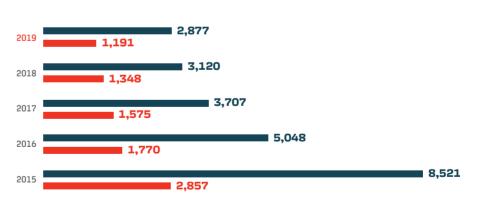
## **Traffic safety**



Russian Railways' Strategy for Guaranteed Transportation Safety and Reliability lays out the general principles that are underpinned by safety management and culture.

2019 saw the number of traffic accidents and incidents involving the Company's railway infrastructure fall 8% against 2018 (2,877 vs 3,120), including a 12% decrease in accidents caused by Russian Railways (1,191 vs 1,348). The reduction was due to a risk-oriented approach to control measures based on a ranking of transport market players by operational risk, along with the company-wide implementation of a roadmap of traffic safety at the Russian Railways Group.



• Traffic accidents and incidents across Russian Railways infrastructure

• Including those caused by the Russian Railways Group

Safety violations across Russian Railways infrastructure





To reduce freight transportation risks, Russian Railways is introducing the latest safety systems. As part of the 2019 programme, the following steps were taken:

- Technovisor innovative systems are being installed on the railcar fleet to measure a range of metrics while the train is in motion.
- 13 railway stations were equipped with advanced automation systems for commercial inspection of trains and cars featuring laser scanners that provide information about the car/ freight profile and identify any deviations in the loading and rolling stock gauges and any occurrences of load shifting;
- to minimise the risk of traffic accidents associated with rolling stock colliding with road vehicles at level crossings, 2019 saw the start of work to design 20 innovative systems to improve level crossing safety.

## Traffic safety across the Russian Railways Group



## In 2019, disbursement of expenses under the project to boost safety performance totalled



Excluding safety violations caused by RRC-2 and RRC-3.