the completion of the installation of transportation security equipment on the St. Petersburg-Poshchino (km 0-58) of the St. Petersburg-Helsinki route;
- design and survey work was completed to upgrade transport security hardware systems to monitor the railway tracks on the rapid-transit section Gavrilovo-Buslovskaya section of the St.

Petersburg-Helsinki route;

- transport and technical security systems were installed or modernised at 23 facilities (railway stations, bridges, tunnels, locomotive depots and communications centres).

In addition, work was performed to provide technical equipment for the complex automated screening system of the Sochi railway facility at the Sochi Airport as part of the spending of federal budget subsidies granted to Russian Railways.

As part of investment projects and measures to create technical security systems, the number of facilities equipped with such security equipment has increased to 1,715, or 5.4% more than the same indicator for 2015.



# Analysis of operating results

The measures being implemented to expand the cargo base and boost revenue resulted in a 1.6% increase in loaded freight turnover to 2,342.6 bln tkm in 2016. The main measures carried out in 2016, which was declared the Year of the Passenger, aimed to develop and improve the organisation of passenger transportation as well as enhance the quality of and expand the range of services provided. Russian Railways also continued work in 2016 to implement initiatives that aim to strengthen the Company's competitiveness on the international market. Contractual obligations were met in full as part of projects to develop railway infrastructure abroad.

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## Transportation logistics

The measures being implemented to expand the cargo base and boost revenue resulted in a 1.6% increase in loaded freight turnover to 2,342.6 bln tkm in 2016.

### Key achievements of 2016

- Loaded freight turnover grew by 1.6% to 2,342.6 bln tkm thanks to measures to increase the freight base and income.
- The proportion of shipments delivered by the required (contractual) date increased 3.2 p.p. to 96.1%.
- More than 22,863 trains were dispatched as part of the fixed schedule freight transportation service and revenue totalled RUB 1,627.9 mln.
- A total of 237,000 t of freight valued at RUB 1,031.9 mln was transported as part of the RZD Express service.

### Freight transportation using Russian Railways infrastructure

Key indicators for freight transportation using Russian Railways infrastructure

Indicator	Measurement unit	2012	2013	2014	2015	2016	
						value	%
<b>Handling</b>	mln t	<b>1,271.9</b>	<b>1,236.8</b>	<b>1,226.9</b>	<b>1,214.5</b>	<b>1,222.3</b>	<b>0.6</b>
average per day	'000 t	3,475.1	3,388.5	3,361.5	3,327.3	3,339.5	0.4
<b>Total freight turnover, including</b>	bln tkm	<b>2,782.6</b>	<b>2,813.1</b>	<b>2,954.5</b>	<b>2,954.9</b>	<b>2,997.8</b>	<b>1.5</b>
loaded freight turnover	bln tkm	2,222.4	2,196.2	2,298.6	2,304.8	2,342.6	1.6
empty freight turnover	bln tkm	560.2	616.9	655.9	650.1	655.2	0.8
Proportion of shipments delivered by the required (contractual) date	%	72.5	77.5	87.1	92.9	96.1	3.2 p. p.



Anatoly Krasnoshchek

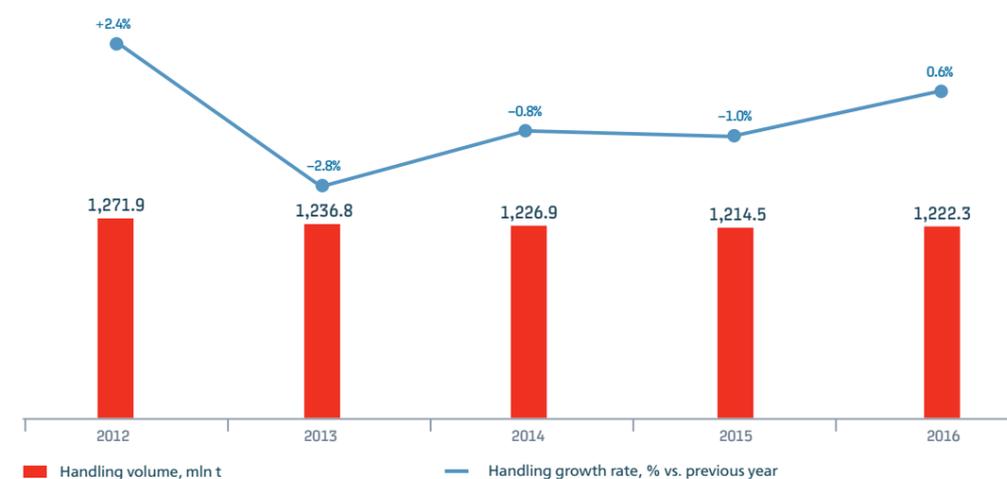
In 2016, we managed to see growth in handling volume for the first time in four years. Total freight turnover increased by 1.5% versus 2015, while loaded freight turnover grew by 1.6% to 2,343 billion tkm – the highest level in the Company's history. The positive trend in volume indicators was achieved through the increased efficiency of railway transportation operations, among other things. Specifically, freight delivery speed increased at a significant rate of 20.7% over the last two years.

### Handling

The activities of Russian Railways largely mirror the situation in the Russian economy and industry since they are connected with the work of major manufacturers. In particular, according to the Russian Federal State Statistics Service, the industrial production index totalled 1.1% in 2016.

Handling throughout the Russian railways network totalled 1,222.3 mln tonnes (3,339.5 tonnes per day on average), an 0.6% increase from the 2015 level. These dynamics are primarily due to growth in handling for construction freight and coal.

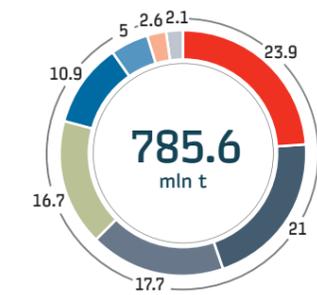
Handling volume dynamics



For the year, an 0.1% decrease was seen in domestic handling (to 785.6 mln tonnes), while handling volume for export increased by 2.2% (to 428.3 mln tonnes). As a result, the share of domestic transportation in the handling structure decreased

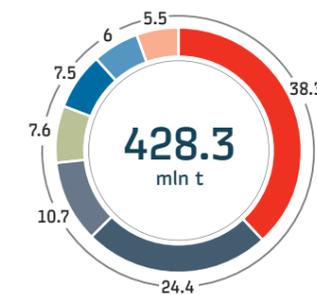
from 64.8% to 64.3% in 2016 along with a simultaneous increase in the specific share of exports from 34.5% to 35.0%. Coal, oil, construction and ore freight made up the bulk of handling. Their total share in overall cargo handling totalled 66.7%.

Structure of domestic freight handling in 2016, %



- Other
- Coal
- Construction freight
- Oil and petroleum products
- Iron and manganese ore
- Ferrous metals
- Chemical and mineral fertilisers
- Timber

Structure of export freight handling in 2016, %

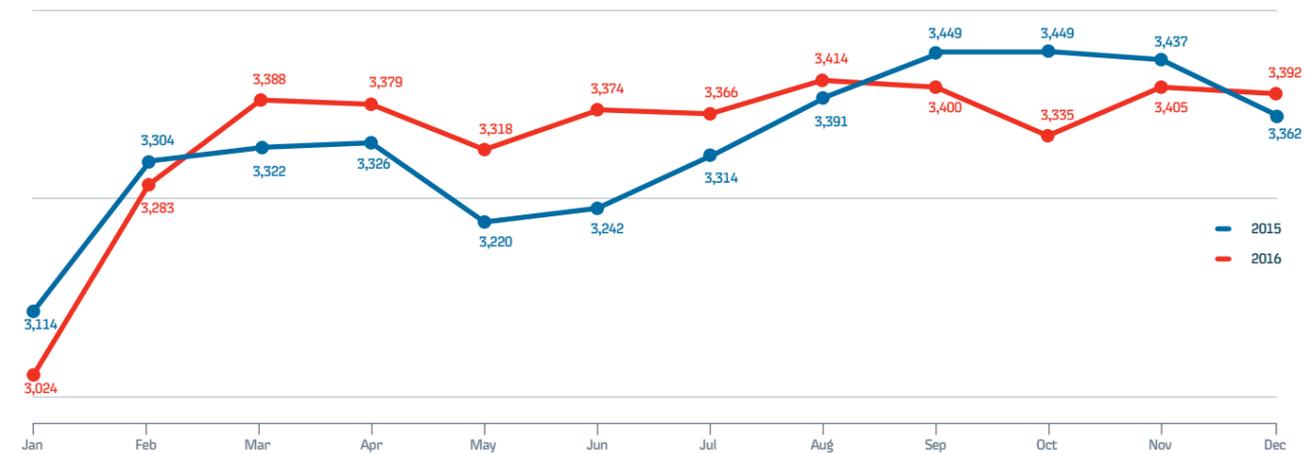


- Coal
- Oil and petroleum products
- Other
- Chemical and mineral fertilisers
- Ferrous metals
- Timber
- Iron and manganese ore

A variety of trends was seen in the breakdown of freight classes in 2016: growth was seen in the handling volume of first tariff class freight (by 2.4% or 17.1 mln tonnes) and third tariff class freight (by 0.7% or 0.9 mln tonnes), while the handling volume of second tariff class freight decreased (by 2.8% or 10.2 mln tonnes).

In terms of assortment, low-margin freight made up the biggest share – 60.2% of total handling volume. Average-margin freight accounted for 29.4%, and high-margin freight for 10.4%.

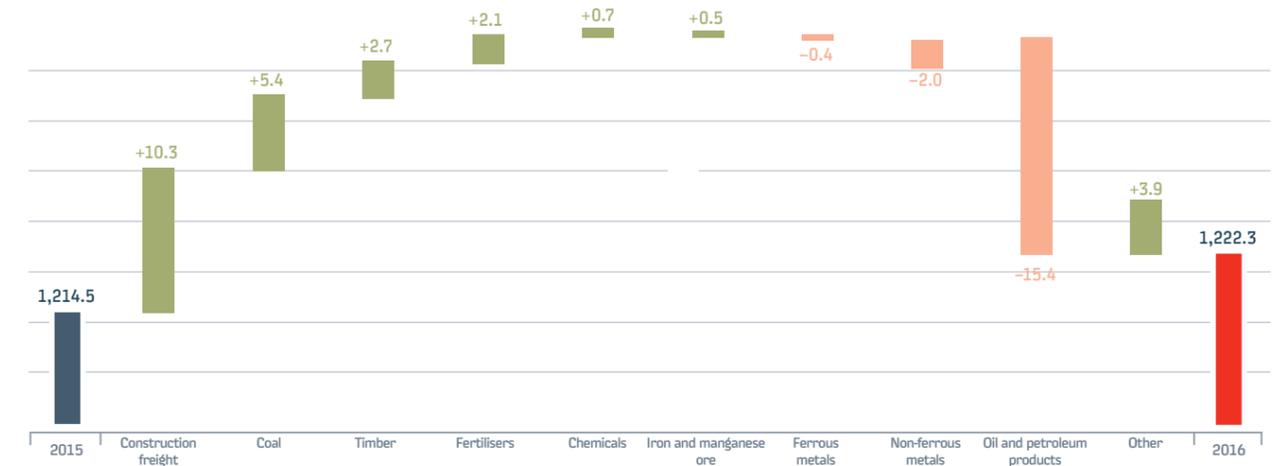
Dynamics of average daily handling, '000 t



Handling by traffic type

Indicator	2015		2016		Change in volume, %
	mln t	share, %	mln t	share, %	
<b>Handling</b>	<b>1,214.5</b>	<b>100.0</b>	<b>1,222.3</b>	<b>100.0</b>	<b>0.6</b>
Domestic traffic	786.4	64.8	785.6	64.3	-0.1
Export, including	419.2	34.5	428.3	35.0	2.2
via ports	259.6	21.4	273.3	22.4	5.3
via border crossings	159.6	13.1	155.0	12.7	-2.9
Import and transit	8.8	0.7	8.4	0.7	-4.3

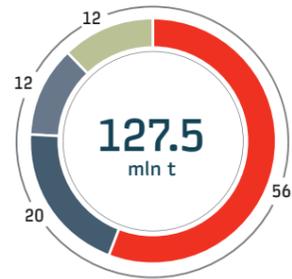
Change in freight handling volume in 2016, mln t



**Structure of freight handling in 2016, %**

**High-margin freight, %**

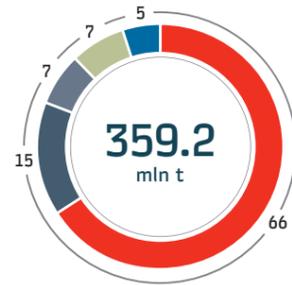
Handling – 127.5 mln t (+0.7.%)  
Share of overall handling – 10.4% (+0.01 p.p.)



- Ferrous metals
- Chemicals
- Ferrous metal scrap
- Other

**Average-margin freight, %**

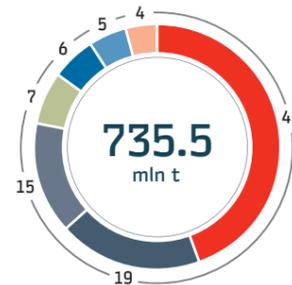
Handling – 359,2 mln t (-2,8 %)  
Share of overall handling – 29.4% (-1.0 p.p.)



- Oil and petroleum products
- Fertilisers
- Containerised freight
- Other
- Grain

**Low-margin freight, %**

Handling – 735,5 mln t (+2,4 %)  
Share of overall handling – 60.2% (+1.0 p.p.)



- Coal
- Construction freight
- Iron and manganese ore
- Other
- Timber freight
- Industrial raw materials
- Cement

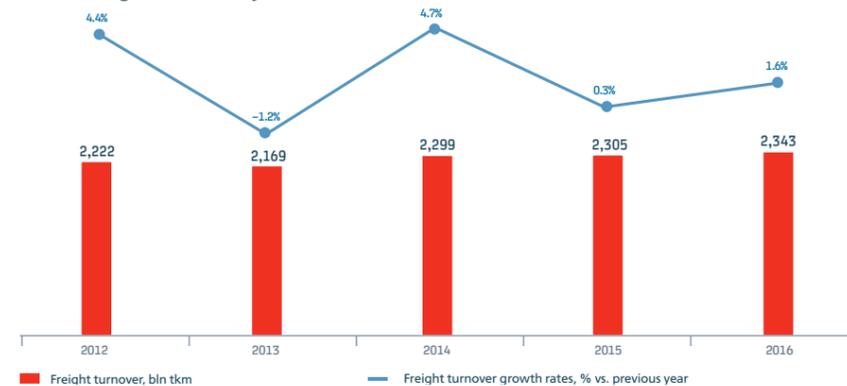
**Freight turnover**

Loaded railway freight turnover grew by 1.6% to 2,342.6 bln tkm in 2016.

Total freight turnover (including empty runs by the railcars of other owners) on Russian Railways infrastructure increased by 1.5% compared with 2015 and totalled 2,997.8 bln tkm, while empty freight turnover edged up 0.8% (to 655.2 bln tkm).

The growth rates in freight turnover outpaced the handling growth rates, which is attributable to growth in the average distance of freight transportation. The reduction in the volume of short-distance domestic freight transportation was compensated by growth in exports via port railway stations (by 68.1 bln tkm, or 8.3%).

**Loaded freight turnover dynamics**



In 2016, the average transportation distance was 1,599 km, which is 1.8%, or 28 km, more than the 2015 indicator, including 1,764 km for loaded shipments (up 1.7%) and 1,199 km in freight on its own axes (up 1.8%).

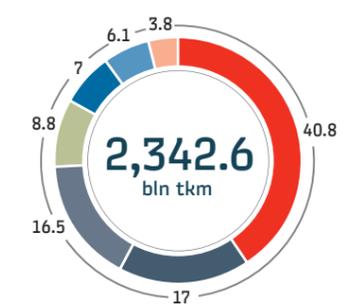
**Average distance of freight shipments, km**

Indicator	2015	2016	Change, %
Loaded shipment	1,734	1,764	1.7
Empty shipment	1,177	1,199	1.8
<b>Average total for network</b>	<b>1,570</b>	<b>1,599</b>	<b>1.8</b>

Domestically, loaded freight turnover declined by 2.4% to 976.7 bln tkm. A decrease was also seen in import freight turnover (by 0.9% to 83.8 bln tkm) and transit freight turnover (by 5.3% to 46 bln tkm). Meanwhile, loaded freight turnover for export increased by 5.5% to 1,236.1 bln tkm.

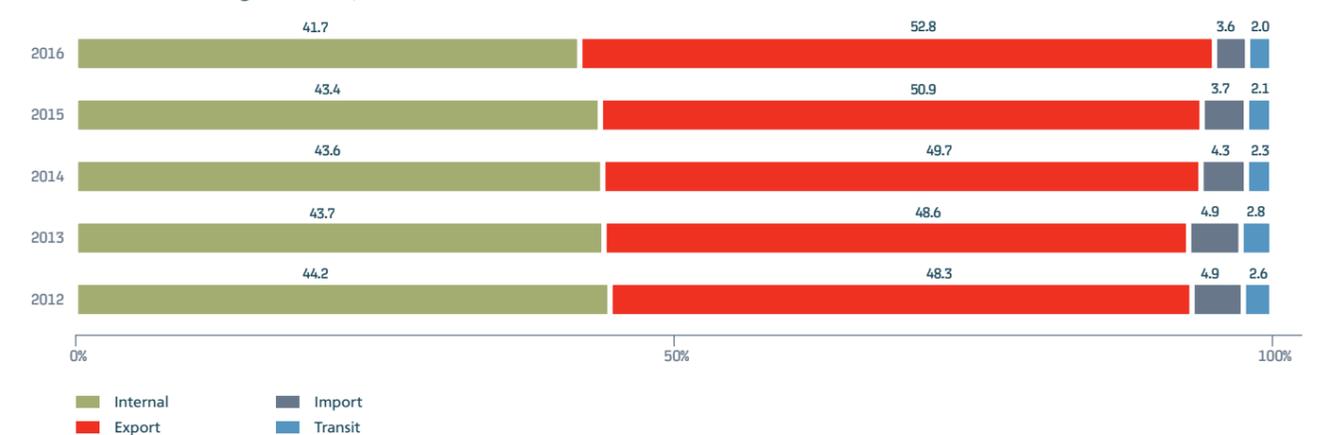
The changes led to a further reduction in the share of domestic shipments within the loaded freight turnover structure and growth in the share of exports.

**Structure of loaded freight turnover in 2016, %**



- Coal
- Oil and petroleum products
- Other freight
- Mineral and construction freight
- Ore
- Ferrous metals
- Chemical and mineral fertilisers

**Structure of loaded freight turnover, %**



Over the last five years, the share of export shipments in freight turnover increased by 4.5 p.p. and reached 52.8% in 2016, while the share of domestic shipments declined to 41.7% by contrast.

Coal accounted for the lion's share of loaded freight turnover in 2016 (40.8%, up 1.6 p.p. versus 2015) followed by petroleum products (17.0%, down 2.2 p.p.) and mineral and construction freight (8.8%, the same as in 2015).

# Easier and faster transportation

The Russian Railway Group's top priority in freight transportation in the coming years is to attract additional cargo to railways from other types of transportation and expand the range of logistics products provided to customers.

To meet these objectives, the group has launched and is successfully providing the following services: 'Organisation of Scheduled Freight Train Traffic' and 'RZD Express'.



# Customer-focused freight transportation

A flexible tariff policy as part of the Tariff Corridor served to attract 5.7 mln tonnes of different freight to railways in 2016.

**96.1%**  
share of shipments delivered on time in 2016, an increase of 3.2 p.p.



## ORGANISATION OF SCHEDULED FREIGHT TRAIN TRAFFIC

**22,863**  
trains  
dispatched in 2016



## FREIGHT EXPRESS

**425** trains  
dispatched in 2016

**512,000** t of freight  
shipped in 2016



## RZD EXPRESS

**237,000** t of freight  
shipped in 2016



**899** km/day  
container train route speed in 2016,  
an increase of 3 km/day (+0,3%) vs. 2015

**1,145** km/day  
container train route speed as part  
of the 'Trans-Siberian Railway in 7 Days',  
an increase of 13 km/day (+1.1%) vs. 2015



## Initiatives to improve customer service quality:

- Unified Contact Centre launched in trial mode
- FFC-Tariff effective automated tariff setting system introduced
- New opportunities to order railcars:
  - via the ETRAN
  - electronic waybill system
  - using the electronic exchange



## Initiatives to improve customer service quality:

- Simplified document flow, including the cancellation of application form GU-12 for direct domestic shipments
- Continued development of the e-sales system: the share of orders made via e-commerce channels increased from 25% to almost 70% in 2016

A project was launched using the rolling stock of TransContainer in 2016 to transport non-containerised freight - large-diameter pipes for the construction of the Nord Stream-2 international gas pipeline.

**1,543,000** TEU  
railway containerised shipments using well cars and/or containers of TransContainer in 2016, a 8.9% increase vs. 2015

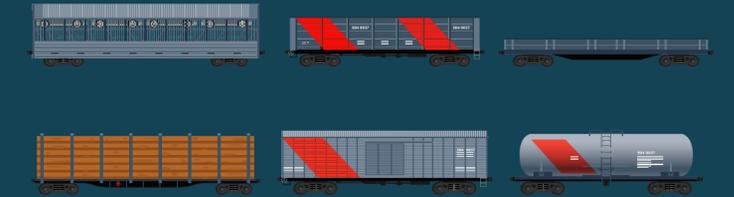


The Company's management made focused efforts to work with customers and partners in the countries of the Asia-Pacific region and Europe, the China-Russia transport service was developed successfully and operations using sea line containers were expanded.

**242,000** TEU  
import shipments by TransContainer in 2016, a 8.3% increase vs. 2015

The Company developed new integrated multimodal services that are attractive to exporters and offered a flexible price policy and highly reliable services to provide containers for transportation.

**13.4%**  
growth in export shipments by TransContainer in 2016



## Freight car market

The Russian freight car fleet was comprised of 1,072,827 railcars as of the end of 2016, of which 175,100 railcars, or 16%, belong to the Russian Railways Group.

# 1,072,827

units

Russian freight car fleet at the end of 2016

## Terminal, warehouse and forwarding

One of the most important tasks in transport and logistics is to provide customers with an integrated transport and forwarding service that includes loading and unloading, storage and warehousing of cargo, the preparation of railcars for transportation, the formation and disbanding of containerised cargo as well as their delivery to the end user.

In an effort to develop and improve the quality of the integrated service, Russian Railways is developing the following new projects and services, which started being implemented in 2016, and plans to continue developing them in the future:

- 'SMART Logistics' – the terminal processing of large-tonnage containers with consumer goods, food products and building materials with subsequent shipment via small-tonnage transport to end consumers;
- 'Remote Warehouse' – ensuring the acceptance and warehouse processing of freight based on remote requests;

- 'Prefabricated Warehouses' – the rapid construction of new infrastructure that meets market needs.

In 2016, Russian Railways was actively involved in implementing national and regional infrastructure projects: processing of construction freight arriving for the construction of the Kerch Bridge and the M-11 Moscow-St. Petersburg federal highway, the construction of the Moscow Central Ring Road, the Rostov-on-Don airport, an airport and bypass in Nizhny Novgorod, football stadiums for the 2018 World Cup in Kaliningrad and Volgograd.

As part of projects to promote the stable operation and development of the national gas transportation and oil pipeline system, the Company processed cargo in 2016 for the construction of the Yug-2 oil pipeline, the Eastern Siberia-Pacific Ocean (a branch to the Komsomolsk oil refinery) and the Power of Siberia gas pipeline as well as the repair of the Ukhta-Torzhok main gas pipelines in the Samara and Orenburg Regions.

Freight processing by the Central Directorate for Terminal and Warehouse Complex Management totalled 102.3 mln tonnes in 2016, a 2.5% increase from 2015.

In other areas of operations, the Central Directorate for Terminal and Warehouse Complex Management earned income of RUB 6.0 bln, or 10.3% more than in 2015. Profit in other areas of operations totalled RUB 1.94 bln, an 11.9% increase from 2015.

# 102.3

mln t

freight processed by the terminal and warehouse complex in 2016

## Transportation and logistics services

One of the Russian Railways Group's strategic objectives is to transition from providing freight shipment services to establishing integrated door-to-door services, expanding the range of 2PL, 3PL and 4PL services and establishing global logistics chains.

Given the limited opportunities to increase the scale and profitability of business in transportation segments regulated by the government, the Group is performing active work to expand activities in de-regulated segments of the transportation and logistics market,

strengthen the positions of Russian Railways on Russian and foreign logistics markets and introduce modern 3PL/4PL logistics technologies on the network.

### Performance results of Federal Freight Company

In 2016, Federal Freight Company implemented measures to renovate the railcar fleet, enhance the fleet's efficiency in loading and increase the share of rolling stock, which enabled the Company to not only maintain its previous positions on the market, but also become the largest operator on the entire 1520 gauge space.

Federal Freight Company increased its share in freight shipments to 13.4% of the overall transportation volume on the railway network in 2016. Its share of the network freight turnover market totalled 15.5%

in 2016. The Company's share of the freight railcar fleet in Russia was 14.2% in 2016.

Federal Freight Company shipped 183.1 mln tonnes of freight in 2016 (up 10.6% from 2015), or 2.8 mln railcar shipments. The biggest growth was seen in the segment of shipments in gondola cars owned by Federal Freight Company: 168.3 mln tonnes were shipped in 2016 (17.2 mln tonnes more than in 2015).

The year 2016 was a turning point on the rolling stock operation market. After several years of a surplus of gondola

cars on the network, the decommissioning of freight cars with expired service life as well as the growing volume of traffic resulted in a local gondola deficit, which led to an increase in rental rates for rolling stock. The current favourable market situation and measures that have been implemented to increase the technological efficiency of the fleet and to optimise costs led to an increase in the Company's revenue and a positive financial result.

### Key financial and economic performance indicators of Federal Freight Company

Indicator	Measurement unit	2015	2016
Revenue	mln RUB	46,484.7	73,240.0
Net profit	mln RUB	-8,548.6	5,759.2



## Performance results of international logistics company GEFCO

The GEFCO Group is a global player on the transportation and logistics services market and operates on five continents.

The GEFCO network includes 44 representative offices around the world, including in key regions for the international business development of Russian Railways such as Central and Eastern Europe, the CIS and China.

The Company specialises in supply chain management (3PL services) as well as integrated services for the management of all logistics processes at client companies (4PL services), which are virtually non-existent in Russia right now.

The Company's customer base includes more than 40,000 counterparties around the world, including transnational industrial corporations, many of which are represented on the Russian market (PSA Peugeot Citroën, General Motors, Renault, Ford, BMW, L'Oréal, Phillips and Electrolux).

In November 2016, GEFCO S.A. signed an additional agreement with PSA Peugeot Citroën to renew the exclusive rights to provide the concern with logistics services. The agreement runs from 2017 until the end of 2021. The signing of this agreement confirms the high level of services offered by the GEFCO Group of companies and the long-term nature of cooperation with this key client.

GEFCO jointly implements a number of projects Russian Railways that aim to improve the efficiency of the Group's supply chains and use assets for joint operations, including by attracting additional freight flows for processing and storage at freight yards and also to provide integrated transportation and logistics services.

GEFCO generated revenue of EUR 4.228 bln in 2016, an increase of 1.3% compared with 2015. Operating profit from continuing operations totalled EUR 114 million in 2016, a 35% increase from the previous year.

## Performance results of United Transportation and Logistics Company

In early 2016, the heads of three railway companies of EAEU member nations (Russian Railways, Kazakhstan Temir Zholy and Belarusian Railways) agreed on the basic principles for the development of United Transportation and Logistics Company (UTLC) as an operator of transit services on the 1520 space and identified the primary route of Dostyk/Altynkol – Brest – Dostyk/Altynkol.

UTLC drafted a development strategy for the company for the period until 2025, which has been submitted for approval

to the structures of Russian Railways, Kazakhstan Temir Zholy and Belarusian Railways. The strategy envisages reaching container transportation of up to 1 mln TEU by 2025.

The company drafted and approved operating procedure standards in 2016 as well as a regulation for UTLC to interact with its customers and agents, which simplifies the procedure for customers to place orders for transit container shipment. As of the end of 2016, UTLC had started providing

customers with information services for transit shipments of containers. As part of improvements to container shipment technologies, UTLC has established a regular information exchange with the Chinese companies that generate the main cargo flows.

UTLC doubled its main indicators in 2016 as a result of comprehensive measures it carried out last year. UTLC shipped 101,000 TEU and dispatched 177 container trains.

## Measures that aim to improve the quality of transportation service for consignors

The Russian Railways Group's main development priority as regards freight transportation in the coming years is to attract additional freight to railways from other types of transportation and expand the range of logistics products offered to customers.

To meet these objectives, the Group has launched and is successfully providing the following services: 'Organisation of Scheduled Freight Train Traffic' and 'RZD Express'.

Transporting freight according to a fixed schedule allows for ensuring the timely and rhythmic delivery of freight and cutting the transportation costs of major holding companies by reducing the turnover of rolling stock and containers. As part of this service, 22,863 trains were dispatched in 2016 with income of RUB 1,627.9 mln, an 8% increase from 2015. There are currently

119 contracts in effect for this service of which 37 were concluded in 2016. The main customers are: SUEK, Mechel, Sibur Holding, RN-Trans and SDS Coal.

The subsidiary RZD Logistics is implementing the RZD Express project to consolidate and provide door-to-door shipments of small freight consignments to end consumers in 118 cities of Russia and Belarus. The RZD Express network includes 680 agencies and more than 11,000 delivery routes. This service is used to annually process more than 17,000 orders and over 92,000 tonnes of freight. In 2016, 237,000 tonnes of freight valued at RUB 1,031.9 mln were shipped as part of the RZD Express service.

In addition, Russian Railways offers the 'Freight Express' expedited freight delivery service, which makes it possible to reduce the time freight spends in transit by following a route based on a specially

developed schedule. Railcars containing the freight of customers with small freight volumes are assembled at a base station for a technical route and travel to the disbandment station without being processed en route. This technology makes it possible to compete with motor transportation in terms of freight delivery speed, while the use of the 'Freight Express' service combined with the rolling stock services provided by Russian Railways subsidiaries and affiliates as well as loading and unloading work significantly simplifies the railway transportation process. A total of 425 trains were dispatched in 2016, or 512,000 tonnes of freight valued at RUB 32.449 mln.

## Passenger transportation

The main measures carried out in 2016, which was declared the Year of the Passenger, aimed to develop and improve passenger transportation as well as enhance the quality and expand the range of services offered.



Mikhail Akulov

For the year, we carried 1.037 billion passengers, a 1.6% increase from the number of passengers transported in 2015. Passenger turnover also increased, reversing the negative trend seen over the last three years. I am pleased to note the situation has stabilized in suburban transportation. Government decisions as well as our constructive joint work with the regions have made it possible to create a long-term sustainable model for the suburban transportation sector. I must also mention the success of the Moscow Central Ring. Passenger traffic via the MCR was only launched in September, but by the end of the year more than 27 million people had already used it.

### Key achievements in 2016

Passenger turnover via Russian Railways infrastructure totalled 124.5 bln pass. km in 2016, including 93.5 bln pass. km for long-haul transportation and 31 bln pass. km for suburban traffic.

A total of 1,037.0 mln passengers were transported, including 101.4 mln passengers on long-haul transportation and 935.6 mln passengers on suburban transportation.

Passenger turnover via rapid-transit trains grew by 24.3% to 4.6 bln pass. km in 2016.

The share of railways in overall passenger transportation via the main types of transport increased by 1.4 p.p. to 27.3% in 2016.

The Moscow Central Ring (MCR) opened in September. The MCR carried more than 27 mln passengers in 2016, or 239,200 people per day on average.

Strizh trains began running from Moscow to Berlin in December 2016. This train had capacity utilisation of 65.8%.

The satisfaction index rose to 77.7 points for long-haul train service and to 76.3 for suburban trains (out of a possible 100 points).

The customer satisfaction level calculated based on an assessment of the level of passenger satisfaction with the quality of services provided by Federal Passenger Company totalled 95%

## Inter-industry competition on the passenger transportation market

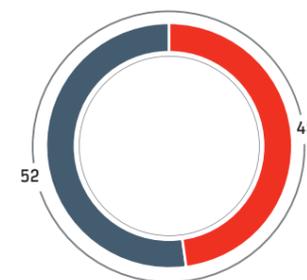
Railway transportation continued to face competitive pressure from air transportation on domestic routes in the de-regulated segment in 2016. The share of railway transportation is higher on the domestic passenger transportation market.

5%

decrease in air transportation passenger turnover in 2016

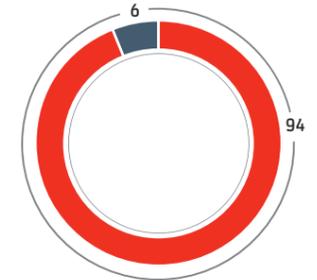
Structure of passenger turnover for railway and air travel by transportation mode in 2016

Air transportation



Domestic travel  
International travel

Railway transportation



Domestic travel  
International travel

Given the competition from air travel seen in 2015, the stable demand for Sapsan and Allegro trains (which offer passengers fast travel time, a high level of comfort, an optimal price level and a convenient schedule), double-decker trains and Strizh trains as well as the use of multimodal transportation and new transport

products as part of the "Daily Express" programme on Lastochka (Desiro RUS) trains demonstrates the positive trend of attracting additional passenger flows from alternative transportation modes and reaffirms the need to continue the development of rapid-transit passenger transportation.

Passenger turnover in the railway industry's main competitor – air transportation – decreased by 5% in 2016.

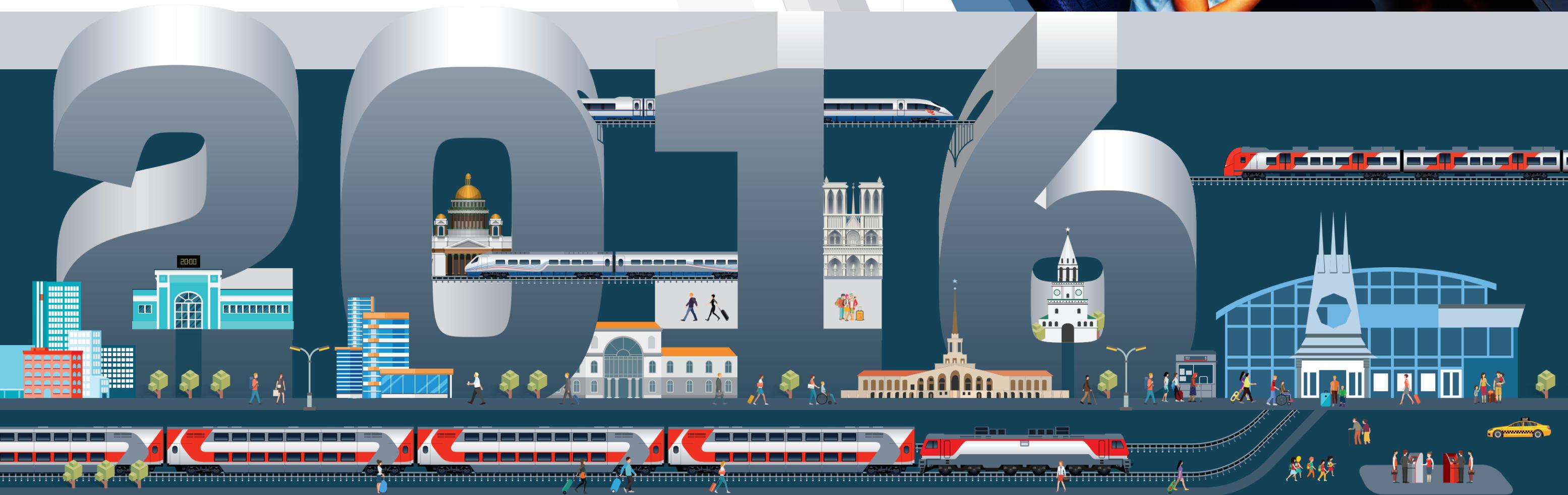
For more on the transportation market, see the 'Market overview' section.

Passenger turnover for railway and air travel in 2010-2016, bln pass. km



# Year of the Passenger

The Russian Railways Group declared the Year of the Passenger. Based on feedback, comments, suggestions, wishes and opinions expressed by passengers, the Company formed 14 areas of the 'Year of the Passenger' programme, which provide for 236 events.



# 2016 – Year of the Passenger



The main focus of the Company's work in 2016 aimed to meet the public's demand for high-quality and affordable railway transportation, offer new products, expand the range of passenger services and develop rapid-transit transportation.

## LOWERING TARIFFS

The Company utilised a number of marketing tools in 2016 to make passenger transportation more affordable such as a flexible tariff policy, dynamic pricing system, various promotions and a loyalty programme, among other things.

2.15 ml people

number of members of the RZD Bonus loyalty programme.

The RZD Bonus loyalty programme won the contest of best projects in customer experience and service management in the category 'Best Customer Experience in the Transportation Sector'.

## EXPANDING DAILY EXPRESS DOMAIN

Russian Railways works constantly to expand its line of products and passenger services. An example of this is an increase in speed traffic volume as well as the expanded geography of routes as part of the Daily Express programme.

45 train pairs

travel on 25 routes of the railway network as part of the Daily Express programme per the current schedule.

10.2 mln passengers

carried in 2016, a 22% increase from 2015.

## DOUBLE-DECKER RAILCARS – COMBINING COMFORT AND SAVINGS

Double-decker railcars were in high demand among passengers in 2016.

Double-decker trains run via the routes: Moscow-St. Petersburg, Moscow-Kazan, Moscow-Voronezh, Moscow-Adler and St. Petersburg-Adler.

2.8 mln people

total transportation volume in 2016.

## INCREASING SPEED

Given the ever-growing demand for rapid-transit transportation and focusing on passengers' request, Russian Railways continued to optimise its train schedule in 2016 and also increase the affordability of rapid-transit transportation

9.2 mln passengers

the number of passengers travelling on rapid-transit trains increased by 19.1%.

Unified tariffs were introduced for poorly protected segments of the population - Senior for pensioners and Junior for young people.

## DEVELOPING SERVICES

The Company continued work to develop additional services for passengers in 2016.

Starting in December 2016, tickets for all long-haul trains can be purchased 60 days prior to their departure.

The service of access to the Internet and the portal with multimedia content was introduced in 33 versions of 14 deluxe trains of Federal Passenger Company.

>75%

of passengers can access wireless Internet services at 107 railway stations.

## TAKING CARE OF THE MOST VULNERABLE PASSENGERS

One of the priority development areas for the passenger sector remains improving the level of service for people with limited mobility

The Russian Railways Mobility Assistance Information Service Centre is open 24 hours a day.

400 stations

offer services to accompany and assist passengers with impaired locomotor functions, hearing and vision.

## COMMUTER TOWNS UNDER SPECIAL CONTROL

The main activities of 2016 aims to improve the quality and ensure the affordability of transportation and develop e-services.

The 'Urban Commuter Train' project encompassed 8 metropolitan areas: Krasnoyarsk, Ufa, Tambov, Rostov-on-Don, Kaliningrad, Volgograd, Kazan and Voronezh.

Suburban train ticket sales were organised using mobile apps.



## Performance of the passenger service

Passenger turnover on public transportation totalled 456.4 bln pass. km in 2016, including 124.5 bln pass. km on railways, 116.6 bln pass. km on road transportation and 215.3 bln pass. km on air transportation.

Negative trends with passenger railway transportation on Russian Railways infrastructure have been several years now. The deterioration in the macroeconomic

environment in Russia has above all resulted in the decreased mobility of the most disadvantaged members of the population – potential passengers in the socially significant regulated transportation segment.

The negative trends continued in the first quarter of 2016 (-2.3% versus 2015), and the situation only began to stabilise starting in April. This was facilitated

by systematic marketing work supporting affordability as well as an expanded route network and increased speeds. In addition, regular work was conducted to improve services and additional services for passengers.

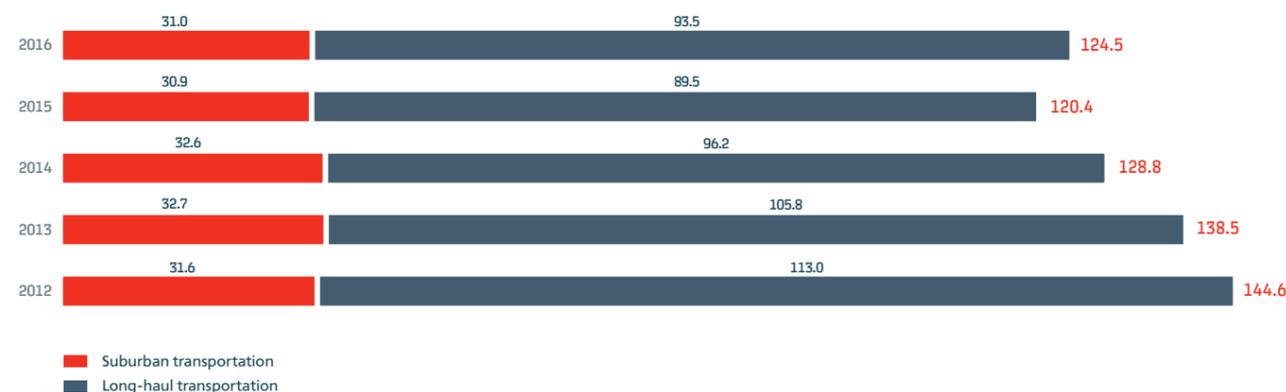
As a result, railway passenger turnover grew by 3.4% in 2016. The number of passengers increased by 1.6% to 1,037 mln people.

### Key indicators for passenger transportation using Russian Railways infrastructure

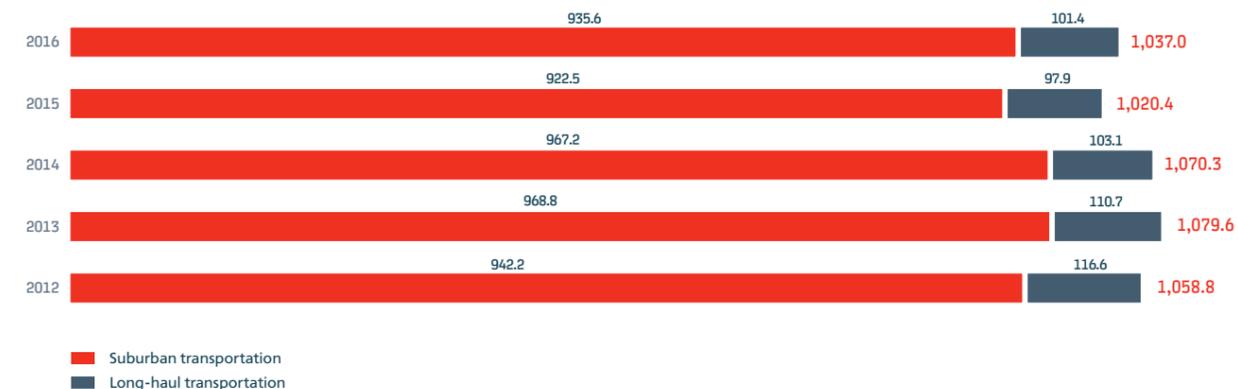
Indicator	2015	2016	Change	
			+/-	%
<b>Passenger turnover, bln pass. km</b>	<b>120.4</b>	<b>124.5</b>	<b>4.0</b>	<b>103.4</b>
Suburban transportation	30.9	31.0	0.1	100.4
Long-haul transportation, including	89.5	93.5	3.9	104.4
Rapid-transit transportation	3.7 <sup>1</sup>	4.6 <sup>1</sup>	0.9	124.3
<b>Passengers transported, mln passengers</b>	<b>1,020.4</b>	<b>1,037.0</b>	<b>16.6</b>	<b>101.6</b>
Suburban transportation	922.5	935.6	13.1	101.4
Long-haul transportation, including	97.9	101.4	3.5	103.6
Rapid-transit transportation	7.7 <sup>1</sup>	9.2 <sup>1</sup>	1.5	119.1

<sup>1</sup> Data for 2015 and 2016 presented taking into account rapid-transit transportation of Federal Passenger Company and the branch of Russian Railways – High-Speed Transportation Directorate (HSTD).

### Railway passenger turnover, bln pass. km



### Number of passengers transported by railway, mln passengers



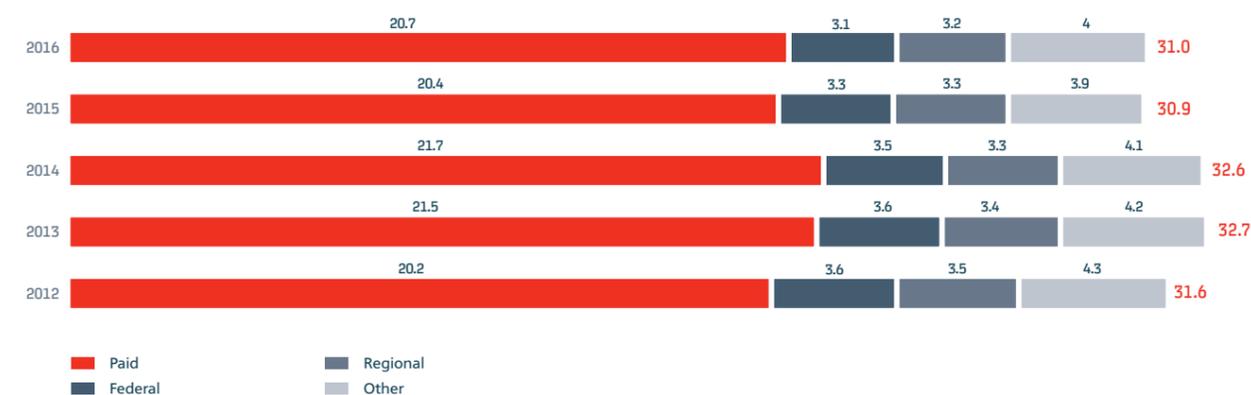
### Suburban passenger transportation via Russian Railways infrastructure

Suburban passenger turnover via Russian Railways infrastructure increased by 0.4% to 31 bln pass. km in 2016 compared with 2015. Suburban transportation carried

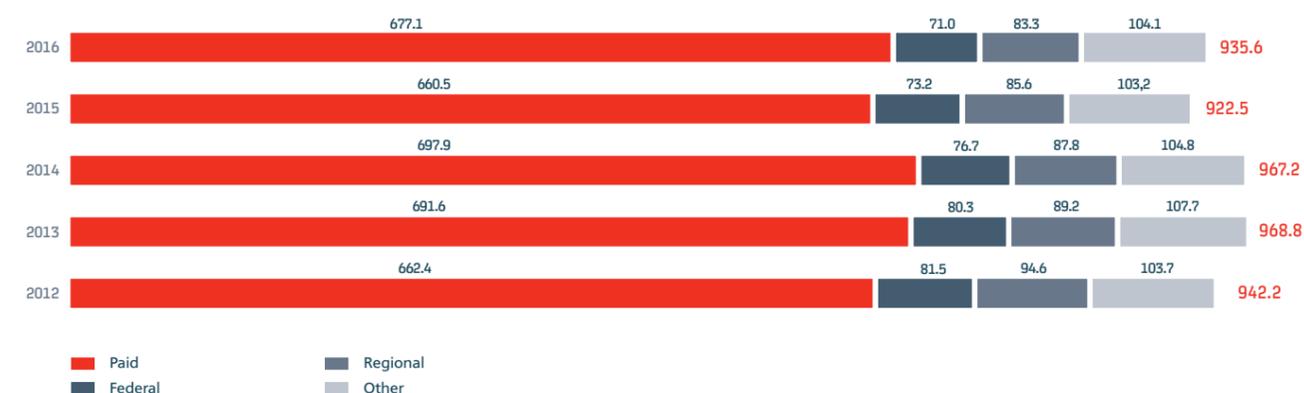
935.6 mln passengers in 2016, or 1.4% more than in 2015. Paying passengers made up 72.3% of the passenger structure, federal benefit recipients – 7.6%, regional benefit

recipients – 8.9% and other categories – 11.2%. The number of paying passengers increased by 2.5% compared with 2015.

### Suburban passenger turnover by category, bln pass. km



### Number of suburban traffic passengers transported via Russian Railways infrastructure by category, mln passengers



### Structure and performance results of the suburban passenger service system

Transportation activities are performed by 25 suburban passenger companies (SPC) and Russian Railways as represented by the High-Speed Transportation Directorate.

Russian Railways has a more than 50% stake in the charter capital of 19 suburban companies.

Based on the 2016 results, 21 SPC were operating in the black with net profit of RUB 2,556.9 mln. Five SPC (North Caucasus SPC, Zabaikalskaya SPC, Kuban-Suburb, Kuban Express-Suburb

and South Urals SPC) had combined losses of RUB 632.8 mln.

1	North-West SPC	989.6
2	Moscow-Tver SPC	629.1
3	Kaliningrad SPC	18.8
4	Central SPC	81.4
5	Volga-Vyatka SPC	3.3
6	Sodruzhestvo	1.0
7	Northern SPC	661.4
8	North Caucasus SPC	-209.2
9	Kuban Express Suburb	-129.3
10	Chernozemye SPC	34.1
11	Saratov SPC	5.5
12	Volgogradtransprigorod	7.6
13	Samara SPC	3.1
14	Bashkortostan SPC	6.8
15	Sverdlovsk Suburban Company	44.7
16	Perm Suburban Company	15.7
17	Omsk Suburb	2.2
18	Express Suburb	0.0
19	Kuzbass Suburb	-1.1
20	Altai Suburb	1.2
21	Krasprigorod	1.9
22	Baikal SPC	29.4
23	Zabaikalsk SPC	-293.1
24	Primorye Express	0.7
25	Sakhalin PC	19.4
<b>Total</b>		<b>1,924.0</b>
including for profitable SPC		2,556.9
for unprofitable SPC		-632.8

### Compensation for shortfalls in income of carriers by constituent entities of the Russian Federation

In recent years, considerable measures have been adopted at the state level to support the suburban railway industry. Compensation for losses in income has increased substantially from 44% in 2011 to 87% in 2016 as a result of planned work aimed at reducing the unprofitability of the suburban passenger sector, decisions adopted by the Government of the Russian Federation and obligations undertaken by the constituent entities of the Russian Federation.

Given the preferential tariff rate in 2016 for the infrastructure services of suburban railway transportation, the demand

of suburban carriers for subsidies to compensate for shortfalls in income arising as a result of the government regulation of tariffs amounted to RUB 12.7 bln (excluding profitable regions). Subsidies were provided to compensate for shortfalls in income from the government regulation of tariffs in the amount of RUB 10.1 bln, which compensated for 79% of this demand. The subsidies received from regional budgets to compensate for shortfalls in income in 2016 amounted to RUB 11.2 bln, including RUB 1.2 bln to repay the losses of previous years.

The deficit in subsidies from the regions amounted to RUB 2.8 bln in 2016.

Thirty-six regions fully compensated for their shortfalls in income in 2016. Transportation is provided

on a self-sustaining basis under preferential infrastructure conditions in five regions (Moscow, the Moscow Region, St Petersburg, the Leningrad Region and Astrakhan Region).

At the same time, in ten regions compensation for the shortfall in the income of carriers amounted to less than 50%. Subsidies to compensate for shortfalls in income by suburban companies were not provided at all in two regions.

#### Compensation for shortfalls in income of carriers by constituent entities of the Russian Federation

Compensation level by constituent entities of the Russian Federation	Number of constituent entities of the Russian Federation					
	2011	2012	2013	2014	2015	2016
No compensation required	6	5	5	4	5	5
100% compensation	11	18	10	15	41	37
> 80% compensation	9	6	12	8	10	12
50–80% compensation	13	8	12	21	3	7
< 50% compensation	30	32	31	20	10	9
Not provided	4	4	3	5	3	2
Transportation stopped	-	-	-	-	1	1
<b>Total</b>						<b>73</b>

### Renovation of rolling stock fleet

Passenger rolling stock is regularly renovated to develop and improve suburban passenger transportation, enhance the quality of services provided as well as improve the technical condition of multiple unit (MU) rolling stock.

The Russian Railways Group purchased 500 suburban multiple unit railcars in 2016 as part of the renovation programme.

### Results of work to establish multimodal hubs

The Company implemented a number of projects in 2015 as part of work to establish multimodal hubs:

- The Company continued developing the 'Urban Commuter Train' project, which is primarily of interest to residents of large metropolitan areas since passengers are able to save substantial time when travelling at rush hour. The 'Urban Commuter Train' project encompassed 8 metropolitan areas: Krasnoyarsk, Ufa, Tambov, Rostov-on-Don, Kaliningrad, Volgograd, Kazan and Voronezh.
- The 'train + bus' project was further developed and had positive results in the Gorky Railway operating domain with the following combined routes established as of the end of 2015: Nizhny Novgorod-Syava, Nizhny Novgorod-Vakhtan, Nizhny Novgorod-Tonshayevo (including transfer at Shakhunya station) and Nizhny Novgorod-Sharanga (transfer at Uren station).
- Multimodal transportation was established in the operating domains of 9 SPC on 20 routes in 2016: Altai Suburb – 1 route, Volgo-Vyatsk SPC – 3 routes, Sodruzhestvo – 4 routes, Baikal SPC – 1 route, Chernozemye SPC – 2 routes, Saratov SPC – 3 routes, Volgogradtransprigorod – 3 routes, Moscow-Tver SPC – 1 route, Central SPC – 2 routes).

### Moscow Little Ring Railway

The Moscow Central Railway (MCR) launched operations on 10 September 2016.

As of the end of 2016, the MCR operated 33 ES2G Lastochka trains and 67 ticket offices for the purchase of travel documents. There were 31 stations available to passengers with 15 stations offering transfers to metro lines and 6 to suburban railway stations.

The MCR carried 27,028,013 passengers over the period from 10 September to 31

December 2016. Each seventh Moscow Railway suburban passenger train was used by the MCR. The MCR accounted for 14.0% of the total number of passengers transported via Moscow Railway.

As all stations were opened, the MCR maintained a stable trend with average daily passenger transportation. The all-time record for passenger transportation was set on December 28 with 319,598 people.

The introduction of paid travel on the MCR (starting from 10 October 2016) confirms the importance of the new transportation

product for residents of the capital region. In particular, average daily transportation versus the first, free month of operation increased by 22.8% and totalled 252,000 people. During the paid travel period, an average of 292,200 passengers used the MCR each day on work days (+33.3% versus the free month), while an average of 155,000 passengers used the service on weekends (-11.8% compared with the free month).

**27,028,013**  
passengers

transported on the MCR from 10 September to 31 December 2016

**14%**

share of MCR of the total number of passengers transported on Moscow

**33**

Lastochka (Desiro RUS) trains in operation on the MCR as of the end of 2016

### Long-haul passenger transportation via Russian Railways infrastructure

The following companies provide long-haul passenger transportation services via Russian Railways infrastructure:

- S&A of Russian Railways (Federal Passenger Company and Sakhalin Passenger Company). Their share of passenger turnover is 94.84%. In particular, Federal Passenger Company had a 90.0% share of passenger turnover via its own trains.
- Independent carriers: Grand Service Express TC, Tverskoy Express and TransClassService. Their share of passenger turnover is 1.64%.

- Russian Railways as represented by High-Speed Transportation Directorate. Its share of passenger turnover is 3.52%,

Long-haul passenger turnover via Russian Railways infrastructure increased by 4.5% to 93.5 bln pass. km in 2016, while the number of passengers transported grew by 3.6% to 101.4 mln.

### Performance results of Federal Passenger Company

Federal Passenger Company had passenger turnover of 89.465 bln pass. km in 2016, up 3.9% from 2015.

On trains formed by Federal Passenger Company, passenger turnover throughout the route increased by 4.8% to 85.076 bln pass. km, including in the de-regulated segment – 25.963 bln pass. km (up 7.2% versus 2015), and in the regulated

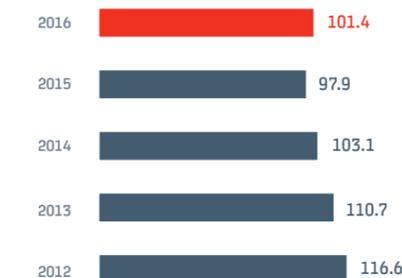
segment – 59.113 bln pass. km (growth of 3.9 % versus 2015).

In trains formed in CIS and Baltic countries using Russian Railways infrastructure, passenger turnover totalled 4.389 bln pass. km in 2016, a 10.8% decrease from 2015.

The Company transported more than 93 mln passengers over the course of the year.

Federal Passenger Company had income from core operations of RUB 201.2 bln

### Number of long-haul passengers transported, mln passengers



in 2016 (up 11.0%), including RUB 180.1 bln of income from passenger transportation (growth of 12.6%). Operating expenses also increased – from RUB 199.0 bln in 2015 to RUB 207.1 bln in 2016.

For the year, Federal Passenger Company increased net profit from RUB 0.1 bln in 2015 to RUB 5.3 billion in 2016.

**For more on the performance results of Federal Passenger Company, please see the Company's website.**

### Key financial indicators of Federal Passenger Company, RUB bln

Indicator	2015	2016	Change, %
Income from core operations	181.2	201.2	11.0
Income from passenger transportation	160.0	180.1	12.6
Income from other activities	21.2	21.1	-0.6
Expenses on core operations	199.0	207.1	4.1
Expenses on transportation	183.6	191.8	4.5
Expenses on other activities	15.4	15.3	-0.5
Operating profit (loss)	-17.8	-5.9	-67.0
Result from other income and expenses	20.2	14.3	-29.0
Profit (loss) before tax	2.4	8.5	3.5x
Net profit	0.1	5.3	37.5x

### International transportation

In the 2015-2016 train schedule, Federal Passenger Company transported passengers as part of direct and transit travel to 16 countries of Europe and Asia – Germany, France, Poland, Austria, Slovakia, the Czech Republic, Hungary, Serbia, Montenegro, Bulgaria, Monaco, Italy, Finland, China, Mongolia and North Korea – via 21 international routes. Passengers were also transported to CIS and Baltic countries.

The trend of decreased passenger traffic internationally continued in 2016, although the rate of decrease slowed. A total of 7,253,836 passengers were transported in 2016, or 4.8% less than in 2015 (the decrease in 2015 was 31.9% versus 2014). Passenger transportation with CIS and Baltic countries totalled 6,300,400 (-6.5% versus 2015), while transportation with other countries totalled 645,700 passengers (+8.5% versus 2015).

The share of passengers transported with non-CIS and Baltic countries increased from 7.8% to 8.9% of the total volume of international transportation.

In transportation with CIS and Baltic countries, the biggest decrease in passenger transportation was seen with Lithuania (-27.5%), Moldova (-24.0%), Kazakhstan (-16.1%), Latvia (-14.3%) and Kyrgyzstan (-14.2%).

Transportation between Russia and Ukraine totalled 2,256,240 passengers in 2016, down 2.3% from 2015. The share of passengers travelling to and from Ukraine increased 1.5 p.p. to 35.8% of total passenger transportation with CIS and Baltic countries.

Travel with Abkhazia totalled 307,748 passengers, or 8.9% of total passenger transportation with CIS and Baltic countries (up 4.2% versus 2015).

Finland accounted for the largest amount of travel with non-CIS countries in the reporting period at 452,448 passengers, a 5.7% increase from 2015 (versus a 17.3% decrease in 2015).

The only decrease in passenger traffic with non-CIS countries during the reporting year was between Russia and Mongolia (-3.9% versus 2015).

**7,253,836**  
people

number of passengers transported internationally in 2016

**6,300,400**  
people

passenger traffic with CIS and Baltic countries in 2016



### High-speed passenger transportation

High-speed passenger transportation is handled by the High-Speed Transportation Directorate (HSTD), a branch of Russian Railways, and Federal Passenger Company.

Passenger turnover via high-speed trains grew by 24.3% to 4.6 bln pass. km in 2016. Passenger turnover increased both domestically and internationally.

The number of passengers transported by high-speed trains increased by 19.1% to 9.2 mln in 2016 compared with 2015. In particular, Sapsan and Lastochka (Desiro RUS) trains carried 5.9 mln passengers on long-haul domestic routes (growth of 27.4%), while Allegro trains carried 0.2 mln passengers on international routes (increase of 8.8%).

An increase in passenger traffic between Russia and Finland occurred due to the 'Plan in Advance' promotional campaign and also due to the stabilisation of the Russian national currency.

Double-decker Sapsan trains continued to operate in 2016 following their launch in August 2014 via the Moscow-St Petersburg route. The Sapsan train occupancy rate was 81.3% for the year (80.3% in 2015). Active efforts to concentrate Sapsan high-speed trains on the Moscow-St Petersburg route helped railway transportation to maintain a 69.7% share of this route (+3.7 p.p. versus 2015).

High-speed Strizh trains started running on the Moscow-Berlin route on 17 December 2016.

Since high-speed trains were put into operation until 1 January 2017, total passenger transportation amounts to:

- Sapsan – 22.7 mln passengers;
- Allegro – 2.3 mln passengers;
- Lastochka (Desiro RUS) – 9.2 mln passengers;
- Strizh – 1.9 mln passenger.

As of 1 October 2016, the High-Speed Transportation Directorate had 16 high-speed Sapsan trains, 94 high-speed Lastochka (Desiro RUS) trains, including 54 ES1 trains produced by Siemens and 44 ES2G trains manufactured by Ural Locomotives, and two Pesa railcars. In addition, the Directorate operates Allegro trains leased by Russian Railways from the Finnish-Russian company Oy Karelian Trains. As part of a project, the High-Speed Transportation Directorate also performs work involving the maintenance of Allegro trains jointly with Finnish Railways (VR Group Ltd).

**9.2**  
mln people

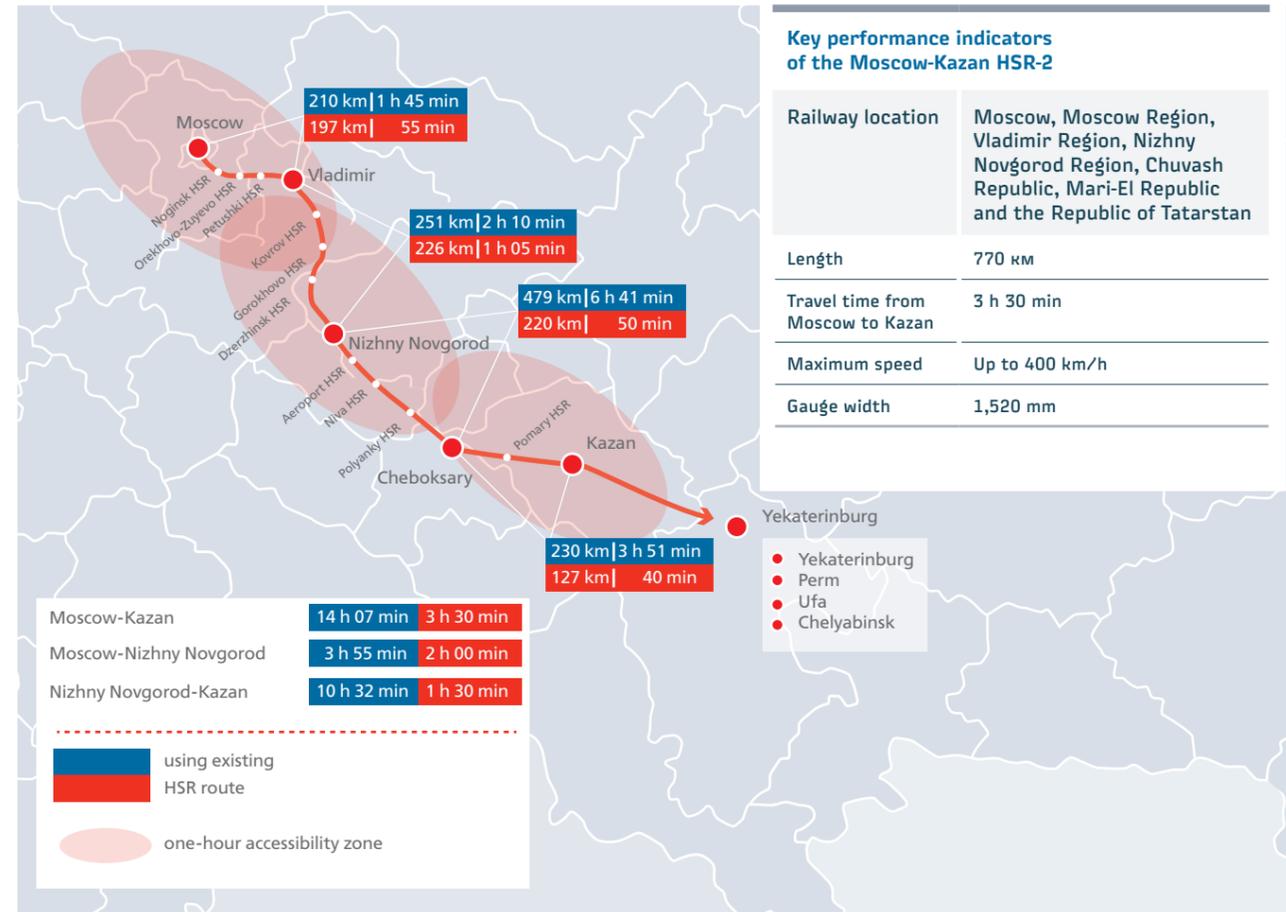
the number of passengers transported by high-speed trains in 2016



## Implementation of rapid-transit and high-speed transportation projects

### Moscow-Kazan High-Speed Railway

#### Moscow-Kazan HSR-2



Russian Railways systematically prepared for the construction of the first Russian-made high-speed railway – the Moscow-Kazan HSR, which was approved by Order No. 5-r of the Government of the Russian Federation dated 13 January 2016.

The main efforts were focused on meeting the following objectives:

- performance of survey and design work to draft design documentation for the construction of the railway;
- creation of a regulatory and technical framework for the design, construction and operation of HSR infrastructure and high-speed rolling stock;
- creation of a regulatory and legislative framework to establish high-speed transportation in the Russian Federation;
- creation of the necessary mechanisms to implement infrastructure projects based on a public-private partnership and concessions;
- establishment and organisation of the manufacturing of a line of high-speed rolling stock in Russia;
- updating of the organisational and legal model for implementing the project and work with potential

national and international investors to agree on the conditions for their involvement in the project, attract investment and the forms of cooperation.

The railway was designed in accordance with Design Contract No. 25/15 dated 18 June 2015. To date, 67% of the total work under the contract has been performed, and RUB 12.6 bln of the total RUB 18.9 bln has been spent.

Jointly with High-Speed Railways, a Russian-Chinese consortium of design organisations and French technical consultants (Systra, SNCF), Russian Railways has fully completed a set of engineering surveys and drafted design documentation for the construction of the first section of the Moscow-Nizhny Novgorod railway.

Documentation has been drafted and approved by the Russian Ministry of Construction to configure the territory for the construction of railways in the Moscow, Vladimir and Nizhny Novgorod Regions, and documentation for the construction of railways in Moscow, Mari El Republic, Chuvash Republic and the Republic of Tatarstan has been submitted to the ministry for endorsement and approval.

The construction of the HSR will utilise the best and leading technical solutions

for high-speed train traffic of up to 400 km/h based on the practice of building and operating high-speed railway lines. This includes a ballast-less track superstructure for speeds of up to 400 km/h (more than 1,400 km projected). The design, which was specifically developed for Russia, takes into account European and Chinese experience, including operation on the Harbin-Dalian section with climatic conditions similar to those in Russia.

The KS-400 contact network has been specially designed for the railway based on mathematical modelling (more than 1,700 km projected). The modelling results have been confirmed by the scientific community of leading countries.

More than 150 km of the Moscow-Kazan HSR will pass through engineering structures – bridges and overpasses that do not intersect at any level with other transport lines. Uniform designs have been developed for the engineering structures with a range of speed from 200 to 350 km/h in order to ensure the technological uniformity of the design solutions. Span structures designed for the first time for such speeds served as the basis for unification.

Design work is scheduled to be completed in the first half of 2017.

In 2016, a concept was drafted to develop the territories surrounding the HSR, and data sheets were compiled for investment projects identifying the main areas and parameters for developing the territories.

A public technological and price audit of engineering surveys and design documentation for the Moscow-Nizhny Novgorod section was carried out, including an assessment of the technical requirements, limitations of high-speed rolling stock and its operation and maintenance technologies taking into account the proposed design solutions, which resulted in a favourable conclusion.

According to international auditors (Ernst & Young Consulting Services, TCIB Transport Consultants International Berlin GmbH & Co.KG and MOLINARI), the main technical and technological solutions provided in the project documentation meet the current level for the construction and operation of high-speed highways around the world.

The siting of the railway has been substantiated and selected to minimise capital expenditures on construction while meeting requirements for the safety and comfort of passenger transportation, and an analysis of passenger traffic confirms the parameters adopted in the design documentation.

The scope of the technical requirements for high-speed rolling stock fully corresponds to international practice, standards and competitive documentation in other countries.

The unit cost of building 1 km of the railway is consistent with the average price range relative to international analogues, while the specific operating costs correspond to global practice.

Over the course of 2016, measures were taken that are required to adopt regulations on amendments to the legislation of the Russian Federation,

including as part of preparations for the expropriation of land plots and real estate properties.

A programme for the scientific and technical support of the construction of high-speed railways and rolling stock was approved by the Federal Railway Transportation Agency following updates by Russian Railways.

Taking into account the design results, special technical specifications for the design and operation of the Moscow-Kazan HSR were updated, and national standards were developed for high-speed railway lines.

The organisational, legal and financial models for implementing the project as well as the investment declaration were updated, and the main provisions of concession and direct agreements as well as shareholder and loan agreements as part of the concession were drafted.

The Company continued work on cooperation with potential investors, including investors from China, Germany and Italy, as part of the implementation of Moscow-Kazan HSR. Proposals were received from potential investors on the conditions for providing debt and equity financing. Work is under way to agree on forms of cooperation and financing parameters that are acceptable to Russia.

Technical requirements for high-speed rolling stock have been drafted and approved as part of the project. The projected train will have an operating speed of up to 360 km/h, and up to 400 km/h in the testing process, with seating capacity for 680 passengers.

A concept has been developed for a high-speed special-purpose freight train with structural features designed to transport between 300 and 600 tonnes of container cargo at speeds of up to 300 km/h.

Agreements of intent concerning the localisation of high-speed railway rolling stock and railway equipment in the Russian Federation were signed during meetings of the presidents of Russia and China in Beijing on 25 June 2016.

The construction of the Moscow-Kazan HSR with an extension to Yekaterinburg and eventually to Beijing as well as the development of the network running towards the European Union will make it possible to unite the Euro Carex network that is currently being built in Europe with speeds of up to 250 km/h and create a "high-speed freight and passenger bridge" between the transport networks of China and Europe.

This ambitious project will not only become one of the key links in the Eurasian transport communications system, but will ensure a direct interface for the Eurasian Economic Union and China's Silk Road Economic Belt project.

According to preliminary estimates, taking into account the East-West trade turnover volume, the proportion of routes passing through Russia could exceed 15% with additional revenue for Russian Railways of more than RUB 300 bln per year (in 2016 prices). Following the approval of the organisational, legal and financial models for the implementation of the investment project to build the Moscow-Kazan HSR at a meeting of an interdepartmental working group on matters concerning the implementation of the project, a proposal will be submitted to the Government of the Russian Federation on the conclusion of a concession agreement with construction subsequently being launched in the second half of 2017.



## Railway transportation and infrastructure

This unit consolidates the core production business divisions that support the Company's priority activities in railway transportation as well as the maintenance and development of infrastructure and locomotives.

### Key achievements in 2016



Oleg Belozеров



In 2016, we ensured positive trends in qualitative production indicators versus the 2015 level. Our achievements in freight speed delivery received high praise from our clients and were reflected in the up to 2% additional targeted indexation of tariffs for freight transportation and infrastructure services in 2017.

The budget targets for the qualitative indicators of rolling stock use were met in 2016, in particular:

- the average freight train service speed was 39.7 km/h, or 0.3% higher than the planned level and 1.5% higher than in 2015;
- the average freight train weight was 4,006 t, which is 0.7% higher than the target and 1% higher than the 2015 level;
- the average daily productivity of the active locomotive fleet in freight traffic reached 2,097,000 tkm gross, which is 1.7% above the plan and 2.9% higher than the 2015 level.

- The efficiency of production activities was improved, making it possible to fulfil the enhanced budget parameters for the use of rolling stock, including for the average freight train weight (+1% versus the 2015 level), average daily locomotive productivity (+2.9%) and service speed (+1.5%).
- The share of shipments delivered within the required period increased by 3.2 p.p. versus the 2015 level (including by 2 p.p. in loaded railcars). Updates were made to the action plan to ensure a 2.4% increase freight shipment delivery speed.
- The route speed of containerised trains totalled 899 km/day, an increase of 0.3% versus the 2015 level, including 1,145 km/day as part of the 'Trans-Siberian Railway in 7 Days' project, up 1.1%.
- The freight train traffic schedule improved by 0.4 p.p. in terms of departure and by 3.2 p.p. in terms of travel time versus 2015.

- All parameters of passenger train scheduling were improved, including by 0.2 p.p. for departure and arrival, and 0.3 p.p. for embarkation/disembarkation stations on the train's route versus the 2015 level.
- The scheduling of suburban trains ensured growth versus 2015 of 0.3 p.p. for arrival at destination points.
- Railway stations improved their quality of work. The downtime of transit railcars at marshalling yards declined 6.3% without processing and 2.3% with processing, while the time of railcar terminal operations at stations decreased 16.8% compared with 2015.
- The number of downtime hours in the work time of locomotive crews decreased 13.7% compared with 2015, including 14.2% in freight traffic, while the plan was for a 10% reduction.
- Track repair work was performed on 5,963 km (100% of the annual plan) as part of the renovation of Russian Railways infrastructure.
- The number of technological violations based on the responsibility of branches on the railway network fell by 50.3%.

#### Key performance indicators

Indicator	Measurement unit	2015	2016	
			value	change, %
Freight turnover	bln tkm	2,954.9	2,997.8	1.5
Loaded freight delivery speed	km/day	371.5	380.5	2.4
Share of loaded shipments delivered by the required date	%	94.7	96.7	2.0 p. p.
Decrease in specific consumption of electricity for train traction (2015 - 100%)	%	100.0	99.5	-0.5 p. p.
Decrease in specific consumption of standard fuel for train traction (2015 - 100%)	%	100.0	98.2	-1.8 p. p.

## Results of the implementation of the division investment programme in 2016

The Central Infrastructure Directorate's investment programme totalled RUB 62.1 bln in 2016. The bulk of the funds – RUB 50.5 bln – were spent on the track reconstruction (modernisation) programme.

A total of RUB 27.2 bln was spent on the programme to develop the Eastern operating domain, while spending on a programme to improve the quality of customer service as part of the Year of the Passenger totalled RUB 1.5 bln. Fixed assets valued at RUB 64.3 bln were commissioned as part of projects of the Central Infrastructure Directorate.

Spending by the Central Traffic Control Directorate totalled RUB 4.2 bln in 2016, including target external investments of RUB 129 mln. Most of the funds were spent on increasing the carrying and processing capacity of the main railway network routes and improving the reliability of operations by branches. The main projects included the 'Construction of Secondary Tracks, Extension of Station Tracks and the Development of Railway Hubs and Border Stations' and 'Programme to Improve and Develop Marshalling Stations'. RUB 2 bln was spent on each of these projects.

The amount of fixed assets put into operation as part of projects of the Central Traffic Management Directorate totalled RUB 6.6 bln in 2016, a 40% increase versus the target.

Spending of investment funds by the Traction Directorate totalled RUB 75.8 bln in 2016, or 1% less than the target, including RUB 67.9 bln spent on the investment project 'Purchase of Traction Rolling Stock' (500 new locomotives were purchased), and the 'Modernisation of Traction Rolling Stock' project – RUB 5.6 bln (1,609 locomotive sections were modernised).

## Repair and modernisation of infrastructure facilities in 2016

Repairs resulted in the renovation of 5,963 km of tracks in 2016, which is in line with the target and 940.7 km more, or 18.7%, than in 2015.

In full compliance with the target, reconstruction (modernisation) work was carried out on 2,200.2 km of tracks and 757 turnouts were built. Total spending amounted to 49.8 bln using investment budget funds (98.2% of the plan).

Russian Railways funds for major track repairs were used to perform the following work in 2016:

- new materials on 33.1 km for a total of RUB 0.5 bln (104.0% of the plan);
- used materials on 868.9 km for a total of RUB 8.5 bln (102.1% of the plan);
- 1,442 turnouts were built for a total of RUB 2.8 bln (100.2% of the plan);

- average railway track repairs of 1,360.2 km for a total of RUB 4.2 bln (96.5% of the plan);
- rail replacement work for 1,885 km for RUB 4.8 bln (100.2% of the plan);
- the complete replacement of rails during the period between major repairs accompanied by average railway track repairs on 1,500.6 km for a total of RUB 12.7 bln (95.7% of the plan).

Total spending on major repairs amounted to RUB 36.1 bln. In addition, major repairs were carried out on engineering structures valued at RUB 2.7 bln in 2016. A total of 180 engineering structures (bridges, pipes and tunnels) and 19.5 km of roadbed were repaired.

In automation and telemechanics, RUB 3.5 bln in funds for major repairs of railway automation and telemechanics equipment were spent in full in 2016.

Repairs were conducted on:

- 990 interlocked switches;
- 524.52 km of automatic and semi-automatic blocking;
- 146 railcar retarders;
- 20 compressors;
- 13 diesel-generator sets.

The Automation and Telemechanics Office spent RUB 4.2 bln on seven investment projects in 2016.

The following was commissioned:

- 105 interlocked switches;
- 33.5 km of automatic blocking;
- 40.1 km of permanent 2-sided automatic blocking.

Spending as part of the investment programme for electrification and power supplies totalled RUB 6.8 bln in 2016. For the year, the following major work was performed:

- reconstruction of 149 km of installed contact network;
- renovation of 66.1 km of high-voltage power supply lines to the automatic block system;
- installation of 113.3 km of suspension cable and 79.1 km of line feeder;
- installation of 1,649 new contact network supports and 1,527 substructures;
- modernisation of equipment at 8 traction substations; replacement of 6 telemechanics systems.

A total of RUB 4.7 bln were spent on major repairs to facilities in 2016. The following facilities were repaired:

- 3,171 contact line supports;
- 392.66 km of worn out contact wire;
- 989.6 km of overhead lines of the automatic blocking system and longitudinal power supply;
- 6,140 units of overhead line supports of the automatic blocking system and longitudinal power supply;
- 36,000 high-voltage insulators for all types of contact network.



## Improving the efficiency of infrastructure

The Russian Railways Budget Committee has established key performance optimisation parameters and developed and implemented a range of cost-cutting measures in an effort to improve the Company's operating efficiency.

### Track renovation

The design solutions for railway track reconstruction (modernisation) and major track repairs provide for an increase in speed and the lifting of existing restrictions for passenger trains over a stretch of 1,233.2 km and for freight trains over a span of 945.8 km.

For the first time since 2013, there was no:

- increase in track length with tonnage exceeding industry standards (25,200 km);
- growth in track scores.

In addition, the number of equipment failures in track facilities decreased by more than 7%.

The Company's main efforts to reduce the length of tracks with tonnage exceeding industry standards aimed to repair first- and second-class lines with particularly heavy congestion, weight and passenger traffic.

### Automation and telemechanics facilities

Major repairs made it possible to reduce first- and second-category equipment failures by 12.3% in 2016 compared with 2015, the number of delayed trains through the fault of automation and telemechanics facilities by 2% and not exceed the traffic safety targets in terms of the permissible level of events in 2016 for automation and telemechanics facilities (4 incidents occurred with a target of 4).

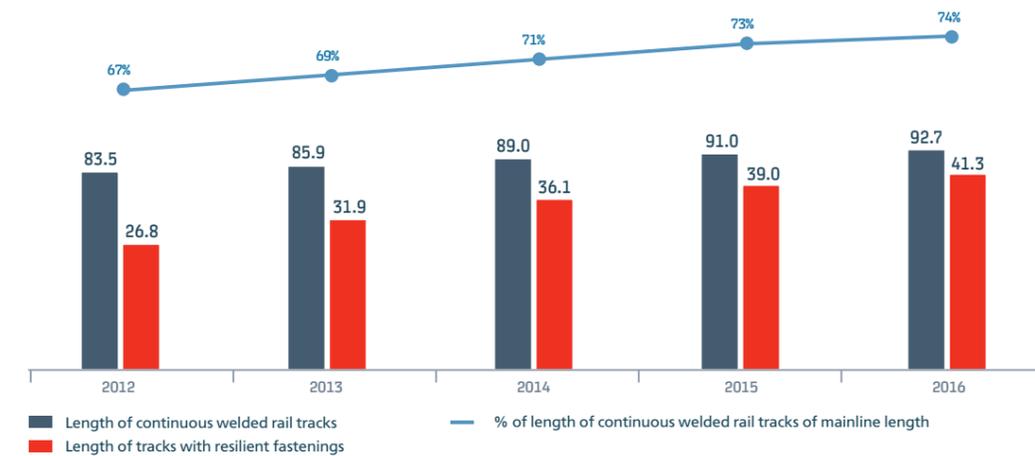
### Electrification and power supply facilities

The fulfilment of the major repair plan in 2016 made it possible to increase the reliability of power supply devices

and reduce the number of first- and second-category equipment failures by 15% compared with the same period of last year.

The number of first- and second-category equipment failures for delayed trains on Russian Railways infrastructure totalled 48,200 in the reporting year, a decrease of 14,400 events from 2015, or 23%. The number of first- and second-category technological disruptions on the Russian Railways network totalled 602,100 events, a decrease of 609,500 events from 2015, or 50.3%. The delay time of freight trains at the responsibility of the units decreased by 557,273 train hours versus 2015, or 19%.

Length of continuous welded rail tracks, including with resilient fastenings, '000 km



## Dynamics and structure of the traction rolling stock fleet in 2016

At the end of the year, the Russian Railways locomotive fleet in operation was comprised of 14,188 units, including:

- in freight traffic – 7,341 units;
- in passenger traffic – 1,624 units;
- in utility traffic – 1,814 units;
- a total of 3,409 units were involved in special shunting and other shunting operations.

At the end of 2016, the working locomotive fleet of Russian Railways was comprised of 9,728 units, including:

- in freight traffic – 5,272 units;
- in passenger traffic – 732 units;
- in utility traffic – 898 units;
- a total of 2,826 units were involved in special shunting and other shunting operations.

Russian Railways purchased 493 locomotives in 2016, including:

- 261 electric locomotives, including 43 passenger and 218 freight locomotives;
- 232 diesel locomotives, including 15 passenger, 118 freight and 99 shunting locomotives.



## Measures to improve the utilisation efficiency of locomotives

One of the strategic areas of work for locomotives is the renovation and unification of the locomotive fleet by operating domain.

New locomotives are distributed in accordance with the operating domain method. The supply of new locomotives makes it possible to gradually get rid of the locomotive fleet in operation and redeploy it to railway operating domains that have increased freight turnover as well as retire the fleet that has exhausted its standard service life.

A total of 374 locomotives were relocated throughout the Russian Railways network in 2016 (246 electric trains and 128 diesel trains).

The following work was carried out in 2016 to improve the efficient use of locomotives:

- In the Eastern operating domain, the number of trains weighing 7,100 tonnes was increased from 2 to 4 pairs per day. In addition, the train weight for 2x2ES5K and 2VL80S electric locomotives on the Mariinsk-Smolyanino section was increased from 7,100 to 7,500 tonnes based on pull and energy efficiency tests;
- as a result of testing on the Lena-Severobaykalsk section for 3ES5K series electric locomotives, the weight of freight trains was increased from 5,800 to 6,000 tonnes, which resulted in the entire Tayshet-Taksim section operating trains weighing 6,000 tonnes;
- based on pull and energy efficiency tests, freight trains weighing 6,300

tonnes were put into operation on the Mariinsk-Irkutsk section starting from March 2016, which increased the train weight on the section from 6,000 to 6,300 tonnes;

- pull and energy efficiency tests were conducted in the operating domain of Zabaykalsk Railway to determine whether coupled freight trains weighing up to 12,600 tonnes could operate on the railway. Based on the testing results, they were put into operation during large-scale track repair work;
- eliminating infrastructural restrictions on traction power supply made it possible to conduct test runs of 2x2ES6 series electric freight locomotives on the Chelyabinsk-Main – Kinel – Rybnoye section, which increased the train weight on the Syrzan-Rybnoye section from 6,500 to 7,000 tonnes;
- the supply of 3ES10 series electric locomotives to the Sverdlovsk Traction Directorate allowed for increasing the operation of freight trains weighing 9,000 tonnes in the Kuzbass-Northwest operating domain from 2 to 4 train paths;
- the supply of 2TE25KM series diesel locomotives to the Moscow operating domain made it possible to expand the domain of their operation to the Republic of Belarus on the Smolensk-Vitebsk section, free up the fleet of 3M62U series diesel locomotives and increase the maximum freight train weight from 6,000 to 6,500 tonnes.

As part of the Year of the Passenger and in accordance with the action plan to improve the quality of passenger service in 2016:

- technology for the non-stop operation of the EP20 electric locomotive to and from the Goryachy Klyuch station was tested, reducing the travel time of Trains No. 102/101 and No. 104/103 between Moscow and Adler by 1 hour to less than a day;
- The travel time of Trains No. 46/45 and No. 70/69 Moscow-Voronezh and Moscow-Belgorod was reduced by 45 minutes in both directions and takes less than 6.5 hours;
- the optimisation of traction service and the use of EP20 electric locomotives reduced the travel time of Trains No. 36/35 St. Petersburg-Adler (double-decker railcars) and No. 33/34 Moscow-Tallinn by 1.5 hours;
- the travel time of the experimental passenger train on the Moscow-Bryansk route using the EP20 electric locomotive was reduced by 45 minutes and takes 3 hours 46 minutes. A spliced-current section at the Sukhinichi station was put into operation in non-stop mode with a maximum speed (40 km/h in the odd direction and 60 km/h in the even direction).

## Development of effective technologies to manage the freight car fleet in 2016 given the large number of rolling stock operators. Results of the introduction of SNOP for railway freight transportation

In an effort to improve railway transportation efficiency, Russian Railways works consistently to implement the provisions of the Single Network Operating Procedure (SNOP) taking into account federal laws and other regulations of the Russian Federation concerning railway transportation.

The SNOP is used when solving problems involving the technical regulation of the transportation process, the organization of train traffic, the work of locomotives and locomotive

crews and the provision of information and is the basis for regulations on interaction between the Company's functional branches. Work organised on the basis of SNOP provisions made it possible in 2016 to achieve positive dynamics in the main rolling stock use indicators.

The SNOP is used when implementing the Integrated Programme for the Phased Transition to the Organisation of Scheduled Freight Train Traffic. This technology is implemented both at the regional level

and throughout the entire railway network. As of 1 January 2017, 641 specialised schedules had been developed and put into operation.

Measures are currently being prepared to update the SNOP in 2017-2019 taking into account the organisation of the transportation process with the use of operating domain technologies and the introduction of principles with an internal and external customer focus.



## International engineering and transportation construction

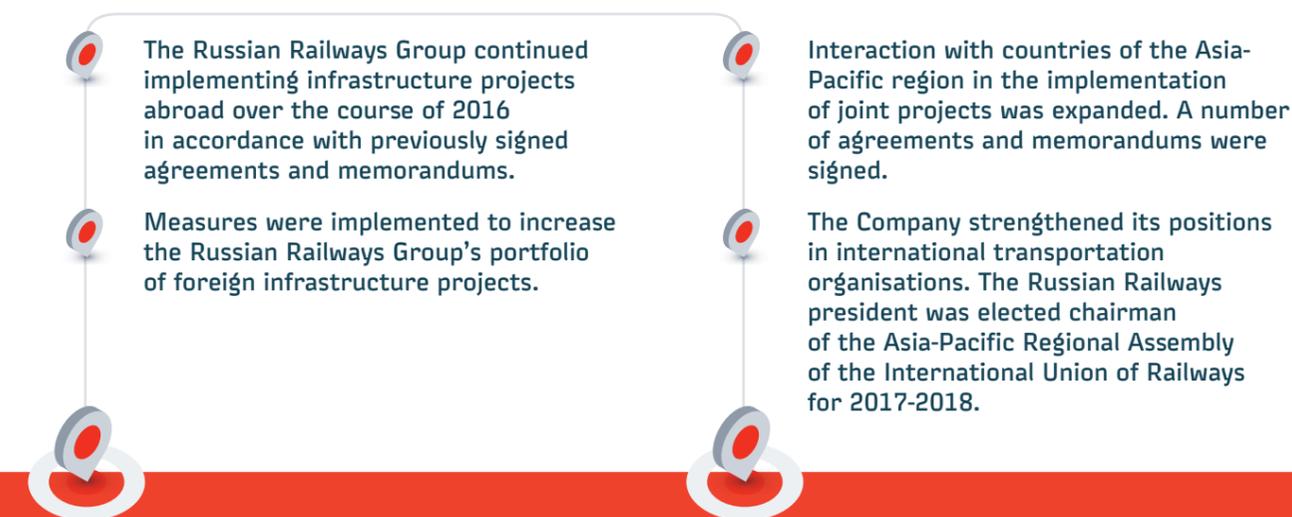
In 2016, Russian Railways continued implementing initiatives that aim to strengthen the Company's competitiveness on the international market. The Company fully met its contractual obligations as part of projects to develop railway infrastructure abroad and undertook measures to develop new and promising markets. Joint logistics projects being implemented in a partnership with foreign companies, above all from the countries of the Asia-Pacific Region, Eurasian Economic Union and the CIS, were further developed. The Company's activities as part of international organisations helped to strengthen its positions in this segment of the railway business.



Vyacheslav Pavlovsky

“ The competitiveness of railway transportation is largely determined by the success of its operations on global markets. Russian Railways continues to steadily increase its standing in this area. The Company successfully implemented projects in Serbia, and signed cooperation agreements with the railways of China and Azerbaijan. Work is under way to enter the markets of India, Brazil and Indonesia. This all suggests that we have solid international potential and strong foundations for its further development.

### Key achievements in 2016



## International activities of Russian Railways and key international projects

### Cooperation with CIS and Baltic States within the 1520 Domain

- The Russian Railways Group's participation in the Council of Rail Transport of CIS States helped to promote key issues concerning international passenger and freight transportation. The Council adopted a number of resolutions to update regulatory documents and signed several important agreements at its 64th and 65th sessions.
- The main outcome of the eleventh International Rail Business Forum Strategic Partnership 1520 (1-3 June, Sochi) was the development of coordinated approaches to the development of the railway industry in the '1520 space'. A number of important agreements were signed, in particular:
  - Russian Railways, Islamic Republic of Iran Railways and Azerbaijan Railways signed a trilateral memorandum to develop the routes of the North-South international transportation corridor;
  - Russian Railways and Kazakh Temir Zholy signed an agreement in order to develop Russian-Kazakh cooperation in the electronic exchange of information about international railway freight transportation.
- The Company continued working jointly with its partners to improve the regulatory legal framework of the Eurasian Economic Union and customs regulation for railway transportation throughout the space of the union.
- The decision was made to extend the Russian Railways' trust management of a 50% stake in Ulan-Bator Railway (Mongolia) until 2019.
- Armenian railway infrastructure was rebuilt and developed in full compliance with a concession agreement.

### Cooperation with Asia-Pacific Region countries

- Russian Railways devoted priority attention throughout 2016 to the development of cooperation with countries of the Asia-Pacific Region and took such interaction to a new level with the conclusion of a number of landmark international agreements:
- In June, Russian Railways and Chinese Railways signed an agreement on comprehensive strategic cooperation for the joint implementation of projects and the further interface of processes to establish the Eurasian Economic Union and the Silk Road Economic Belt.
  - In November, Russian Railways and the Chinese group of companies Port of Yingkou signed a cooperation agreement to intensify joint work as part of a project to build an international terminal and logistics centre on the core of the Bely Rast terminal and logistics centre.
  - In December, Russian Railways, China's Sinotrans, the Kaluga Region government and Russian Export Centre signed a four-sided memorandum of intent. The document will contribute to the development cross-border trade between Russia and China.
  - In October, Russian Railways and South Korea's Samsung Electronics signed a memorandum on mutual understanding to support the development of container transportation via the East-West route. The document will help to attract additional transit freight to the Russian railway network to be forwarded on to the South Korean company's factories in Eastern Europe.

## Interaction with international organisations

One of the Russian Railways Group's objectives in international cooperation is to harmonise transportation law and improve the existing regulatory legal framework of the transportation process. This objective is met through the Company's participation in the activities of international organisations such as the Council of Rail Transport of CIS States, the International Union of Railways (UIC), the Organisation for Cooperation of Railways (OSJD), the International Rail Transport Committee, the Intergovernmental Organisation for International Carriage by Rail, the Inland Transport Committee of the UN European Economic Commission, the UN Economic and Social Commission for Asia and the Pacific and others.

The main effects achieved as a result of this work are an expansion in Eurasian transport ties, an increase in transit potential as well as the enhanced attractiveness of logistics services and freight delivery conditions through the development of international transport corridors.

In 2016, the Company concluded its multi-year programme of chairmanship in the UIC. A milestone was the election of the Russian Railways president as chairman of the UIC Asia-Pacific Regional Assembly for 2017-2018.

Significant work was carried out via the OSJD to prepare and endorse the text of the Convention on Direct International Railway Transportation along with its

appendices, which began undergoing the approval procedure at interdepartmental national levels in November 2016 as part of an open special conference.

Over the course of the year, a working group within the Inland Transport Committee of the UN European Economic Commission drafted a new Convention on the Facilitation of Border Crossing Conditions for the International Carriage of Passengers, Luggage and Goods by Rail.

The Russian Railways Group's activities within the format of the BRICS Business Council helped to further converge the positions of BRICS nations on matters concerning the development of joint commercial projects.

## Russian Railways Group's cooperation with European partners

The Russian Railways Group's interaction with European partners primarily focused on the design and manufacturing of new rolling stock and its introduction to the national railway network. In 2015, Russian Railways continued work to strengthen cooperation with global railway engineering leaders such as Siemens, Alstom, Bombardier, Talgo, Knorr Bremse and others. Further progress was also made in matters concerning the localisation of advanced rolling stock production in Russia and the introduction

of environmentally friendly and energy efficient technologies to the Russian railway network.

In June, Russian Railways and Siemens AG signed an updated version of a strategic memorandum. The document provides for the development of cooperation between the two companies in rapid-transit and high-speed railway transportation, the manufacturing and operation of locomotives, digital technologies, railway automation and telemechanics,

electrification, personnel training as well as the implementation of projects on external markets.

In addition, Russian Railways continued to promote a project to set up a new Eurasian transportation corridor jointly with the railway administrations and transportation agencies of Austria, Slovakia and Ukraine. The latest stage of a feasibility study for the project was carried out.

## Changes in international activities in 2016 that contributed to the increased effectiveness of interaction with international counterparties and institutions

Changes in approaches to international business that took place in 2016 focused on increasing the Group's presence in these segments of the global market for railway services and technologies.

Aware of the Group's competitive advantages, the Company's management has defined the strategic goals, areas and priorities for long-term development of cooperation with foreign partners.

At the same time, the main objective is to ensure growth in revenue from foreign economic activity by effectively expanding the geography of its business and the volume of foreign operations.

## Implementation of international transportation infrastructure construction projects

The Russian Railways Group continued implementing foreign projects in 2016 to build railways and develop infrastructure in Serbia, Mongolia and Armenia.

Having completed the infrastructural part of a project in North Korea in 2014, the Company focused its efforts on increasing transportation volume.

Russian Railways continued developing a project to form a new Eurasian transport corridor to Bratislava and Vienna.

In addition, measures were implemented to expand the Group's portfolio of infrastructure projects. Opportunities and formats for cooperation in this segment of the railway business were studied with Iran, Cuba, India and other nations.

In Serbia, RZD International and Serbian Railways continued implementing a contract on the construction of railway infrastructure and the supply of diesel trains. On 6 June, RZD International completed work ahead of schedule to rebuild three northern sections of the Pan-European Transport Corridor X with total length of 65 km. At the end of the year, also earlier than scheduled, the Company fully supplied 27 Russian-made diesel trains to Serbia for suburban transport.

Work was carried out as planned to build and electrify 16 km of a second track on the Belgrade-Pancevo railway line and also to prepare for the signing of an additional agreement for the construction and reconstruction of the Stara Pazov – Novi Sad section. In

July, work began on the Resnik-Valevo section. In addition, Russia's NIIAS and Serbian design institute CIP signed a contract for the design of the Unified Dispatch Centre for the Remote Control of Railway Traffic.

As part of the fulfilment of obligations under a trust management agreement for a 50% stake in Ulan-Bator Railway, work was continued to modernise and develop Ulan-Bator Railway. The implementation of the project should ensure the required increase in capacity both for the freight transportation, above all minerals from the fields of Mongolia to China and the ports of Russia's Far East, as well as to increase transit between Russia and China. The trustee management of the stake has been extended until 2019.

The Company continues to implement a project to manage Armenia's railway system and is fully meeting its obligations under a concession agreement. Infrastructure has been modernised and the rolling stock fleet has been renovated. Work will be continued in 2017.

In North Korea, joint work was continued during the reporting year with international partners to attract additional freight to infrastructure that has been built (work to rebuild the Rajin-Khasan Railway and build a terminal in the port of Rajin was completed in 2014). Total freight shipment, primarily coal, totalled 1.5 mln tonnes.

A project office set up by Russian Railways for the establishment of a new Eurasian transportation corridor that envisages the construction of a 1,520-mm railway

line to Bratislava and Vienna continued work to promote the project via a four-way joint venture and interaction with the government and business structures of these countries.

Russian Railways continued work in 2016 to prepare for the signing of a contract with Islamic Republic of Iran Railways for design, supply of materials and equipment, and construction as part of a project to electrify the Garmsar-Ince Burun railway section. In December, a protocol to the previous agreement on the project was signed with additional conditions. Russian Railways opened a general representative office in Tehran to coordinate the joint work.

Another promising area for the Russian Railways Group's international cooperation is the development of interaction with the Republic of Cuba to modernise railway infrastructure. In early December 2016, a road map was signed to study the conditions for cooperation.

The signing of a protocol on cooperation between Russian Railways and the Indian Ministry of Railways in October 2016 as part of the High-Speed Railways programme was a practical step towards promoting joint projects in India. Under the document, the parties intend to continue work to coordinate a draft contract for the development of a feasibility study for a project to modernise the Nagpur-Secunderabad railway line. Implementing the project will make it possible to increase passenger transportation speeds on the section to 200 km/h.

## Social policy

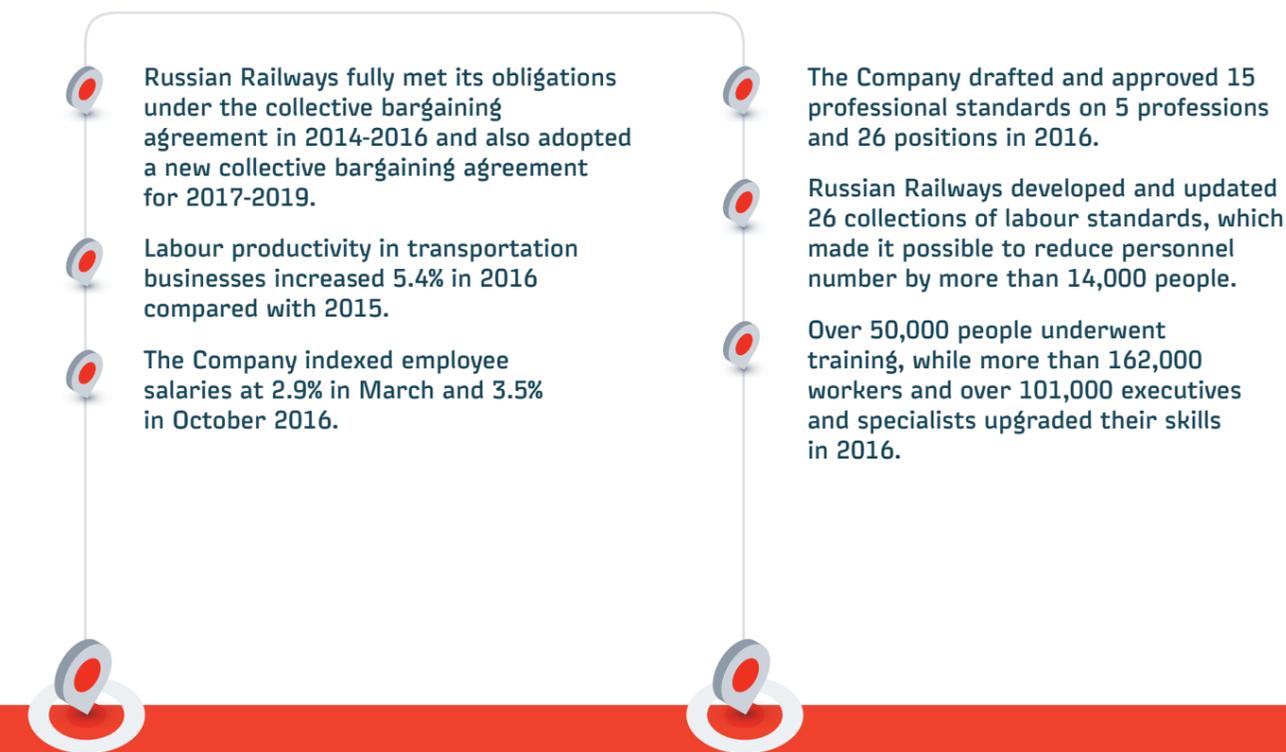
The development of social affairs is based on an objective assessment of the added value created from social support to employees and the effective use of assets to provide market services. The Group's social policy pursued outside of the workforce is an integral component.



Dmitry Shakhanov

➤ Growth in workforce productivity is a key indicator for our work. It increased by 5.4% in 2016. Our Company maintains its status as a socially responsible employer. We indexed employee salaries on two occasions over the course of the year. The Company signed a new collective bargaining agreement for 2017-2019. It preserves the guarantees and social obligations to the workforce, veterans and pensioners.

### Key achievements in 2016



## Personnel management

Russian Railways views its personnel as its primary asset. Recruiting and retaining personnel with the required skills along with their continuous development and social support are the top priorities of the Company's personnel policy.

### Labour productivity

Russian Railways has carried out systematic work since its establishment to ensure growth in labour productivity and to optimise staffing levels. Over this entire period, the growth dynamics in labour productivity has outpaced the growth dynamics in transportation volumes due to the optimisation of staffing levels.

Labour productivity for transportation businesses increased 5.4% in 2016 compared with 2015.

Work to update existing regulations, instructions and other technological documents specifying the use of labour resources made it possible to obtain

an effect from implementing measures of a technical and technological nature in a timely manner.

### Personnel numbers and structure

Russian Railways had 774,000 employees as of 31 December 2016, a decrease of 3.4% people from a year prior. As a result of an effective social and personnel policy, the Company managed to maintain its personnel turnover rate at the 2015 level.

Planned downsizing was carried out above all due to the natural outflow of staff, retirement, temporary hiring constraints,

the use of temporary and seasonal employment, the redistribution of personnel between divisions and pro-active personnel re-training.

The educational level of personnel continued to expand in 2016. In particular, employees with a higher education made up 30.4% of total personnel, a 1.6% increase from the start of the previous

year, while employees with a secondary vocational education made up 27.1% of employees (up 0.3% from the start of the year).

As of the end of 2016, the proportion of employees under 35 years accounted for 42% of total personnel numbers, while employees under 30 made up 26.2%.

### Remuneration and improving personnel motivation

The average monthly salary of Russian Railways employees engaged in all businesses increased 5.3% in 2016 compared with 2015 and totalled RUB 46,852 (RUB 44,500 in 2015) as a result of a set of measures to improve labour productivity and salary indexation in accordance with the obligations of the collective bargaining agreement.

The material incentive system, which is built on the principle of assigning key objectives to the structural division level, made it possible to:

- meet the main budget parameters of increasing freight train speed, average train weight and employee labour productivity;

- improve adherence to the passenger and freight train schedule and reduce the downtime of transit railcars at marshalling yards;
- reduce the working downtime of locomotive crews.

**Remuneration dynamics**

Indicator	2012	2013	2014	2015	2016
Average monthly salary of Russian Railways employees engaged in all types of activities, RUB	35,702	38,935	41,126	44,500	46,852
Growth vs. previous year, %	107.8	109.1	105.6	108.2	105.3
Ratio of salaries of Russian Railways employees vs. national average	1.34	1.31	1.27	1.31	1.28

**Personnel training**

Russian Railways continued systematic work in 2016 to provide training, re-training and advanced training for its personnel, in particular:

- training of more than 50,000 workers in key professions;
- more than 25,000 people upgraded their skill category;
- 13,100 people were trained in a second profession;
- more than 162,000 people upgraded their skills in various courses at training centres and in the workplace.

The Company has established and is effectively developing a unique corporate system of vocational training comprised of 15 vocational training centres with 66 focuses that meet 80% of the demands of the Company's divisions for skilled personnel in the main railway professions. Employees are trained at training centres according to curricula and programmes are developed on the basis of the requirements of the Uniform Wage-Rates and Skills Handbook.

Russian Railways continued close cooperation with industry-based higher educational institutions in 2015 to train specialists with a higher and secondary vocational education. At present, more than 37,000 students are studying at railway universities based on orders from Russian Railways.

**Corporate university**

The corporate university is a centre of expertise in personnel assessment, methodology for developing educational programmes, the training and development of managers, the introduction of distance educational technologies and the implementation of programmes to develop the talent pool of the Russian Railways Group. As of the end of the reporting year, the university's portfolio included 151 educational programmes, 26 of which were developed and put into operation in 2016. The Centre for Practical Training in Lean Manufacturing Technologies and the Training Centre for Mandatory Occupational Safety Programmes have been established at the university.

In 2016, 11,500 managers and specialists of Russian Railways underwent training at the corporate university.

**Retraining and advanced training of managers and specialists**

A total of 18,000 people underwent training as part of engineering training programmes based at railway transportation universities during the reporting year. Special attention was paid to timely training in occupational safety and other mandatory areas: occupational safety, electrical safety, fire safety, environmental protection and transport safety. More than 62,000 underwent advanced training in these programmes in 2016.

Russian Railways facilitates the business education of the Company's high-potential managers. In 2016, 23 employees underwent training in MBA programmes, and 338 Russian Railways managers and specialists whose activities have international specifics underwent foreign language training.

The Company carried out systematic work aimed at cost optimisation for training. Savings from optimising contractual work, the co-financing of business education by employees and expanded use of distance training totalled RUB 40.95 mln.

**5.3%**

growth in the salaries of Russian Railways employees vs. the 2015 level

**34,000** employees

of Russian Railways improved their living conditions with the Company's financial support in 2016

**55,400** employees

of Russian Railways underwent healthcare treatment at Company facilities in 2016

**Collective bargaining agreement**

The collective bargaining agreement for 2014-2016 applies to all of Russian Railways, including branches, structural divisions and representative offices.

The main focus of the agreement is on hiring, developing, retaining and motivating employees. The Group has introduced the principle of employee responsibility for production results.

Russian Railways traditionally meets all the obligations set forth in the collective bargaining agreement. In 2016, the Company spent more than RUB 100 bln on such purposes.

Obligations under the Russian Railways collective bargaining agreement make up roughly 20% of total spending on personnel.

Roughly 2,200 employees received subsidised mortgage loans in 2016 to purchase housing with total subsidies amounting to RUB 4.27 bln.

The Company primarily focuses on young and large families as well as single parents raising children. Non-repayable subsidies for up to 70% of housing costs are earmarked for such families.

Over the period from 2006 to 2016, more than 34,000 Russian Railways employees improved their living conditions with the Company's financial support.

**Healthcare**

As part of efforts to ensure the continuity and safety of the transportation process, Russian Railways operates a network of private healthcare facilities that includes 101 hospitals and 71 clinics.

The Company's healthcare system supports the medical component of train traffic safety with more than 1.5 mln mandatory preliminary and regular medical examinations of hired employees as well as 28 mln pre-trip medical check-ups.

In 2016, a total of 128,200 people vacationed and underwent rehabilitation at Russian Railways facilities, including 55,400 railway employees and 14,800 members of their families, 10,100 retirees and 47,900 other individuals and employees, their family members and pensioners of subsidiaries and affiliates.

**Corporate youth policy**

Measures were carried out over the course of 2016 as part of the Russian Railways Youth target programme to develop professional and corporate competencies among young employees and to actively involve them in improvements to the Russian Railways Group's activities and enhancing the customer focus and level of service. Special attention was paid to youth with blue-collar jobs, enhancing their professionalism and promoting their work.

**Corporate pension system**

The Russian Railways corporate pension system is based on the principle of the shared interest of the employee and employer in generating an employee's future pension.

In terms of its goals and purpose, a private (corporate) pension is an additional measure of social support to workers regardless of the state pension system. Its strategic goal is to ensure a replacement rate of at least 40% of an employee's lost earnings.

More than 595,700 Russian Railways employees have pensions with the Blagosostoyanie Private Pension Fund. Over 296,700 former railway workers draw a private pension.

Pensions were assigned to 18,586 Russian Railways employees in 2016 with the average pension totalling RUB 8,744.

In 2016, a new collective bargaining agreement was concluded for the next three years. It is based on the collective bargaining agreement of Russian Railways for 2014-2016 and the new Industry Agreement for Railway Transportation Organisations for 2017-2019, which was signed on 20 July 2016 and served as the platform for the preparation of collective bargaining agreements for railway transportation organisations for 2017 and beyond.

## Occupational safety

Creating safe working conditions that aim to preserve the life and health of the Company's employees is one of the primary objectives to which Russian Railways devotes constant attention.

The Russian Railways Group's Occupational, Environmental and Industrial Safety Policy is the fundamental document that describes the Company's position, goals and key objectives in ensuring the safety of production processes.

Russian Railways has established an occupational safety management system that is a component of the Company's corporate management system.

Constant improvements to the occupational safety management system at Russian Railways as well as a set of measures to support the safety of production

processes performed at the Company ensures a downward trend in the incidence of occupational injury and occupational disease. The injury rates have declined steadily over four years: overall injury by 38%, and fatal injury by 44%.

In 2016, in an effort to transition to a risk-oriented approach in occupational safety management, the Company introduced a professional risk management system at all structural units of the Traction Directorate, Central Infrastructure Directorate, Central Traffic Management Directorate and Central Track Repair Directorate. Risk calculations were conducted using the newly developed Russian Railways Automated Professional Risk Management System (APRMS) based on the unified corporate HR resources management system.

The foundation for the APRMS software was the Professional Risk Analysis and Assessment Methodology for Russian Railways Employees, which was approved in 2016.

A number of regulatory documents that envisage the establishment of a professional risk assessment and management system at Russian Railways were drafted in 2016.

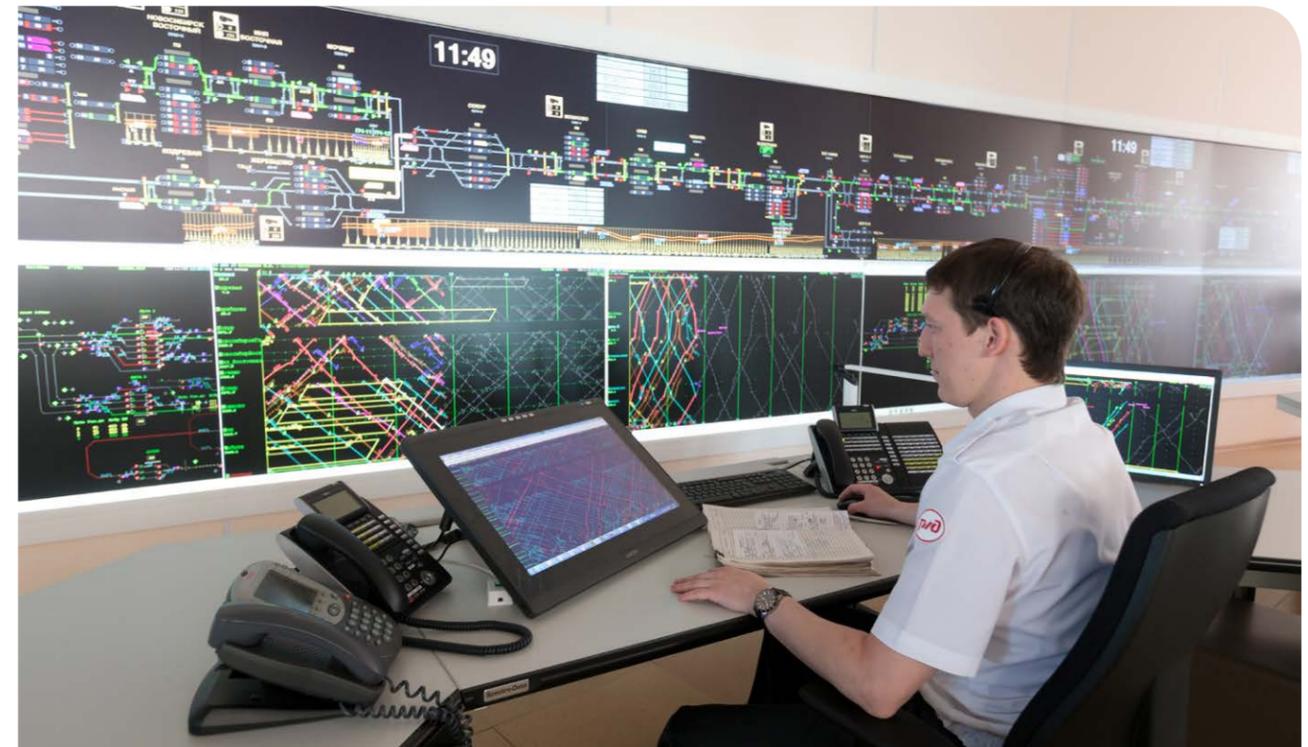
The final meeting of the Russian Railways Management Board in 2016 set the objective of introducing the risk-oriented approach in the occupational safety management system at 100% of the branches of the production unit in 2017.

Occupational injury dynamics



Dynamics of key occupational safety indicators

Indicator	2012	2013	2014	2015	2016
Spending on occupational safety (measures to improve occupational safety and conditions), RUB mln	12,676.1	16,030.0	16,330.0	18,593.5	18,715.5
Occupational injury frequency rate (number of injures per '000 workers)	0.39	0.39	0.34	0.29	0.30
As a percentage, '000 jobs	19.7	7.5	9.4	4.3	1.0
Improved labour conditions, '000 jobs	55.7	46	33	23	32



## Environmental protection

Russian Railways has drafted and is implementing an Environmental Responsibility Programme, approved a Concept for Environmental Protection Activities and an Environmental Protection Policy and has set strategic benchmarks for reducing the energy intensity of services and the negative environmental impact.

Total spending by the Company on environmental protection measures in 2016 amounted to RUB 5.2 bln, including RUB 3.1 mln in investments.

In 2016, the Company put 77 environmental protection facilities

into operation and acquired 180 units of testing and measuring equipment for laboratories and one vehicle-based mobile environmental laboratory.

Air pollutant emissions from stationary sources decreased by 6,400 tonnes, or 8.7%, in 2016.

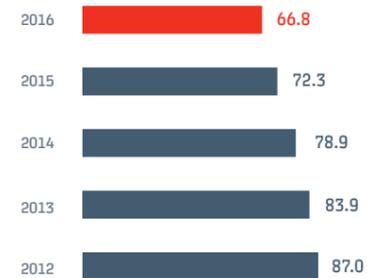
Water consumption fell by 8.9 mln m<sup>3</sup> (9.4%) in 2016 to 86.12 mln m<sup>3</sup>.

The discharge of contaminated wastewater to the environment decreased by 2 mln m<sup>3</sup>, or 22%, to 6.9 mln m<sup>3</sup> last year.

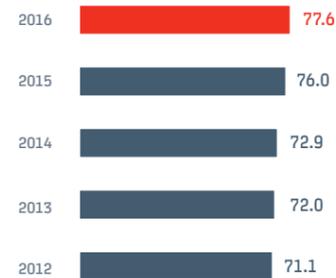
Russian Railways structural divisions generated 1.802 mln tonnes of production and consumption waste in 2016 with roughly 40% of that amount utilised and decontaminated by the Company's divisions. In addition, 60% of the generated waste is given to third-party organisations with 28.4% transferred under consumption agreements and 71.6% under revenue agreements.

The Company's structural divisions recycled 1,900 tonnes of paper, glass and plastic waste in 2016 as part of a separated waste collection project, producing an economic effect of RUB 6.5 mln.

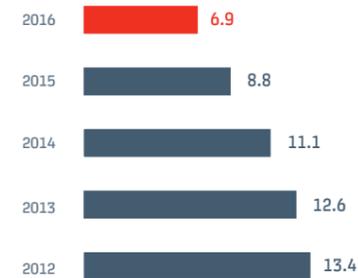
**Air pollutant emissions from stationary sources of Russian Railways branches, '000 t**



**Proportion of decontamination and recirculation of Russian Railways waste into economic activities, %**



**Discharges of contaminated wastewater into water bodies and terrain by Russian Railways branches, mln m<sup>3</sup>**



## Charitable and sponsorship activities

The Company approves a Charitable Activities Plan for each year. A total of RUB 3,278 mln were allocated for charity in the reporting year.

In 2016, Russian Railways:

- provided charitable assistance to orphanages and children's hospices;
- provided charitable assistance for repair and restoration work at the Church of Peter and Paul in Novaya Basmannaya Sloboda in Moscow, the construction of the Saint Innocent complex

and support for the Transfiguration Valaam Stavropegial Monastery male monastery;

- provided support for the creative activities of the musicians Valery Gergiev, Vladimir Spivakov and Yuri Bashmet;
- provided support in organising and hosting the Spasskaya Tower International Military Music Festival;
- allocated funds to support the activities of Moscow State University of Railway Engineering, Petersburg State Transport

University, Irkutsk State University of Railway Engineering as well as railway technical schools and other organisations;

- provided support for Lokomotiv-Yaroslavl Hockey Club, Lokomotiv-Novosibirsk Volleyball Club, Lokomotiv-Kuban Professional Basketball Club, the Krasnodar Territory Basketball Federation and Kuban-Region Sport Club.



# Management of investment activities

The priority objective in the Russian Railways investment budget for 2016 was to implement projects of national importance involving the fulfilment of orders from the Russian President and Government that are to be carried out with state support.

In 2016, the main construction and installation work was completed on the project 'Reconstruction and Development of the Moscow Railway Little Ring' and passenger traffic was launched.

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# Approaches to planning investment projects

The planning of the investment programme takes place in several stages:

- 1** Formation of a master plan for the development of the railway network using an input-output balance and identification of the general areas for the development of railway transportation.
- 2** Identification of sources to fund the investment programme as part of the formation of the Company's financial plan.
- 3** Prioritisation during the consideration of investment projects at meetings of the Investment Projects Expert Council and Investment Committee based on the available sources of funding.

## Formation of a master plan for the development of the railway network using an input-output balance and identification of the general areas for the development of railway transportation

The process of identifying promising areas for the development of railway transportation essentially consists of the following three stages:

- building an input-output balance;
- forming a master plan for the development of the railway network;
- identifying medium-term objectives for the development of railway transportation based on the master plan.

### Building an input-output balance

Today, the interregional input-output balance of freight transportation is the primary tool used to identify the prospective freight base and the main freight routes on the Company's railway network.

The main principle for building the input-output balance is transitioning

from the macroeconomic forecasts of the Russian Ministry of Economic Development to forecasts of interregional traffic flows taking into account the industry's programmes and development strategies, Russia's subnational entities as well as requests from individual enterprises.

One important aspect of constructing forecasts is to take into account plans for the development of related modes of transportation (plans of Russian sea ports) as well as the development programmes and strategies of the constituent entities of the Russian Federation.

### Formation of a master plan for the development of the railway network

The prospective freight base for railway transportation serves as the basis for identifying and substantiating the measures required to develop railway transportation infrastructure and, in turn, forms the basis of the master plan for the development

of the railway network for the period until 2020 and 2025.

The master plan developed based on this approach aims to detect and resolve a number of systemic constraints and bottlenecks that emerge

on railway transportation and are critical for the further development of railway infrastructure.

## Identifying medium-term objectives for the development of railway transportation based on the master plan

The Company identifies medium-term priorities for implementing development and renovation investment projects based on the long-term railway infrastructure development plans as well as the growth rates in the freight base.

This three-tiered systematic approach enables the Company to construct forecasts for the development of railway infrastructure with a rather high degree of accuracy and form the Long-term Investment Programme of Russian Railways.

Using the Long-term Investment Programme as a basis, the Company can clearly identify projects that should be implemented in the medium term (three-year period).

## Identification of sources to fund the Investment Programme as part of the formation of the Company's financial plan

When forming its Investment Programme, Russian Railways adheres to the principle of consistency with respect to sources of funding and the structure of the Investment Programme.

Specifically, the Company seeks to secure investment budget funding for spending on:

- renovations to fixed assets at the level of depreciation charges;
- commercially effective projects at the level of borrowed funds;
- commercially ineffective projects at the level of government support.

Russian Railways has classified the entire package of investment projects based on the criteria of the payback period and commercial effectiveness according to three categories.

The first category includes projects with a payback period of 10-15 years that Russian Railways is prepared to finance using its own cash flow as well as borrowed funds within an accepted level of debt load.

The second category includes projects with a payback period of 15-30 years. Russian Railways cannot borrow to finance these projects since the market does not offer borrowed funds with this kind of term structure. At present, investment projects in this category are financed by issuing infrastructure bonds.

The third category consists entirely of ineffective (stranded) investment projects for Russian Railways that may only be funded by budget sources since the state budget can recoup the invested funds via a multiplier budget effect. This category includes the following projects:

- modernisation of the railway infrastructure of the Baikal-Amur and Trans-Siberian Mainlines with the development of traffic and carrying capacity;
- comprehensive development of the Mezhdurechensk-Tayshet section of Krasnoyarsk Railway;
- development and renovation of railway infrastructure at approaches to ports in the Azov and Black Seas;

- construction of the Prokhorovka-Zhuravka-Chertkovo-Bataysk railway line (a new line on the Zhuravka-Millerovo route);
- development of the Moscow Transport Hub;
- construction of secondary tracks and the electrification of the Vyborg-Primorsk- Yermilovo section;
- construction of the Moscow-Kazan High-Speed Railway.

## Prioritisation of investment projects

After the objectives for railway transportation development are identified at meetings of the Russian Railways Investment Projects Expert Council and Russian Railways Investment Committee taking into account the transition projects that have already been implemented and also based on the available sources of funding for the Investment Programme in the medium term, the parameters of the investment projects for renovating and developing railway infrastructure are optimised.

The Investment Projects Expert Council's primary objective is to conduct an in-depth technological study of the proposed projects prior to their consideration by the Investment Committee.

The Investment Projects Expert Council considers the details of the medium-term investment projects on an itemised basis each year at meetings in August and September and selects the most optimal measures from a technological standpoint.

The primary objectives of the Investment Committee are:

- to conduct an economic expert evaluation of the projects;
- to identify possible funding targets for the Company's Investment Programme;
- to rank and prioritise the investment projects based on the performance indicators and overall strategic objectives of the Company's investment policy;
- to consider and approve the projects in the Company's Investment Programme;
- to monitor the implementation of the Company's Investment Programme;
- to consider matters concerning the optimisation of the management of the Company's investment activities;

- to adopt decisions on adjustments to the budgets and financial plans of the branches of Russian Railways.

Based on the decisions regarding the priority of investment projects adopted at the meeting of the Company's Investment Committee, a three-year Investment Programme is prepared and subsequently considered by the Russian Railways Board of Directors and the Russian Government.

**RUB 376.4 bln**  
actual execution of the investment programme in 2016

## Highlights of the investment programme in 2016

The actual execution of the investment programme totalled RUB 376.4 billion, including:

- using the Company's own funds – RUB 273.3 bln;
- using state support funds – RUB 103.1 bln.

A priority objective for 2016 as part of the Russian Railways investment budget was the implementation of projects of national importance involving the fulfilment of the instructions of the President and Government of the Russian Federation and attracting government support funds:

- development of the infrastructure of the Eastern operating domain;
- development of the Moscow transport hub;
- Reconstruction of the Mezhdurechensk-Tayshet section;

- development and renovation of railway infrastructure at approaches to ports in the Azov and Black Seas;

- construction of the Zhuravka-Millerovo railway line as well as secondary tracks on the Vyborg-Primorsk-Yermilovo section and the Moscow-Kazan High-Speed Railway.

The implementation of projects to develop capacity also continued in 2016, including for:

- reconstruction of the Mga-Gatchina-Veyarn-Ivangorod section;
- development of the Tobolsk-Surgut-Korotchayevo section;
- reconstruction and construction of engineering structures, the construction of secondary tracks and the development of marshalling yards.

The main construction and installation work was completed on the project 'Reconstruction and Development of the Moscow Little Ring Railway' and passenger transportation commenced during the reporting year.

Fixed assets valued at RUB 281.5 bln were put into operation in 2016:

- 110.0 km of secondary railway tracks;
  - 172.4 km of stationary tracks;
  - 88 km of electrification;
  - Reconstruction of 2,200.2 km of railway tracks.
- and 493 locomotives and 232 multiple units were also acquired.



# Infrastructure development

One of the priority tasks in executing the Russian Railways investment budget in 2016 was the implementation of projects of national importance related to the fulfilment of orders from the Russian President and Government of the Russian Federation that are implemented with state support for the development of railway infrastructure.



# Investment activities of Russian Railways

## 376.4 bln RUB

size of Russian Railways investment programme in 2016



### IMPORT SUBSTITUTION

The purchase of import-containing products decreased by RUB 2,435.24 mln over the 12 months of 2016 due to the following components:

- localisation of the production of rolling stock as well as its components and assemblies, track machinery as well as devices of traction power supply systems, signalling, centralisation and blocking equipment and communications equipment (for which the decrease totalled RUB 2,008.69 mln);
- the purchase of Russian-made analogues of imported products (for which the decrease totalled RUB 426.55 mln).

### IMPLEMENTATION OF PRIORITY PROJECTS OF NATIONAL IMPORTANCE



#### DEVELOPMENT OF THE MOSCOW TRANSPORTATION HUB

**Goal:** to rebuild and develop the Moscow Little Ring Railway. The main work was completed in the reporting year and passenger traffic commenced.



#### DEVELOPMENT OF THE RAILWAY INFRASTRUCTURE OF THE EASTERN OPERATING DOMAIN

**Goal:** to eliminate bottlenecks on the railways of the Baikal region and the Far East to ensure additional freight transportation for Russian companies by 2020.



#### RECONSTRUCTION OF THE MEZHDURECHENSK-TAYSHET SECTION

**Goal:** to ensure freight transportation of 15 mln tonnes on the Kyzyl-Kuraġino railway line currently under construction by 2020, including the shipment of 12 mln tonnes of coal from the Eleġestkoye coal deposit to Far East ports.



#### DEVELOPMENT AND RENOVATION OF RAILWAY INFRASTRUCTURE AT APPROACHES TO PORTS IN THE AZOV AND BLACK SEAS

**Goal:** to rebuild railway infrastructure to ensure freight delivery to ports in the Azov and Black Sea transport hub.



#### CONSTRUCTION OF THE ZHURAVKA-MILLEROVO RAILWAY LINE

**Goal:** to enhance the transportation safety of freight and passengers and ensure sustainable transportation to the south that does not depend on external factors.



#### DESIGN AND CONSTRUCTION OF THE MOSCOW-KAZAN HIGH-SPEED RAILWAY

A Russian-Chinese consortium of designer companies have fully carried out a set of engineering surveys based on orders from High-Speed Railways (a subsidiary of Russian Railways) for the Moscow-Nizhny Novġorod-Kazan line and developed design documentation for the construction of the Moscow-Nizhny Novġorod section.

## 281.5 bln RUB

worth of fixed assets put into operation in 2016

## 110.0 km

of secondary railway tracks

## 172.4 km

of stationary tracks

## 88.0 km

of electrification reconstructed

## 2,200.2 km

of railway tracks reconstructed

## 493 locomotives

acquired in 2016

## 232 railcars

of multiple unit rolling stock acquired in 2016



## Implementation of projects with government support

### Modernisation of the railway infrastructure of the Baikal-Amur and Trans-Siberian Mainlines

In an effort to eliminate bottlenecks on the railways of the Baikal region and the Far East to ensure up to 66.8 mln tonnes of additional freight transportation per year for Russian companies by 2020 compared with the 2012 level, a set of priority measures has been implemented since 2013 to develop the railway infrastructure of the Eastern operating domain.

The following has been put into permanent operation on Eastern operating domain facilities as part of the implementation of the project in 2016:

- additional main tracks built on the Taksim-Lodya stretch (27.7 km);

- reconstruction of 9 stations – 92.2 km (Khabarovsk Park B, Uktur, Pozharsky, Teysin, Vandan, Komsomolsk-Marshalling, Slyudyanka-2, Izvestkovaya) and 11 passing loops (323 km, Mokhortov, Barsovy, Duki, Pil, Talidzhak, Badzhal, Kholoni, Katama, Dalnevostochny, Sagdzhemu);
- renovation of 34.7 km of automatic blocking;
- reconstruction of the road bed on 5 sections (Ogoron-Moldavsky (2,782 km PK0-2,783 km PK4), Tangomen-Dugda (2,893 km PK0-2,894 km PK2), Dugda-Nora (2,904 km PK5-2,906 km PK6);
- Khabarovsk-Ussuriysk (8,961 km), Turinskaya-Karymskaya (6,278 km);
- modernisation of 18 traction substations (Khilok, Gonzha, Mogzon, Razmakhino, Urulga, Ayachi, Amazar, Lesnaya, Koroli, Tarmanchukan, Priiskovaya, Ruzhino, Sibirtsevo, Sokhondo, Yanchukan, Daban, Ulkan, Kunerma);
- reconstruction of 11 small bridges and a bridge over Bureya River;
- construction of 10 residential buildings (at the stations Novaya Chara, Oktyabrsky, Taksimo, Vikhorevka, Magdagachi, Litovko and Obluchye).



### Comprehensive development of the Mezhdurechensk-Tayshet section

This project is being implemented to handle the projected freight flow by 2020, above all to ensure freight transportation of 15 mln tonnes on the Kyzyl-Kuragino railway line currently under construction by 2020, including the shipment of 12 mln tonnes of coal from the Elegestkoye coal deposit to Far East ports.

The project envisages a full set of measures to increase the section's capacity: the construction of 115 km of additional main tracks, 2 passing

loops, the new Avda-Gromadskaya connecting line with a signalling, centralisation and blocking device, the reconstruction of the second Dzhebsky Tunnel, the development of stations, the reinforcement of power supply devices on the Abakan-Kuragino, Kuragino-Sayanskaya and Uyar-Tayshet sections.

The following facilities have been put into operation as of 1 January 2017:

- the Kirba passing loop on the Khankul-

Khonykh stretch;

- downyard shunting at the Abakan station;
- Avda-Gromadskaya connecting line (3.3 km);
- first stage of the construction of secondary tracks on the Lukashevich-Kravchenko stretch (1.5 km).

### Development and renovation of railway infrastructure at approaches to ports in the Azov and Black Seas

In 2016, work was fully completed on the construction of 22.3 km of additional main tracks on the Abganerovo (included in reconstruction)-Gniloaksayskaya (excluded from reconstruction) haul. The opening of the section was delayed until 2017 due to the lengthy registration of permit and title documents.

In addition, the following work was continued:

- the construction of additional main tracks with total length of 131.3 km, including on the stretches: Tinguta-Abganerovo (21.5 km), Remontnaya-Gashun (20.1 km), Gashun-Zimovniki (17.6 km), Manych-Shablievskaya (7.4 km), Zabyty-Poliviansky (17.7 km), Razvlnaya-Peschanokopskaya (18.5 km), Poroshinskaya-4 km (17.5 km) and Poltavskaya-Protoka (11 km);

- the reconstruction of the Kozyrki station and the construction of the Grechanaya station as well as the completion of preparatory work on the construction of the Krasnodar hub bypass on the Grechanaya-Kozyrki section.

Design and survey work was performed for the construction of additional main tracks on the stretches: Gornopolyansky-Kanalnaya, Kanalnaya-Tinguta, Eya-Rovnoye, Rovnoye-Poroshinskaya and others, as well as the Krasnodar hub bypass and the construction of road overpasses on the sections.

The following work was performed in 2016:

- backfill of the road bed - 1,130,000 m<sup>3</sup>;
- laying of 81.0 km of tracks and 51 sets of turnouts;

- track ballasting - 270,000 m<sup>3</sup>;
- construction of engineering structures - 21 construction pipes;
- construction of 13 bridges;
- reconstruction of 5 crossings;
- installation of protective screens - 2.2 km;
- installation of 1,700 contact network supports;
- installation of 67 km of contact suspension.

## Development of the railway infrastructure of the Moscow Transport Hub

As part of the implementation of the Programme for the Implementation of a Comprehensive Project for the Development of the Railway Infrastructure of the Moscow Transport Hub in 2012-2020 and until 2025 (hereinafter the Programme), Russian Railways completed construction work in 2016 as part of the Reconstruction and Development of the Moscow Little Ring Railway project.

The start of regular passenger transportation on the Moscow Central Ring (hereinafter the MCR) was a landmark for the Moscow region.

The implementation of the project established a modern urban passenger transportation system, eased the burden on the metro system and land

transportation, created a new interchange loop and improved the transportation accessibility throughout the city. The modernisation of railway infrastructure made it possible to connect residential areas, parks, sports facilities, shopping centres and offices, and ensure the development of depressed parts of the city that had previously been inaccessible. The surrounding urban areas have been given a new impetus for development.

A total of 27 mln passengers were transported in 2016, and passenger traffic continues to grow. The need to further develop the MCR has already been identified: increase throughput and carrying capacity, reduce train intervals and, as a consequence, develop passenger and railway infrastructure.

Construction and installation work was also completed in 2016 to build passenger infrastructure at the Otdykh halt platform on the Kazakh railway in order to establish an additional stop for Sputnik electric trains to ensure transport accessibility to the National Aviation Centre (NAC). A stop for Sputnik electric trains travelling on the Moscow-Ramenskoye route was organised on 12 September 2016.

In addition, work was performed as part of projects to develop railway infrastructure on the following radial routes – Paveletsky, Yaroslavl, Gorkov, Kursk and Smolensk.



## Construction of the Prokhorovka-Zhuravka-Chertkovo-Bataysk railway line

The main goal of the project to build a 136.9-km railway on the Zhuravka-Millerovo section to bypass Ukrainian territory is to improve the safety of freight and passenger transportation and ensure stable transportation towards the south that does not depend on external factors.

The work is being performed pursuant to Decree No. 196 of the President of the Russian Federation dated 17 April 2015 'On the Construction of a Two-Track Electrified Railway on the Zhuravka-Millerovo Section'.

As of 1 January 2017, the following design, construction and installation work had been performed:

- all high-voltage power transmission lines (12 intersections) were fully removed from the construction zone;

- the communications lines of Rostelecom were fully reorganised;
- work was completed on the rerouting of 8 of 11 gas pipelines (73%);
- a large portion of engineering structures were built - 70 of 98 under the project (71%), including 66 culverts (100%), 2 small cattle-crossing bridges (100%) and 2 of 19 railway overpasses (10%);
- the backfill of 34.3 mln m3 of road bed of a total 40.4 mln m3 (86%). The road bed is scheduled to be fully completed in January 2017 by the deadline specified in the action plan.

Work is being conducted to build the track superstructure and electrification line.

A total of 40.2 km of track superstructure sections have been laid, including on the Zhuravka-Zaytsevka and Zaytsevka-Sergeyevka stretches - 23.7 km of main tracks, and at the Zhuravka, Zaytsevka and Sergeyevka stations - 16.5 km.

As regards design work, favourable conclusions on state expert evaluations were obtained for the design and estimate documentation for four of eight stages of the facility, while design documentation for another four stages is currently undergoing a state expert evaluation with the Russian Main State Expert Review Board.

## Construction of the Moscow-Kazan High-Speed Railway

Systematic preparations were made in 2016 to build the first Russian-made high-speed railway pursuant to the instructions of the country's leadership and in accordance with the network schedule for implementing the Moscow-Kazan High-Speed Railway approved by Order No. 5-r of the Government of the Russian Federation dated 13 January 2016.

Jointly with High-Speed Railways, a Russian-Chinese consortium of design organisations and French technical consultants (Systra, SNCF), Russian Railways has fully completed a set of engineering surveys and drafted design documentation

for the construction for the first section of the Moscow-Nizhny Novgorod railway.

Documentation has been drafted and approved by the Russian Ministry of Construction to configure the territory for the construction of railways in the Moscow, Vladimir and Nizhny Novgorod Regions.

Documentation for the construction of railways in Moscow, Mari El Republic, Chuvash Republic and the Republic of Tatarstan has been submitted to the ministry for endorsement and approval.

In 2016, a concept was drafted to develop the territories surrounding the HSR, and data sheets were compiled for investment projects identifying the main areas and parameters for developing the territories.

A public technological and price audit of engineering surveys and design documentation for the Moscow-Nizhny Novgorod section was carried out, including an assessment of the technical requirements, limitations of high-speed rolling stock and its operation and maintenance technologies taking into account the proposed design solutions, which resulted in a favourable conclusion.

# Modernisation and innovative development projects

The innovative activities of Russian Railways focus on meeting the Group's strategic development priorities and are described by the draft Comprehensive Innovative Development Programme of the Russian Railways Group for the Period of 2016-2020 (hereinafter the CIDP-2020).

The Group's priority development areas envisaged by the CIDP-2020 are specified as both government policy documents as well as the policy documents of Russian Railways, including the Scientific and Technical Development Strategy of the Russian Railways Group for the period until 2020 and 2025 ('White

Book') as well as other strategic policy documents.

The draft CIDP-2020 contains information about the results of the Company's innovative development and priority long-term areas, including improving the reliability of the main technological

processes, energy efficiency and workforce productivity, the development of intelligent control systems for the transportation process and information technologies in all spheres of transportation activities and the introduction of innovative diagnostics and geoinformation technology systems.

## Introduction of innovations in infrastructure

As part of the 'Digital Railway' comprehensive innovative project, which provides for the improved efficiency of the core activities of the Russian Railways Group through the development and introduction of innovative projects in the management of the transportation process, a number of global-level innovative technical systems were developed and introduced in 2016, including:

- a trackless circuit interval regulation system was established on the Bolshevo-Fryazino section of the Moscow Railway (analogous systems are currently being developed in Germany, Austria and England) and is slated to be introduced on the Baltiysk-Shipovka section of Kaliningrad Railway in 2017;
- intelligent automated train operation systems were introduced on 160 locomotives with distributed traction, making it possible to save 3-5% of electricity;

- a shunting automatic locomotive signalling system was introduced at the Bekasovo station of Moscow Railway (8 such stations are equipped with such systems).

As part of strategic cooperation between two companies – Russian Railways and Siemens – the multiple unit depot of the Podmoskovnaya station launched a Data Analysis and Processing Engineering Centre, which makes it possible to forecast the condition of train units and increase the readiness of rolling stock and infrastructure for operation while optimising operating costs and gradually transitioning to the 'maintenance based on condition' standard.

The Luzhskaya station of the Ust-Luga transport hub introduced 14 systems that automate production processes, including locomotive control, fasten rolling stock without a worker, manage station processes and the centralised control of

switches and signals. Hump locomotive operations to split trains are performed without a driver 90.6% of the time. The introduction of innovative technologies has made it possible to reduce the number of personnel from other enterprises involved by 246 people and resulted in payroll savings of RUB 148.3 mln.

**160** locomotives equipped with an intelligent automated driving system

In order to establish combined passenger and freight transportation on the Moscow Little Ring Railway, Russian Railways is implementing the world's first combined interval regulation system with mobile block sections based on an automatic block system with voice-frequency track circuits and microprocessor-based on-board units. Specialists from leading foreign companies say the system and its individual components have great export potential.

The MCR has introduced a control system for ES2G Lastochka (Desiro RUS) electric trains. The functional development of this system as regards the control of stationary devices in 'Auto-dispatcher' mode and rolling stock in the 'Auto-driver' system will make it possible in the future to switch to the full automation of train operations with safe remote monitoring in 'Driver-less' mode.

In an effort to establish the continuous monitoring of the condition of MCR infrastructure without any additional burden on the transportation process, work is currently being performed to integrate information and measurement

systems in the Lastochka (Desiro RUS) electric train that are designed to ensure the automated diagnostics of infrastructure components, including ultrasonic rail flaw detection. The efficiency of the infrastructure diagnostics process is to be enhanced using these systems for the first time in world practice by eliminating the standard scheme for using laboratory cars (flaw detector, track gauge and railcar laboratory for contact network testing).

Anti-cyberattack protection devices have been developed to increase the cybersecurity of computer-based interlockings installed on the MCR.

The breakthrough technologies being used as part of the reconstruction of the Moscow Little Ring Railway are intellectual property results. Individual technical solutions were awarded at international exhibitions and listed among list 100 best inventions in Russia.

Projects envisaged by the 'Lean Manufacturing at Russian Railways' programme have generated a real

economic effect in the amount of RUB 668 mln that was incorporated into the budgets of production divisions for the first time and introduced a new mechanism to motivate employees through lean manufacturing projects: an economic incentive fund totalling RUB 92 mln was formed for 2017 from the money saved, and individual lean manufacturing projects valued at RUB 20 mln were implemented based on leadership principles.

In accordance with the Quality Management Strategy at the Russian Railways Group, which envisages enhancing customer and passenger satisfaction levels with the Company's services by improving their quality, optimising technological processes, increasing efficiency and reliability, and ensuring traffic safety based on the quality control of technological and business processes, Russian Railways has expanded the IRIS standard among railway equipment suppliers. The Company also continuously improves and develops its quality management system.

**RUB 668** mln economic effect from lean manufacturing projects

**RUB 92** mln size of economic incentive fund for 2017 from the money saved in 2016

## Import substitution

Order No. 98-r of the Government of the Russian Federation dated 27 January 2015 approved a priority action plan to ensure the sustainable development of the economy and social stability, which envisages a number of measures to reduce the dependency of Russian economic sectors on imports and ensure import substitution for strategic groups of supplies.

The Russian Railways Holding is one of Russia's main consumers of railway rolling stock, railway automation and telemechanic equipment, engineering and technological equipment as well as communications and power supply equipment for which imported components are used in manufacturing. An analysis of the import dependency of the Russian Railways Group's suppliers revealed that the Company has a critical need for the development of the domestic industry and the establishment of competitive internal markets for railway products.

The Company has approved and is implementing an Import Substitution Programme for the products it purchases, which describes the objectives and areas of activities that require import substitution, identifies the main indicators and presents the key projects and measures.

Lists of priority import-containing products purchased by the Russian Railways Group's business entities have been proposed

to industrial enterprises located in Russia and countries of the Customs Union for production and have been made publicly available on the official Russian Railways website (the 'Import substitution' sub-section of the 'Tenders' section).

The purchase of import-containing products decreased by RUB 2,435.24 mln over the 12 months of 2016 due to the following components:

- localisation of the production of rolling stock as well as its components and assemblies, track machinery as well as devices of traction power supply systems, signalling, centralisation and blocking equipment and communications equipment (for which the decrease totalled RUB 2,008.69 mln);
- the purchase of Russian-made analogues of imported products (for which the decrease totalled RUB 426.55 mln).

As part of work to reduce the level of imported components in the purchased products and also to implement the Import Substitution Programme, a standard method was updated and introduced to determine the level of localisation for the manufacturing of products purchased for the needs of the Russian Railways Group (Russian Railways Order No. 721-r dated 21 April 2016).

Key projects to reduce the level of imported components in the products purchased by the Company include projects to localise the manufacturing of rolling stock.

**RUB 2,435.24 mln**

decrease in purchases of import-containing products in 2016

## Work with small- and medium-sized enterprises

The Russian Railways partnership programme with small- and medium-sized enterprises (SME) was developed in accordance with the action plan (road map) 'Expansion of the Access of Small- and Medium-sized Enterprises to the Procurements of Infrastructural Monopolies and Companies with State Participation', which was approved by Order No. 867-r of the Government of the Russian Federation dated 29 May 2013. This programme was drafted taking into account the methodological guidelines of the Russian Ministry of Economic Development and is publicly available on the Russian Railways website in the 'Tenders' section ('Information for SME' sub-section). The partnership programme aims to search for partners among SME and create a list of such partners that manufacture and sell high-tech and innovative products and engage in research, development and technological work. At present, the register of Russian Railways partners includes information about 68 SME.

In accordance with the directives approved by the Prime Minister of the Russian Federation dated 24 October 2013 as No. 6362p-P13, the Company has formed a Russian Railways advisory body that is responsible for auditing the effectiveness of the procurements it conducts, which is a permanent

consultative and advisory body. The advisory body includes representatives of industry-based scientific and educational institutions and technological platforms, representatives of the public organisations Opora Rossii small business association, Delovaya Rossiya, Agency for Strategic Initiatives to Promote New Projects and the Institute of Natural Monopolies Research, the non-profit partnerships Club of Leaders for the Promotion of Business Initiatives and the Guild of Forwarders as well as members of the Chamber of Commerce and Industry of the Russian Federation and the Public Chamber of the Russian Federation.

The Group has organised a joint working group with the SME Corporation to ensure SME have access to the procurements of Russian Railways.

Russian Railways and the All-Russian Public Organisation of Small- and Medium-sized Enterprises Opora Rossii have concluded a cooperation agreement to support SME, which envisages the creation of favourable conditions for small- and medium-sized companies to have access to procurements of goods, work and services provided by the Russian Railways Group.

In order to further expand interaction with SME in matters of scientific, technical and innovative development,

the Company in 2015 established the 'SME One-Stop Shop' system, which allows for performing the initial classification of the proposals it receives, compile a register of proposals and process the proposals to make decisions on procurements or to reject the proposals. For external users, a data entry form is available that allows for completing the registration procedure as well as a form for collecting information about the proposal.

The Company plans to expand the number of system users and provide responsible specialists of its divisions in the relevant areas of activities (scope of application) with the opportunity to organise automated notifications and operational reporting. Similarly, decisions are to be made about expanding the range of external users of this system (in particular with respect to applicants that are not SME). At the same time, the Company provides the ability to integrate this resource and other functional automated systems at Russian Railways with the measures that are being implemented, in particular as part of the investment programme, informatisation programme, scientific and technical development plan and procurement plan.

## Resource conservation and energy efficiency

Russian Railways remains a leader among global railway companies in terms of the energy efficiency and eco-friendliness of freight and passenger transportation, as evidenced by information from the annual 'Energy Consumption and CO<sub>2</sub> Emissions' handbook of the UIC and IEA for 2016.

Russian Railways achieved the following results in 2016 through improvements to the management system for the energy conservation activities of its production processes and the implementation of measures contained in the Energy Conservation and Improved Energy Efficiency Programme:

- a decrease in the specific consumption of fuel and energy resources for the traction of trains running on electric and diesel traction by 0.2% and 1.8%, respectively;
- a 2.8% increase in the energy recovery rate of return;
- a decrease in the consumption of fuel and energy resources for the heating of locomotives awaiting work totalling 10.7% in electric traction and 5.7% in diesel traction.

The Company decreased the energy intensity of its production activities by 1.5% in 2016 compared with 2015 and increased the energy efficiency of its manufacturing activities by 1.5%.

Total savings of fuel and energy resources from the Russian Railways Energy Conservation and Improved Energy Efficiency Programme for 2016-2018 amounted to 8,419.7 TJ in 2016 (+21.8% versus the plan) valued at RUB 4.989 bln, which is one of the best results in the history of the Company's energy conservation activities.

The investment project 'Introduction of Resource Conservation Technologies on Railway Transportation' remains one of the main investment tools in the implementation of the Russian Railways Energy Strategy for the Period until 2020 and Long-Term until 2030, which was updated in 2016. The measures in this project along with the programmes for rolling stock renovation and railway infrastructure modernisation, above all stationary energy, form the basis for the Russian Railways Energy Conservation and Improved Energy Efficiency Programme.

In 2016, 3,700 units of resource and energy conservation equipment worth a total of RUB 2,493.8 mln were introduced as part of the resource conservation programme.

The operation of the technical equipment introduced as part of the investment project 'Introduction of Resource Conservation Technologies on Railway Transportation' in 2016 will enable the Company's branches to reduce operating costs by RUB 483.7 mln in 2017, including cutting the consumption of fuel and energy resources by RUB 345.8 mln.

# +1.5%

increase in the energy efficiency of manufacturing activities vs. 2015

# 3,700

units of resource-saving equipment introduced in 2016



# Analysis of financial results

During the reporting year, the Company's activities focused on priority objectives, including those set by the President and Government of the Russian Federation: fully meeting demand for freight transportation, providing affordable and high-quality passenger transportation and increasing performance efficiency.

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## Key financial and economic results

Indicator	Measurement units	2015	2016		Change vs. plan		Change vs. previous year	
			plan	actual	+/-	%	+/-	%
<b>Total income</b>	RUB bln	<b>1,510.8</b>	<b>1,567.5</b>	<b>1,577.5</b>	<b>10.0</b>	<b>100.6</b>	<b>66.7</b>	<b>104.4</b>
<b>Income from transportation, infrastructure services and locomotive traction</b>	RUB bln	<b>1,326.0</b>	<b>1,378.7</b>	<b>1,387.0</b>	<b>8.3</b>	<b>100.6</b>	<b>61.0</b>	<b>104.6</b>
<b>freight transportation</b>	RUB bln	<b>1,203.9</b>	<b>1,247.1</b>	<b>1,254.5</b>	<b>7.3</b>	<b>100.6</b>	<b>50.5</b>	<b>104.2</b>
<b>provision of infrastructure services including</b>	RUB bln	<b>99.8</b>	<b>104.7</b>	<b>104.6</b>	<b>-0.1</b>	<b>99.9</b>	<b>4.9</b>	<b>104.9</b>
for freight transportation	RUB bln	8.1	8.0	7.4	-0.6	92.1	-0.7	91.9
suburban transportation	RUB bln	28.7	30.0	30.5	0.5	101.5	1.8	106.4
long-haul transportation	RUB bln	63.1	66.6	66.7	0.1	100.2	3.7	105.8
<b>provision of locomotive traction services</b>	RUB bln	<b>10.5</b>	<b>11.0</b>	<b>10.9</b>	<b>-0.1</b>	<b>99.3</b>	<b>0.4</b>	<b>103.9</b>
<b>passenger transportation, including</b>	RUB bln	<b>11.7</b>	<b>15.8</b>	<b>17.0</b>	<b>1.1</b>	<b>107.0</b>	<b>5.2</b>	<b>144.4</b>
long-haul transportation	RUB bln	11.2	13.9	14.9	0.9	106.7	3.6	132.5
suburban transportation	RUB bln	0.5	1.9	2.1	0.2	109.3	1.6	409.0
<b>Income from other activities</b>	RUB bln	<b>184.8</b>	<b>188.8</b>	<b>190.5</b>	<b>1.6</b>	<b>100.9</b>	<b>5.7</b>	<b>103.1</b>
<b>Total expenses</b>	RUB bln	<b>1,427.2</b>	<b>1,464.0</b>	<b>1,460.3</b>	<b>-3.7</b>	<b>99.7</b>	<b>33.1</b>	<b>102.3</b>
<b>Expenses on transportation, infrastructure services and locomotive traction</b>	RUB bln	<b>1,266.2</b>	<b>1,298.7</b>	<b>1,296.2</b>	<b>-2.4</b>	<b>99.8</b>	<b>30.1</b>	<b>102.4</b>
<b>freight transportation</b>	RUB bln	<b>1,137.4</b>	<b>1,163.4</b>	<b>1,160.8</b>	<b>-2.5</b>	<b>99.8</b>	<b>23.4</b>	<b>102.1</b>
<b>provision of infrastructure services including</b>	RUB bln	<b>109.0</b>	<b>111.9</b>	<b>112.4</b>	<b>0.6</b>	<b>100.5</b>	<b>3.4</b>	<b>103.1</b>
for freight transportation	RUB bln	7.3	7.3	6.7	-0.6	92.1	-0.6	91.9
suburban transportation	RUB bln	33.1	34.3	34.8	0.5	101.4	1.7	105.1
long-haul transportation	RUB bln	68.6	70.3	70.9	0.7	100.9	2.3	103.4

Indicator	Measurement units	2015	2016		Change vs. plan		Change vs. previous year	
			plan	actual	+/-	%	+/-	%
<b>provision of locomotive traction services</b>	RUB bln	<b>7.8</b>	<b>8.2</b>	<b>8.1</b>	<b>-0.1</b>	<b>99.3</b>	<b>0.3</b>	<b>103.9</b>
<b>passenger transportation, including</b>	RUB bln	<b>11.9</b>	<b>15.3</b>	<b>14.9</b>	<b>-0.4</b>	<b>97.4</b>	<b>3.0</b>	<b>124.8</b>
long-haul transportation	RUB bln	10.2	11.9	11.4	-0.5	95.5	1.2	111.9
suburban transportation	RUB bln	1.7	3.3	3.5	0.1	104.1	1.7	200.3
<b>Expenses on other activities</b>	RUB bln	<b>161.0</b>	<b>165.4</b>	<b>164.1</b>	<b>-1.3</b>	<b>99.2</b>	<b>3.0</b>	<b>101.9</b>
<b>Total sales profit</b>	RUB bln	<b>83.6</b>	<b>103.5</b>	<b>117.2</b>	<b>13.7</b>	<b>113.3</b>	<b>33.6</b>	<b>140.2</b>
<b>Profit from transportation, infrastructure services and locomotive traction</b>	RUB bln	<b>59.8</b>	<b>80.0</b>	<b>90.8</b>	<b>10.8</b>	<b>113.4</b>	<b>30.9</b>	<b>151.7</b>
<b>freight transportation</b>	RUB bln	<b>66.5</b>	<b>83.8</b>	<b>93.6</b>	<b>9.9</b>	<b>111.8</b>	<b>27.1</b>	<b>140.8</b>
<b>provision of infrastructure services including</b>	RUB bln	<b>-9.2</b>	<b>-7.2</b>	<b>-7.8</b>	<b>-0.6</b>	<b>108.7</b>	<b>1.4</b>	<b>84.4</b>
for freight transportation	RUB bln	0.7	0.7	0.7	-0.1	92.1	-0.1	91.9
suburban transportation	RUB bln	-4.4	-4.3	-4.3	0.0	100.7	0.1	96.6
long-haul transportation	RUB bln	-5.5	-3.6	-4.2	-0.5	114.6	1.4	75.6
<b>provision of locomotive traction services</b>	RUB bln	<b>2.7</b>	<b>2.9</b>	<b>2.8</b>	<b>0.0</b>	<b>99.3</b>	<b>0.1</b>	<b>103.9</b>
<b>passenger transportation, including</b>	RUB bln	<b>-0.2</b>	<b>0.6</b>	<b>2.1</b>	<b>1.5</b>	<b>-</b>	<b>2.2</b>	<b>-</b>
long-haul transportation	RUB bln	1.0	2.0	3.5	1.5	-	2.4	332.5
suburban transportation	RUB bln	-1.2	-1.4	-1.4	0.0	-	-0.2	114.5
<b>Profit from other activities</b>	RUB bln	<b>23.8</b>	<b>23.5</b>	<b>26.4</b>	<b>3.0</b>	<b>112.6</b>	<b>2.6</b>	<b>111.1</b>
<b>Result from other income and expenses</b>	RUB bln	<b>-58.6</b>	<b>-65.4</b>	<b>-73.6</b>	<b>-8.2</b>	<b>112.5</b>	<b>-14.9</b>	<b>125.4</b>

## Russian Railways performance results in 2016

Indicator	Measurement units	2015	2016		Change vs. plan		Change vs. previous year	
			plan	actual	+/-	%	+/-	%
Income from participation in other organisations, including dividends	RUB bln	2.9	4.0	4.0	-	100.1	1.1	137.7
Expenses on loans and borrowings	RUB bln	-64.7	-63.8	-64.5	-0.7	101.2	0.2	99.7
Result from the sale of shares in SGA	RUB bln	5.7	-	-	-	-	-5.7	-
Budget allocations	RUB bln	32.2	1.9	2.1	0.2	112.8	-30.0	6.7
Exchange rate differences	RUB bln	-22.1	12.8	18.8	6.0	147.2	41.0	-85.0
Changes in provisions	RUB bln	7.6	4.2	-7	-11.2	-166.7	-14.6	-92.1
EBITDA	RUB bln	336.3	315.6	315.7	0.1	100.0	-20.5	93.9
Profit before tax	RUB bln	25.0	38.1	43.6	5.5	174.4	18.7	174.8
Profit tax and other similar obligations	RUB bln	-24.6	-37.2	-37.1	0.0	99.9	-12.5	-
Net profit	RUB bln	0.3	0.9	6.5	5.6	-	6.2	-



Vadim Mikhailov

The Company had a balanced financial result in 2016 without receiving any government subsidies. Cost-cutting amounted to more than RUB 103 bln in 2015-2016, which is comparable with our monthly expenses. As a result of timely measures, the specific cost of transportation activities increased by only 0.8% versus the 2015 level amidst significant price pressure, average annual inflation of 7.1% and a 4% increase in industry prices. We met the plans we laid out in terms of revenue indicators and generated roughly RUB 1.6 trillion in revenue throughout the Company.

Despite an 0.2% decline in Russia's GDP, freight handling on the railway network increased by 0.6% versus 2015 (to 1,222.3 mln t), while freight turnover grew by 1.5% (2,997.8 bln tkm).

The positive dynamics in terms of volume were achieved, among other things, due to the improved quality of railway transportation operations, in particular a significant increase in freight delivery speed of 20.7% over the last two years.

In addition, Russian Railways achieved the target reduction in accidents on railway infrastructure set by the Government of the Russian Federation. The number of transportation incidents declined by 41% in 2016.

In the passenger sector, the trend of decreasing passenger transportation volume seen over the last three years was reversed. A total of 1,037 mln passengers were transported in 2016, an increase of 1.6% versus the previous year. The situation with suburban transportation stabilised as well.

The Moscow Central Ring launched operations in September 2016. By the end of the year, it had been used by more than

27 mln people. Daily passenger traffic is steadily increasing and new records are constantly being set (more than 319,000 passengers used the MCR on 28 December 2016 alone).

As a result of work performed to improve efficiency, the Company fully balanced its financial result for the first time without receiving any government subsidies, which had previously been allocated to Russian Railways for its major repair programme.

At the same time, the deterioration in the freight handling structure in terms of profitability became a key challenge for the Company. This trend will presumably impact the Company's work over the next few years.

In particular, despite the indexation of freight transportation tariffs at 9%, the average return per 10 tkm increased by only 2.7%. Due to changes in the transportation structure, including due to a decrease in the share of high-profit freight and an increase in the proportion of low-profit freight, the shortfall in income versus the initial plan totalled more than RUB 84 bln.

In order to maintain a breakeven

point, the Company reduced expenses on transportation activities by almost RUB 60 bln versus the initial plan. It also worked to improve the efficiency of other types of activities and implement other financial management measures (roughly RUB 30 bln).

In addition, additional expenses on property taxes were covered due to the lack of a decision to maintain a preferential property tax rate.

The Company also sought out an additional RUB 15 bln in funds for major tax repairs and RUB 0.8 bln for the partial funding of work performed as part of the Year of the Passenger.

Due to the implementation of an efficiency programme, transportation costs increased by 0.8% versus last year amidst annual inflation of 7.1% and industrial price growth of 4%.

## Key financial and economic results in 2016

### GDP growth

**-0.2%**

### Industrial production

**+1.1%**

### Consumer price index

**+7.1%**

### Growth in industrial prices

**+4.0%**

### Handling

**+0.6%**

1,222.3 mln t

### Freight turnover

**+1.5%**

2,997.8 bln tkm

### Passenger turnover

**+3.4%**

124.5 bln pass. km

### Passengers transported

**+1.6%**

1,037 mln passengers

### Income from core operations

**RUB 1,577.5 bln**

+4.4% vs. 2015

### Expenses on core operations

**RUB 1,460.3 bln**

+2.3% vs. 2015

### Sales profit

**RUB 117.2 bln**

+40.2% vs. 2015

### Transportation costs

**+0.8%**

### Growth in labour productivity

**+5.4%**

### Change in loan portfolio

**RUB +24.6 bln**

### Net debt / EBITDA

**2.8**

### Net profit

**RUB 6.5 bln**

## Assets, equity and liabilities

Indicator	As of 31 Dec 2014	As of 31 Dec 2015	As of 31 Dec 2016	+/- vs. 2015
<b>Fixed assets</b>	<b>3,741.9</b>	<b>3,985.1</b>	<b>4,669.2</b>	<b>684.1</b>
Financial investments	444.9	429.8	426.2	-3.6
Other non-current assets	270.4	276.6	292.5	15.9
<b>Total non-current assets</b>	<b>4,457.3</b>	<b>4,691.4</b>	<b>5,387.8</b>	<b>696.4</b>
Reserves	69.0	62.0	65.7	3.7
Accounts receivable	122.7	135.3	122.0	-13.3
Cash and cash equivalents	86.1	138.1	85.1	-53.0
Other current assets	111.6	30.3	23.1	-7.1
<b>Total current assets</b>	<b>389.4</b>	<b>365.7</b>	<b>295.9</b>	<b>-69.8</b>
Equity	3,516.2	3,570.4	4,230.5	660.1
Borrowed funds	715.7	900.4	829.1	-71.3
Other liabilities	90.0	113.6	116.3	2.6
<b>Total long-term liabilities</b>	<b>805.7</b>	<b>1,014.1</b>	<b>945.4</b>	<b>-68.7</b>
Borrowed funds	140.5	88.5	91.9	3.4
Accounts payable	305.6	342.3	374.8	32.5
Other short-term liabilities	78.7	41.9	41.1	-0.8
<b>Total short-term liabilities</b>	<b>524.8</b>	<b>472.7</b>	<b>507.8</b>	<b>35.1</b>
<b>Balance</b>	<b>4,846.7</b>	<b>5,057.1</b>	<b>5,683.7</b>	<b>626.6</b>

## Analysis of income from transportation activities

Income from transportation totalled RUB 1,387.0 bln in 2016, up 4.6% from the 2015 level (RUB +61.0 bln).

Indicator	Measurement units	2015	2016		Change			
			plan	actual	actual vs. plan		2016 vs. 2015	
					+/-	%	+/-	%
<b>Income from transportation, infrastructure services and locomotive traction</b>	RUB bln	<b>1,326.0</b>	<b>1,378.7</b>	<b>1,387.0</b>	<b>8.3</b>	<b>100.6</b>	<b>61.0</b>	<b>104.6</b>
freight transportation	RUB bln	1,203.9	1,247.1	1,254.5	7.3	100.6	50.5	104.2
passenger transportation, including	RUB bln	11.7	15.8	17.0	1.1	107.0	5.2	144.4
long-haul transportation	RUB bln	11.2	13.9	14.9	0.9	106.7	3.6	132.5
suburban transportation	RUB bln	0.5	1.9	2.1	0.2	109.3	1.6	4x
provision of infrastructure services including	RUB bln	99.8	104.7	104.6	-0.1	99.9	4.85	104.9
for freight transportation	RUB bln	8.1	8.0	7.4	-0.6	92.1	-0.7	91.9
long-haul transportation	RUB bln	63.1	66.6	66.7	0.1	100.2	3.7	105.8
suburban transportation	RUB bln	28.7	30.0	30.5	0.5	101.5	1.8	106.4
provision of locomotive traction services	RUB bln	10.5	11.0	10.9	-0.1	99.3	0.4	103.9

## Income from freight transportation

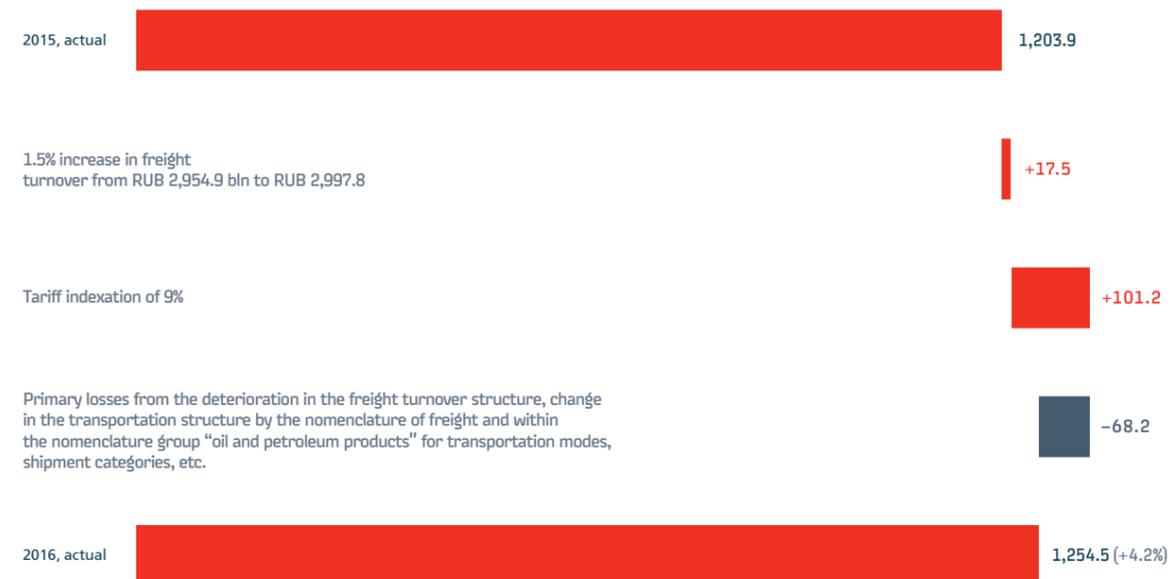
Russian Railways had total income of RUB 1,254.5 bln in 2016, an increase of RUB 50.5 bln, or 4.2%, compared with 2015.

An additional RUB 17.5 bln in income was generated from a 1.5% increase in freight turnover versus last year, while a 9% indexation of tariffs for freight transportation produced an additional RUB 101.2 bln.

The following negative changes posed the key challenge to the Company in 2016:

- in the structure of freight transportation by the nomenclature of freight and within the nomenclature group 'oil and petroleum products' (an increase in the share of low-profit freight for Russian Railways);
  - in terms of transportation mode (a decrease in the share of freight turnover for transit, domestic and, international transportation via border crossings combined with an increase in the share of less profitable freight transportation through ports of the Russian Federation);
  - by shipment categories, etc.
- These changes in the transportation structure resulted in lower growth rates in the average rate of return. In particular, for 2016 the growth in the average rate of return for Russian Railways totalled 2.7% versus the previous year, while growth of 7.5% in the effective rate was envisaged when determining the indexation level for freight transportation in 2016. The decrease in the growth rates of the rate of return led to a reduction tariff revenue for Russian Railways and also to a decline in the overall tariff burden on the economy as a whole.

Factor analysis of the increase in income from freight transportation, 2016 vs. 2015, RUB bln



## Income from long-haul passenger transportation

### Russian Railways provides long-haul passenger transportation on the Sapsan, Lastochka (Desiro RUS) and Allegro rapid-transit trains.

Income from such transportation totalled RUB 14.9 bln over the reporting period, an increase of RUB 3.6 bln, or 32.5%, versus last year's level.

The growth in income from long-haul passenger transportation via rapid-transit trains was impacted by a 27% increase in

the volume of passengers transported in 2016 versus 2015, which is related to a 14% increase in assignments, including:

- a 27% increase for Sapsan trains (48% for single-unit trains and 18% for double-set trains);

- a 5% increase for Allegro trains;
- a 23% increase for Lastochka (Desiro RUS) long-haul trains.

## Income from suburban passenger transportation

Income from suburban passenger transportation totalled RUB 2.1 bln.

Until October 2016, Russian Railways provided suburban passenger transportation as a carrier in the Krasnodar Territory via Lastochka electric trains

on sections of the Sochi operating domain. Income from such transportation totalled RUB 0.7 bln.

Starting from 1 October 2016, the carrier in the Sochi operating domain is Kuban Express Suburb.

Starting from 10 September 2016, Russian Railways has provided suburban transportation services on the Moscow Central Ring, which generated income of RUB 1.4 bln over the period prior to the end of the year.

## Income from the provision of infrastructure services

Income from the provision of infrastructure services totalled RUB 104.6 bln, an increase of RUB 4.85 bln, or 4.9%, from last year, including:

- income from the provision of infrastructure services during freight transportation decreased by RUB 0.7 bln versus last year for the following reasons:
  - a change in the tariff level for services to use railway transportation infrastructure in connection with the introduction on 7 June 2015 of new rates established by Order No. 127-t/1 of the Federal Tariffs

Service dated 29 April 2015, which are 63% lower than the previous contractual tariffs of Russian Railways (RUB -0.3 bln);

- a decrease in the number of railcars left on infrastructure in connection with a 4.6% reduction in the operating railcar fleet in 2016 (-44,000 units) versus the 2015 level (RUB -0.4 bln);
- income from the provision of infrastructure services during passenger transportation increased by RUB 5.5 bln versus the 2015 level, including:

- an increase of RUB 3.7 bln compared with 2015 in long-haul transportation due to 4% indexation, growth in the share of rapid-transit and high-speed long-haul trains as well as an 0.4% increase in railcar-km work;
- an increase of RUB 1.8 bln in suburban transportation versus last year due to 4% indexation and a 1.7% an 0.4% increase in railcar-km work.

## Income from locomotive traction services

Income from locomotive traction services totalled RUB 10.9 bln. Income increased by RUB 0.4 bln, or 3.9%, versus last year.

# Expenses on transportation activities

Expenses on transportation activities totalled RUB 1,296.2 bln in 2016, a level consistent with the Company's plan and 2.4% higher than in 2015.

Indicator	2015	2016	Change, actual 2016 / actual 2015	
	actual	actual	RUB bln	%
<b>Total expenses on transportation activities</b>	<b>1,266.2</b>	<b>1,296.2</b>	<b>30.1</b>	<b>102.4</b>
<b>Payroll expenses</b>	<b>395.6</b>	<b>400.7</b>	<b>5.1</b>	<b>101.3</b>
<b>Allocations for social needs</b>	<b>110.4</b>	<b>110.8</b>	<b>0.4</b>	<b>100.4</b>
<b>Material expenses</b>	<b>432.7</b>	<b>452.3</b>	<b>19.7</b>	<b>104.5</b>
Materials	55.9	61.7	5.8	110.3
Fuel	83.1	78.7	-4.4	94.7
including for train traction	70.5	68.5	-2.0	97.1
Electricity	128.0	138.0	10.0	107.8
including for train traction	112.5	121.4	8.9	107.9
Other material expenses	165.7	173.9	8.3	105.0
<b>Depreciation</b>	<b>189.8</b>	<b>190.3</b>	<b>0.6</b>	<b>100.3</b>
<b>Other expenses</b>	<b>137.7</b>	<b>142.1</b>	<b>4.4</b>	<b>103.2</b>

Structure of Russian Railways expenses on transportation activities by cost components, %



Payroll expenses totalled RUB 400.7 bln in 2016, an increase of 1.3%, or RUB 5.1 bln, compared with 2015.

The change in expenses was due to the following factors:

- growth in expenses that depend on transportation volume (RUB +1.8 bln);
- growth in payroll expenses due to the indexation of wages at 2.9% starting from 1 March 2016 and at 3.5% starting from 1 October 2016 (3.9% average for 2016 versus 2015) in accordance with clause 4.1.5 of the Russian Railways collective bargaining agreement for 2014-2016 (RUB +13.9 bln) and the corresponding increase in other payments (deductions to the National Pension Fund, payments of a social nature, etc.) (RUB+1.1 bln). The overall increase totalled RUB 15.0 bln;
- an additional increase in major track repair programme with full rail replacement during the track repair period accompanied by average track repair work on 1,500 km of tracks to prevent growth in the number of km with weight exceeding the standard tonnage. Total increase in expenses of RUB 15 bln, including payroll expenses of RUB 2.4 bln. Additional funding for the major track repair programme was provided in accordance

with the decision of the Russian Railways Board of Directors (Minutes No. 23 dated 25 December 2015).

At the same time, due to the optimisation measures, payroll expenses declined by RUB 14.1 bln, including from:

- the effect of the outsourcing of non-core operations (RUB -3.5 bln);
- measures as part of a programme to improve labour productivity (RUB -8.1 bln);
- a decrease in payments for one-off remuneration for Company loyalty and estimated liabilities due to a reduction in the number of employees entitled to such payments (RUB -1.3 bln), among other items.

Allocations for social needs totalled RUB 110.8 bln in 2016, an increase of 0.4%, or RUB 0.4 bln, compared with 2015. The increase in expenses resulted from the corresponding growth in payroll expenses for which insurance premiums are charged.

Fuel expenses amounted to RUB 78.7 bln in 2016, a decrease of 5.3%, or RUB 4.4 bln, from 2015, including:

- fuel expenses on train traction decreased 2.9% (RUB -2.0 bln).

The change in expenses occurred due to:

- an increase in transportation volume as measured in gross tkm in diesel traction by 1.2% (RUB +0.8 bln);
- a decrease in diesel fuel prices (RUB -1.5 bln);
- optimisation measures that aim to fuel consumption by decreasing the specific rates of fuel consumption on diesel train traction by 1.7%, which made it possible to cut costs by RUB 1.3 bln;
- expenses on other production needs decreased by 18.5% (RUB -2.4 bln).

The change in expenses occurred due to:

- the additional increase in major track repairs (RUB +0.2 bln);
- a decrease in diesel fuel prices (RUB -0.4 bln);
- a decrease in fuel consumption as part of optimisation measures (regulation of heating modes for locomotives that are temporarily out of service, the optimisation boiler equipment modes, etc.) (RUB -2.2 bln).

**RUB 400.7 bln**  
payroll expenses in 2016

**RUB 78.7 bln**  
fuel expenses in 2016

**RUB 138.0 bln**  
electricity expenses in 2016

Electricity expenses amounted to RUB 138.0 bln in 2016, an increase of 7.8%, or RUB 10.0 bln, from 2015, including:

- electricity expenses on train traction grew 7.9% (RUB +8.9 bln).

The change in expenses resulted from:

- an increase of 1.7% (RUB +1.9 bln) in transportation volume as measured in gross tkm in electric traction;
- growth of 6.2% (RUB +7.1 bln) in the average electricity tariff for train traction;
- optimisation measures that aim to cut electricity consumption by reducing specific electricity consumption rates for train traction in electric traction by 0.1%, which resulted in cost-cutting of RUB 0.1 bln;

- expenses on other needs increased 7.3% (RUB +1.1 bln).

The change in expenses resulted from:

- growth in the average electricity tariff by 6.9% (RUB 1.0 bln);
- an additional increase major track repairs (RUB +0.1 bln).

All other material expenses (materials and other material expenses) amounted

to RUB 235.6 bln in 2016, an increase of 6.3%, or RUB 14.0 bln, from the 2015 level.

The change in expenses resulted from:

- growth in expenses that depend on transportation volume (RUB +1.4 bln);
- growth in expenses due to the the implementation of the 'Year of the Passenger' programme (RUB +0.8 bln);
- an additional increase in major track repairs (RUB +11.4 bln);
- other factors (RUB +0.4 bln) - cost-optimisation measures were implemented despite growth in costs due to a RUB 16.0 bln increase in prices for the products consumed by the Company, which made it possible to reduce expenses by RUB 15.6 bln.

Depreciation amounted to RUB 190.3 bln in 2016, an increase of 0.3%, or RUB 0.6 bln, from 2015. The change in expenses is due to both the commissioning of new fixed assets as part of the Russian Railways Investment Programme as well as the retirement of a number of facilities and ongoing work to preserve fixed assets not involved in the transportation process.

Other expenses amounted to RUB 142.1 bln, an increase of 3.2%, or RUB 4.4 bln, compared with 2015.

The main factors affecting the changes in other expenses were:

- growth in property tax expenses (RUB +5.8 bln) due to an increase in the tax rate (from 1% to 1.3%) starting from 1 January 2016 for public railways as well as structures that constitute an integral part of such facilities, etc.;
- growth in expenses to fund a programme to lease advanced track maintenance equipment for a wide range of track repair work in order to ensure the efficient operation of railway infrastructure (RUB +1.3 bln);
- an additional increase in major track repairs (RUB +0.3 bln);
- a decrease in expenses through optimisation measures (RUB -0.3 bln), including a reduction in expenses on lease payments, communications support, software, communications and other items.

Reference: Spending on transportation activities in connection with the commissioning of the new MCR increased by a total of RUB 2.5 bln in 2017.

Railway transportation costs totalled 415.2 kopecks per 10 equivalent tkm, which is 0.8% higher than in 2015 (with average annual inflation of 7.1% in the country).

In addition, investment programme funds were used to rebuild 2,200.2 km of tracks in 2016. The total volume of track rehabilitation (reconstruction and major repairs of railway tracks) amounted to almost 6,000 km (5,963 km) in 2016.

## Major repairs of fixed assets

Russian Railways spent almost RUB 72.3 bln on major repairs to its fixed assets in 2016. Among other things, these funds were used to repair 3,762.8 km of tracks, 1,600 electric locomotive units and 653 diesel locomotive units, more than 524.5 km of automatic

and semi-automatic blocking devices, 990 interlocking switches, 146 railcar retarders, more than 2,048 km of contact network, over 1,153 km of overhead and cable electricity transmission lines and 54 traction substations in 2016.

## Cost optimisation

In the face of ever-changing macroeconomic conditions in 2016, Russian Railways managed to promptly assess the risks to its production, financial and economic indicators prior to the end of 2016. Over the course of the year, the Company held four meetings of the Budget Committee at which it formulated objectives for growth in internal efficiency in 2016.

This work resulted in a Consolidated Action Plan to Optimise Operating and Investment Activities, including cost optimisation through the implementation of the appropriate measures.

These effects were above all achieved through improving energy efficiency, introducing resource-saving technologies, containing price growth as well as implementing organisational and technical measures, including through:

- an additional programme to improve labour productivity by 1.5 p.p. (from 3.5% to 5%);
- restricting growth in the prices of the products (services) purchased by the Company while maintaining the required level of quality, the deadlines for making supplies and guaranteed sustainability (including reducing expenses on materials, payments to outsourcing companies, routine repairs on vehicles, buildings and structures, the maintenance of devices, tools and equipment, among other things);
- reducing the amount of new materials used for track superstructures by applying shaped full-length flattener systems when conducting scheduled and preventive track repairs using a technology to replace part of used ballast;

- stricter specific fuel and energy consumption rates for train traction through the increased efficiency of regenerative braking and the use of regenerative power return, the introduction of resource-saving technologies (systems to register the operational parameters of diesel locomotives and monitoring diesel fuel, automatic train operation in passenger and freight traffic and the heating of diesel locomotives);

- reducing the consumption of fuel and energy resources for other needs (installation of meters for electricity metering at facilities that are recorded in accordance with standard calculations; replacement of used lamps with LED bulbs; a reduction in the average daily mileage of vehicles as well as route optimisation and a reduction in the number of service requests for their use; the installation of fuel consumption meters for vehicles, etc.);

- updates to the commissioning dates of fixed assets as part of the investment programme as well as work to preserve fixed assets;

- optimising locomotive maintenance costs (setting tasks for maintenance companies to install new line equipment only to replace equipment with an expired service life and if it is necessary to create a transitional stock of new series locomotive equipment, meeting the technical availability ratio for locomotives and combining scheduled second and third routine repairs with work to extend service life);

- optimising other costs (expenses on communications activities, consulting services, business trips and communications services, among

other things).

As part of implementing its approach to maintain break-even operations, the Company reduced expenses on transportation activities by RUB 57.2 bln versus the initial plan approved by the Russian Railways Board of Directors and endorsed by the Government of the Russian Federation on 26 November 2015 (Minutes No. 43) (from RUB 1,353.4 bln to RUB 1,296.2 bln).

In comparable conditions, given the failure to adopt a decision in 2016 on maintaining the property tax rate at the 2015 level of 1% with respect to railway infrastructure facilities, which was projected in the initial financial plan, expenses decreased by roughly RUB 63.5 bln.

In addition, by improving the internal efficiency of operations, Russian Railways found an additional RUB 15 bln for major repairs and maintenance of railway infrastructure (tracks), which enabled the Company to not only increase the physical amount of major track repairs, but also prevent growth in track length with tonnage exceeding industry standards.

The Company also spend an additional RUB 0.8 bln on funding measures as part of the Year of the Passenger in an effort to expand the customer base and enhance the efficiency of passenger transportation. As a result of the measures, transportation activity costs only increased by 0.8% versus the 2015 level despite significant price pressure, which is considerably lower than average annual inflation (7.1%).

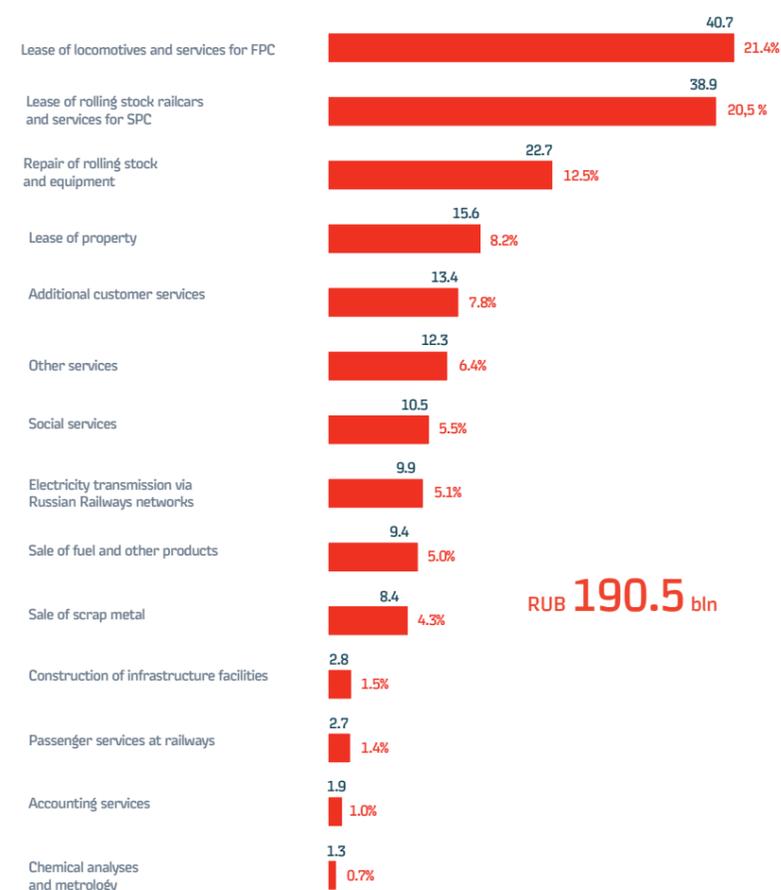
The adoption of effective and timely anti-crisis measures in 2016 enabled the Company to neutralise all core risks.

## Other activities

Profit from other activities totalled RUB 26.4 bln in 2016, an increase of RUB 2.6 bln, or 11%, versus last year.

The Company's income from other activities amounted to RUB 190.5 bln, an increase of RUB 5.7 bln, or 3%, compared with 2015.

### Structure of income from other activities, RUB bln



Taking into account the prevalence of a substantial share (more than 45%) of low-profit services (lease of rolling stock to suburban companies and FPC and social services) and services regulated by regional authorities (transmission of electricity to third party consumers and housing and utility services) in the structure of other income in 2016, the key factors for the better-than-expected profit dynamics included measures taken by the Company to improve the efficiency of other sales through the development and improvement of the customer focus and continuous work to reduce the costs of the services it provides.

The stabilisation of rolling stock lease volumes for suburban passenger companies and FPC and the Company's balanced policy to contain growth in the cost of its services have made it possible to improve the profitability of rolling stock lease volumes for suburban passenger companies and FPC. The positive dynamics were achieved by implementing measures to increase workforce productivity, unifying regulatory documents governing the process for the maintenance and routine repair of rolling stock, increase the efficient work of rolling stock and apply resource-saving technologies.

The key driver in the growth in profit from other sales in 2016 was an increase in the effective management of the

Company's property by additionally integrating leasable areas into commercial turnover and attracting new tenants.

In 2016, the Company managed to significantly improve work as regards electricity transmission indicators by reducing the amount of technological losses, regulating a number of issues with UES FGC and in general conducting a more effective campaign to approval tariffs for electricity transmission via the Company's networks.

Measures were implemented to provide related services for consignors and consignees. In particular, loading and unloading work increased by 5.3 mln tonnes, or 10%.

The growth in profit from other sales resulted from a 14% increase in the sale of scrap metal along with an effective price policy for its sale.

Further work was carried out in 2016 to reincorporate inefficiently used social and utility facilities into civil circulation (in particular, the transfer to municipal ownership of a major boiler facility in the city of Tynda and approximately 39 social facilities).

# 3%

growth in income from other activities vs. 2015

# 45%

share of low-profit services in the structure of other income in 2016

# 11%

growth in profit from other activities vs. 2015 level

## Other income and expenses

In 2016, other income totalled RUB 127.1 bln and other expenses amounted to RUB 200.6 bln for a financial result of RUB 73.6 bln.

### Change in other income and expenses in 2015–2016, RUB bln

Indicator	2015	2016	Change	
			+/-	%
<b>Result from other income and expenses</b>	<b>-58.6</b>	<b>-73.6</b>	<b>-15.0</b>	<b>126</b>
Including for the main articles:				
sale of assets	7.1	0.6	-6.5	8
sale of shares	5.7	-	-5.7	-
dividends	2.9	4.0	1.1	138
contribution of property to charter capital	0.7	-	-0.7	-
payable interest	11.8	9.2	-2.6	78
exchange rate differences	-22.1	18.8	40.9	-
change in provisions	7.6	-7.0	-14.6	-
budget funding	32.2	2.1	-30.1	6
interest payable excluding capitalised interest	-64.5	-64.2	0.3	99
guarantees under the collective bargaining agreement for Company employees and their families as well as retirees	-26.8	-25.7	1.1	96

## Dividend income from Russian Railways subsidiaries

Dividend income from subsidiaries totalled RUB 4.0 bln in 2016. GEFCO accounted for most of the dividend payments (RUB 1.5 bln). Dividend income from subsidiaries totalled RUB 2.9 bln in 2015.

The increase in dividend income totalled RUB 1.1 bln versus the 2015 level, which is largely due to the growth in the financial result of subsidiaries as well as the implementation of Order No. 705-r of the Government

of the Russian Federation dated 18 April 2016 on the payment of dividends amounting to at least 50% of net profit of Russian Railways subsidiaries for 2015.

## Profit from the sale of stakes in subsidiaries

The Company did not sell stakes in a number of subsidiaries in 2016 given the decline

in investment activity and a lack of interest from potential investors.

In 2015, the Company sold shares in 5 subsidiaries at a loss of RUB 5.7 bln.

## Contribution of property to the charter capital of subsidiaries

The Company did not conclude any transactions to contribute property to the charter capital of subsidiaries in 2016.

In 2015, the Company generated a financial result of RUB 0.7 bln from an additional share issue by Sakhalin Passenger Company.

## Interest payable

Income from interest payable totalled RUB 9.2 bln in 2016. In 2015, income from interest payable amounted

to RUB 11.8 bln. The decrease in income from interest payable totalled RUB 2.6 bln versus 2015, which is related to the decline

in cash balances on special accounts in which settlements are conducted as part of separate investment projects.

RUB **4.0** bln

dividend income from subsidiaries in 2016

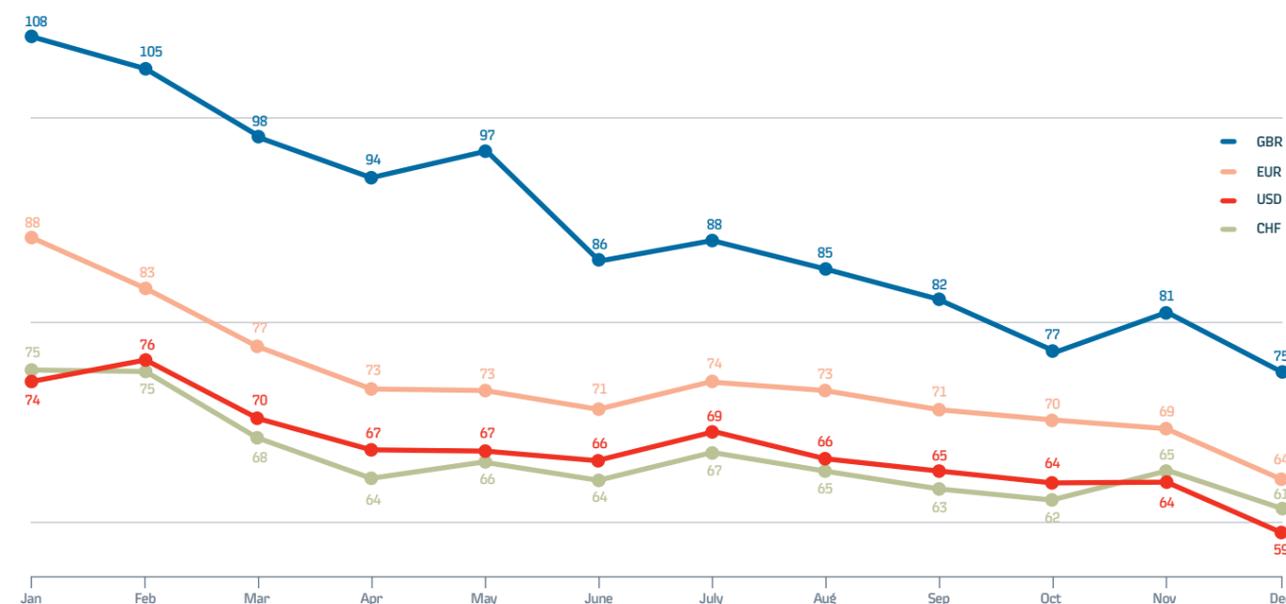
RUB **9.2** bln

income from interest payable in 2016

## Exchange rate differences

In 2016, the Company continued to apply hedge accounting for foreign exchange earnings denominated in Swiss francs as well as investments denominated in euros. As a result of applying hedge accounting, of the total RUB 90.1 bln in positive exchange rate differences, the Company's profit was approximately 40%, or RUB 34.8 bln. Taking into account the exchange rate differences attributable to the hedged items received in the form of revenue during the period, the total positive effect of exchange rate differences on the Company's profit amounted to RUB 18.8 bln

Exchange rate dynamics of main currencies in 2016, RUB per unit



### Appreciation of the national currency in 2015:

- vs. USD – 16.8%;
- vs. EUR – 19.9%;
- vs. GBP – 31%;
- vs. CHF – 19.2%.

In 2016, total negative exchange rate differences amounted to RUB 92 bln with most of the losses, or RUB 69.7 bln, classified as the Company's additional capital.

## Debt servicing costs

Russian Railways had total interest payable of RUB 64.2 bln in 2016, excluding capitalised interest (total accrued interest for 2016 – RUB 79.8 bln).

In 2015, interest payable amounted to RUB 64.5 bln, excluding capitalised interest (total accrued interest for 2015 – RUB 76.1 bln).

The growth in accrued interest versus the 2015 level was due to the relative growth in the amount of interest (in the rouble equivalent) accrued on foreign currency borrowings as a result of a higher average annual foreign currency exchange rate relative to the rouble.

However, a decrease has been seen in the proportion of interest attributable to the Company's profit versus last year, which in turn was the result of capitalised interest for investment programme items.

## Social expenditures

Expenses associated with guarantees under the collective bargaining agreement totalled RUB 25.7 bln in 2016, a decrease of RUB 1.1 bln, or 4%, from the 2015 level (RUB 26.8 bln).

Despite the decline in social expenditures, the Company fully met its obligations to employees and retirees under the collective bargaining agreement and maintained a high level of social responsibility.

The Company makes social expenditures as part of the Russian Railways collective bargaining agreement, which is adopted for a three-year period and serves as the unconditional motivational tool for recruiting and retaining personnel in the regions where the Company operates.

In 2016, the Company conducted collective negotiations and adopted and registered the Russian Railways

collective bargaining agreement for 2017-2019 with the Department of Labour and Social Protection of the City of Moscow as No. 1-918 dated 15 November 2016, which will be used to further enhance the effectiveness of social expenditures at the Company maintain its competitiveness on the labour market.

## Changes in provisions

The negative result from changes in provisions totalled RUB 7.0 bln in 2016. However, considering the litigation performed by Company management to recover advance payments issued to foreign subcontractors as part of the implementation of the Libyan project, a total of RUB 2.6 bln was transferred to Russian Railways in 2016 with the proportionate reflection of the financial result from the recovery of this debt from the doubtful debt provisions.

## Other expenses

As part of the Concept for the Management of the Company's Non-core Assets, low-liquidity assets with a largely social function (housing and utility, healthcare and educational facilities in the Amur Region as well as road overpasses and road infrastructure in the Republic of Tatarstan and the Vologda Region) with book value of RUB 2.2 bln were transferred to municipal property free of charge in 2016.

Structure of other expenses, %



- Utilities
- Roads
- Healthcare
- Social

## Management of working capital

The model for managing working capital adopted by the Company is characterised by negative net working capital and means that the Company utilises its current liabilities as a source of investment activities.

Thus, this policy aims to maximise the order portfolio among suppliers and contractors and create demand for the products of related industries.



### Accounts receivable

Structure and dynamics of accounts receivable, RUB bln				
Article	01/01/2016	31/12/2016	+/- vs. start of year	% vs. start of year
<b>Commercial (trade) debt of buyers and customers</b>	<b>16.7</b>	<b>13.5</b>	<b>-3.2</b>	<b>81</b>
Prepayments under business contracts	23.7	26.7	3.0	113
Debt associated with the decisions of the federal and regional authorities, including	145.7	148.1	2.4	102
Suburban passenger companies	39.5	39.5	0.0	100
Federal Railway Transportation Agency	26.2	28.6	2.4	109
Ministry of Health and Social Development	10.9	10.9	0.0	100
Prepayments under exchange contracts for the Alpika-Service motorway	69.1	69.1	0.0	100
Overpayment of taxes and fees	15.1	1.2	-13.9	8
Other debtors (including contributions to charter capital)	18.2	17.3	-0.9	95
<b>Total</b>	<b>219.4</b>	<b>206.8</b>	<b>-12.6</b>	<b>94</b>
Including past-due accounts receivable	1.8	1.5	-0.3	83
Share of past-due accounts receivable	0.8 %	0.7 %	-0.1 %	91

As of the end of 2016, total accounts receivable amounted to RUB 206.8 bln (a decrease of 6% versus the start of 2016, or RUB 12.6 bln).

Of total accounts receivable:

- commercial debt (short-term outstanding trade debt on sales according to signed contracts) – RUB 13.5 bln.
- prepayments under business (commercial) contracts – RUB 26.7 bln;
- debt associated with the decisions of the federal and regional authorities - RUB 148.1 bln (mainly associated with decisions adopted at the government level):
  - debt restructured for 10 years, restored from provisions and the current debt of suburban companies and the FRTA (RUB 68.1 bln);

- debt of the Ministry of Health and Social Development restored from provisions to compensate for expenses on the suburban transportation of federal benefit holders (RUB 10.9 bln);

- long-term debt of the Russian State Property Committee under an exchange contract for the motorway component of the Olympic project Alpika-Service (RUB 69.1 bln), which is to be paid for using state property on the basis of decisions adopted by the executive authorities;
- current overpayment of taxes and debts of other debtors, including transit settlements under agency and commission agreements, penalties, etc. (RUB 18.5 bln);

The amount of past-due debt decreased to RUB 1.5 bln and its share of overall debt amounted to 0.7% (down 0.1% versus 2015).

Accounts receivable of Russian Railways as of 31 December 2016, RUB bln



## Accounts payable

The Company's accounts payable increased by RUB 32.5 bln (or +10%) in 2016 to RUB 374.8 bln.

### Structure and dynamics of accounts payable, RUB bln

Article	Actual 31/12/2015	Actual 31/12/2016	+/- vs. start of year	% vs. start of year
<b>Debt to suppliers and contractors</b>	<b>182.0</b>	<b>196.0</b>	<b>14.0</b>	<b>108</b>
for investment activities	98.4	119.0	20.6	121
for operating activities	83.6	77.1	-6.5	92
Debt to personnel on wages and transactions with accountable persons	14.1	15.5	1.4	110
Debt for social insurance and security	9.2	9.3	0.2	102
Debt to budget for taxes and fees	17.8	20.5	2.7	115
Prepayments received, including:	104.9	117.7	12.8	112
for shipments	83.7	91.4	7.7	109
other prepayments	21.2	26.3	5.1	124
Other debt	14.2	15.7	1.4	110
<b>TOTAL accounts payable</b>	<b>342.3</b>	<b>374.8</b>	<b>32.5</b>	<b>110</b>

### Turnover period of accounts payable, days

Indicator	2015	2016	+/- vs. 2015	+/- vs. 2015, %
Turnover period	40.8	42.9	2.1	105
for operating activities	33.4	30.9	-2.5	93
for investment activities	53.4	66.9	13.5	125

Accounts payable to suppliers and contractors totalled RUB 196.0 bln as of the end of 2016, including RUB 119.0 bln for investment activities and RUB 77.1 bln for current activities.

The turnover period for accounts payable to suppliers and contractors under all

contracts was 43 days for the Company as a whole in 2016. As regards settlements under contracts for investment activities, the turnover period increased by 14 days compared with 2015, which is above all due to the seasonal nature and reflection of the bulk of capital expenditures in the fourth quarter of 2016.

Past-due accounts payable to suppliers and contractors make up 0.5% of total debt.

## Factor analysis of profitability

### Return on equity

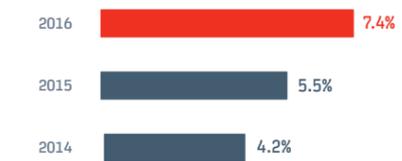
Return on equity (ROE) totalled 0.15% in 2016.

#### Return on equity (net profit/equity)



The return on equity was impacted by the following factors: net profit margin, asset turnover and financial leverage.

#### Sales profitability



The Company's policy to improve cost efficiency and optimisation ensured faster growth of revenue over expenses and positive dynamics in sales profitability with growth totalling 1.9 p.p. versus last year.

#### Operating profitability



Net profit margin (operating profitability) totalled 0.4%, an increase of 0.4 p.p. versus 2015, which is due to growth in sales profitability as well as financial management measures.

#### Financial leverage (Assets/Equity)



A decrease of 8 p.p. in financial leverage primarily resulted from a reduction of the debt burden due to the positive revaluation of foreign currency-denominated liabilities (loan debt totalled RUB 988.9 bln in 2015 and RUB 921 bln in 2016 taking into account the net increase of RUB 24.6 bln).

#### Use (turnover) of assets (Income/Assets)



The indicator for the use (turnover) of assets (income/assets) decreased by 2 p.p. due to growth in assets resulting from the revaluation of fixed assets (RUB 520.1 bln) and an increase in ongoing construction because of government projects that are scheduled to be commissions and generate effects in subsequent periods.

## Government support for Russian Railways in 2016

Government support for Russian Railways from all budgets totalled RUB 94.9 bln in 2016, including federal budget subsidies of RUB 93.6 bln.

### Subsidies to reimburse loss of income related to the government regulation of tariffs

The Government of the Russian Federation is regulating the tariffs for the services of Russian Railways on a long-term basis until 2030. Compensation for the loss of income of the infrastructure owner is provided in the form of subsidies from federal budget funds.

Total subsidies earmarked in the 2016 federal budget to compensate for losses by Russian Railways associated with the regulation of tariffs

for infrastructure services on suburban transportation totalled RUB 32.5 bln.

Subsidies are also earmarked for Russian Railways to compensate for losses in income that occurred as a result of the government regulation of tariffs for services to use railway infrastructure for suburban passenger transportation in 2011-2014 and were not fully repaid. Compensation for the services provided in the past period totalled RUB 0.1 bln in 2016. The rules for providing subsidies

are established by Resolution No. 844 of the Government of the Russian Federation dated 17 October 2011 taking into account additions and amendments made to this regulatory legal act.

Thus, Russian Railways received a total of RUB 32.6 bln in subsidies in 2016 to compensate for losses in income as a result of the government regulation of tariffs for services to use railway infrastructure for suburban passenger transportation.

### Contributions to the charter capital of Russian Railways

Government projects continued in the reporting year to develop railway transportation infrastructure funded by the Russian Railways budget through contributions to the Company's charter capital.

Total contributions to Russian Railways charter capital amounted to RUB 61 bln in 2016, including:

- for measures to develop the transport industry of the Moscow Region – RUB 16.4 bln (including RUB 4.7 bln from the Moscow budget);
- to build the Moscow-Kazan High-Speed Railway – RUB 0.1 bln;
- for the comprehensive reconstruction of the M. Gorky-Kotelnikovo-

Tikhoretskaya-Krymskaya section with a bypass of the Krasnodar hub – RUB 20.08 bln;

- for the construction of the Prokhorovka-Zhuravka-Chertkovo-Bataysk railway line – RUB 24.44 bln.

### Subsidies and compensation for losses from regional budgets and extrabudgetary funds

The Company received public support from regional budgets and extrabudgetary funds in 2016 in the amount of RUB 1.3 bln, including:

- RUB 0.7 bln in subsidies from the Krasnodar Territory budget to reimburse lost revenue from the state regulation of tariffs for suburban railway passenger transportation;
- RUB 0.1 bln in subsidies provided in connection with the regulation of electricity and heat tariffs;

- RUB 0.02 bln in subsidies for maintenance on low-density railway sections;

- RUB 0.01 bln in subsidies to compensate for a portion of expenses related to the major repair of the platform, railway station and surrounding area of the Sviyazhsk railway station (Republic of Tatarstan);

- RUB 0.19 bln in compensation for losses related to the need to rebuild the existing intersection of the Perm-Yekaterinburg highway with railway

tracks on the Bakharevka-Ferma stretch;

- RUB 0.3 bln in funding from the Social Insurance Fund for scheduled preventive occupational injury measures.

RUB **94.9** bln  
total government support in 2016

RUB **93.6** bln  
subsidies from the federal budget

RUB **1.3** bln  
subsidies from regional budgets and extrabudgetary funds

### Government support from the federal budget, regional budgets and extrabudgetary funds in 2016, RUB bln

Types of government support	Volume
<b>Direct support</b>	<b>32.6</b>
Subsidies to compensate for income losses resulting from the government regulation of tariffs for services to use the infrastructure of public railway transportation for suburban traffic	32.6
<b>Implementation of government projects via the Russian Railways budget</b>	<b>61</b>
Development of the Moscow Transport Hub:	16.4
including from the federal budget	11.7
including from the Moscow budget	4.7
Construction of the Prokhorovka-Zhuravka-Chertkovo-Bataysk railway line	24.44
Rapid-transit and high-speed traffic	0.1
Comprehensive reconstruction of the M. Gorky-Kotelnikovo-Tikhoretskaya-Krymskaya section with a bypass of the Krasnodar hub	20.08
<b>Government support from regional budgets and extrabudgetary funds</b>	<b>1.3</b>
<b>Total government support</b>	<b>94.9</b>



## Payment of taxes and insurance premiums

Total payable taxes and insurance premiums as reflected in the accounting statement amounted to RUB 311.5 bln in 2016, a 10% increase from 2015, including:

- to regional and local budgets – RUB 134.34 bln, or 34% more than in 2015;
- to extrabudgetary funds – RUB 128.32 bln, or 0.5% more than in 2015.
- to the federal budget – RUB 48.8 bln, or 11.3% less than in 2015;

### Tax payments accrued for taxes and insurance premiums reflected in Russian Railways accounting, RUB bln

Indicator	2015	2016	+/-	%
<b>Total for taxes and fees</b>	<b>283.04</b>	<b>311.46</b>	<b>28.42</b>	<b>110.0</b>
<b>Federal budget</b>	<b>55.00</b>	<b>48.80</b>	<b>-6.20</b>	<b>88.7</b>
VAT	54.69	45.30	-9.39	82.8
Profit tax	0.00	3.00	3.00	-
Profit tax charged as a tax agent on income generated by a foreign organisation from sources in the Russian Federation	0.04	0.03	-0.01	75.0
Profit tax charged on income as profit of controlled foreign companies (CFC)	0.00	0.16	0.16	-
Other taxes to the federal budget	0.27	0.31	0.04	114.8
<b>Regional and local budgets</b>	<b>100.29</b>	<b>134.34</b>	<b>34.05</b>	<b>134.0</b>
Profit tax	0.00	26.40	26.40	-
Personal income tax	55.67	56.24	0.57	101.0
Property tax	42.78	49.93	7.15	116.7
Land tax	1.61	1.55	-0.06	96.3
Other taxes	0.23	0.23	0.00	100
<b>Extrabudgetary funds</b>	<b>127.75</b>	<b>128.32</b>	<b>0.57</b>	<b>100.5</b>
Pension Fund	93.39	93.89	0.50	100.5
Social Insurance Fund	10.89	10.98	0.09	100.8
Health Insurance Fund	21.81	21.85	0.04	100.2
Accident Insurance Fund	1.66	1.61	-0.05	97.0

A total of RUB 289.4 bln were spent on the payment of current taxes and insurance premiums (including offsets and refunds) in 2016, including

- to the federal budget – RUB 52.8 bln;
- to the budgets of the constituent regions of the Russian Federation and municipalities – RUB 117.3 bln;

- to extrabudgetary funds – RUB 119.3 bln

The amount of taxes paid in 2016 increased by RUB 8.8 bln, or 3.1%, compared with the amount of tax payments made in 2015.

**Payment of taxes and insurance premiums (including offsets and refunds) by Russian Railways, RUB bln**

Indicator	2015	2016	+/-	%
<b>Total taxes and fees</b>	<b>280.53</b>	<b>289.37</b>	<b>8.84</b>	<b>103.1</b>
including				
<b>to the federal budget</b>	<b>64.63</b>	<b>52.83</b>	<b>-11.80</b>	<b>81.7</b>
of which				
value-added tax	64.89	50.40	-14.49	77.7
profit tax	-0.54	2.06	2.60	
<b>Regional and local budgets</b>	<b>97.76</b>	<b>117.25</b>	<b>19.49</b>	<b>119.9</b>
of which				
profit tax	0.04	11.80	11.76	29.5 x
personal income tax	55.44	55.87	0.43	100.8
property tax	40.45	47.75	7.30	118.0
land tax	1.61	1.60	-0.01	99.4
<b>Extrabudgetary funds</b>	<b>118.14</b>	<b>119.29</b>	<b>1.15</b>	<b>101.0</b>
of which				
insurance premiums	116.70	117.88	1.18	101.0
Accident Insurance Fund	1.44	1.41	-0.03	97.9

The amount of taxes paid to the federal budget in 2016 decreased by RUB 11.8 bln, or 18.3%, compared with 2015, taxes paid to regional and local budgets increased by RUB 19.5 bln, or 19.9%, and taxes paid to extrabudgetary funds increased by RUB 1.1 bln, or 1.0%.

Russian Railways paid RUB 50.4 bln in VAT in 2016. The decrease in VAT payments by RUB 14.5 bln (22.3%) was primarily due to the payment of RUB 14.2 bln in VAT in the first quarter of 2015 as part of the transaction to transfer the motorway section of the Joint Adler Road project to Alpika-Service under an exchange agreement with the Federal Railway Transportation Agency.

## Corporate profit tax

Profit tax payments increased by RUB 14.4 bln in 2016 compared with last year. Given the loss generated in 2015 for the purposes of profit tax, there was no payable profit

tax to the federal budget and budgets of the constituent entities of the Russian Federation.

## Regional and local taxes

Russian Railways paid a total of RUB 117.3 bln to the budgets of the constituent entities of the Russian Federation and municipalities in 2016, or 19.9% more than the 2015 level.

The increase in tax payments to regional and local budgets compared with 2015 resulted from growth in profit tax and property tax payments

to the budgets of the constituent entities of the Russian Federation.

The amount of property taxes charged in 2016 totalled RUB 49.9 bln, an increase of RUB 7.1 bln, or 16.7%, compared with 2015 due to an increase in the tax rate (from 1.0% to 1.3%) for railway transportation infrastructure facilities starting from 1 January 2016.

The Company spent a total of RUB 47.8 bln on the payment of property taxes in 2016, an increase of RUB 7.3 bln, or 18%, compared with the previous year.

Personal income tax grew by RUB 0.4 bln, or 0.8%, compared with 2015.

## Insurance premiums

Total insurance premiums paid to extrabudgetary funds amounted to RUB 128.3 bln in 2016, an increase of RUB 0.6 bln, or 0.5%, compared with 2015.

Insurance premium tariffs for payers making payments to individuals in 2016 amounted to: 22% to the Russian Pension Fund, 2.9% to the Social Insurance Fund and 5.1% to the Federal Mandatory

Medical Insurance Fund. In accordance dated 26 November 2015, the maximum amount of insurance premiums to be paid for mandatory medical insurance is RUB 796,000 (RUB 711,000 in 2015), while the maximum amount of insurance premiums to be paid for mandatory social insurance in the event of temporary disability or in connection with maternity is RUB 718,000 (RUB 670,000) per individual.

The increase in the maximum amount of insurance premiums led to growth of RUB 755.6 mln in the amount of insurance premiums paid to the Pension Fund and RUB 85.0 mln to the Federal Social Fund.

The effective rate on insurance premiums was 27.3% in 2016, which is consistent with last year's level.

## Share capital and dividends

### Share capital

The Russian Federation is the founder and sole shareholder of Russian Railways. The Government of the Russian Federation exercises shareholder powers on behalf of the Russian Federation. The charter capital of Russian Railways was formed by the founder through the contribution of the property and assets of federal railway transportation organisations. As of the end of 2016, Russian Railways had total charter capital of RUB 2,144,315,141,000 split into 2,094,315,141 common registered shares in uncertificated form with par value of RUB 1,000 each and 50,000,000 preferred registered shares with par value of RUB 1,000 each.

In order to implement infrastructure projects in 2016, the Company's charter capital was increased in accordance with the decisions of the Government of the Russian Federation, including:

- by RUB 44,151,961,000 through the placement of common shares with par value of RUB 1,000 each in accordance with Order No. 160-r of the Government of the Russian Federation dated 5 February 2016.
- by RUB 16,882,685,000 through the placement of common shares with par value of RUB 1,000 each in accordance with Order No. 2706-r of the Government of the Russian Federation dated 17 December 2016.

### Report on the distribution of net profit earned in 2015

Russian Railways generated net profit of RUB 318 mln in 2015. The Company's approved financial plan for 2015 envisaged a loss of RUB 26.2 bln. Dividends were paid as part of previously planned parameters in

the amount of RUB 302 mln, which amounts to 95% of the Company's planned profit for 2015 (Order No. 1370-r of the Government of the Russian Federation dated 30 June 2016).

### Projected distribution of the Company's net profit earned in 2016. Dividends.

Russian Railways had net profit of RUB 6.5 mln in 2016. In accordance with clause 42 of Section 6 of the Russian Railways Charter, the Company must establish a reserve fund amounting to 5% of the net profit of the reporting year (RUB 325 mln). In accordance with Directive No. 3723p-P13 dated 31 May 2017, the general meeting of Russian Railways shareholders was advised to spend 50% of net profit per International Financial Reporting Standards (IFRS) on the payment

of dividends for 2016 in cash form, which amounts to RUB 5.147 bln, including RUB 5.142 bln for the Company's common shares and RUB 5 mln on the Company's preferred shares.

The dividend policy of Russian Railways is based on the balance of the interests of the Company and its shareholders as it relates to determining the amount of dividend payments, specifically:

- enhancing the Company's investment appeal;
- strict observance of shareholder rights as envisaged by the legislation of the Russian Federation.

#### Dynamics of net profit distribution in 2011-2016, RUB bln

Indicator	2011	2012	2013	2014	2015	2016
Net profit	16.8	14.1	0.7	-44.5	0.3	6.5
Reserve fund	0.8	0.7	0.03	0	0.02	0.3
Accrued dividends	4.2	0.0	0.185	0.045	0.3	5.147
for common shares	4.2	0.0	0.185	0.04	0.3	5.142
for preferred shares	-	-	-	0.005	0.005	0.005
Accrued dividends, % of net profit (RAS)	25.0	0.0	25	-	0.0	79.2

# Debt policy and investor relations

The primary goal of attracting borrowed funds for Russian Railways is to ensure uninterrupted financing for the Company's investment and operational activities.

The Company uses long-term borrowed funds to fund strategically important and commercially effective investment projects and also to refinance liabilities, while short-term borrowings provide flexibility in managing current liquidity.

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## Dynamics of the loan portfolio in 2016

The Company attracted medium- and long-term borrowed funds<sup>1</sup> for a total of RUB 121.2 bln in 2016. The bulk of borrowings were made in the form of public debt instruments placed among Russian and foreign investors. Russian Railways repaid a total of RUB 114.6 bln in obligations in the reporting year. The volume of the Company's loan portfolio was significantly impacted by the appreciation of the rouble, which

led to the revaluation of foreign currency-denominated debt and a reduction in its rouble-equivalent amount by the end of the year.

In addition, the Company attracted bilateral short-term (ranging from a few days to two months) bank loans throughout 2016 for the day-to-day management of liquidity. The turnover of short-term loans attracted and repaid totalled

RUB 219.4 bln over the course of the year. As of the end of the year, debt on short-term loans totalled RUB 18 bln.

For the year, the Company's total debt under borrowed liabilities amounted to RUB 921.0 bln (down 6.9% versus the start of the year), including arrears on the body of the debt of RUB 905.3 bln (down 6.6% from versus the start of the year).



Vadim Mikhailov

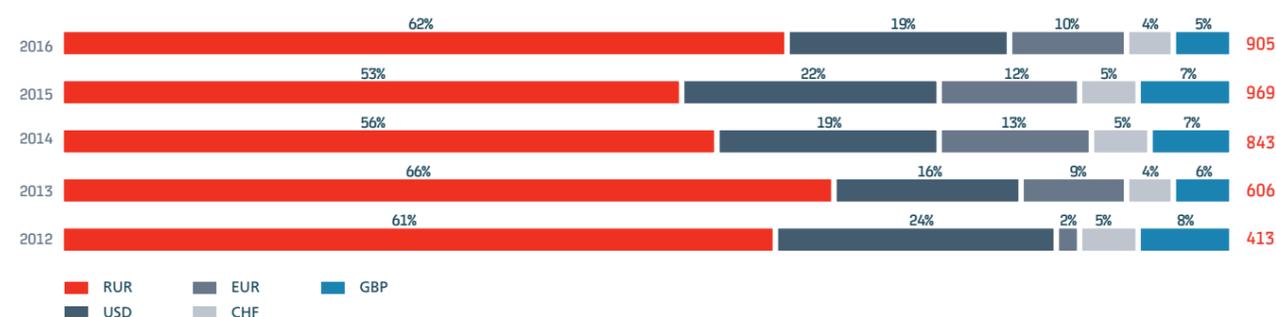
“ We placed RUB 40 bln from the Sovereign Wealth Fund that we had planned to receive in 2016 in the form of infrastructure bonds using market sources, thus easing the burden on the federal budget. In addition, effective actions on financial markets resulted in improvements to the structure of the loan portfolio in terms of reducing the volume of foreign currency-denominated obligations through their partial replacement with rouble-denominated sources as well as slashing the overall cost of debt. In 2016, Russian Railways became the only company over the last three years to attract funds from foreign investors in rouble-denominated bonds issued on the international market. The rate of the Eurobonds was set at a level below the cost of borrowing on the local market.

## Structure of the loan portfolio and debt policy

As of 31 December 2016, the Russian Railways Group's loan portfolio was characterised by the following indicators that describe the key targets in the Company's debt policy:

Share of foreign-currency denominated borrowings	Share of short-term debt	Average borrowing maturity
38%	8%	10 years
The presence of foreign currency-denominated liabilities in the Company's loan portfolio creates risks associated with fluctuations in currency exchange rates. However, the interest rates on foreign-currency denominated borrowings are lower than the rouble-denominated borrowing rates. Achieving a balance between the foreign currency- and rouble-denominated borrowings is one of the key objectives of the debt policy.	The presence of short-term liabilities in the loan portfolio creates pressure on the Company's liquidity.	The Company carries out systematic work to increase and maintain the average maturity of liabilities in the loan portfolio, which is consistent with the long-term nature of the payback period for the investment projects financed at their expense.
The debt policy sets the maximum share of foreign-currency denominated borrowings at 40%.	Russian Railways maintains the volume of short-term borrowings in the portfolio at a level of no more than 15%.	The average maturity period of the loan portfolio is stably maintained at 9-10 years.

### Dynamics of the Russian Railways loan portfolio structure by currency<sup>2</sup>

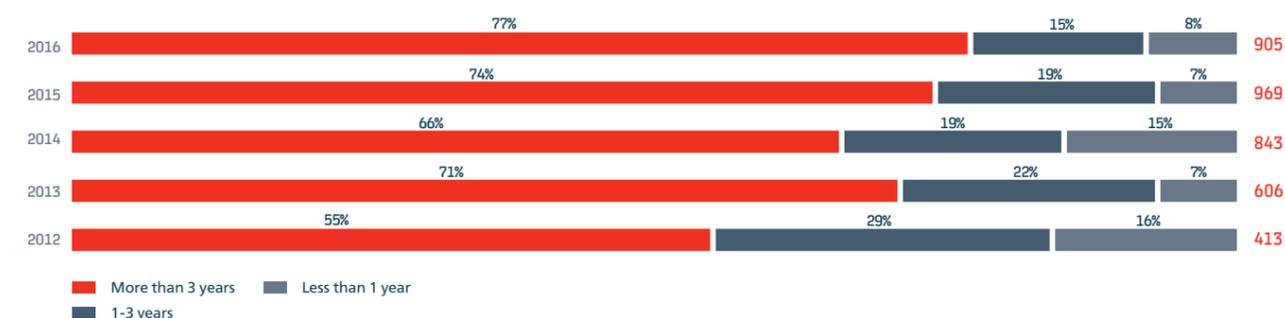


The share of foreign currency-denominated borrowings approached 50% at the start of 2016 due to the substantial weakening of the rouble exchange rate and surpassed the maximum level prescribed by the debt policy. In this regard, the Company decided to conduct measures to reduce the amount of debt in foreign currency through the partial replacement of foreign

currency-denominated borrowings with rouble-denominated borrowings. As part of this plan, Russian Railways conducted a series of transactions throughout the year for the early buyback of previously placed Eurobonds (see the 'Landmark transactions of 2016' section) and reduced the amount of foreign currency-denominated liabilities by more

than USD 250 mln (in the equivalent of all currencies). As a result of these measures and also taking into account the rouble's gradual appreciation over the course of the year, the share of foreign currency-denominated borrowings was reduced to 38% by the end of the year.

### Dynamics of the Russian Railways loan portfolio structure by maturity<sup>3</sup>



<sup>1</sup> Excluding short-term loans for the day-to-day management of liquidity that were attracted and repaid throughout 2016.

<sup>2</sup> For the body of debt. As of 31 December of the corresponding year.

<sup>3</sup> For the body of debt. As of 31 December of the corresponding year.

## Landmark transactions of 2016

### International capital market

A substantial portion of the Company's loan portfolio (roughly a third of all borrowings) is made up of long-term borrowings provided by infrastructure bonds placed in favour of state-owned funds (the Pension Fund of the Russian Federation and the National Wealth Fund). The maturity of the infrastructure bonds ranges from 15 to 30 years.

The bulk of the loan portfolio is comprised of the Company's Eurobonds placed for an average of 7 to 10 years and rouble-denominated bonds generally placed on the local market for 5 to 7 years.

As the maturity dates approach for the respective obligations, the Company replaces them with new long-term borrowings, determines their maturity taking into account the existing repayment schedule and maintaining the share of short-term liabilities for the entire scheduled horizon at a level not exceeding 15%. The presence of a certain amount of short-term loans makes it possible to promptly manage the Company's debt while reducing it in the event unplanned income is received.

The long-term portion of the loan portfolio (maturity of more than 3 years) increased

to 77% as of the end of 2016, while the share of short-term remained roughly at last year's level of 8%.

The average maturity of liabilities in the Russian Railways loan portfolio was approximately 10 years as of the end of 2016, while payments were evenly distributed over the long term, thus minimising risks associated with refinancing.

As part of measured implemented at the start of the year to reduce the volume of foreign-currency denominated debt, the Company held a tender for the early repayment of previously placed euro-denominated Eurobonds with scheduled maturity in 2021. Based on the applications that were satisfied, debt was reduced by EUR 98.5 mln with the buyback taking place at a price below their face value, providing an additional positive financial effect from the transaction.

In October of the reporting year, Russian Railways concluded a series of transactions for the early and partial redemption of foreign currency-denominated liabilities with their simultaneous refinancing through new placements in roubles and foreign currency. As a result of the transactions, short-term Eurobonds were redeemed with maturity within 6 months and 1.5 years for a total amount equivalent to approximately

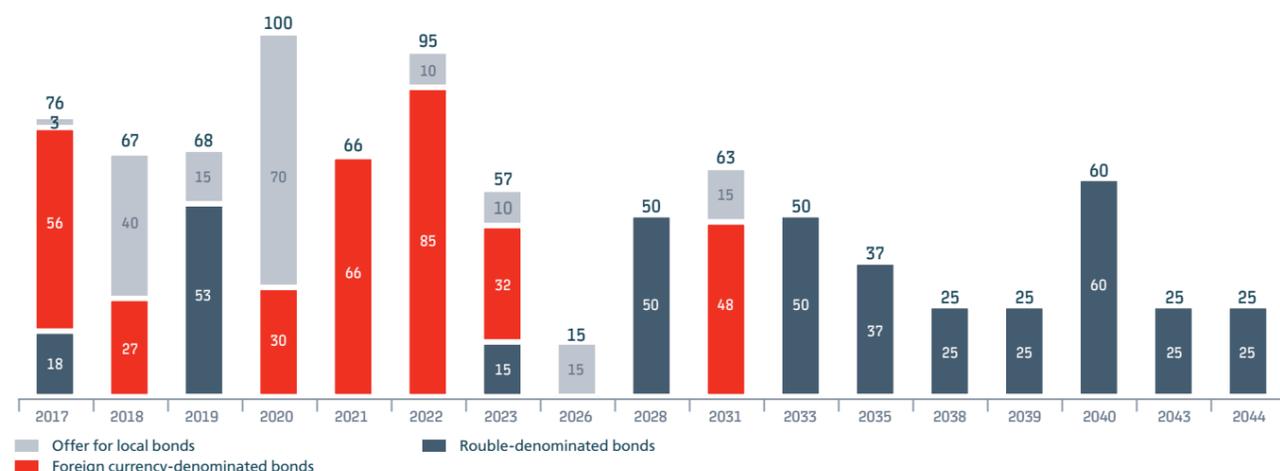
USD 680 mln. The redeemed bonds were replaced with funds from the placement of USD 500 mln worth of new Eurobonds with maturity in 4 years and RUB 15 bln worth of Eurobonds with maturity in 7 years. The transactions were a key part of a programme being implemented by Russian Railways to optimise its loan portfolio whose goal is to reduce the volume and establish a balance schedule for the redemption of foreign-currency denominated liabilities.

The four-year USD 500-mln placement was made at the lowest rate for dollar-denominated Eurobonds in the Company's entire history – 3.45% p.a. The rate was set based on an eight-fold oversubscription of the bid book during the placement with a decrease by more than half of a percentage point of the initially announced rate of 4.0% p.a. The success of the transaction was marked by the high quality and diversification of the investors, among other things. Based

on the placement results, the geography of investors was distributed as follows: U.S. – 26%, UK – 21%, continental Europe and Russia – 17% each, Asia – 12% and investors from other regions – 7%.

The rouble-denominated placement of RUB 15 bln in Eurobonds was the first placement in the national currency by a corporate issuer since 2013. The 7-year placement period was the longest for a rouble-denominated Eurobond placement since 2012. During the book-building, the rate for which the benchmark was initially set at 9.5% was reduced to 9.2%, which is lower than the yield curve for Russian Railways bonds on the local market with a premium of less than 1% versus federal loan bonds (OFZ). Almost half of the placement was sold to major international funds and management companies, which purchased 48% of the Eurobonds

Debt repayment schedule of Russian Railways<sup>1</sup>



<sup>1</sup> For the body of debt. Liabilities as of 31 December 2016. Currency payments calculated using the currency exchange rates as of 31 December 2016.

### Local capital market

In 2016, Russian Railways placed RUB 40 bln worth of long-term rouble-denominated market bonds, which replace financing from the National Wealth Fund intended to implement a programme to purchase traction rolling stock in 2016.

The funds from the National Wealth Fund were replaced in coordination with the Government of the Russian Federation in order to ease the burden on the state budget. The bonds were placed in favour of private pension funds.

## Work with ratings agencies and investors

With the easing of geopolitical tensions and restoration of trust in the Russian economy among international investors in 2016, Standard & Poor's and Fitch revised their outlook on the sovereign credit rating of the Russian Federation from 'negative' to 'stable'. In accordance with the methodology of the agencies, the change in the sovereign rating automatically triggered similar actions for the ratings of a number of quasi-sovereign Russian issuers, including Russian

Railways.

As of the end of the year, the rating of Russian Railways corresponded to the rating of the Russian Federation and stood at BB+/Ba1/BBB- from Standard & Poor's, Moody's and Fitch, respectively, with a 'stable' outlook from Standard & Poor's and Fitch and a 'negative' outlook from Moody's. In their reports, the agencies once again provided a positive assessment of the quality of work of Russian Railways

based on the management of the loan

portfolio structure and noted the long repayment terms, moderate debt burden, stable financial indicators as well as sustainable access to debt capital, including foreign capital.

### Credit ratings of the Russian Federation and Russian Railways as of the end of 2016

Issuer	Agency	Rating	Outlook
Russian Federation	Standard & Poor's	BB+	Stable
	Moody's	Ba1	Negative
	Fitch	BBB-	Stable
Russian Railways	Standard & Poor's	BB+	Stable
	Moody's	Ba1	Negative
	Fitch	BBB-	Stable

In 2016, Russian Railways continued a bilateral dialogue with Russian and foreign financial investors both in the format of bilateral meetings as well

as at industry-based conferences. The central event was the Company's road show in September devoted to its return to the international capital market

with the first Eurobond placement in two years. In addition, a traditional annual corporate investor's day was held in London in December 2016

## Leasing

Russian Railways makes decisions to attract lease financing based on the general principles of the debt policy taking into account IFRS approaches for assessing the level of financial debt.

In 2016, the Company continued to implement a programme called 'Renovation of track maintenance equipment in 2012–2016' using the leasing mechanism.

Following an open competition in 2012, a long-term lease agreement was concluded with VEB Leasing for the supply of track maintenance equipment manufactured by the Remputmash plant in Kaluga

worth a total of RUB 90.6 bln including VAT in 2012–2016. The financing rate under the lease agreement was 11.4% p.a.

The track maintenance equipment supplied under the leasing agreement is being used for routine railway infrastructure maintenance work.

Track maintenance equipment worth a total of RUB 88.47 bln including VAT was leased in 2012–2016, including track machinery worth a total of RUB 20.1 bln including VAT in 2016.

As of 1 January 2016, Russian Railways had total lease obligations of RUB 47.1 bln

including VAT.

A total of RUB 21.93 bln including VAT was spent on lease payments in the reporting year.

Total lease obligations with maturity prior to 2024 amounted to RUB 54.0 bln including VAT as of 31 December 2016.

### Dynamics of the leasing portfolio in 2015-2016. RUB bln including VAT

Indicator	2015	2016
Balance at start of year	42.3	47.1
Incurrence of obligations	25.3	28.8
Repayment of obligations	20.5	21.9
Balance at end of year	47.1	54.0

## Information disclosure and reporting policy

Information is disclosed in accordance with the Regulation on the Information Policy adopted by the Russian Railways Board of Directors. The Company discloses financial and accounting statements in accordance with Russian (RAS) and international (IFRS) standards based on the requirements of legislation.

The Company's annual report contains a range of information that

is essential for stakeholders and meets the requirements of regulatory acts for the structure and content of annual reports provided to shareholders to prepare for general meetings. The Company's internal documents are available on its website. Part of the essential information about the Company's activities is disclosed in English.

Russian Railways has issued bonds that trade on the MICEX-RTS Moscow Exchange and discloses information online in accordance with the requirements of the legislation of the Russian Federation concerning securities.

# Procurement activities

Russian Railways continued improving procurement activities and the accessibility of procurements for market participants in 2016. The Russian Railways website contains the necessary methodological materials on 'How to become a Russian Railways supplier, sample documentation forms, regulatory documents and recommendations to participants on how to prepare applications to take part in procurement procedures. A number of measures were implemented over the course of the year to simplify the procedure for participating in procurements.

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# Procurement activities

Russian Railways performs procurement activities in accordance with the Regulation on the Procurement of Goods, Work and Services for the Needs of Russian Railways, which was drafted based on the requirements of the legislation of the Russian Federation, in particular:

**1** Federal Law No. 223-FZ dated 18 July 2011 "On the Procurement of Goods, Work and Services by Certain Types of Legal Entities" (hereinafter Law No. 223-FZ);

**2** Resolutions of the Government of the Russian Federation and other documents adopted pursuant to the requirements of Law No. 223-FZ.

Procurements by Russian Railways totalled RUB 1,150.0 bln in 2016. Procurements resulting from competitive procedures amounted to RUB 724.2 bln in 2016, or 63.0% of the total procurement volume, with procurements based on Russian Railways administrative documents making up RUB 227.0 bln, or 19.7%, and procurements on other legitimate grounds accounting for RUB 198.8 bln, or 17.3% (purchase of electricity, utility services and medical services, among other things).

The proportion of procurements from a single supplier (contractor) was 37.0% in 2016, or RUB 425.8 bln, or the same level as the previous year.

More than half of the contracts based on competitive procedures were concluded as part of electronic procedures (63.1%), which is 20% higher than the indicator for the same period of last year. Starting from 2016, procurements in electronic form are conducted both on the electronic platform of Russian Railways as well as the electronic platforms of Fabrikant and TEK-Torg.

In 2016, Russian Railways continued to improve procurement activities and accessibility to procurements for market participants. The Russian Railways website contains the necessary methodological materials on 'How to become a Russian Railways supplier', sample documentation forms, regulatory documents and recommendations to participants on the preparation of applications to participate in procurement procedures.

A number of measures were implemented during the reporting year to simplify the procedure for participating in procurements:

- the list of requirements for procurement participants

and the list of documents requested from participants were streamlined;

- a competitive selection was organised for the procurement of goods, work and services worth up to RUB 500,000;
- a mechanism was developed for feedback with suppliers, including the establishment of a hotline, a complaint review procedure and an information section on procurement activities issues on the Russian Railways website.

In order to attract small- and medium-sized enterprises (hereinafter SME) to the Company's procurements, the following measures were implemented over the last year:

- a list of goods, work and services that are procured from SME was finalised and posted on the Russian Railways website in the unified information system;
- the Russian Railways website created a section 'Information for SME' that contains information about support

measures for SME, a partnership programme with SME, a 'one-stop shop' for SME to submit proposals on innovative goods, work and services;

- procurements among SME started being held solely in electronic format and the cost of the electronic signature key was reduced;
- forums and seminars were organised for SME suppliers.

On 14 October 2016, the conference 'Procurements of Russian Railways. Open Dialogue' was held in Moscow with the participation of Russian Railways President Oleg Belozеров, Federal Corporation for the Development of Small- and Medium-Sized Enterprises CEO Alexander Braverman, the heads of core Russian Railways departments and business representatives.

The conference was attended by roughly 1,500 people, including more than 900 located in the auditoriums of 16 railways from Kaliningrad to Khabarovsk. As part of preparations for the meeting, more than 400 questions were received from suppliers

with responses posted on the Russian Railways website in the 'Tenders' section.

As a result of improvements to procurement activities in 2016, the Company managed to:

- increase the average number of participants from 2.0 (in 2015) to 2.7;
- reduce the Company's expenses and increase savings during procurements from RUB 4.7 bln (in 2015) to RUB 10.8 bln;
- comply with the standards set by the legislation of the Russian Federation for procurements from SME, in particular the volume of purchases, in which only SME can participate amounted to RUB 61.3 bln, or 21.1%, in 2016 with the required standard being 10%.

RUB **1,150** bln  
total volume of participants in 2016

**63.1%** of contracts  
were concluded based on electronic procedures

RUB **10.8** bln  
savings during procurements in 2016

# Corporate governance

Russian Railways is gradually carrying out an organisational reform in which the objective is to build a corporate governance system for the Russian Railways Group.

Russian Railways is committed to a transition from the operational management of the activities of subsidiaries and affiliates to strategic management and is introducing the best corporate practices.

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# Corporate governance system

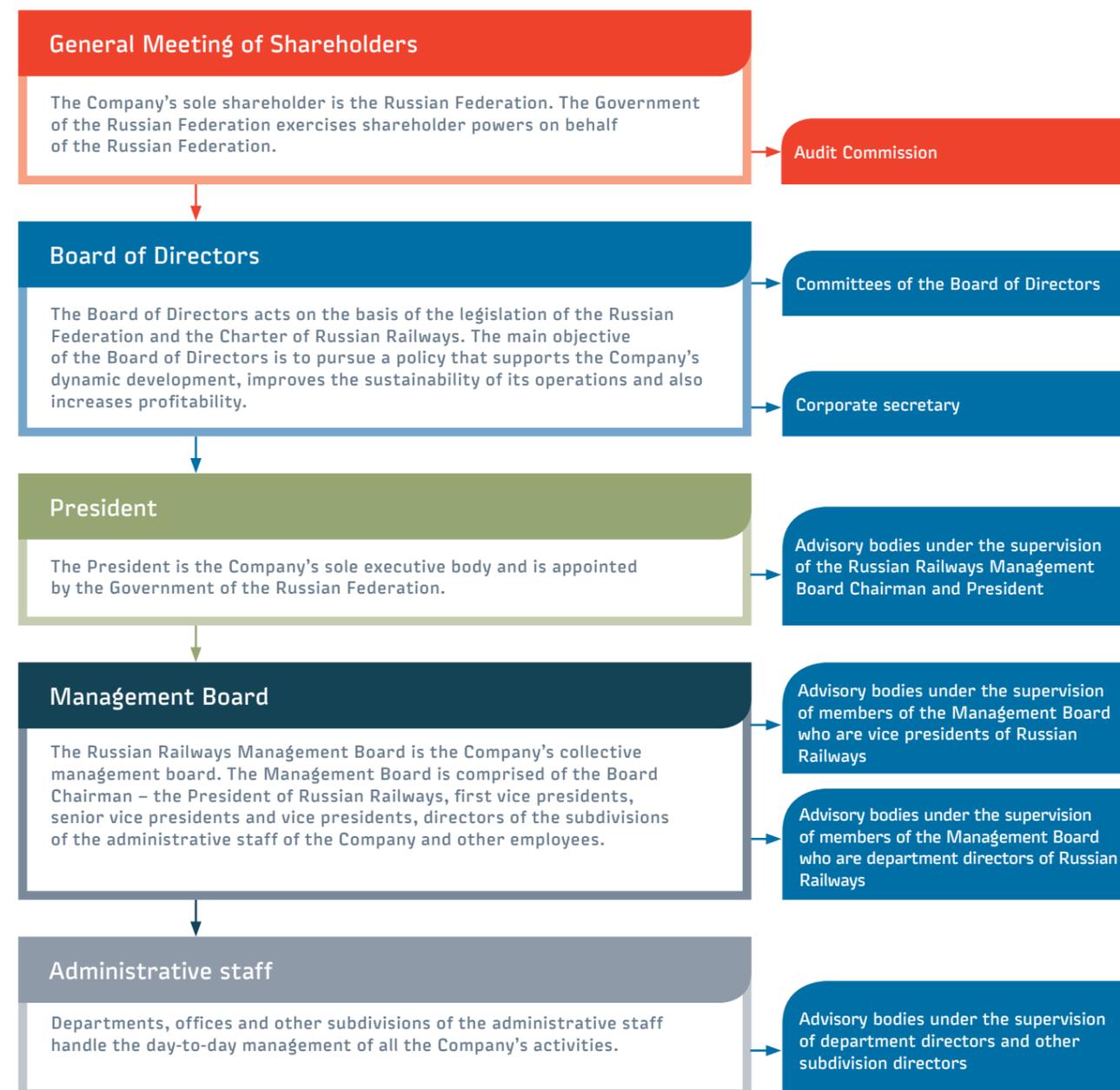
The corporate governance system in place at the Russian Railways Group allows for:

- 1 implementing the policy of Russian Railways, including the dividend policy, with respect to subsidiaries;
- 2 establishing the management and supervisory bodies of subsidiaries;
- 3 monitoring the business planning process and financial and economic activities of S&A;
- 4 monitoring the disposal of the non-core assets of Russian Railways subsidiaries;
- 5 interacting with shareholders and investors while observing the rights of minority shareholders, including when arranging transactions associated with the purchase and sale of stakes in S&A;
- 6 balancing the goals of the Russian Railways Group and the strategic activities of the Group's companies.

The following best practices are employed as part of the corporate governance system established at the Russian Railways Group:

- the involvement of independent directors in the work of the Russian Railways Board of Directors and the boards of directors of subsidiaries. The Russian Railways Board of Directors includes three independent directors;
- based on the annual general meetings of shareholders held in 2016, independent directors were involved in the work of the boards of directors of the 17 largest subsidiaries;
- Russian Railways subsidiaries conducted most of the key measures to introduce key provisions of the Code of Corporate Governance over the course of 2015-2016;
- a treasury control system has been established for the Group's subsidiaries;
- work is being conducted to introduce the provisions of the Code of Corporate Governance at Russian Railways according to the action plan (road map) approved by the Russian Railways Board of Directors on 12 December 2016;
- the committees under the boards of directors consider agenda items on a tentative basis. Three committees operate under the Russian Railways Board of Directors: the Audit and Risk Committee, the Personnel and Remuneration Committee and the Strategic Planning Committee. Committees under the boards of directors functioned at 26 major companies that are part of the Russian Railways Group.

## Management structure of Russian Railways



## General Meeting of Russian Railways Shareholders

The supreme governing body of Russian Railways is the General Meeting of Shareholders. In accordance with Article 47 of the Federal Law 'On Joint-Stock Companies', the resolutions of the General Meeting of Shareholders shall be adopted unanimously by the sole shareholder – the Government of the Russian Federation – and documented in writing in the form of resolutions and orders.

The resolutions of the Annual General Meeting of Shareholders of Russian Railways in 2016 were documented by Order No. 1370-r of the Government of the Russian Federation dated 30 June 2016.

### Agenda items:

- approval of the annual report and balance sheet for 2015, including the profit and loss statement for 2015;
- spending on dividend payments for Russian Railways common shares for 2015;
- spending on the payment dividends on Russian Railways common shares for 2015;
- spending on remuneration for members of the Company's Board of Directors;
- spending on remuneration for members of the Company's Audit Commission;

- determining the number of members of the Board of Directors;
- the appointment of members of the Board of Directors;
- determining the number of members of the Audit Commission;
- the appointment of members of the Audit Commission;
- approval of the auditor for 2015.

In addition to the Annual General Meeting of Shareholders, there were eight Extraordinary General Meetings of Shareholders in the reporting year on matters concerning an increase in the Company's charter capital, amendments to the Charter and Appendices thereto and the early termination of the powers and election of the Company's Board of Directors for which the resolutions are documented in Orders of the Government of the Russian

Federation No. 160-r dated 5 February 2016, No. 893-r dated 13 May 2016 and No. 2706-r dated 17 December 2016 as well as Resolutions of the Government of the Russian Federation No. 66 dated 4 February 2016, No. 80 dated 5 February 2016, No. 258 dated 1 April 2016, No. 1333 dated 10 December 2016 and No. 1379 dated 17 December 2016.

## Russian Railways Board of Directors

The Board of Directors is the key component in the corporate governance of Russian Railways and acts on the basis of the legislation of the Russian Federation, the Charter of Russian Railways approved by Resolution No. 585 of the Government of the Russian Federation dated 18 September 2003 and the Regulation on the Russian Railways Board of Directors approved by Order No. 265-r of the Government of the Russian Federation dated 25 February 2004.

The main objective of the Board of Directors is to pursue a policy that supports the Company's dynamic development, improves the sustainability of its operations and also increases profitability.

Independent directors have been elected to the Russian Railways Board of Directors since 2008 in accordance with international corporate governance practices.

In 2016, changes were made to the Russian Railways Board of Directors: in accordance with the resolution of an Extraordinary General Meeting of Shareholders (Order No. 893-r of the Government of the Russian Federation dated 13 May 2016), Dmitry Komissarov and Vladimir Yakunin resigned from the Board of Directors, the number of Board members was increased to twelve people, and the following new members of the Board of Directors were elected:

- Kirill Dmitriev – CEO of RDIF Management Company LLC;
- Sergey Nedoroslev – Chairman of the Board of Directors of KASKOL Group LLC;

- Nikolay Podguzov – Deputy Minister of Economic Development of the Russian Federation;
- Alexey Tsydenov – Deputy Minister of Transportation of the Russian Federation.

Under a resolution of the Board of Directors dated 19 May 2016, Arkady Dvorkovich was elected Chairman of the Russian Railways Board of Directors.

The current Russian Railways Board of Directors was elected with twelve members, three of whom are independent directors:

- representatives of the Russian Federation:
  - Oleg Belozеров;
  - Grigory Berezkin;
  - Arkady Dvorkovich;
  - Kirill Dmitriev;
  - Andrey Ivanov;

- Hartmut Mehdorn;
- Nikolay Podguzov;
- Alexander Ryazanov;
- Alexey Tsydenov;

- independent directors:
  - Sergey Nedoroslev;
  - Vasily Sidorov;
  - Sergey Stepashin

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

## Biographical information about members of the Russian Railways Board of Directors



**Arkady Dvorkovich**  
Chairman of the Russian Railways Board of Directors

Mr Dvorkovich was born in 1972. He graduated from the Economics Faculty of Lomonosov Moscow State University with a degree in economic cybernetics and the New Economic School with a master's degree in economics in 1994. He graduated from Duke University in North Carolina with a master's degree in economics in 1997.

### Professional experience

- 1994 – Consultant, Senior Expert, Chief Executive and Scientific Director, Economic Expert Group, Ministry of Finance of the Russian Federation;
- 2000 – Expert at the Centre for Strategic Research;
- August 2000 – Adviser to the Minister for Economic Development and Trade of the Russian Federation;
- 2001 – Deputy Minister for Economic Development and Trade of the Russian Federation;
- 2004-2008 – Director of the Experts' Directorate of the President of the Russian Federation;
- 2008-May 2012 – Aide to the President of the Russian Federation;
- 21 May 2012 – Appointed Deputy Chairman of the Government of the Russian Federation under a decree of the President of the Russian Federation;
- 2015 – Chairman, Russian Railways Board of Directors.

### Government and industry awards:

Medal 'For Contribution to the Establishment of the Eurasian Economic Union (1st class)'; Order of Honour; Order 'For Services to the Fatherland (4th class)'; Medal 'For Service to the Motherland (2nd class)'; Medal 'In Commemoration of the 1,000th Anniversary of Kazan'; Order 'For Service to the Italian Republic' (Italy); Order of Friendship of Peoples (Belarus); Gratitude of the President of the Russian Federation.



**Oleg Belozеров**  
President of Russian Railways

Mr Belozеров was born in 1969. He graduated from St Petersburg State University of Economics and Finance with a major in economics and industrial planning in 1992. He is a candidate of economic sciences.

### Professional experience

- 1998–2000 – Deputy Commercial Director, Head of the Logistics and Transportation Department, Lenenergo;
- 2000 – Deputy Director, Freight Motor Transport Enterprise No. 21;
- 2000-2001 – Head of the Financial and Economic Department, Office of the Plenipotentiary Representative of the Russian President in the North-West Federal District;
- 2001–2002 – Deputy Director, Corporate Property Management, LOMO;
- 2002-2004 – CEO, Russian Fuel Company;
- July-November 2004 – Deputy Director, Federal Road Agency;
- 2004-2009 – Director, Federal Road Agency;
- March 2009-May 2015 – Deputy Minister of Transportation of the Russian Federation;
- August 2011 – Assigned class rank – Full State Counsellor of the Russian Federation, 1st Class;
- 2014 – Member of the Russian Railways Board of Directors;
- May 2015 – First Deputy Minister of Transportation of the Russian Federation;
- August 2015 – President, Russian Railways.

### Government and industry awards:

Medal 'In Commemoration of the 300th Anniversary of St. Petersburg'; Badge 'Honoured Worker of the Fuel and Energy Complex'; Medal 'In Commemoration of the 1,000th Anniversary of Kazan'; Gratitude of the President of the Russian Federation; Medal of the Order 'For Merit to the Fatherland (1st Class)'; Anniversary Lapel Pin 'In Commemoration of the 200th Anniversary of the Water and Ground Transportation Office'; Order of Honour; Honorary Certificate of the Government Staff of the Russian Federation; Badge of Merit 'For Merit to Strengthening Cooperation with the Audit Chamber of the Russian Federation'; Lapel Pin 'Honoured Road Builder of Russia'; Honorary Certificate of the Audit Chamber of the Russian Federation; Badge 'Honoured Transport Worker of Russia'; Medal 'Federation Council: 20 Years'; Order 'For Merit to the Fatherland (4th Class)'; Honorary Certificate of the President of the Russian Federation.



Andrey Ivanov

Mr Ivanov was born in 1975. He graduated from Krasnoyarsk State University in 1997 with a major in law. His postgraduate studies include the Russian Academy of Public Service under the Russian President (Moscow) in 2009 with a focus on management and the Russian Academy of Public Service under the Russian President (Moscow) in 2010 with a focus on business.

**Professional experience**

- 1997-1998 – Research Assistant, Krasnoyarsk State University;
- 1998-2004 – Leading Specialist and Chief Specialist, Administration of the Krasnoyarsk Region; Advisor to the Krasnoyarsk Region Governor on Legal Matters and Local Self-government; 29 December 2001 – Advisor to the Krasnoyarsk Region Governor on Legal Matters and Local Self-government; Department Director;
- 2004-2008 – Vice President, Siberian Engineering Holding; First Vice President, Siberian Engineering Holding as of 14 August 2006;
- 2008 – Chairman of the Board of Directors, SM.art Investment Company;
- 2008-2012 – Deputy Director and Director, Department for Budget Policy in Innovation, Civilian Industry, Energy, Communications and Public-Private Partnership, Ministry of Finance of the Russian Federation;
- 2011 – Member of the Board of the Ministry of Finance of the Russian Federation;
- 2012 – Deputy Minister of Finance of the Russian Federation;
- 2014 – Member of the Board of Directors, Russian Railways.

**Government and industry awards:**

Gratitude of the Ministry of Agriculture of the Russian Federation; Medal of the Russian Prosecutor General's Office '290th Anniversary of the Russian Prosecutor General's Office'; Gratitude of the Ministry of Telecom and Mass Communications of the Russian Federation; Medal of the Order 'For Merit to the Fatherland (2nd Class)'; Silver Medal 'For Contribution to the Development of the Russian Agribusiness Industry' of the Ministry of Agriculture of the Russian Federation.



Sergey Stepashin

Mr Stepashin was born in 1952. He graduated from the Higher Political School of the USSR Ministry of Internal Affairs in 1973, the Military and Political Academy in 1981 and the Finance Academy under the Government of the Russian Federation in 2002.

He is a candidate of historical sciences, a doctor of legal sciences, professor, State Advisor on Justice of the Russian Federation and an Honorary Doctor of the Diplomatic Academy of the Ministry of Foreign Affairs.

**Professional experience**

- 1990-1993 – People's Deputy of the RSFSR, Chairman of the Committee of the Supreme Soviet of the Russian Federation on Defence and Security Affairs;
- 1993-1999 – First Deputy Minister of Security; Director, Federal Counterintelligence Service; Director, Federal Security Service; Minister of Justice; Minister of Internal Affairs of Russia;
- 1999 – First Deputy Prime Minister; Minister of Internal Affairs; Prime Minister of the Russian Federation;
- After being elected to the State Duma in December 2009, Mr Stepashin chaired the Anti-Corruption Committee;
- 2000-2013 – Chairman, Audit Chamber of the Russian Federation;
- 2014 – Member of the Board of Directors, Russian Railways;
- 2015 – Member of the Board of Directors, SoyuzNefteGaz Intergovernmental Oil Company

**Government and industry awards:**

Order 'For Merit to the Fatherland (2nd Class)'; Order 'For Merit to the Fatherland (3rd Class)'; Order 'For Merit to the Fatherland (4th Class)'; Order of Courage; Medal 'For Distinction in Military Service (1st and 2nd Class)'; Medal 'For Impeccable Service in Protecting Public Order'.



Grigory Berezkin

Mr Berezkin was born in 1966. He graduated from the Faculty of Chemistry of Moscow State University in 1988. He defended his candidacy thesis for a major in petrochemicals in 1993.

**Professional experience**

- 2000-2003 – CEO, ESN Energo, which manages the company Kolenergo; Member of the Board of Directors, Kolenergo;
- 2004-2007 – Member of the Board of Directors, UES of Russia;
- 2006 – Chairman of the Board of Directors, ESN;
- 2007-2010 – Member of the Board of Directors, Freight One;
- 2008-2011 – Member of the Board of Directors, SG-trans;
- Member, Management Bureau, Russian Union of Industrialists and Entrepreneurs (RUIE); Chairman, RUIE Commission for Electricity; Chairman, RUIE Commission for Independent Directors;
- Member of the General Council, All-Russia Public Organization Delovaya Rossiya;
- 2010 – Member of the Board of Directors, Russian Railways.



Vasily Sidorov

Mr Sidorov was born in 1971. He graduated from Moscow State Institute of International Relations under the Russian Ministry of Foreign Affairs in 1993 with a major in international public law and the Wharton School of Business of the University of Pennsylvania with a major in finance.

**Professional experience**

- 2000-2003 – First Vice President, Sistema-Telecom;
- 2003-2006 – President, MobileTeleSystems (MTS);
- 2006-2010 – Co-owner, Telecom- Express Group;
- 2010 – Managing Partner, Euroatlantic Investments Ltd;
- 2012 – CEO, ARIDA;
- 2012 – Member of the Board of Directors, Russian Railways;
- 2013 – Member of the Board of Directors, Aeroflot; 2014 – Director, Audit Commission under the Aeroflot Board of Directors;
- Member, Expert Council under the Government of the Russian Federation; Member, Shareholder Advisory Council, VTB Bank.
- Recipient of the 'Director of the Year' prize (AID-RUIE-PWC) in 2016 in the 'Independent Director' category.



Hartmut Mehdorn

Mr Mehdorn was born in Warsaw in 1942. He graduated from the Faculty of Engineering of Berlin Technical University (diploma in engineering). He is an Honorary Doctor of Engineering Sciences.

**Professional experience**

- 1965-1966 – Focke-Wulf Engineering Development Department;
- 1966-1978 – Worked at Vereinigte Flugtechnische Werke aircraft manufacturer, then served as director of production at Messerschmitt-Bölkow-Blohm (MBB);
- 1979-1984 – Member of the Board of Directors, Airbus Industrie S.A. in Toulouse (France);
- 1984-1989 – Headed the MBB-Transport- und Verkehrsflugzeuge group of aircraft manufacturers;
- 1985 – Member of the MBB Board of Directors;
- 1989-1992 – Chairman of the Board of Directors, Deutsche Airbus GmbH;
- 1992-1995 – Member of the Management Board, Deutsche Aerospace AG;
- 1995-1999 – Chairman of the Management Board, Heidelberger Druckmaschinen AG printing press manufacturer;
- 1997-1999 – Member of the Management Board of the North Rhine electricity company Westphalia Lands Rheinisch-Westfälisches Elektrizitätswerk AG;
- 1999-2009 – Chairman of the Management Board, Deutsche Bahn AG in Berlin;
- 2011-2013 – Chairman of the Management Board of Germany's second largest airline Air Berlin;
- 2011 – Member of the Board of Directors, Russian Railways;
- 2013-2015 – Chairman of the Management Board, Berlin Brandenburg Airport.



Alexander Ryazanov

Mr Ryazanov was born in 1953. He graduated from Gubkin Russian State University of Oil and Gas in 1979 and from the All-Russian State Distance-Learning Institute of Finance and Economics in 1993.

**Professional experience**

- 1979-1999 – Rose from instrumentation technician to General Director of Surgut Gas Processing Plant;
- 1999 – Deputy of the Regional Duma (Tyumen) and Deputy of the Duma of the Khanty-Mani Autonomous District (Surgut);
- 1999-2001 – Deputy of the State Duma of the Russian Federation, Deputy Chairman of the Property Committee of the State Duma of the Federal Assembly of the Russian Federation;
- 2001-2006 – Deputy Chairman and Member of the Management Board, Gazprom;
- 2007 – Chairman of the Board of Directors, Russian Holding Company (Moscow);
- 2007 – Member of the Board of Directors, BIOTEchnologies;
- 2008 – Member of the Board of Directors, Russian Railways;
- 2009-2010 – Chairman of the Management Board, Sroytransgaz;
- 2010 – Member of the Board of Trustees, Moscow State Institute (University) of International Relations under the Russian Ministry of Internal Affairs (public activities);
- 2011-2016 – CEO, Plyushchikha Management Company;
- 2012 – Member of the Management Board and Member of the Committee for the National Register of Independent Directors under the Russian Union of Industrialists and Entrepreneurs (public activities);
- 2013 – Member of the Board of Directors, Petroltool.

**Government and industry awards:**

Medal of the Order 'For Merit to the Fatherland (2nd Class)'; Medal 'For Developing Subsoil Resources of West Siberia'; awarded the title 'Honoured Worker of the Gas Industry'.



Kirill Dmitriev

Mr Dmitriev was born in 1975. He graduated from Stanford University with honours and has a bachelor's degree in economics. In 2000, he earned his MBA with honours (Baker Scholar) at Harvard Business School.

**Professional experience**

- Before taking over the Russian Direct Investment Fund in 2011, he headed major direct investment funds and concluded a number of landmark transactions for Russia: the sale of Delta Bank to GE, Delta Credit to Societe Generale and shares in STS Media to Fidelity Investments, among others. He began his career at Goldman Sachs and McKinsey & Company;
- He is Deputy Chairman of the Investment Council under the Chairman of the State Duma of the Russian Federation and the Vice President of the Russian Union of Industrialists and Entrepreneurs. He was appointed by the Russian President as a member of the BRICS and APEC business councils, is listed on the World Economic Forum's 'Young Global Leaders' and is a member of the boards of directors at Rostelecom, Gazprombank and Mother and Child as well as the boards of trustees of the Mariinsky Theatre and Lomonosov Moscow State University;
- 2011 – Became Russia's sole representative in the rating '100 Most Influential Professionals in the FDI Industry over the Previous 10 Years' (Private Equity International);
- 2011 – CEO, RDIF Management Company LLC;
- 2016 – Member of the Board of Directors, Russian Railways.



Serġey Nedoroslev

Mr Nedoroslev was born in 1963. He graduated from Altai State University in 1985 with a degree in physics and worked as an engineer at the General Physics Department of the National Research Council. In 1989, he studied at the graduate school of the Moscow Institute of Electronic Technology with a major in semiconductor and related device manufacturing technology. In 2007, he defended his dissertation on the subject 'Corporate governance at joint-stock companies with dominant state participation'. He is a candidate of economic sciences.

**Professional experience**

- 1987 – Worked at companies he established. Founder of the Kaskol Group and the STAN machine-tool company;
- Member of the Expert Council under the Government of the Russian Federation, Co-chairman of the All-Russian Public Organisation Delovaya Rossiya, Member of the Administrative Office of the Russian Engineering Union All-Russian Industrial Association of Employers;
- 2016 – Member of the Board of Directors, Russian Railways.



Alexey Tsydenov

Mr Tsydenov was born in 1976. He graduated from the Far Eastern State Transport University in 1998 with a major in transportation (railway) organisation and control and governance. He underwent professional training at the Russian Academy of National Economy and Public Service under the President of the Russian Federation in 2011 as part of a training programme for the senior-level executive candidate pool. He is a Full State Counsellor of the Russian Federation, 2nd class;

**Professional experience**

- 1998–2001 – Accountant, Sector Head, Marketing and Contractual Work Department, Far East Railway;
- 2002–2004 – General Director, Dalneftetrans;
- 2004–2006 – General Director, Far East Transport Group;
- 2006–2009 – Deputy Director, Railway Transportation State Policy Department, Ministry of Transportation of the Russian Federation;
- 2009–2012 – Department Head, Deputy Director, Industry and Infrastructure Department, Government of the Russian Federation;
- 2012 – Director, Federal Railway Transportation Agency;
- 2012–2017 – Deputy Minister of Transportation of the Russian Federation;
- 2017 – Member of the Board of Directors, Russian Railways.

**Government and industry awards:**

Order of Friendship, Lapel Pin 'Honoured Railway Worker' and other departmental awards.



Nikolay Podġuzov

Mr Podguzov was born in 1974. He graduated from St. Petersburg State Technical University in 1997 and from Moscow State Institute of International Relations (University) under the Russian Ministry of Foreign Affairs in 2000.

**Professional experience**

- 2000–2003 – Leading Specialist, Chief Specialist and Consultant, Department of the Ministry of Finance of the Russian Federation;
- 2003–2006 – Vice President, Department of Trust Investment Bank;
- 2006–2010 – Vice President and Department Director, Renaissance Capital-Financial Consultant;
- 2010–2012 – Department Head and Office Head, VTB Capital;
- 2012–2013 – Deputy Director, Economics and Finance Department of the Government of the Russian Federation;
- 2013 – Deputy Minister of Economic Development of the Russian Federation;
- 2016 – Member of the Board of Directors, Russian Railways.

## Information about meetings of the Russian Railways Board of Directors in 2016

Meetings of the Board of Directors are held in accordance with its work plan, which is compiled based on proposals from the chairman of the Board of Directors, the president, members of Management Board, members of the Audit Commission and the auditor of Russian Railways. The work plan is prepared for six months and approved by the Board of Directors. Extraordinary meetings of the Board of Directors may also be convened if necessary.

In 2016, the Board of Directors held a total of 19 meetings (6 in person and 13 with absentee voting) at which matters were considered and more than 112 resolutions were adopted on various matters concerning the Company's activities. The most important issues are considered at meetings held in person.

**Attendance of meetings of the Russian Railways Board of Directors by Board members**

Board of Directors member	Number of meetings that a Board member could have attended/attended
Oleġ Belozarov	19/19
Grigory Berezkin	19/19
Arkady Dvorkovich	19/19
Kirill Dmitriev <sup>2</sup>	10/10
Andrey Ivanov	19/14
Dmitry Komissarov <sup>1</sup>	9/9
Hartmut Mehdorn	19/19
Serġey Nedoroslev <sup>2</sup>	10/10
Nikolay Podġuzov <sup>2</sup>	10/10
Alexander Ryazanov	19/19
Vasily Sidorov	19/18
Serġey Stepashin	19/19
Alexey Tsydenov <sup>2</sup>	10/10
Vladimir Yakunin <sup>1</sup>	9/1

<sup>1</sup> Resigned from the Russian Railways Board of Directors on 13 May 2016.

<sup>2</sup> Joined the Russian Railways Board of Directors on 13 May 2016.

## Performance report of the Board of Directors in 2016

The Board of Directors determines the Company's business priorities and approves its long-term plans and core programmes, including the budgets and investment programme. The main objective of the Board of Directors is to pursue a policy that supports the Company's dynamic development, improves the sustainability of its operations and also increases profitability.

**In order to implement these functions, the Russian Railways Board of Directors in 2016:**

- approved and endorsed an adjustment to the Russian Railways Investment Programme for 2016;
- fully approved proposals of Russian Railways on drafts of the consolidated financial plan of Russian Railways and its core subsidiaries and the Russian Railways Investment Programme for 2017;
- approved the proposals of Russian Railways for an adjustment to the Russian Railways Investment Programme and Financial Plan for 2016 and based on operational results for the first half of 2016;
- approved the Russian Railways Investment Programme and Financial Plan for 2017 and the planned period of 2018 and 2019;
- fully approved the draft terms of reference for an external independent cost audit of Russian Railways taking into account the results of an express analysis of Russian Railways operations to identify priority reserves for optimisation as well as the criteria for selecting a consultant to perform work;
- tentatively approved the Russian Railways Annual Report for 2015 and prepared recommendations for the Company's Annual General Meeting of Shareholders on the approval of the report;
- prepared recommendations for the Russian Railways Annual General

Meeting of Shareholders on the approval of the Company's annual accounting (financial) statement for 2015, including the profit and loss statement;

- took under advisement the consolidated financial statement of Russian Railways for 2015 prepared in accordance with IFRS;
- took under advisement the report on the procurement activities of Russian Railways for 2015;
- approved proposals on the organisation of the pricing monitoring system for the main range of procured goods, work and services of Russian Railways and its subsidiaries and affiliates. Took under advisement a comparative analysis of the procurement activities of Russian Railways for 2015 for the main range of procured goods, work and services, including the volume of procurements, and the procurement activities of major legal entities covered by Federal Law No. 223-FZ dated 18 July 2011 'On Procurements of Goods, Work and Services by Certain Types of Legal Entities';
- considered the development and adoption of local regulatory acts of Russian Railways that establish the standardisation of procurements of certain types of goods, work and services as well as the mandatory application of procurement standards when planning and performing the business activities of Russian Railways as part of the execution of Directive No. 2793p-P13 of the Government of the Russian Federation dated 19 April 2016;
- approved an increase in spending by Russian Railways on charity in 2016, approved the Sponsorship and Charitable Activities Policy of Russian Railways and approved spending focuses and the allocation of funds for the sponsorship and charitable activities of Russian Railways and its subsidiaries;
- approved the road map developed by Russian Railways to organise risk

management and internal control processes in preventing and combating corruption at Russian Railways;

- considered issues concerning the reorganisation of certain educational institutions of Russian Railways (public and private preschool educational institutions) as well as the reorganisation of certain general educational institutions of Russian Railways (private general educational institutions);
- supported the main approaches for updating the Concept for the Reform of Healthcare Facilities of Russian Railways taking into account the recommendations of the Strategic Planning Committee of the Russian Railways Board of Directors, which was coordinated with the Ministry of Health of the Russian Federation;
- approved the Non-core Asset Disposal Programme of Russian Railways and the Register of Non-core Assets of Russian Railways.

In addition, the Russian Railways Board of Directors established that a list of KPI for quarterly bonuses to the Russian Railways president (approved by the Russian Railways Board of Directors on 18 May 2015) with amendments made by the Russian Railways Board of Directors on 15 December 2015 shall apply for quarterly bonuses to the Russian Railways president when summarising the operational results for the second quarter of 2016. The Personnel and Remuneration Committee of the Russian Railways Board of Directors along with Russian Railways management were instructed to continue work to improve the 'Integral Operating Efficiency Indicator' of Russian Railways as well as the procedure for its approval and monitoring by the Russian Railways Board of Directors.

The Board of Directors determines the Company's policy for the remuneration of members of the Board of Directors, executive bodies as well as other key executives of the Company. As part of performing these functions, the Russian Railways Board of Directors prepared recommendations for the Company's Annual General Meeting of Shareholders

on matters concerning the payment of remuneration to members of the Board of Directors and Audit Commission.

The Russian Railways Board of Directors set the target value for ROIC on unregulated types of activities for 2015 at the actual level for 2015 and also established a generalised qualitative assessment of the activities of the Management Board and Russian Railways as a whole based on the results for 2015.

In accordance with the Regulation on the Remuneration System for Members of the Russian Railways Management Board approved by a resolution of the Russian Railways Board of Directors, the Russian Railways Board of Directors approved the final fund for the long-term bonus payments to the the Russian Railways Management Board for 2013-2015.

In accordance with the Company's Charter, the Board of Directors plays a key role in decision-making with respect to S&A.

### Remuneration for members of the Board of Directors

Shareholders decided at the Annual General Meeting in 2016 to pay remuneration to the Board of Directors for the 2015/2016 corporate year in the amount and manner prescribed by the Regulation on Remuneration and Compensation Paid to Members of the Russian Railways Board of Directors (approved by the decision of the Russian Railways Board of Directors on 19 May 2016).

Under the Regulation developed in accordance with the recommendations of the Russian Federal Property Management Agency and the Code of Corporate Governance, remuneration is calculated using a formula based on the main component of remuneration, which is equal to RUB 2,000,000 and depends on the participation of members of the Board of Directors in Board meetings.

In 2016, the Russian Railways Board of Directors approved a list of S&A for which the Board of Directors adopts decisions in accordance with sub-clause 23 of clause 71 of the Russian Railways Charter. The Board of Directors considered reports on budget execution by key S&A of the Russian Railways Group and determined the position of Russian Railways (Company representatives) at meetings of the boards of directors of the Russian Railways Group's S&A on the following agenda items: on the execution of the 2015 budget, the approval of the budget for 2016, the election of the sole executive body and the approval of the agenda for general meetings of shareholders and meetings of the boards of directors of S&A.

The Russian Railways Board of Directors monitors the corporate governance practice at the Company.

In 2016, the Russian Railways Board of Directors approved an action plan

**Board members are paid additional remuneration for performing additional functions that is calculated according to the base portion of remuneration and increased by the following ratio:**

- 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 Chairman of the Board of Directors;
- 1.5 for a member of the Board of Directors who performs the functions of a member of a committee under the Board of Directors.

Additional remuneration shall be paid for participation in the work of committees, provided that the member of the Board of Directors personally attended (submitted a written opinion for)

(road map) to introduce the provisions of the Corporate Governance Code, made amendments to the Regulation on the Audit and Risk Committee of the Russian Railways Board of Directors, made amendments to the Regulation on the Procurement of Goods, Work and Services for the Needs of Russian Railways approved by the Russian Railways Board of Directors on 30 June 2014 and supported the main approaches for updating the Concept for the Reform of Healthcare Facilities of Russian Railways.

Meetings of the Russian Railways Board of Directors and the committees of the Russian Railways Board of Directors, high-quality preparations for such meetings and active participation in such meetings by members of the Board of Directors and committee members ensure the Board of Directors functions effectively.

at least 75% of the in-person 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 shall be 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 payments from commercial organisations by the legislation of the Russian Federation.

According to the decision of the Russian Railways Annual General Meeting of Shareholders, a total of RUB 39,400,000 were spent on remuneration paid to members of the Russian Railways Board of Directors.

# Committees of the Russian Railways Board of Directors

In order to tentatively consider the most important issues and prepare the relevant recommendations for the Russian Railways Board of Directors, the Company has the following committees:

- 2 Audit and Risk Committee;
- 3 Personnel and Remuneration Committee;
- 4 Priority Investment Projects Committee.

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

## 1 Strategic Planning Committee;

The committees are elected

## Strategic Planning Committee

The purview of the Strategic Planning Committee includes preparing recommendations for the Russian Railways Board of Directors on the following matters:

- determining the strategic goals of the activities of the Company and S&A as well as adjusting

and monitoring the implementation of the strategies of the Company and S&A;

- the Company's dividend policy;
- the Company's participation in other organisations;

- the innovative activities of the Company and S&A;
- the approval of long-term plans and the main programmes for the Company's activities, including the annual budget and investment programme.

The Strategic Planning Committee held 15 meetings during the reporting year.

The Strategic Planning Committee prepared recommendations for the Russian Railways Board of Directors to adopt decisions, including on the following matters:

- reviewing the list of activities that aimed to generate additional revenues for Russian Railways in 2016;
- schedules for updating the development strategies of Gefco and subsidiaries and affiliates included in the list in accordance with sub-clause 23 of clause 71 of the Charter of Russian Railways;
- the implementation status of the Moscow-Kazan HSR project;
- the reorganization of certain educational institutions of Russian Railways;

- the preparation of the updated Concept for the Reform of the Healthcare Facilities of Russian Railways;
- the external independent cost audit of Russian Railways and the development of an action plan for their optimisation for 2016 and the medium term;
- attracting private pension savings to invest in public railway transport, including for the implementation of the Investment Programme of the Russian Railways Group, including based on the example of Blagosostoyanie NPF;
- the implementation of the Financial Plan and Investment Programme of Russian Railways in the first half of 2016;
- the review of the draft terms of reference and criteria for selecting a consultant and the draft contract

- for the external independent cost audit of Russian Railways;
- the development (updating) of plans (programmes) to reduce operating costs by 10%;
- the activities of the infrastructure complex of Russian Railways;
- the activities of the passenger complex of Russian Railways;
- the restoration of Russian Railways' corporate control over TransContainer and RZD Logistics;
- innovative development;
- the projects of the consolidated financial plan of Russian Railways and its main subsidiaries and the Investment Programme of Russian Railways for 2017 and the planned period of 2018 and 2019.

Members of the Strategic Planning Committee under the Russian Railways Board of Directors as of 31 December 2016

No.	Name	Position
1	Alexander Ryazanov	Chairman of the Strategic Planning Committee, Member of the Russian Railways Board of Directors
2	Grigory Berezkin	Member of the Russian Railways Board of Directors
3	Kirill Dmitriev	Member of the Russian Railways Board of Directors
4	Andrey Ivanov	Member of the Russian Railways Board of Directors
5	Sergey Nedoroslev	Member of the Russian Railways Board of Directors
6	Nikolay Podguzov	Member of the Russian Railways Board of Directors
7	Vasily Sidorov	Member of the Russian Railways Board of Directors
8	Alexey Tsydenov	Member of the Russian Railways Board of Directors
9	Vadim Mikhailov	Russian Railways Senior Vice President
10	Sergey Maltsev	Russian Railways Senior Vice President
11	Alan Lushnikov	Assistant to the Deputy Chairman of the Government of the Russian Federation
12	Vasily Gorev	Russian Railways Corporate Secretary
13	Dmitry Komissarov	Chairman of the Board of Directors of Technology Company



## Audit and Risk Committee

The purview of the Audit and Risk Committee includes interaction with the Company's Audit Commission as well as preparing recommendations for the Russian Railways Board of Directors on the following matters:

- the Company's accounting (financial) statement;
- risk management, internal control and corporate governance;
- conducting an internal and external audit;
- determining the Company's position on matters involving the assessment of assets (property, shares, etc.)
- for the purposes of concluding transactions therewith;
- the approval of long-term plans and the main programmes for the activities of S&A as well as their annual budgets and reports on their execution.

The Audit and Risk Committee held seven meetings in 2016.

The Audit and Risk Committee prepared recommendations for the Russian Railways Board of Directors to adopt decisions, including on the following matters:

- determination of the starting (maximum) contract price for the provision of services involving the mandatory audit of the Russian Railways accounting (financial) statement for 2016;
- the coordination of the activity plan of the Zheldoraudit Internal Audit Centre of Russian Railways for 2016;
- the approval of the budget for the Zheldoraudit Internal Audit Centre of Russian Railways for 2016;
- the results of the procurement activities of Russian Railways for 2015, the first quarter, the first half and the first 9 months of 2016;
- the conclusion of the Russian Railways auditor based on the audit of the Company's consolidated financial statement for 2015;
- the conclusion of the Russian Railways auditor based on the audit of the Company's accounting (financial) statement for 2015;
- the preliminary approval of the annual accounting (financial) statement of Russian Railways for 2015 according to Russian accounting standards, including the profit and loss statement;
- the conclusion of the Russian Railways Audit Commission based on its audit of the Company's financial and business activities for 2015;
- the preliminary approval of the Russian Railways Annual Report for 2015;
- recommendations on the maximum amount of share dividends and the procedure for their payment for the Annual General Meeting of Russian Railways Shareholders based on the Company's results in 2015 as well as the distribution of Russian Railways net profit for 2015;
- recommendations to the Annual General Meeting of Shareholders for the approval of the Russian Railways auditor for 2016;
- the approval of the amount of payment for the services of the Russian Railways auditor for 2016;
- the determination of the position of Russian Railways (representatives of Russian Railways) at meetings of the boards of directors of Russian Railways S&A on matters concerning the approval of a report on the execution of the Company's budget for 2015;
- the approval of related party transactions;
- the approval of the road map developed by Russian Railways to organise risk management and internal control processes in preventing and combating corruption at Russian Railways;
- the approval of an action plan (road map) to introduce the Corporate Governance Code;
- the determination of the placement price for additional shares in Russian Railways.

### Members of the Risk and Audit Committee under the Russian Railways Board of Directors as of 31 December 2016

No.	Name	Position
1	Serġey Stepashin	Chairman of the Audit and Risk Committee, Member of the Russian Railways Board of Directors
2	Serġey Nedoroslev	Member of the Russian Railways Board of Directors
3	Vasily Sidorov	Member of the Russian Railways Board of Directors
4	Anatoly Chabunin	Russian Railways Vice President and Internal Control and Audit Director
5	Mikhail Beskhmel'nitsyn	Head of the Control and Analytical Service of the Russian Railways President
6	Alan Lushnikov	Assistant to the Deputy Chairman of the Government of the Russian Federation
7	Vasily Gorev	Russian Railways Corporate Secretary
8	Dmitry Komissarov	Chairman of the Board of Directors of Technology Company

## Personnel and Remuneration Committee

The purview of the Personnel and Remuneration Committee includes preparing recommendations for the Russian Railways Board of Directors on the following matters:

- the determination of the members of the Company's Management Board (except for the position of Management Board chairman and president);
- the endorsement of the concurrent service of the Management Board chairman and Management Board members in positions in the governing bodies of other organisations;
- the determination of the amount of remuneration and compensation to be paid to members of the Company's Audit Commission;
- the determination of the amount of remuneration and compensation to be paid to members of the Company's Board of Directors;
- the determination of the Company's position (representatives of Russian Railways) when the governing bodies of S&A consider agenda items included in the annual list approved by the Russian Railways Board of Directors for the General Meeting of Shareholders and meetings of the Board of Directors as regards the determination of the number of members of the Board of Directors, the election and early termination of the powers of members of the boards of directors of S&A, the adoption of a resolution on candidates for the heads
- the development and periodic revision of the Company's policy concerning remuneration for members of the Board of Directors, members of the Company's executive bodies and other key executives;
- the selection of an independent consultant on matters concerning remuneration for members of the Company's executive bodies and other key executives.

of the governing bodies and members of the oversight bodies of S&A and the termination of their powers;

Russian Railways Vice President Dmitry Shakhnov, Russian Railways Economics Department Director Irina Kostenets and Russian Railways Corporate Secretary Vasily Gorev take part in the work of the Personnel and Remuneration Committee under the Russian Railways Board of Directors as permanent invitees with the right to provide advice on agenda items in accordance with the Regulation on the Personnel and Remuneration Committee.

The Personnel and Remuneration Committee held nine meetings in 2016.

The Personnel and Remuneration Committee prepared recommendations for the Russian Railways Board of Directors to adopt decisions, including on the following matters:

- on the release and appointment of members of the Russian Railways Management Board;
- the determination of the position of Russian Railways (representatives of Russian Railways) at a meeting of the board of directors of Russian Railways S&A included in the list of Russian Railways subsidiaries and affiliates approved by the Russian Railways Board of Directors for which the Russian Railways Board of Directors adopts decisions in accordance with sub-clause 23 of clause 71 of the Russian Railways Charter on matters concerning the election of the general director of the company and the early termination of the powers and election of the company's board of directors;
- the endorsement of the concurrent service of Management Board members

in positions in the governing bodies of other organisations;

- recommendations to the Annual General Meeting of Shareholders on the payment of remuneration to members of the Russian Railways Board of Directors for its work in the 2015-2016 corporate year;
- recommendations to the Annual General Meeting of Shareholders on the payment of remuneration to members of the Russian Railways Audit Commission for its work in the 2015-2016 corporate year;
- the determination of a generalised qualitative assessment of the activities of the Management Board and Russian Railways as a whole for 2015;
- the approval of final fund for the long-term bonus payments to the Russian Railways Management Board for 2013-2015;
- proposals on the number of members and the regulation for the formation of the boards of directors of Russian Railways subsidiaries and affiliates;
- proposals on updates to the remuneration system for members of the boards of directors and committees of the boards of directors of Russian Railways subsidiaries and affiliates;
- proposals on updates to the Regulation on the Remuneration System for Members of the Russian Railways Management Board.

In addition, five joint committee meetings were held in 2016: four joint meetings

of the Strategic Planning Committee and Audit and Risk Committee, and one joint meeting of the Personnel and Remuneration Committee and the Audit and Risk Committee.

Recommendations were prepared at the joint meetings for the Russian Railways Board of Directors, including on the following matters:

- the optimisation and improved efficiency of spending on charity and sponsorship (taking into account Directive No. 5024p-P13 of the Government of the Russian Federation dated 31 July 2015:
  - the approval of the Sponsorship and Charitable Activities Policy of Russian Railways;
  - spending on charity and sponsorship of Russian Railways and its subsidiaries in 2016;
- the approval of the Non-core Asset Disposal Programme of Russian Railways and the Register of Non-core Assets of Russian Railways;
- the implementation status of the Moscow-Kazan HSR project;
- the allocation of additional funds to fund the Moscow-Kazan HSR project as part of an adjustment to the Russian Railways Investment Programme and Financial Plan for 2016.

### Members of the Personnel and Remuneration Committee under the Russian Railways Board of Directors as of 31 December 2016

No.	Name	Position
1	Serгей Nedoroslev	Chairman of the Personnel and Remuneration Committee, Member of the Russian Railways Board of Directors
2	Alexander Ryazanov	Member of the Russian Railways Board of Directors
3	Vasily Sidorov	Member of the Russian Railways Board of Directors
4	Dmitry Komissarov	Chairman of the Board of Directors of Technology Company

## Priority Investment Projects Committee

The purview of the Priority Investment Projects Committee includes preparing recommendations for the Russian Railways Board of Directors on the following matters:

- the determination of the priority focuses of the Company's investment activities;
- the development and approval of a project reporting format;
- the review of the parameters for the implementation of the Company's priority investment projects, including the efficiency indicators of their implementation;
- the formation of proposals to adjust the parameters for the implementation of the Company's priority investment projects;
- an assessment of the results of the implementation of the Company's priority investment projects;
- the formulation of recommendations on adjustments to the Company's Investment Programme.

### Members of the Priority Investment Projects Committee under the Russian Railways Board of Directors as of 31 December 2016

No.	Name	Position
1	Arkady Dvorkovich	Chairman of the Russian Railways Board of Directors, Deputy Chairman of the Government of the Russian Federation
2	Mikhail Abyzov	Minister of the Russian Federation (by agreement)
3	Oleġ Belozеров	Member of the Russian Railways Board of Directors, Russian Railways President
4	Andrey Ivanov	Member of the Russian Railways Board of Directors, Deputy Minister of Finance of the Russian Federation
5	Alan Lushnikov	Assistant to the Deputy Chairman of the Government of the Russian Federation
6	Nikolay Podġuzov	Member of the Russian Railways Board of Directors, Deputy Minister of Economic Development of the Russian Federation
7	Alexey Tsydenov	Member of the Russian Railways Board of Directors, Deputy Minister of Transportation of the Russian Federation

### Permanent members of the Priority Investment Projects Committee under the Russian Railways Board of Directors

No.	Name	Position
1	Anatoly Krasnoshchek	Russian Railways First Vice President
2	Serġey Maltsev	Russian Railways Senior Vice President
3	Vadim Mikhailov	Russian Railways Senior Vice President
4	Oleġ Toni	Russian Railways Vice President
5	Fyodor Pekhterev	CEO of the Transportation Economics and Development Institute
6	Vasily Gorev	Russian Railways Corporate Secretary

The Priority Investment Projects Committee held four meetings in 2016.

The Priority Investment Projects Committee prepared recommendations for the Russian Railways Board of Directors to adopt decisions, including on the following matters:

- the enhanced efficiency of the transportation and freight operational system of Moscow as part of the fulfilment of Order No. AD-P9-8684 of the Government of the Russian Federation dated 22 December 2015;
- the review of the results of a process and price audit of the measures of the investment project
- 'Modernisation of the railway infrastructure of the Baikal-Amur and Trans-Siberian Mainlines with the development of traffic and carrying capacity';
- an adjustment to the detailed action plan for the investment project 'Development of the Moscow Railway Transport Hub, including the Moscow Little Ring Road and radial routes';
- an adjustment to the detailed action plan for the investment project 'Modernisation of the railway infrastructure of the Baikal-Amur and Trans-Siberian Mainlines with the development of traffic and carrying capacity';
- an adjustment to the Russian Railways Investment Programme for 2016 based on other infrastructure projects implemented with state support;
- the approval of a detailed action plan and targets for the investment project 'Development and renovation of railway infrastructure at approaches to ports in the Azov and Black Seas';
- the implementation of the investment project 'Development and renovation of railway infrastructure at approaches to ports in the Azov and Black Seas'.

## Corporate secretary

The corporate secretary of Russian Railways is a special official whose tasks include ensuring that the Company's bodies and officials comply with the requirements of the legislation of the Russian Federation, the Charter and internal documents guaranteeing the rights and legitimate interests of shareholders, organising measures to settle conflicts involving the

violation of shareholder rights as well as arranging interaction between the Company and its shareholders and between the Company's management bodies.

The corporate secretary is appointed and dismissed by the decision of the Board of Directors based on a majority of votes by

Board members. The corporate secretary's duties are described in the Regulation on the Russian Railways Corporate Secretary and the Administrative Office of the Corporate Secretary.

Vasily Gorev has been the corporate secretary of Russian Railways since September 2015.

### Vasily Gorev Corporate Secretary

He graduated from Lomonosov Moscow State University in 2005 with a major in mathematics and completed postgraduate studies in 2005-2007. He has an MBA from the University of Chicago Booth School of Business.

#### Professional experience

- 2014-2015 – Involved in the establishment of European Long Haul airline (Barcelona, Spain).
- 2011-2014 – Finance and Corporate Governance Consultant and Analyst at UBS Global Asset Management / UBS O'Connor (Chicago, USA). Started his career at Metropol IFC and UIC (Moscow, Russia).

## Management Board of Russian Railways

The Company's Management Board handles the general management of business operations as the collective executive body (except for the resolution of matters that fall within the purview of the General Meeting of Shareholders and the president according to Federal Law No. 208-FZ dated 26 December 1995 'On Joint- Stock Companies' and the Company Charter unless otherwise specified by the Charter).

The main tasks of the Company's Management Board include preparing proposals on the Company's business strategy, implementing its financial and business policy, formulating decisions on the most important issues concerning its day-to-day business operations and coordinating the work of its divisions, improving the efficiency of the internal control and risk monitoring systems and ensuring the observance of the rights and legitimate interests of shareholders.

The Company's Management Board carries out its activities in accordance with the legislation of the Russian Federation, the Company Charter, the resolutions of the General Meeting of Shareholders and the Board of Directors, the Regulation on the Russian Railways Management Board and the Company's internal documents.

The Management Board acts in the Company's interests and is accountable to the Company's General Meeting of Shareholders and the Board of Directors.

The purview of the Company's Management Board includes the following matters:

- the preparation and submission to the Board of Directors of the Company's business priorities and long-term plans for their implementation, including the Company's annual budgets and Investment Programme, the preparation of reports on their implementation for the Board of Directors as well as preparing and approving the current business plans;
- the approval of internal estimated tariffs, fees and payments for work (services) performed (rendered) by the Company that are not related to natural monopolies;
- the approval of rules that ensure the proper organisation and reliability of accounting at the Company and the timely submission of the annual report and other financial reporting to the relevant bodies as well as information about the Company's operations to shareholders, creditors and the media;
- the submission to the Board of Directors of prospectuses for the issuance of securities and other documents related to the issuance of the Company's securities;
- organising the fulfilment of the Company's long-term and current plans and implementing the Company's investment, financial and other projects;
- establishing the procedure for taking into account the Company's affiliates;
- considering and coordinating draft collective bargaining agreements at the Company and regulations on industry-wide private pension support, mandatory pension insurance, professional pension insurance and an industry-wide tariff agreement on railway transportation as well as submitting them to the Company's president for signing;
- establishing the procedure for shareholders to review information about the Company;
- establishing a remuneration system and determining measures to motivate Company employees;
- issuing binding instructions to subsidiaries on matters specified in the charters of these companies or in agreements which the Company has concluded with them;
- approving the Company's internal documents on matters that fall within the purview of the Management Board;
- resolving other matters related to the Company's current operations that are submitted for consideration by the chairman of the Management Board, the Board of Directors or shareholders.

### Members of the Russian Railways Management Board

No.	Name	Position
1	Oleġ Belozerov	President
2	Anatoly Krasnoshchek	First Vice President
3	Alexander Misharin	First Vice President
4	Gennady Verkhovyykh	Senior Vice President – Director of the Central Infrastructure Directorate
5	Valentin Gapanovich	Senior Vice President
6	Serġey Maltsev	Senior Vice President
7	Vadim Mikhailov	Senior Vice President
8	Mikhail Akulov	Vice President
9	Salman Babayev	Vice President – CEO of the Centre for Corporate Transportation Service
10	Oleġ Valinsky	Vice President – Director of the Traction Directorate
11	Pavel Ivanov	Vice President – Director of the Central Traffic Control Directorate
12	Pyotr Kaptsev	Vice President – Director of the Moscow Transport Hub Development Centre
13	Anatoly Meshcheryakov	State Secretary – Vice President
14	Vyacheslav Pavlovsky	Vice President
15	Andrey Starkov	Vice President
16	Oleġ Toni	Vice President
17	Nikolay Fedoseyev	Vice President
18	Anatoly Chabunin	Vice President – Director of Internal Control and Audit
19	Shevket Shaydullin	Vice President – Director of the Traffic Safety Department
20.	Dmitry Shakhanov	Vice President
21	Vadim Bynkov	Director of the Legal Department
22	Olġa Gnedkova	Director of the Corporate Finance Department
23	Vadim Morozov	Senior Advisor to the Russian Railways President

## Remuneration system for the Management Board and information about the amount of remuneration for the Management Board for the reporting year

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

Executives are given 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. The KPI system, which includes general corporate and functional indicators, is approved by the Russian Railways Board of Directors.

The total income earned by members

of the Russian Railways Management Board amounted to RUB 2,295.5 mln in the reporting year.

### Biographical information about members of the Russian Railways Management Board



**Oleg Belozеров**  
President of Russian Railways

Mr Belozеров was born in 1969. He graduated from St Petersburg State University of Economics and Finance with a major in economics and industrial planning in 1992. He is a candidate of economic sciences.

#### Professional experience

- 1998–2000 – Deputy Commercial Director, Head of the Logistics and Transportation Department, Lenenergo;
- 2000 – Deputy Director, Freight Motor Transport Enterprise No. 21;
- 2000–2001 – Head of the Financial and Economic Department, Office of the Plenipotentiary Representative of the Russian President in the North-West Federal District;
- 2001–2002 – Deputy Director, Corporate Property Management, LOMO;
- 2002–2004 – CEO, Russian Fuel Company;
- July–November 2004 – Deputy Director, Federal Road Agency;
- 2004–2009 – Director, Federal Road Agency;
- March 2009–May 2015 – Deputy Minister of Transportation of the Russian Federation;
- August 2011 – Assigned class rank – Full State Counsellor of the Russian Federation, 1st Class;
- 2014 – Member of the Russian Railways Board of Directors;
- May 2015 – First Deputy Minister of Transportation of the Russian Federation;
- August 2015 – President, Russian Railways.

#### Government and industry awards:

Medal 'In Commemoration of the 300th Anniversary of St. Petersburg'; Badge 'Honoured Worker of the Fuel and Energy Complex'; Medal 'In Commemoration of the 1,000th Anniversary of Kazan'; Gratitude of the President of the Russian Federation; Medal of the Order 'For Merit to the Fatherland (1st Class)'; Anniversary Lapel Pin 'In Commemoration of the 200th Anniversary of the Water and Ground Transportation Office'; Order of Honour; Honorary Certificate of the Government Staff of the Russian Federation; Badge of Merit 'For Merit to Strengthening Cooperation with the Audit Chamber of the Russian Federation'; Lapel Pin 'Honoured Road Builder of Russia'; Honorary Certificate of the Audit Chamber of the Russian Federation; Badge 'Honoured Transport Worker of Russia'; Medal 'Federation Council: 20 Years'; Order 'For Merit to the Fatherland (4th Class)'; Honorary Certificate of the President of the Russian Federation.



**Anatoly Krasnoshchek**  
First Vice President of Russian Railways

Mr Krasnoshchek was born in 1959. He graduated from Leningrad Institute of Railway Engineers in 1988 with a major in railway transportation process management and is a candidate of economic sciences.

#### Professional experience

- July 2008 – Director, East Siberian Railway, Russian Railways.
- December 2011 – Vice President, Russian Railways.
- March 2013 – Senior Vice President, Russian Railways.
- October 2015 – First Vice President, Russian Railways.



**Alexander Misharin**  
First Vice President of Russian Railways

Mr Misharin was born in 1959. He graduated from Ural State University of Railway Transport with a major in railway transportation electrification in 1981 and a major in economics and business management (railway transportation) in 1997. He is a candidate of economic sciences and a doctor of technical sciences.

#### Professional experience

- November 2009 – Governor, Sverdlovsk Region.
- December 2012 – First Vice President, Russian Railways.



**Gennady Verkhoviykh**  
Vice President and Director of the Central Infrastructure Directorate of Russian Railways

Mr Verkhoviykh was born in 1959. He graduated from Leningrad Institute of Railway Engineers in 1981 with a major in railway operation.

#### Professional experience

- February 2007 – Director, Russian Railways Passenger Transportation Department.
- October 2013 – Director, Russian Railways Passenger Transportation Business Unit Management Department.
- November 2015 – Vice President and Director, Central Infrastructure Directorate, Russian Railways.
- May 2016 – Senior Vice President and Director, Central Infrastructure Directorate, Russian Railways.



Mr Gapanovich was born in 1955. He graduated from Novosibirsk Institute of Railway Engineers in 1992 with a major in railway transportation process management. He is a candidate of technical sciences.

**Professional experience**

- June 2008 – Senior Vice President, Russian Railways.

**Valentin Gapanovich**  
Senior Vice President of Russian Railways



Mr Akulov was born in 1960. He graduated from Moscow Institute of Railway Engineers in 1982 with a major in railway transportation electrification.

**Professional experience**

- July 2009 – Vice President, Russian Railways; General Director, Federal Passenger Directorate, Russian Railways.
- March 2013 – Vice President, Russian Railways.

**Mikhail Akulov**  
Vice President of Russian Railways



Mr Maltsev was born in 1963. He graduated from Leningrad Higher Command School of Railway Troops and Military Communications in 1983 with a major in tactical military communication command.

**Professional experience**

- December 2007 – Advisor, New Transportation Company.
- November 2015 – Senior Vice President, Russian Railways.

**Sergey Maltsev**  
Senior Vice President of Russian Railways



Mr Babayev was born in 1955. He graduated from Khabarovsk Institute of Railway Engineers in 1978 with a major in railway operations.

**Professional experience**

- October 2007 – General Director, First Freight.
- March 2011 – Vice President, Russian Railways.
- December 2015 – Vice President, Russian Railways; General Director, Centre for Corporate Transportation Service.

**Salman Babayev**  
Vice President and General Director of the Russian Railways Centre for Corporate Transportation Service



Mr Mikhailov was born in 1969. He graduated from the State Financial Academy in 1992 with a major in finance and credit.

**Professional experience**

- September 2009 – Senior Vice President, Russian Railways.

**Vadim Mikhailov**  
Senior Vice President of Russian Railways



Mr Valinsky was born in 1961. He graduated from Dzerzhinsky Leningrad Technical College of Railway Transportation in 1986 with a major railway operation and from St. Petersburg State University of Railways in 1997 with a major in transportation organisation and management.

**Professional experience**

- 2004-2008 – Deputy Director for Transportation, October Railway.
- August 2008 – First Deputy Director, October Railway.
- October 2014 – Railway Director.
- January 2016 – Vice President and Director, Traction Department, Russian Railways.

**Oleg Valinsky**  
Vice President and Director of the Russian Railways Traction Directorate



Mr Ivanov was born in 1964. He graduated from Moscow Institute of Railway Engineers in 1986 with a major in railway transportation process management.

**Professional experience**

- October 2009 – First Deputy Director, Central Traffic Control Directorate, Russian Railways.
- April 2011 – Director, Central Traffic Control Directorate, Russian Railways.
- June 2015 – Director of Transportation Control and Director of the Central Traffic Control Directorate, Russian Railways.
- November 2015 – Vice President and Director, Central Traffic Control Directorate, Russian Railways.

**Pavel Ivanov**  
Vice President and Director of the Central Traffic Control Directorate of Russian Railways



Mr Pavlovsky was born in 1956. He graduated from Moscow State Institute (University) of International Relations under the Russian Ministry of Foreign Affairs in 1978.

**Professional experience**

- 2004-2008 – Director, Consulate Department, Russian Ministry of Foreign Affairs.
- 2008-2009 – Director, Main Production and Commercial Department for Diplomatic Corps Servicing, Russian Ministry of Foreign Affairs.
- January 2006 – Member, Collegium of the Russian Ministry of Foreign Affairs.
- December 2009 – Ambassador-at-Large, Russian Ministry of Foreign Affairs. Has the diplomatic rank of Ambassador Extraordinary and Plenipotentiary.
- 20 July 2010 – Appointed Ambassador of the Russian Federation to Norway.
- May 2016 – Appointed Vice President, Russian Railways.

**Vyacheslav Pavlovsky**  
Vice President of Russian Railways



Mr Katsyv was born in 1953. He graduated from Moscow Automobile and Road Institute in 1975 with a major in automobiles and automotive fleet. He is a doctor of technical sciences.

**Professional experience**

- May 2007 – Deputy Chairman, Government of the Moscow Region; Minister of Transportation, Government of the Moscow Region.
- June 2012 – Director, Main Department of the Moscow Region for Relations with the Federal Authorities.
- September 2013 – Advisor to the Governor of the Moscow Region.
- October 2014 – Vice President and Director, Moscow Transport Hub Development Centre of Russian Railways.

**Petr Katsyv**  
Vice President and Director of the Moscow Transport Hub Development Centre of Russian Railways



Mr Starkov was born in 1969. He graduated from Moscow Textile Institute with a major in industrial power engineering.

**Professional experience**

- 2004 – Deputy Director, Structural Reform Department, Ministry of Transportation of the Russian Federation.
- 2005 – First Deputy General Director, Rosspirtprom (federal government enterprise).
- 2009-2010 – First Deputy General Director, All-Russian Exhibition Centre.
- 2011-2015 – Corporate Secretary, Russian Railways.
- September 2015 – Senior Advisor to the Russian Railways President.
- February 2016 – Vice President, Russian Railways.

**Andrey Starkov**  
Vice President of Russian Railways



Mr Meshcheryakov was born in 1966. He graduated from Kiev Higher Military Aviation Engineering School in 1988 with a major in avionics and from the Institute of Modern Business in 1998 with a major in finance and credit. He is a candidate of technical sciences.

**Professional experience**

- October 2009 – First Deputy General Director, Transmashholding.
- December 2011 – Senior Advisor to the Russian Railways President.
- February 2012 – State Secretary and Vice President, Russian Railways.

**Anatoly Meshcheryakov**  
State Secretary and Vice President of Russian Railways



Mr Toni was born in 1964. He graduated from Voronezh Engineering and Construction Institute in 1986 with a major in industrial and civil construction and from Northwest Academy of Public Service in 2003 with a major in state and municipal management. He is a candidate of economic sciences.

**Professional experience**

- April 2006 – Vice President, Russian Railways.

**Oleg Toni**  
Vice President of Russian Railways



Mr Fedoseyev was born in 1966. He graduated from Moscow Institute of Radio Engineering, Electronics and Automation in 1989 with a major in electronic devices and from the Academy of the Russian Ministry of Security in 1993 with the qualification of an officer with higher special education.

**Professional experience**

- January 1993 – service in agencies of the Russian Federal Security Service.
- December 2015 – Vice President, Russian Railways.

**Nikolay Fedoseyev**  
Vice President of Russian Railways



Mr Shakhanov was born in 1961. He graduated from the Academy of the USSR Ministry of Internal Affairs in 1988 with a major in law.

**Professional experience**

- April 2009 – Vice President, Russian Railways.

**Dmitry Shakhanov**  
Vice President of Russian Railways



Mr Morozov was born in 1954. He graduated from Leningrad Institute of Railway Engineers in 1977 with a major in railway operations. He is a doctor of technical sciences.

**Professional experience**

- August 2005 – First Vice President, Russian Railways.
- October 2015 – Senior Advisor to the Russian Railways President.

**Vadim Morozov**  
Senior Advisor to the Russian Railways President



Mr Chabunin was born in 1960. He graduated from Novosibirsk Institute of Economy in 1990 with a major in finance and credit.

**Professional experience**

- March 2009 – Director, Federal Road Agency.
- May 2013 – Deputy Director, Federal Financial and Budget Oversight Service.
- September 2015 – Internal Control and Audit Director, Russian Railways.
- October 2015 – Vice President, Russian Railways.
- November 2015 – Vice President and Internal Control and Audit Director, Russian Railways.

**Anatoly Chabunin**  
Vice President and Internal Control and Audit Director of Russian Railways



Mr Bynkov was born in 1962. He graduated from Kalinin State University in 1985 with a major in law.

**Professional experience**

- April 2009 – Director, Legal Department, Russian Railways.

**Vadim Bynkov**  
Head of the Legal Department of Russian Railways



Ms Gnedkova was born in 1960. She graduated from Novosibirsk Institute of Railway Engineers in 1981 with a major in accounting. She is a candidate of economic sciences.

**Professional experience**

- September 2005 – Head of Corporate Finance Department, Russian Railways.

**Olga Gnedkova**  
Head of the Corporate Finance Department of Russian Railways



Mr Shaydullin was born in 1961. He graduated from Kuybyshev Institute of Railway Engineers in 1990 with a major in technical locomotive operation management. He is a candidate of technical sciences.

**Professional experience**

- December 2008 – General Director, South Caucasus Railway.
- February 2012 – Director, Kuybyshev Railway, Russian Railways.
- December 2012 – Vice President and Director, Traffic Safety Department, Russian Railways.

**Shevket Shaydullin**  
Vice President and Director of the Traffic Safety Department of Russian Railways

# Supervisory and audit bodies of Russian Railways

## Audit Commission

The Audit Commission oversees the Company's financial and economic activities and acts on the basis of the legislation of the Russian Federation, the Charter of Russian Railways and the Regulation on the Russian Railways Audit Commission approved by Order No. 265-r of the Russian Government dated 25 February 2004.

The purview of the Audit Commission includes auditing the Company's financial and economic activities based on its performance for the year and at any time based on its own initiative, a resolution of the Board of Directors or at the request of a shareholder; auditing and analysing

the Company's financial condition, its ability to pay, the operation of the internal control system and the financial and operational risk management system, asset liquidity and the debt to equity ratio; confirmation of the accuracy of the data contained in the Company's annual report, the annual financial statement and other reports as well as the Company's other financial documents; verifying the compliance of the decisions on financial and economic matters adopted by the Company's President, Board of Directors and Management Board with the Charter and the resolutions adopted by the General Meeting of Shareholders.

The Russian Railways Audit Commission elected in accordance with Order No. 1370-r of the Government of the Russian Federation dated 30 June 2016 was approved with seven members:

### Natalya Annikova Chairman

Education: Moscow State University of Railway Engineering; Academy of National Economy under the Government of the Russian Federation.

#### Professional experience

- 2011-2013 – Advisor to the General Director of RZDstroy.
- 2013-present – First Deputy General Director for Economics and Finance, Construction Office No. 308.
- 2015-present – Chairman, Russian Railways Audit Commission.

### Alexander Varvarin

Education: Griboedov Institute of International Law and Economics, Law, Lawyer.

#### Professional experience:

- 2005-2009 – Director, Legal Department; Director, Corporate Relations Department, Russian Union of Industrialists and Entrepreneurs.
- 2006 – General Director, Centre for the Development of Corporate Relations and the Resolution of Economic Disputes non-profit partnership.
- 2009 – Managing Director for Corporate Relations and Legal Support, Russian Union of Industrialists and Entrepreneurs.
- Member of the Board of Directors, VCIOM, IDGC of Volga, Kubanenergo, IDGC of North Caucasus and State Transportation Leasing Company; Chairman of the Board of Directors, Innovative Production Centre of Textiles and Light Industry, VNIPlneft, Production Centre, Central Research Institute of the Leather Footwear Industry, Central Research Institute of the Technological Fitting of Textile Equipment, the Central Research Institute of Integrated Light Industry Automation and Central Research Institute of Film Materials and Artificial Leather.
- 2012 – Member of the Russian Railways Audit Commission.

### Viktoriya Semerikova

Education: Plekhanov Russian Academy of Economics.

#### Professional experience

- 2006-2013 – Lead Manager, Chief Manager and Director, Russian Banks Division, Office of Subsidiary Banks, Corporate Development and Financial Assets Department, VTB Bank.
- 2013-2016 – Advisor to the Director of the Russian Federal Property Agency; Director, Corporate Technologies Office, Russian Federal Property Agency.
- 2013 – Member of the Russian Railways Audit Commission.

### Yevgeny Stolyarov

Education: Faculty of Economics of Lomonosov Moscow State University.

#### Professional experience

- 2009-2010 – Specialist, Share Trading Division, Troika Dialog Investment Company.
- 2010-2012 – Specialist, Share Sales Division, Renaissance Broker.
- 2012-2013 – Deputy Division Chief, Russian Federal Property Management Agency.
- 2013 – Member of the Russian Railways Audit Commission.
- 2015-present – Deputy Office Director, Russian Federal Property Management Agency.

### Maxim Yeronin

Education: MISA National University of Science and Technology and Kutafin Moscow State Law University.

#### Professional experience

- 2009-present – Chief Specialist/Expert, Consultant and Deputy Director, Corporate Governance Division, Department of Property Relations and Regional Planning, Russian Ministry of Transportation.
- 2014 – Member of the Russian Railways Audit Commission.

### Vasily Shipilov

Education: Moscow State University of Railway Engineering.

#### Professional experience

- 2008-2010 – Specialist, Russian Ministry of Economic Development.
- 2010-2013 – Deputy Division Chief, Russian Railways.
- 2013-present – Division Chief, Russian Ministry of Economic Development.
- 2014 – Member of the Russian Railways Audit Commission.

### Boris Lyuboshits

Education: Bauman Moscow State Technical University; Academy of National Economy under the Government of the Russian Federation.

#### Professional experience

- 1999-present – General Director, AuditGroup.
- 2015 – Member of the Russian Railways Audit Commission.

According to Order No. 1370-r of the Government of the Russian Federation dated 30 June 2016, a total of RUB 2.4 mln were spent

in 2016 on remuneration for members of the Russian Railways Audit Commission for work conducted in 2015.

## Internal control and audit

Internal control functions at Russian Railways are based on the current organisational and methodological framework prepared in accordance with the best international and national professional practices and meet the ethical standards in matters of internal audit and control adopted in the modern Russian and global business communities.

The internal control system was established to provide reasonable assurance that the Russian Railways Group will achieve its goals.

The internal control system at Russian Railways is governed by a combination of subjects and objects. The objects of the internal control system are the financial and economic activities of Russian Railways divisions and business processes. The subjects of the internal control system are determined by the organisational structure of Russian Railways.

The main objectives of the Russian Railways Group's internal control system are:

- to ensure the efficiency and effectiveness of financial and economic activities;
- to safeguard assets and use resources in a cost effective manner;
- to identify and manage risks;
- to ensure the accuracy and completeness of accounting (financial) and other types of reporting;
- to observe the law and regulatory legal acts of the Russian Federation and the regulatory documents of Russian Railways.

The goal of the internal audit system is to provide independent and objective information to the Board of Directors and executive management bodies about the status of financial and business activities, the reliability and effectiveness of the risk management and internal control systems and the corporate governance practice at the Company and its subsidiaries in order to maintain financial stability,

enhance the effectiveness and efficiency of business processes, improve performance and achieve the Company's goals.

The Russian Railways Group has updated its Internal Corporate Standards System for Auditing Activities in accordance with the requirements of the regulatory documents of the Russian Federation and international professional internal audit standards and also taking into account best practices, including for the introduction of the process approach, and amendments to the organisational and administrative documents of Russian Railways.

The Russian Railways Board of Directors and the Audit and Risk Committee under the Russian Railways Board of Directors determine the general focuses for organising the internal control and audit system, consider the assessment results of its effectiveness and analyse its actual condition taking into the nature, scale and conditions of the Russian Railways Group's activities.

The Vice President and Internal Audit and Control Director of Russian Railways handles matters related to internal control and audits at the Company's divisions.

A major role in the internal audit and control system at Russian Railways is played by the divisions that conduct an independent assessment of the activities of structural units and inform Company management about audit results – the Zheldorkontrol Internal Control Centre and Zheldoraudit Internal Audit Centre, which are directly subordinate to the Vice President and Internal Audit and Control Director of Russian Railways.

The Zheldorkontrol Internal Control Centre conducts audits of the financial and business activities of Russian Railways divisions, monitors compliance with measures to eliminate any violations or shortcomings that are found in the internal control system, coordinates the work of Russian Railways divisions as regards organising and carrying out internal control and provides Russian Railways management with reliable information about the financial and business activities of Russian Railways.

The Zheldoraudit Internal Audit Centre assesses the actual condition and effectiveness of the internal control system, including monitoring the quality of the independent assessments conducted by Russian Railways divisions, drafts recommendations to improve the effectiveness of the internal control system and introduce additional internal control procedures, and prepares information for Russian Railways management about the reliability of internal control procedures at the Company's divisions.

The Zheldorkontrol and Zheldoraudit Centres have a total of 710 employees.

The Zheldorkontrol Centre includes regional offices located in the railway operating domains and has audit divisions.

The main objectives of internal audits and control are:

- to organise and conduct audits that aim to improve the efficiency and effectiveness of business processes at the Russian Railways Group and the reliability of reporting, safeguard assets and comply with the requirements of the laws of the Russian Federation and the regulatory documents of Russian Railways;
- a systematic and consistent assessment of the reliability and effectiveness of the internal control and risk management system as well as an assessment of corporate governance practices;
- to provide information in a timely manner to Russian Railways management about the status of financial and economic activities, the effectiveness of business processes, the reliability of internal control and risk management procedures as well as corporate governance at Russian Railways divisions and at S&A and other organisations of Russian Railways in the prescribed manner;
- to draft proposals and recommendations on ways to improve activities and enhance

the reliability and effectiveness of the risk management and internal control systems as well as the corporate governance practices of the entity being audited (divisions of Russian Railways, business process and other subjects) and/or the Company as a whole.

Continuous development and improvements to the internal audit and control system allow the Company to respond in a timely and proper manner to changes in the external environment and enhance the effectiveness and efficiency of activities.

Complete information about the procedures used to monitor the financial and business activities of the Company's structural divisions and business processes enables management to adopt effective decisions and achieve the Company's goals while ensuring a high level of control.

### Biographical information about internal control and audit executives

**Anatoly Chabunin**  
Vice President and Internal Control and Audit Director of Russian Railways.  
Born in 1960.

Education: higher, Novosibirsk Institute of National Economy.

**Professional experience at Russian Railways:**  

- 2015 – Vice President and Internal Control and Audit Director, Russian Railways.

**Anastasia Dolgaleva**  
Director of the Zheldorkontrol Centre.  
Born in 1977.

Education: higher, Altai State University.

**Professional experience at Russian Railways:**  

- 2015-2016 – Deputy Director, Zheldorkontrol Internal Control Centre, Russian Railways;
- 2016 – Director, Zheldorkontrol Internal Control Centre, Russian Railways.

**Yury Podkopayev**  
Director of the Zheldoraudit Centre.  
Born in 1963.

Education: higher, Moscow Institute of Railway Engineers and a Master's of Business Administration certificate of continuing professional education in corporate audit with in-depth foreign language study.

**Professional experience at Russian Railways:**  

- 2003-2012 – Deputy Director, Zheldorkontrol Internal Control and Audit Centre, Russian Railways; Director, Regional Management Centre in Moscow;
- 2013 – Director, Zheldorkontrol Internal Audit Centre, Russian Railways.

### Auditor of statements according to international standards

The auditor of the Company's consolidated financial statements in accordance

with IFRS is Ernst & Young.

### Auditor of statements according to Russian accounting standards

In accordance with Order No. 1370-r of the Russian Government dated 30 June 2016, BDO Unicon was approved as the auditor of the accounting (financial) statements of Russian Railways for 2016 according to Russian Accounting Standards.

The amount of annual remuneration for BDO Unicon under the Contract dated 1 July 2016 is RUB 29,950,000, including VAT of RUB 4,568,644.

# Priority objectives of the Russian Railways Group for 2017



Implement measures that aim to enhance the management and operation of Russian Railways property by improving the management of the Company's non-core and unused property.

Update the long-term railway network development parameters, including the development of a programme for the second stage of the development of the railway infrastructure of the Eastern operating domain over the period from 2020 to 2025.



Ensure the unconditional fulfilment of the Company's Financial Plan and Investment Programme approved by the Government of the Russian Federation and the Russian Railways Board of Directors, including through:

- improving the principles of long-term tariff regulation and the effective application of the right to flexibly change tariff levels within the price limits;
- enhancing the internal efficiency of activities in order to ensure that the growth rate in railway transportation costs does not exceed the projected average annual consumer price index for goods and services of 104.7%;
- the effective management of resources and production reserves and the further introduction of the risk management system and outsourcing.



Streamline the labour organisation of employees to ensure growth in workforce productivity (105%) based on rationalisation, improvements to the lean manufacturing system and quality management as well as the regulation and standardisation of internal processes.



Monitor that the volume of contracts signed complies with the parameters of the financial plans of branches, type design procurements based on the list of standard requirements, improve the quality of interaction with suppliers, including small and medium-sized business, and also develop an automated system to control the Russian Railways Group's procurement activities.



Strengthen the Russian Railways Group's positions on foreign markets for logistics and the construction of railway infrastructure by developing cooperation with foreign partners and specialised international organisations.



Ensure the traffic and carrying capacity of infrastructure meets the needs of users of railway transportation services.



Implement measures to improve the quality of transportation and logistics services and operating domain technologies in the transportation management system in order to increase scheduled freight shipments and the reliability and speed of deliveries (by 95.5% and 380 km/day, respectively), improve the structure of transportation by freight nomenclature and also realise transport potential.



Expand the range and quality of services, introduce new marketing initiatives, including through a flexible price policy to improve the level of satisfaction among long-haul and suburban passengers and also ensure sustainable transportation service, including for the 2017 FIFA Confederations Cup.



Support social stability in the workforce based on the Company's balanced and effective personnel and social policy.



Develop a traffic safety culture at the Russian Railways Group, including enhancing the level of traffic safety and reliability of the transportation process (to the level of 1.38 events/mln pass. km), and prevent an adverse environmental impact.



Ensure interaction with the federal executive authorities on matters concerning the tariff policy, the implementation of essential infrastructure projects, the organisation of suburban passenger transportation as well as compensation for the Russian Railways Group's declining revenue from passenger transportation and the provision of infrastructure services.



Implement measures that aim to establish an integrated network of rapid-transit and high-speed transportation in the Russian Federation, above all the construction of the Moscow-Nizhny Novgorod-Kazan high-speed railway.

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## Glossary

**1520 mm** – the official track gauge of railways within the Commonwealth of Independent States, Baltic countries, Mongolia and Finland. The total length of the tracks within the ‘1520 space’ exceeds 150,000 km. It is referred to as the ‘broad’ gauge. The ‘1520 space’ is the territory served by the ‘broad’ gauge railways.

**2PL, 3PL and 4PL** – levels of logistics service (PL-Party Logistics): partial logistics outsourcing, comprehensive logistics outsourcing and integrated logistics outsourcing.

**CIT (International Rail Transport Committee)** – an international non-governmental organisation (association) whose objectives include drafting international law concerning rail transportation based on conventions.

**Common Economic Space (CES)** – the economic and political integration of three nations: Russia, Kazakhstan and Belarus.

**Federal Freight Company (FFC) (Second Freight Company prior to 13 October 2012)** – a subsidiary of Russian Railways established in accordance with the decision of the Russian Railways Board of Directors dated 26 August 2010

and one of the largest railway freight transportation operators in Russia.

**Freight One** – a major operator of railway freight transportation in Russia.

**Federal Passenger Company (FPC)** – a subsidiary of Russian Railways that provides long-haul passenger and luggage transportation by railways.

**Freight turnover** – the volume of work to transport freight measured by tonne-kilometres. It is calculated by adding the multiplied value of the freight transported in tonnes by the distance travelled in kilometres.

**Federal Tariffs Service (FTS)** – The federal executive authority in charge of regulating natural monopolies; handles the government regulation of prices (tariffs), in particular on railway transportation, in accordance with the legislation of the Russian Federation.

**GEFCO S.A.** – a subsidiary of Russian Railways, which concluded a transaction on 20 December 2012 to purchase a 75% of shares in the French logistics operator GEFCO from PSA Peugeot Citroen for a cost of EUR 800 mln.

**Handling (freight shipment)** – the weight of freight in tonnes accepted for transportation via the railway network. The value is calculated as the sum of all shipments accepted during the reporting period for transportation within the country directly from shippers, from other types of transportation for further transportation and from foreign railways.

**HSTD** – High-Speed Transportation Directorate – branch of Russian Railways.

**HSR** – high-speed railway.

**IAMCS** – integrated automated marshalling control system.

**IFRS** – international financial reporting standards.

**International Union of Railways (UIC)** – (French – Union Internationale des Chemins de fer) – an international organisation that unites national railway companies in order to jointly resolve problems involving the development of railway transportation.

**MCR** – Moscow Central Ring.

**MLRR** – Moscow Little Ring Railway.

**Multimodal transportation** – shipments using two or more types of transportation based on a single contract.

**MU (multiple units)** – railway rolling stock with motorised railcars. MU include electric trains (including high-speed electric trains), diesel trains and motor railcars.

**NC Kazakhstan Temir Zholy** – National Company Kazakhstan Railways.

**Organisation for Cooperation between Railways (OSJD)** – an international organisation whose objectives include developing international freight and passenger transportation and establishing a common railway transportation space in the Eurasian region.

**OTIF (Intergovernmental Organisation for International Carriage by Rail)** – an international organisation established in accordance with the Convention concerning International Carriage by Rail.

**Passenger turnover** – the volume of work to transport passengers measured by passenger-kilometres. It is determined by adding the multiplied value of the number of passengers for each transportation category by the distance travelled in kilometres.

**Passenger transportation (dispatch)** – the volume of work performed to transport passengers as determined by the number of tickets sold and issued free of charge in a particular reporting period taking into account the passenger trips made attributable to this period based on group tickets, freight documents, commuter tickets and other tickets.

**Process and price audit (PPA)** – an expert assessment of the feasibility of an investment project, the selection of the projected technological and cost solutions for building facilities as part of an investment project, the compliance of the solutions with market practices and international analogues as well as the reliability of construction costs and operating expenses to implement the investment project during the process of its life cycle.

**RAS** – Russian Accounting Standards.

**RCGC** – Regional Corporate Governance Centre.

**ROR** – the railway operating rules of the Russian Federation.

**RZD International** – a specialised engineering company set up within the Russian Railways Group to centralise

the functions of strategic planning of foreign economic activities and to manage infrastructure projects abroad.

**SPC** – suburban passenger companies.

**S&A** – subsidiary and affiliate companies of Russian Railways.

**UBR** – Ulan Bator Railway.

**UNECE ITC (UN Economic Commission for Europe Inland Transport Committee)** – the UN Economic Commission for Europe body that regulates international cooperation in the transportation sector.

**UNESCAP** – the United Nations Economic and Social Commission for Asia and the Pacific.

**United Transportation Logistics Company (UTLC)** – a joint project by Russian Railways, Belarusian Railway and NC Kazakhstan Temir Zholy to establish a single logistics operator.

## Legal disclaimer

This annual report (hereinafter referred to as the Annual Report) has been produced based on the information available to Open Joint Stock Company Russian Railways (hereinafter referred to as JSC RZD or the Company) and its affiliates (hereinafter referred to as the Group or RZD) as of the date of its publication.

The annual report of JSC RZD for 2016 discloses information to provide the shareholder represented by the Government of the Russian Federation, as well as government agencies, potential and actual investors, shippers, passengers and other stakeholders and information users with comprehensive and relevant data on the operations of JSC Russian Railways in 2016 and the Company's development trends.

The report complies with the following standards and regulatory documents:

- the Federal Law "On Joint-Stock Companies";
- Federal Law No. 39-FZ "On the Securities Market" dated 22 April 1996;
- Regulation No. 454-r on Information Disclosure by Issuers of Securities dated 30 December 2014;
- Order No. 228 of the Federal Agency for State Property Management dated 26 July 2005 "On the regulation of activities of the Federal Agency for State Property Management in the sphere of corporate management" (with recommendations for the Russian Federation to form a position concerning the approval of the annual report of the open joint stock company whose shares are held by the Russian Federation);
- Regulation No. 17/ps of the Federal Commission for the Securities Market dated 31 May 2002 "On the approval of a regulation on additional requirements for the procedure for preparing, convening and holding a general shareholders' meeting";

- the Corporate Governance Code approved by the Board of Directors of the Bank of Russia dated 21 March 2014.

- Resolution No. 1211 of the Government of the Russian Federation dated 10 November 2015 "On Amendments to the Approximate Structure of the Annual Report of a Joint-Stock Company Whose Shares are under Federal Ownership"

- Resolution No. 1214 of the Government of the Russian Federation dated 31 December 2010 "On Improving the Procedure for the Management of Open Joint-Stock Companies Whose Shares are under Federal Ownership and Federal State Enterprises"

This report is an overview of the condition and performance results of JSC RZD for the year ended 31 December 2016 as well as major trends that may have an impact on its future performance.

For the purposes of this document, the word "Company", pronoun "we" and its various forms refer to JSC RZD.

This report contains forward-looking statements that reflect expectations of the Company's management.

These forward-looking statements are not based on actual circumstances and include all the statements with regard to the Company's intentions, opinions or current expectations concerning its performance, financial standing, liquidity, growth prospects, strategy and the industry where JSC RZD operates. These forward-looking statements

are inherently characterised by risks and uncertainty factors as they relate to the events and depend on circumstances that may not occur in the future. Such terms as "assume", "consider", "expect", "forecast", "intend", "plan", "project", "review", "could" and other similar expressions and negative phrases are normally indicative of a predictive nature of a statement. These assumptions contain risks and uncertainties either expected or unexpected by the Company. Thus, future performance may be different from current expectations and users of this information may not rely in their assumptions solely on the information provided in the Annual Report. Apart from the official information on JSC RZD activities, this Annual Report contains information obtained from third parties. This information has been obtained from sources deemed reliable by JSC RZD. However, we do not guarantee that this information is accurate as it may be incomplete. JSC RZD does not guarantee that its or its industry's actual performance, scale or operating rates will match the performance, scale or operating rates expressed or implied in any forward-looking statements contained in this Annual Report or elsewhere. JSC RZD shall not be liable for any losses that may be sustained by any person as a result of this person's reliance on forward-looking statements. Unless otherwise expressly provided for in applicable laws, the Company does not assume any obligations with regard to the distribution or publication of any updates or changes in forward-looking statements that reflect any changes in expectations or new information as well as further events, conditions or circumstances.

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