NATIONAL REGULATORY DEVELOPMENT AND ENFORCEMENT PROCESSES RELATED TO PROVISION OF COMPLEX AUTOMOTIVE VEHICLE SAFETY IN THE RUSSIAN FEDERATION

1. Accession to the 1958 Geneva Agreement

Since the middle of 1970th the development of technical norms in regards to products of the Russian automotive industry is conducted in coordination with activities of the World Forum for Harmonization of Vehicle Regulations (WP.29).

The Soviet Union became the full participant of the 1958 Geneva Agreement from 17 February 1987. The important fact is establishing by the governmental decree the priority of application of the technical provisions agreed at the international level concerning safety of vehicles – 43 UNECE Regulations.

Subsequently in 1992 the Russian Federation Government has declared, that the Russian Federation is the state-continue of the USSR on realization of the rights and fulfillment of the obligations following from agreements signed by the USSR, including the 1958 Geneva Agreement.

One of the main consequences of participation of the USSR and, further, the Russian Federation in activities of the World Forum WP.29 was the development of the national certification system for the mechanical vehicles with the base of requirements contained from the UNECE Regulations.

2. National certification system for the mechanical vehicles

In 1992, the State Committee of the Russian Federation for Standardization, Metrology and Certification at the President of the Russian Federation adopted the «Certification System of Mechanical Vehicles and Trailers». It was based on principles of the 1958 Geneva Agreement and provided for 40 UNECE Regulations and 7 National Standards for the purpose of vehicle type approval.

In 1998, the number of the UNECE Regulations included into the list of obligatory requirements reached 57.

In December 2007, the list of obligatory technical requirements was significantly modified. The number of the UNECE Regulations became 73.

The practice of application of the certification system for automotive vehicles has shown its efficiency as the instrument for protecting the Russian market from product dangerous to the consumers and, as well, for creating incentive motives for manufacturers to develop products of higher technological level, to improve design of produced automobiles, to put new models into production.

3. The new concept of technical regulating in automotive industry at stages of the vehicle life cycle

The Federal Law of 27 December 2002 No. 184-ФЗ «Concerning Technical Regulating» established a new legal mechanism concerning development, adoption, application and execution of obligatory requirements (technical regulations) and voluntary rules (standards) concerning products on all phases of their life cycle.

The legal basis of the concept of technical regulating concerning automotive industry products includes the international agreements with participation of the Russian Federation, in particular, the 1958 Geneva Agreement, the 1998 Global Agreement, the 1997 Vienna Agreement, the 1968 Convention on Road Traffic and the 1971 European Agreement supplementing the said Convention, the 1957 ADR Agreement and the 1970 ATP Agreement, and also the Russian federal legislation, in particular, the Federal Laws «Concerning Safety of Road Traffic», «Concerning Preservation of the Environment», «Concerning Protection of Atmospheric Air», «Concerning Sanitary and Epidemiologic Well-Being of the Population», «About Protection of the Consumers’ Rights».

Basing on the concept of technical regulating the development of the Technical Regulations «About Requirements to Emissions of Harmful (Polluting) Substances by the Automotive Vehicles Released for Circulation in the Territory of the Russian Federation», adopted by the Russian Federation governmental decree of 12 October 2005 No. 609 (with the changes adopted by the Russian Federation governmental decrees of 27 November 2006 No. 718 and of 26 November 2009 No. 956) and «Concerning Safety of Wheeled Vehicles», adopted by the Russian Federation governmental decree of 10 September 2009 No. 720 (with the changes adopted by the Russian Federation governmental decree of 10 September 2010 No. 706) was carried out.

3.1. The Technical Regulation Concerning Vehicle Emissions

In connection with the high social importance of a problem of air pollution by the exhaust gases of the road vehicles equipped with internal combustion engines, first of all the Technical Regulations «About Requirements to Emissions of Harmful (Polluting) Substances by the Automotive Vehicles Released for Circulation in the Territory of the Russian Federation» has been developed.

Vehicles are divided into ecological classes depending on level of emissions of harmful substances. For each ecological class the technical specifications of emissions are established according to the provisions of the UNECE
Regulations Nos. 24, 49, 83 and 96, to which there are direct references in the Technical Regulation. The terms of enforcement of the technical specifications are established as well.

It was provided, that the release of 100% vehicles of the ecological class 2 (Euro-2) was mandated from April 2006. From 1 January 2008 the requirements of the ecological class 3 (Euro-3) were in force, from 1 January 2010 the norms of the ecological class 4 (Euro-4) were enforced, and from 1 January 2014 the introduction of norms of the ecological class 5 (Euro-5) is mandated.

3.2. The Technical Regulation Concerning Safety of Wheeled Vehicles

The scope of the Technical Regulation covers the road vehicles, which are released for circulation and being in operation, including, cases of their design modifications affecting safety, and also the vehicle components affecting vehicle safety (fig. 1).

The Technical Regulations establishes the requirements by means of direct references to 112 UNECE Regulations and 2 Global Technical Regulations. Besides that, the national requirements, which fulfillment is connected with maintenance of vehicle safety under operating conditions typical for the Russian Federation, are included into the Technical Regulation in the form of text.

The course of adoption of the UNECE Regulations and application of those in the Russian Federation is presented on fig. 2.

Taking into consideration the established in the Russian legislation principle of conformity of technical requirements to the national economy level of development, a number of the requirements included into the mandatory list, has different levels of stringency, and the target dates of gradual transition to application of the higher level requirements are provided.

The Technical Regulations establishes the necessity of the individual assessment of an individual vehicle released for circulation, when it is:

1) a result of an individual technical creativity;
2) imported into the Russian Federation by a physical person for own needs;
3) imported into the Russian Federation after admission to participation in traffic abroad, i.e., had the state registration plates of other country.

Fig. 1. Objects of technical regulating and the forms of assessment
With respect to such vehicles the base requirements of design safety which do not vary during vehicle operation, shall be checked, in particular, to equipment preventing unauthorized use, heating systems, lighting devices, visibility through rear-view mirrors, seat belts and their anchorages, seats and their anchorages, external projections and interior fittings, rear and lateral underrun protection devices, prevention of fire risk. Such requirements were derived from the corresponding UNECE Regulations. Therefore in case of submitting by the applicant the communications concerning approval of a vehicle type pursuant to the UNECE Regulations Nos. 10 - 12, 14, 16 - 18, 21, 26, 34, 39, 46, 48, 58, 73 and 107, the technical expertise with respect to the corresponding requirements of the Technical Regulations is not performed. The special attention was given to the safety of vehicle categories М2 and М3 (buses). The extended requirements of the Technical Regulation are based on the requirements of the UNECE Regulation No. 107. The individual vehicles shall comply with the requirements of operational safety, which to be checked at the state technical inspection with use of technical diagnosing means. The requirements of operational safety applied to individual vehicles, were developed basing on the Russian national standards and included into the Technical Regulation in the form of the separate annex.

The duty of submitting a vehicle to the state technical inspection is assigned to the vehicle owner (the representative of the owner), who is considered as the applicant for the compliance assessment. For that purpose the owner or his (her) representative applies to the organization authorized on inspecting vehicle technical conditions. On completion of the inspection, its results in the form of a diagnostic card are submitted to the territorial division of the State Inspection on Traffic Safety of the Ministry of Internal Affairs of the Russian Federation. Then the owner or his (her) representative is given the coupon (certificate) of the state inspection that is a necessary condition for the admission of such vehicle to participation in traffic in the Russian Federation.

Summary

The Russian Federation pursues a policy of application of the technical provisions agreed at the international level as the national technical requirements with respect to automotive vehicles, which is purposeful on elimination of the barriers interfering international trade with simultaneous maintenance of compliance to modern safety requirements. The UNECE Regulations are the basis of the national technical requirements of the Russian Federation.

Figure 2. Adoption of the UNECE Regulations within the framework of the 1958 Geneva Agreement and application of those in the Russian Federation