

Innovation driven development

In 2017, Russian Railways updated its Comprehensive Innovative Development Programme until 2020 (the "CIDP"), with the Board of Directors approving the priority action plan for innovation-driven growth of the Company under the said programme for 2018–2019. Russian Railways' 2017 R&D capex amounted to RUB 942.5 m.

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

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



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

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

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

Digital Railway project

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

Innovative technologies were already used to upgrade the Elbrus hardware and software system for forecasting

Transportation Management System (IRTMS). By 2025, the system is expected to integrate all automated processes of managing railway transportation, transport logistics and railway transportation services to improve Russian Railways' performance and increase traffic safety. The system will have an automated centre to support decision-making enabling real-time process management, operation planning, and high-level modelling and forecasting.

train traffic through simulation modelling. Digital technologies also help improve information exchange with ports and develop electronic workflow (for both internal processes and external exchanges with customs authorities and other transportation participants).

Analysis of financial results¹



Vadim Mikhailov

First Deputy CEO of Russian Railways

// The strong commitment and impressive performance of many thousands of the Company's employees helped us make 2017 a year of success. We have outperformed all our financial and volume targets for 2017. The Company's RAS net profit increased 2.7 times (vs RUB 6.5 bn in 2016) and amounted to RUB 17.5 bn.

RUSSIAN RAILWAYS' PERFORMANCE IN 2017

Handling

+3.2% y-o-y
+0.6% vs target
1,261.3 mt

Income from freight transportation

+7.8% y-o-y
+ RUB 15.6 bn vs target
RUB 1,352.8 bn

Overhaul

+16.7% y-o-y
- RUB 3.6 bn vs target
RUB 84.3 bn

Sales profit

RUB 140 bn
(+19.5% y-o-y)
+ RUB 27.6 bn vs target

Total freight turnover

+6% y-o-y
+0.7% vs target
3,176.7 bn tkm

Cost of transportation

+0.9% y-o-y
-1.4% vs target

EBITDA

+12.1% y-o-y
+ RUB 0.9 bn vs target
RUB 353.9 bn

Net profit

RUB 17.5 bn
+ RUB 11.0 bn y-o-y
+ RUB 14.5 bn vs target

Transportation expenses

+6.6% y-o-y
-0.7% vs target
RUB 1,381.8 bn

Labour productivity

+9.2% y-o-y
+1.5 pp vs target

Net debt / EBITDA

-0.2x vs target
2.8x (RAS)

RUB 23.1 bn
(excl. FX effects)

+ RUB 31.6 bn y-o-y
+ RUB 9.6 bn vs target

¹ Based on the audited RAS financial statements for 2016 and 2017; the statements and the auditor report are available on Russian Railways' website at: http://ir.rzd.ru/static/public/ru?STRUCTURE_ID=32#3