

Strategy of Guaranteed Safe and Secure Transportation

JSC “Russian Railways” is moving to a proactive traffic safety policy. The updated Strategy for Guaranteed Security and Reliability of the Transport Process of JSC “Russian Railways” developed in 2012 and approved in early 2013 provides for the establishment of an effective technological failure prevention system. The safety management system of JSC “Russian Railways” also aims to foster the culture of safety by involving as many workers of the Holding Company as possible.

The priority of safety for railway transportation is becoming increasingly important. This trend is clearly apparent both at a global level and in the requirements of the Russian governing authorities.

JSC “Russian Railways” is paying an increasing level of attention to the safety of transport due to changes in the structure of the Holding Company, its transition to management by type of business and the development of new areas (express and high-speed passenger traffic, intensive urban and suburban passenger and heavy freight traffic), as well as due to the significant deterioration of the technical and technological base of rail transport and the reduction of the state’s control over compliance of products and services.

The updated Strategy for Guaranteed Security and Reliability of the Transport Process of JSC “Russian Railways” was adopted as an extension to the relevant Functional Strategy effective from 2007 to 2013 and is based on an up-to-date understanding of the systemic causes of traffic safety violations. The prevailing principle of the updated Strategy is “to anticipate and prevent”.

The strategy provides for additional measures, not only in respect of the supervision of compliance with safety regulations and elimination of violations, but above all, measures to prevent violations and improve the reliability of the transportation process.

The use of assessment methodologies and risk management, methods of factor analysis, valuation techniques to measure the influence of the reliability of technical facilities on traffic safety systems, and management decisions support systems are expanding. An effective tool to improve the reliability of the transport process is the URRAN implemented in 2012 (the Resources, Risk and Reliability Management System at different stages of the life cycle), which provides an analysis of the reliability and functional safety of technical facilities, railway infrastructure facilities and rolling stock.

The greatest attention is paid to the effectiveness of the safety management systems (SMBD), harmonized with international safety standards in force on the railways in the European Union. The SMBD ensures a unified approach and coordinated interaction between all branches, subdivisions, subsidiaries and affiliated companies of the Holding Company, participating in or providing transportation. Among the other important innovations of the Strategy are the introduction of the internal audit of the SMBD audit and, in time, the external audit of the safety management system and its certification.

At the core of the safety management systems is the Situation Center for Emergency Monitoring and Management of JSC “Russian Railways”, which is responsible for operational safety, transportation and fire protection, and the monitoring of weather conditions. In 2012, documents regulating the activities of the Situation Center in the normal mode or in the emergency response mode, as well as its operational cooperation with federal authorities and third parties, were approved.

Target (benchmark) traffic safety indicators

As traffic safety indicators, traffic reliability and acceptable risk levels have not been developed at a state level, since 2010 such indicators and their values and targets are set out in the corporate documents of JSC “Russian Railways” and have been approved by the Board of the Holding Company.

In 2012, the most important measure — the ratio of the absolute number of safety incidents versus the total train turnover in mln train-kilometers — was updated and calculated taking into account the accident rate specified in the Transport Strategy and Railway Development Strategy. For 2015 the target is 66% of the 2007 baseline level and in 2030 43-51% of the baseline level. For the period from 2011 to 2015 the indicators are calculated on an annual basis, and also in 2016, 2020 and 2030, taking into account the innovation and energy resource development in relation to the rail transport strategy. The indicators are specified for the whole of JSC “Russian Railways” and for all branches, divisions and subsidiaries of the Holding Company, whose activities are related to traffic safety. The objective of the Holding Company and its structural units is not exceed the maximum target values.

Formation of the safety culture

On 1 September 2012, new rules for technical operation of the railways, train traffic instructions, shunting operations and railway signaling came into effect. JSC “Russian Railways” has organized the study and knowledge assessment of the new document for over 600 thousand employees of the Holding company and over 20 thousand employees of third party organizations whose activities are related to train traffic, shunting operations and construction works on the infrastructure facilities of JSC “Russian Railways”.

The transition to a positive safety culture and staff training are an important part of the Strategy since an emphasis on administration and the punishment of those responsible for a particular incident (whether a railway, a business entity or an individual) neither increases motivation nor staff initiatives and, ultimately, minimizes the influence of the human factor on traffic safety.

The Strategy involves, in particular, the introduction of an assessment of employee competencies with regard to their willingness to comply with safety requirements, to adapt quickly to new requirements, their increased access to security information, up to the unrestricted dissemination of information on violations and measures to address them. This is supplemented by internal investigation of events and incidents with procedures to identify the cause-and-effect relationships before they occur, and an analysis of these relationships.

Objective

To ensure a guaranteed level of safety of human life and health, nature, wealth and hardware systems when carrying out the transport process at all stages, and a target level of reliability of the transportation process

Underlying principles

- 1 Defining acceptable levels of risk and standards for traffic safety indicators;
- 2 Situational security monitoring, implementing management decision support systems to forecast the traffic reliability and prevent security breaches;
- 3 Upgrading the technical and technological base, improving the reliability of hardware, and enhancing information technologies in the field of traffic safety;
- 4 Evaluating the economic efficiency of investment projects in areas of safety and security of the transportation process, taking into account the probability of incidents and events, and any possible direct or consequential losses or loss of profits;
- 5 Two-way exchange of security information, both vertically and horizontally— with employees involved in related activities and employees of related organizations;
- 6 Building a culture of safety, involving employees in solving the problems of traffic safety, monitoring professional knowledge in the field of security;
- 7 Improving the procedures for investigating accidents, audit and management audit of traffic safety.