

# Strategic projects

The Company has identified five strategic projects.

## STRATEGIC PROJECTS



### Affordability Project



## PROJECT GOALS

Review of the pricing policy for infrastructure services:

- applying a discounting factor to existing rates for transportation by higher-speed trains with average speeds of 91 km/h to 140 km/h
- establishing rate caps



### Network Project



- Building the Company's product portfolio
- Optimising train routes and schedules
- Improving the consumer experience of transport services



### Fleet Project



- Improving fleet management
- Reducing carriage non-productive time
- Developing and introducing a centralised rolling stock automatic management system



### Repairs Project



- Reducing carriage repair costs and carriage repair-related downtime
- Improving labour productivity and carriage repair quality
- Reducing the failure rates (including through the introduction of lean approaches)



### Crew Project



- Enhancing customer focus and improving passenger experience
- Raising labour productivity of train crews through new technologies



## Affordability Project

The goal of the Affordability project is to increase the passenger numbers carried by FPC by reducing transportation costs to cost-effective levels, leading to lower prices for passengers.

The Affordability project provides review of the pricing policy for infrastructure services for long distance public rail transportation:

- applying a discounting factor to existing rates for transportation by higher-speed trains with average speeds of 91 km/h to 140 km/h, while potentially raising the infrastructure access tariffs for express trains to maintain RZD's revenues;
- establishing rate caps<sup>1</sup> on infrastructure access tariffs for long-distance trains. The objectives of the first stage of the project were achieved in 2016. The FAS of Russia has amended the Tariff Guidelines (Decree No. 1836/16 dated 23 December 2016 amending FTS

of Russia Decree No. 156-t/1) to change the tariff schemes for infrastructure services, which will enable the Company to save RUB 3.2 billion annually, increase the number of passengers carried by daytime trains by 24.6% per year, boost revenues by 22.1%, and reduce the need for subsidies by RUB 1 billion (since higher-speed trains are included in the deregulated segment).

The development of a pricing cap mechanism for long-distance trains will be continued in 2017.

The effort is aimed to provide the infrastructure owner with the authority to offer to carriers discounts off infrastructure services in passenger transportation. Discounts are subject to increased passenger volumes through higher traffic on a specific route during a particular period (year, quarter).



**Review of the existing rates will enable the Company:**

to achieve annual savings of

RUB **3.2** billion

increase revenues

by **22.1%**

increase the number of passengers carried

by **24.6%**

<sup>1</sup> A rate cap on infrastructure services means that the provider of infrastructure services (JSC RZD) may reduce (below the tariff established by the Russian Federal Antimonopoly Service, FAS of Russia) the infrastructure access tariff for passenger trains on particular routes without consent of the FAS Russia. The purpose of this is to provide more trains in the timetable by selling tickets at lower prices.



## Network Project

The purpose of the Network project is to generate target demand and satisfy it effectively through optimising train routes and schedules, the Company's product portfolio<sup>2</sup>, and improving the consumer experience of transport services.

In 2016, the Company continued to develop its Daytime Express Programme<sup>3</sup>. In 2016, these trains carried over 10.2 million passengers (+20.6% year-on-year).

The Company continues to develop the multimodal transportation segment that combines railway and bus services. The Company introduced eight multimodal routes combining train and bus services to increase passenger traffic and improve passenger experience. In 2016, over 75 thousand passengers benefited from multimodal transportation services provided by FPC, which is 1.5 times higher than in 2015. To increase train speeds, the Company has developed the Programme to Increase an Average Speed of Long-Distance Passenger Trains<sup>4</sup>.

The Programme covers the period from 2017 to 2022 and will be implemented in three stages:

- Stage I (2017–2018);
- Stage II (2019–2020);
- Stage III (2021–2022).

Eleven train pairs will be accelerated on eight routes during Stage I: Saint Petersburg – Belgorod, Moscow – Voronezh, Krasnodar – Adler, Saint Petersburg – Petrozavodsk, Moscow – Belgorod, Moscow – Saransk, Moscow – Bryansk, Moscow – Smolensk.

Double-decker trains, which have proven their cost efficiency, will be another major contributor to the expansion of the Company's product portfolio.

Double-decker trains run on six routes and enjoy increasing popularity among passengers. In 2016, double-decker trains carried 2.8 million passengers, which is twice as many as in the previous year.

The Comprehensive Long-Term Programme to Introduce Double-Decker Passenger Carriages on RZD's Network<sup>5</sup> aims to improve the operational performance of long-distance passenger rolling stock in the context of the infrastructure throughput capacity shortage and lower state subsidies.

Between 2017 and 2020, more than 20 routes for higher-speed double-decker trains will be launched under the Programme, with prices lower than in single-decker compartment carriages, boosting the passenger traffic by 2.6 million people.

An important factor for the successful implementation of the Programme is the Russian Government's decision to reduce VAT rates for long-distance services to zero, allowing FPC to allocate additional funds to purchasing new passenger carriages to develop its route network.

<sup>2</sup> In the context of the Network project, a product means a set of consumer properties provided by the Company to customers on a paid basis. A product is based on tangible components (carriage, route, train, meals, services, etc.); however, the main aspects are its value for the customer and the consistency of the customer experience and perception of using each product. An illustrative example: a future product called *Luxury Single* would be sold to customers for various routes to travel by single or double-decker carriage with a composting toilet, in a private compartment with free Wi-Fi access, air conditioning unit, hot meals, fresh newspapers and magazines, and slippers, at an average speed of not less than 90 km/h. The product portfolio means the entire range of a company's products.

<sup>3</sup> Daytime trains with high average speeds put on routes where launching trains without reducing infrastructure costs would not be profitable. RZD may not reduce the rates without introducing a pricing cap mechanism, as the rates are set by the FAS of Russia.

<sup>4</sup> Approved by RZD Order No. 2028r dated 30 September 2016.

<sup>5</sup> Approved by RZD Order No. 2822r dated 30 December 2016.



## Fleet Project

The purpose of the Fleet project is to improve utilisation of the rolling stock by reducing carriage non-productive time. The Fleet project will reduce the need for additional carriages.

The key steps within the Fleet project are:

- aligning trains within an overall turnaround schedule, providing for the use of a single train set on several routes and optimisation of train set options;
- standardising and unifying carriages within clusters. Localising relatively homogeneous (in terms of technical

and consumer properties) carriages within a cluster will help reduce the inventories of spare parts, improve their supply logistics, and increase the product line consistency;

- developing target railcar fleet management processes to optimise fleet operation while maintaining the required volumes of passenger transportation.

The implementation of the project improved carriage productivity by 15%<sup>1</sup> in 2016. The total financial effect of the project was RUB 1.5 billion in 2016.



RUB **1.5** billion

financial effect of the Fleet project in 2016

<sup>1</sup> Carriage productivity is measured in passenger-kilometres per carriage.





## Repairs Project

The Repairs project is aimed at reducing carriage maintenance and repair costs through:

- reducing carriage downtime due to repair;
- increasing the labour productivity of the maintenance staff;
- increasing the quality of carriage repair services, including through the introduction of lean approaches;
- adjusting the maintenance and repair frequency for locomotive-hauled passenger carriages.

In 2016, measures undertaken as part of the project included:

- developing the concept of a new procedure for passenger carriage maintenance and repair, providing for transition from the Run and Time

in Service approach to a repair approach based on Run Only. The implementation of the concept enabled us to reach an agreement with JSC TVZ to amend the design documentation for carriages produced by JSC TVZ;

- analysing, describing, and simulating maintenance and repair business processes as a pilot project in four carriage depots: Samara, Voronezh, Kirov, and Kotlas. As a result, we identified key areas for improvement in carriage maintenance and repair.

In 2017, we plan to:

- introduce a new procedure for passenger carriage maintenance and repair, i.e. the Run Only approach;
- develop the Programme of Organisational and Technical Measures to Optimise JSC FPC's

Passenger Carriage Maintenance and Repair Costs. According to early estimates, the pilot implementation of the programme in 2017 will help reduce maintenance and repair costs by 10%.

Based on the estimated project performance at the pilot facilities, decision will be made to upscale the project to FPC's entire network.



# 10%

targeted reduction of maintenance and repair costs in 2017



## Crew Project

The Crew project is aimed at enhancing the customer focus of train crews, improving passenger experience, and increasing the labour productivity and wages of attendants by introducing new technologies. In 2016, as part of the brand new ideology, Attendant for the Passenger, Not for the Carriage, the Company implemented in two waves a pilot project to introduce progressive service standards on FPC's trains,

assigning cleaning positions to train crews and excluding cleaning and garbage disposal responsibilities not directly related to passenger service from the attendants' job scope. The pilot project was implemented at 13 FPC branches. The experiment covered 13 trains, which made a total of over 70 journeys.

Based on the results of the test journeys, the decision was made to proceed with

further phased roll-out of the new service approach to 53 train sets of 20 trains operated by FPC, between April and September, starting in 2017.

The Company is aware that the overall satisfaction of its employees contributes to the positive financial result through their attitude towards their colleagues and customers.

