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Государственное обеспечение высокой квалификации водителей – залог безопасности на автомобильных дорогах Российской Федерации

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Аннотация: Актуальность темы исследования обусловлена тем, что число погибших и раненых в автомобильных авариях намного превышает людские потери на других видах транспорта. Ключевым фактором воздействия на безопасность на дорогах, следовательно, и на повышение качества предоставления услуг в системе автотранспортного обеспечения населения является уровень квалификации водителей. В данной статье проанализированы проблемы подготовки начинающих водителей, вопросы повышения профессиональной переподготовки работников автопредприятий, проблемы соблюдения режима труда и отдыха водителей, осуществляющих коммерческие перевозки пассажиров и грузов, а также разработаны предложения, которые позволят сократить аварийность на дорогах РФ и повысить уровень услуг социальной направленности с использованием автомобильного транспорта. В статье раскрыто понятие квалификации водителей, предложены пути повышения уровня подготовки водителей в автошколах, определены факторы институционального ограничения водителей-новичков, позволяющие снизить количество аварий на дорогах, тем самым сократить экономические потери государства, связанные с аварийностью на дорогах. Определена гамма многоаспектных, истинных причин нелегитимного поведения водителей-любителей, заслуживающих незамедлительного устранения на законодательном уровне.
Ключевые слова: квалификация водителей, повышение качества услуг, безопасность дорожного движения, начинающие водители, автошкола, переподготовка водителей, повышение квалификации водителей, тахограф

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GOVERNMENT PROVISION OF DRIVERS' HIGH QUALIFICATION AS A GUARANTEE OF SAFETY ON RUSSIAN ROADS

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Abstract: The relevance of this study refers to the fact that the number of fatalities and injuries in car accidents far exceeds human losses on other types of transportation. The level of driver training is one of the main factors, affecting the safety on roads. It is aimed to improve the quality of service provision in the motor transportation system for all population of the country. This article investigates such concerns as the problem of beginners and not experienced drivers, the issues of improving the professional retraining of automobile enterprise employees, the problems of observing the work and rest schedule for drivers engaged in the commercial transportation of passengers and goods. The authors developed proposals that will reduce the accident rate on the roads of the Russian Federation and improve the level of social services from using road transportation. The article discusses the concept of driver qualifications, suggests ways to improve the level of driver training in driving schools, identifies factors of institutional restriction for new drivers to reduce the number of accidents on the roads, thereby reducing the economic losses of the state related to traffic accidents. A list of the real causes for illegal behavior of non-professional drivers, deserving immediate elimination at the legislative level has been determined.
Keywords: driver's qualification, rising of service quality, road safety, novice drivers, auto school, driver's retraining, rising of driver's qualification, tachograph

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Introduction

The relevance of the research on raising the drivers' level of training and qualification is confirmed by its combination with the requirements of the Decree of the President of the Russian Federation on May 7, 2018, No. 204 "On the national goals and strategic objectives of the development of the Russian Federation for the period up to 2024"[1]. One of the goals of the Decree is to reduce the number of dead and injured in road traffic accidents (RTA) by 2024 by 3.5 times compared with the figures for 2017. In 2017, more than 19,000 Russians died, and over 250,000 people injured on the roads of the country[2]. *Russia's annual economic losses from road accidents amount to nearly 2% of gross domestic product* and are comparable in figures to the gross regional product of such subjects of the Russian Federation as the Krasnodar Territory or the Republic of Tatarstan[3]. The importance of the problems of road safety and quality of services in the motor transport system deserves special attention, researches and practical support from state and municipal authorities, as well as scientists and specialists. One of the significant factors influencing the quality of services and road safety is the qualification level of drivers using road transport.

Methods

The methodological basis of this study was scientific work in the field of improving the quality of service in the motor transport system for the population of the country. The analysis of the official statistical data of the regulatory framework and other analytical information made it possible to identify the central causes that negatively affect accidents on the Russian roads. Accomplished Pareto-analysis has revealed the main factors influencing on which will allow an increase in traffic safety. To summarize the results of the study, the methods of generalization and synthesis were used, which allowed the authors to make estimates of ways to reduce the death rate in road accidents. In the course of the study were also used: desk research methods, expert assessment methods, and sociological research methods.

Results and discussion

First, it is necessary to define the qualifications of drivers employed in transportation in the road transport industry. It is necessary because experts and specialists interpret this concept differently. During the work process on the monograph [Moskaleva, 2012. P. 301], were disclosed the content and characteristics of the indicators of drivers' qualifications. The most important of them are:

to know and observe the Russian Road Traffic Regulations, to observe the Rules aimed at improving road safety for passenger and cargo transportation by road and urban ground electrical transport[4], the Rules of organized transportation of a group of children by bus[5];

the continuous driving experience and intensive work on different routes for at least 3-4 years;

the experience to confidently drive a vehicle in complicated road and weather conditions: icy road sections, water barriers; deep pits on the road, often filled with mud; heavy snowfall with the formation of a snow layer on the road; heavy rain with thunderstorms and/or hail; hurricane, etc.;

availability of a driver's license, allowing to manage a wide range of vehicles;

to know the design of the controlled vehicle (including security systems), the ability to fix simple malfunctions along the way, to determine the technical vehicle health before leaving on the route;

the ability to prevent and exclude road accidents knowing the traffic rules, other regulations, and driving skills.

Knowledge of traffic rules, the formation of their observance, driving skills training should be provided by driving schools. Unfortunately, there are driving schools, which do not provide quality training for drivers, but earn money by reducing the actual amount of training agreed with the future driver, which in turn leads to lower tuition fees and saving on driving schools, and as a result, reduced quality training for future drivers. There are also such forms of education as online education, distance learning and other substitutes of instruction. The quality of driver's training depends on the size of the program that he learned. As the study showed, there is a centrally established *short duration of practical driving at driving schools*, which negatively affects the adaptability of new drivers to participation in road traffic and the ability to drive a vehicle in complex road conditions. Some legal and regulatory compliance have a negative effect on the development of practical driving skills. For example, in Article 16 of the Road Traffic Regulations driving on highways is prohibited for student drivers. At the same time, in other countries, to obtain the necessary practical skills of driving, driving lessons on highways with an instructor are allowed [Kuzmina, 2016. P. 2-7; Halkias, Schauer, 2004. P. 23]. The relevance of high-quality training for drivers, their admission to participation in road traffic made it possible to attribute drivers who received the driving license less than 2 years ago to the risk group, which is emphasized in the Road

1 The Decree of the President of the Russian Federation "On the national goals and strategic objectives of the development of the Russian Federation for the period up to 2024" on May 7, 2018 No. 204 // http://prezident.org/articles/ukaz-prezidenta-rf-204-ot-7-maja-2018 (date accessed: November 05, 2018)

2 http://stat.gibdd.ru/ (date accessed: December 06, 2018)

3 Road safety strategy in the Russian Federation for 2018-2024. Approved by the decree of the Government of the Russian Federation on January 8, 2018, No. 1-r. Collection of Legislation of the Russian Federation. 2018. No 5. Article 774. P. 2573-2583.

4 Approved by the order of the Ministry of Transport of the Russian Federation of January 15, 2014 No. 7. Rossiyskaya Gazeta. 2014. No. 136. P. 25

5 Rules for organized transportation of groups of children by bus. Approved by the Resolution of the Government of the Russian Federation of December 17, 2013 No. 1177. Collection of Legislation of the Russian Federation 2013. No. 52 (Part II). Article 7174. P. 19571-19574.

Safety Strategy in the Russian Federation for 2018-2024[6]. Issues of adaptation of novice drivers to safe driving are considered in the Program "Goal-Zero" of the party "Edinaya Rossiya (United Russia)" [Project ..., 2009. P. 35], in the transport programs of Sweden[7] and the Netherlands[8] also. Comparative analysis of data on accidents, depending on the experience of managing the vehicle (in 2016, every thirteenth accident occurred due to traffic violations by novice drivers with experience less than 2 years, which is 7.9% of all accidents that killed 1154 and injured 16953 people), motivated the authors to develop a set of proactive steps to reduce the negative effects of incompetence of novice drivers. Some of the proposed models are the development of the terms described in the monograph [Moskaleva, 2012. P. 348] and the scientific article [Moskaleva, 2014. P. 65-73].

An important step to accelerate the acquisition of practical driving skills is *to increase the duration of driving lessons in driving schools*. The peculiarity of this proposal, as well as all other cumulative actions described below, is that all this is done on the driver's expense and does not affect the economy of the region or municipality negatively. Since the possibilities of driving schools are not unlimited, driving instruction should be continued at the end of the driving school. Practically, this is done as seen below. To improve the skills of "young" drivers, reduce the number of violations of the RTR in this category of drivers and, as a result, reduce the risk of creating an emergency, the authors propose to introduce *two-step issuance of driving licenses*. The essence of this proposal is that after the end of the driving school lessons and practice, the driver receives a temporary license, which after a year of driving without significant violations, would be replaced by a permanent one. It is quite easy to compile a list of significant traffic violations, and it is also necessary to include some violations by a number of restrictions in it. The system of two-step issuance of driver's licenses is described further. The system is not original in particular, but the order of its implementation, proposed by the authors, is more important. During Soviet times, there was a practice of issuing temporary driver's licenses, which, after two years of driving without specific violations of the traffic rules, were replaced with permanent ones. In fact, this is the two-step issuance of driver's licenses, but, according to the authors, considering more than two million drivers as beginners for two years is too long. That is why it is proposed to set the period of one year. Although they have not yet received wide distribution, such systems function in some states. The authorities note a decrease in the accident rate in states where such systems operate [Kirshfink, Hernandez, Boero, 2000. P. 24; Zhong-Ren, Beimborn, 2000]. Austria is an excellent example; a two-step process for issuing drivers' licenses has been in effect there since 2003. After training in a driving school and passing the necessary exams for the "amateur" category, a person receives a driver's license and the right to independently drive a vehicle without any restrictions. But there is one clause: in the first year, each novice driver must pass additional training in the same driving school with duration of 12 hours. During the classes, the novice will be explained some distinctions (mistakes), taking into account the acquired driving skills. Novice drivers, who forgot about extra classes, will be reminded twice of their responsibility to complete their education. The driver's license will be canceled in case of refusal from the mandatory advanced training, with the introduction of appropriate information in the police database. The most evident effect of such a system was for young people: the number of accidents with their participation in the first year after obtaining the license decreased by an average of 28%.

The experience of Austria would be useful in Russia, but with some significant clarifications. Firstly, additional driving instruction for 12 hours does little effect. Even after a whole year of everyday driving, many (if not all) novice drivers still feel anxious driving a car. And if these 12 hours are used immediately after the end of the driving school, then it will not give anything at all, only the appearance of training. According to the authors, the number of *additional hours for driving training* should include *at least 30 hours*, and they should take place immediately after the end of driving school. The forms of such training may be different: in a driving school (not necessarily in the same one where the driver underwent basic training), in the form of private lessons. But there is an important point – it is necessary that the fact of additional training is confirmed in writing form by a driving school, or an expert driver (additional private lessons). Specialists and regulatory acts can set the number of additional hours of training. For example, in the framework of the Strategy Road Safety in the Russian Federation for 2018-2024. It should be noted that the number of additional 30 hours of training is relatively conditional. Together with the driving instructor, each novice driver should determine the number of additional hours of training (but not less than 30 hours). The novice driver should be more interested in additional training, because his own safety and the safety of other road participants depend on his driving skills. The result of lack of skills leads to accidents, injuries, and economic losses.

Many factors influence the duration of driving training. The most significant factors are the age of a novice driver (the older ones master the knowledge of driving much longer), individual abilities, character traits, the gender of the driver, and some others. The study found that additional post-school driving practice is especially necessary for drivers aged 18 to 24 years. Drivers of this age are most often the cause of road accidents (among the number of all novice drivers). The death rate of drivers in the age group from 18 to 24 years in accidents due to their fault is about two times

6 Road safety strategy in the Russian Federation for 2018-2024. Approved by the order of the Government of the Russian Federation of January 8, 2018, No. 1-r. Collection of Legislation of the Russian Federation. 2018. No. 5. Article 774. P. 2573-2583

7 Vision Zero (Zero Mortality Concept) is a Swedish road safety program // https://ru.wikipedia.org/wiki/Vision_Zero

8 Transport policy of industrialized countries. Transport policy of the Netherlands for the period up to 2020 // http://www.mintrans.ru/presse/Trans Strat_Foreign_Experiens_3_3 (date accessed: December 21, 2009).

higher than those of older drivers. Experts believe that the areas of the human brain that are responsible for suppressing impulses and weighing the consequences of decisions, or simple actions, develop after the age of 24 years. Training for novice drivers aged 60 years and older is also very necessary: people of this age learn much worse than the young ones, especially how to drive a car properly. They need much more time for that.

If the additional driving instruction, after the end of the driving school, does not become compulsory, a significant part of the young novice drivers will not do it at their will. This can be referred to carelessness and a remarkable manifestation of megalomania. For a particular category of novice drivers, self-deception is inherent: they often think that they able and can do anything on the road. For this reason, some necessary measures are required: restrictions, i.e. institutional coercion and regulatory measures. As one of such measures, a legislative speed limitation for drivers *with experience less than 1 year: in cities – not more than 40 km/h, and on highways and other roads – not more than 70 km/h.* Another useful limitation for novice drivers *is not to make night trips during the first year of driving.* A posteriori analysis showed that, at night, the risk of getting into an accident increases in 5-6 times and more than 50 percent of all road traffic accidents are fatal (this statistic applies to drivers of all ages and qualifications). In order to determine the concept of "nighttime trips" in one way, it is necessary to state the meaning of this definition in the Road Traffic Regulations. The influence of nighttime on road safety is described in the monograph [Moskaleva, 2012. P. 190]. It also includes relevant recommendations.

In addition to the proposal to legislatively ban night trips for novice drivers, the authors believe that *drivers with experience less than one year should not make long trips driving a vehicle*. Experts must limit travel distance; in the authors' opinion, this distance should not exceed 500 kilometers. On a long trip, the driver is often overworked due to noncompliance of work-rest schedules (long driving time is hard work). It is not so easy to control the distance of a driver's trip, especially within the same region with a large area. But it is necessary that the driver knows that the distance of his trip can be regulated. One of such regulations is the installation of the tachometer in the vehicle of a novice driver, so, the driver can avoid penalties from the traffic police because of long-distance trips violations. Then the trip distance goes into the second plan; it will become more important to keep the work-rest schedule. Security systems that indicate the driver's fatigue state are used now more widely. It is worth noting that in budget cars such systems will not appear soon. If a long-distance trip takes place not only in the daytime but also at night, the situation is getting worse. It should be noted that the combination of nighttime and the trip distance also causes the weakening of driver's attention and reaction, the difficulty of estimating distance and speed, the blinding because of the bright headlights of oncoming cars, etc.

The next important proposal that needs to be implemented in Russia is *to prohibit novice drivers from using a mobile phone while driving, even if they use "hands-free"*.

A significant reason for the basic incompetence of novice drivers in practical driving *is the low professional training of driving school instructors who teach future drivers to drive*. This may include short and incomplete preparation of driving school instructors to how they teach driving a car. In this regard, *significant changes are necessary for the quality of driving school teachers training*; difficult weather conditions and off-road drive training, teachers must acquire special skills for right communication with their students (many cases of changing driving teachers due to incorrect communication between teacher and student).

A significant indicator of driver qualification is not only knowledge but also the obligatory observance of the rules of the road, other laws, legislative and regulatory documents. Traffic accidents, resulting from non-compliance with the established rules of behavior by drivers, are fatal for more than 19 thousand people annually and about 250 thousand injured. One-third of deaths in road accidents are citizens of the most active working age (26-40 years old), about 20% of the victims become disabled [Blinkin, Reshetova, 2013. P. 105]. The given statistics allows making a reasoned conclusion – the behavior of a certain part of drivers (an important indicator of qualification) is maladaptive, far from ideal, and dangerous for people around them. The study showed the relevance of determining which drivers most "suffer from indiscipline and permissiveness" and, accordingly, who will and how to "cure this disease". It has been recognized that the main share of traffic violations is made by so-called "amateur" drivers of passenger cars. A part of this drivers' category has a high opinion of themselves as a social elite with an unrivaled ability to drive a car. Such misbehavior leads to the manifestation of permissiveness during the driving and in communication with other road users. In fact, many of them are not experienced in driving skills; they commit traffic violations, either consciously or due to ignorance of the traffic rules. By the method of practical analysis and information database generalizations, it was found that according to the total annual number of 180-200 thousand traffic violations, this category of "amateur" drivers' accounts for 67-75% of violations.

The behavior of drivers who violate the rules of the road and changes in the rules of children and passenger transportation are evolving in a positive way. These changes have received considerable attention from the scientific community, legislative, regulatory and supervisory bodies, experts, and specialists. However, the proposed and implemented measures of impact on the drivers' attitude do not work due to underestimation of the negative role of the named type of illegitimate relations in connection to the established rules, as well as rude, arrogant drivers in relation to other road users.

In the course of the analysis, the author of the research got acquainted with the proposals of different scientific works, experts, specialists, with the content of the current regulatory and legislative documents on the formation of decent, law-abiding behavior of road users. There are three examples of this type of researches. The Kichedzhi and Hatoyama's work "Moscow: transport problems of a megapolis" [Kichedzhi, Hatoyama, 2010. P. 140-150, 252-255]

emphasize the need for drivers to achieve "smart driving" through self-education. The definition of "smart driving", in this case, implies willingness and confidence in driver's behavior, due to the realization of the fact that the transport and roads' situation depends on each of the drivers. However, the probability for the formation of the "smart driving" for Russian drivers is reduced to zero in the near future. This especially applies to the researched category of careless drivers. But in a situation of unacceptable annual death and injury rates in automobile accidents, the authors determine the formation of exemplary driver behavior as a nationwide task that does not tolerate delay. The author mentioned in scientific work [Mokina, 2015. P. 50-54], made a generalized (with reference to the experience of foreign countries) proposal to introduce a psychophysiological selection of drivers before issuing them driver's license in order to exclude people who, due to their psycho-physiological qualities, are inappropriate for performing driving functions. Part of the proposal on the psychophysiological testing of future drivers in the learning process, bringing these test results to the teaching staff is, probably, acceptable. On the other hand, this proposal should be treated with caution, since drivers are offered measures that review to the practice-tested indicators of medical contraindications which are established by the Federal Law of December 28, 2013 No. 437-FZ and defined in the process of medical examination for future drivers, as well as during the preliminary (when applying for a job) and periodic medical examination (at least once every two years) for professional drivers.

During a speech one of the participants in the State Council Presidium meeting on Russian road safety issues [Kuzmina, 2016. P. 6], it was proposed to increase children's education on the fundamentals of road safety, including the creation of children's specialized training grounds. According to the author of this proposal, if we teach children the rules of the road now, "we will get the next generation of disciplined, cultural drivers on the roads of the country". Despite the usefulness of the proposed measure, the author assesses the acceptability and effectiveness of such basic road traffic regulations training only for children. When a person gets older and becomes a full-fledged driver, he is guided by quite different criteria of behavior, with a different attitude to bad manners such as disobedience, indifference to advice, comments, and reproaches. The main difficulty in developing the law-abiding behavior of future and full-fledged drivers of a certain type consists of their absolute non-compliance of the traffic regulations' canons and accumulation of a rude attitude towards others. The steady progress of such an undesirable process is due to the lack of education of a common culture, social status, high self-conceit, snobbery, light penalties for serious violations of traffic rules (in fact, it is impunity that leads to repeated violations). This also includes the lack of criticality of own actions, the absolute unacceptability, and unwillingness to hear any disapproval from other people. Consequently, it is a waste of time without pragmatic results to engage in the formation of a law-abiding, disciplined manner of behavior in this category of future and full-fledged drivers. A completely different approach for solving the problem of compliance with traffic rules as well as other laws is needed. Such non-compliant drivers, which are really dangerous for all road users, can only be affected by a *significant increase in penalties and cancellation of the driver's license after repeated violations of traffic rules for a period of at least three years*. Such measures will reduce economic losses due to numerous accidents.

An essential role for the qualification growth of professional drivers is the wage level. At various forums and levels of government, it has been repeatedly emphasized that in all regions of the Russian Federation *the salary of workers of road transport enterprises (including drivers) of urban and municipal subordination is below the average for the regional economy*. As a result, the prestige of the driver profession became low, which, in turn, led to a shortage of personnel, and, to a greater extent, this affected the passenger vehicle drivers. First of all, in order to reduce the staff shortage of qualified municipal drivers on urban and rural routes, it is necessary to solve the problem of drivers' wages. But, at the same time, there is a problem of high debt load of the subjects of the Russian Federation that, in turn, cannot help to change the situation. This is why this initiative should be given a nationwide significance. It turns out that the higher the indicators in the country's economy the more effectively this problem will be solved.

Many scientific papers are devoted to this problem, including the study of the Rector of RANEPA, Mau V. A. [Mau, 2016. P. 485]. To a certain extent, the increase in the economic competitiveness of municipal unitary enterprises (frequent transportation in more favorable economic conditions) is facilitated by the possibility of introducing regulated transportation tariffs (along with unregulated tariffs) according to the law No. 220-FZ of July 13, 2015, "On the organization of regular transportation of passengers and cargoes by motor vehicles and urban ground electrical vehicles in the Russian Federation and on Amendments to certain legislative acts of the Russian Federation", and the potentiality to increase the wage level of drivers on this basis.

One of the tasks for the qualification growth of professional drivers is the *periodic retraining of drivers* engaged in the commercial transportation of passengers and cargoes. A round-table in the Civic Chamber of the Russian Federation on May 18, 2017, was devoted to solving this problem at the state level [Kuzmina, 2017. P. 12-21]. The Ministry of Transport of the Russian Federation noted the preparedness of the draft of the appropriate federal law, which now is at the stage of conceptual consideration. At the same time, the foreign experience of the European Union in drivers' retraining is being studied. According to it, each driver, who wants to work for hire, must undergo advanced training, and obtain a certificate of professional competence or an appropriate mark in his driving license. Professional training of employees of automobile enterprises, including drivers, is currently carried out in accordance with the order of the Ministry of Transport of the Russian Federation on March 11, 2016 No. 59 "On approval of the procedure for passing professional

selection and vocational training by workers employed to work directly related to the movement of motor vehicles and urban ground electric transport". The same order sets out the procedure for the internship of drivers who were first employed or transferred to work from one type of vehicle to another.

A significant sign of the driver's professionalism is *compliance with the regime of work and rest*, established by the Regulation on the specifics of working hours and rest time for drivers[9]. In case of violation of the work and rest regime, an unhealthy state of the driver occurs: tiredness, fatigue, a half-asleep state, manifested in the form of laxity, being in a sleepy state, caused by lack of sleep or sleepless at night before driving. Long-term driving beyond the working shift requires the constant composure from the driver, timely response to sudden changes in road conditions, which causes fatigue and stress. In such condition, driver's reaction time is reduced and dangerous conditions for getting into an accident are created. In order to determine the driver's time on buses while transporting passengers on intercity and international routes with more than 20 seats, tachographs must be installed – individual control devices to continuously record not only the duration of the driver's work but also the distance passed, speed, route deviations. The vehicles with the carrying capacity of over 3.5 tons must have tachographs installed as well. Drivers' violation of work and rest time occurs most often in private transport companies and is caused, on the one hand, by the efforts of drivers to earn as much as possible, on the other hand, by a lack of driving personnel or a conscious reduction in the number of drivers in order to reduce financial costs. As a result, drivers' overworking often becomes the cause of accidents, which significantly affects economic losses.

9 Approved by Order of the Ministry of Transport of August 20, 2004 No. 15 with amendments to Order of the Ministry of Transport of the Russian Federation of December 24, 2013 No. 484

Conclusion

Based on the conducted analysis, we can draw the following conclusions.

Firstly, after graduating from the driving school, every novice driver must continue his training and observe a number of legislative restrictions as well as meet certain requirements:

- obtain a permanent driver's license in a two-step process;
- complete a course of additional driving instruction not less than 30 hours;
- comply with speed limit of 40 km/h in city limits and 70 km/h on highways and other roads during the first year of driving;
- do not make nighttime trips during the first year of driving;
- do not make long trips during the first year of driving;
- do not use a mobile phone while driving a car (even if there is a "hands-free" device);
- do not transport children during the first year of driving.

Secondly, to form a legitimate and proper behavior of drivers of vehicles, it is necessary to significantly increase the penalties to the amount of tens of thousands of rubles and deprive the right to drive a vehicle after a repeated violation of road traffic rules for at least three years.

Thirdly, for drivers engaged in the commercial transportation of passengers and cargo, it is necessary to make proper legislation which applies for periodic retraining based on international experience.

Fourthly, in order to comply with the drivers' schedule of work and rest, the installation of tachographs is strongly recommended not only in buses and trucks but also in taxis.

The proposed measures will help improving the skills of drivers, reduce accidents on the roads of Russia, reduce socio-economic losses due to road accidents, and, consequently, improve the quality of services in the motor transport system of the population.

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