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## UPGRADING THE CARRIAGES



In addition to new rolling stock purchases, JSC FPC focuses on upgrading and improving the equipment of carriages built earlier.

In 2019, a new concept for an open-plan carriage was introduced. The new concept was implemented in a pilot batch of carriages converted from traditional mass-produced carriages while undertaking overhauls with service life extension.

The main feature of the new concept is the personal space optionality offered to each passenger by using partitions installed along the aisle, and individual curtains. The refreshed third-class open-plan sleeping carriage provides for a modular replacement of interior elements, which will help reduce repair time and costs and also enable changes to the interior over the service life of the carriage.

In 2020–2021, JSC FPC continued to refresh its fleet of third-class open-plan sleeping carriages. 67 carriages of this type underwent overhaul reconditioning.

Based on the successful projects for overhaul reconditioning of third-class open-plan sleeping carriages with interior renewal, a refreshed interior design was developed

for second-class sleeping carriages 47K subjected for overhaul reconditioning. All innovations successfully used in the overhauled third-class open-plan sleeping carriages were also leveraged for second-class carriages.

In 2021, the overhaul reconditioning programme was completed for 148 second-class sleeping carriages featuring new interior design.

In 2020/2021, the Company launched branded carriages for the Ruskeala Express and Sochi trains as part of efforts to develop rail tourism. The Ruskeala Express interiors were inspired by the famous Nikolayevsky Express carriages, and the Sochi carriages have a retro design in the style of the 1970s–1980s Soviet Union. All carriages are built using latest technology and fitted with advanced equipment.

The installation of environmentally friendly toilets is underway. In 2021, the share of carriages equipped with air conditioning units increased by 4.8%, and the share of carriages with environmentally friendly toilet facilities increased by 6% of the assigned fleet.

## AVAILABILITY OF CARRIAGES EQUIPPED WITH AIR CONDITIONING UNITS AND ENVIRONMENTALLY FRIENDLY TOILET FACILITIES

The Company operates 12,939 carriages with power sockets for device charging, with the share of such carriages in the total fleet at 86.1%.

JSC FPC has completed a project to equip its branded trains with high-speed data lines, with a total of 6,850 carriages equipped with this connectivity solution. The data line is used to provide passengers with access to the Poputchik (Fellow Passenger) multimedia portal, as well as for technical purposes – to support the operation of the carriage equipment monitoring and diagnostics system, the CCTV system, and the passenger boarding control system.

The Company also plans to use the data line for providing a voice communication service for the train crew and for deploying the software to replace legacy equipment used in the passenger train security and communication monitoring and control system.

Water and air sanitisers are also being installed, with the share of carriages already equipped with these solutions already standing at 36.2% and 46.7%, respectively.

Sandwich frames made of plastic and aluminium have almost completely replaced wooden window frames in passenger carriages.





