

## Measures Reducing the Number of Accidents in Motor Transport Companies

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**Abstract-** Ensuring professional reliability of drivers is one of the most important activities of the companies carrying out motor transportation. According to the State Road Safety Police of the Ministry of Internal Affairs of the Russian Federation (SRSP MIA) approximately 80% of road accidents deal with mistakes resulting from a human factor. This long-term statistical regularity reveals a priority role of the driver in traffic safety in "Automobile – Driver – Road – Environment" system. For a long period of time a driver's factor in the problem of traffic safety in Russia was mainly considered as a disciplinary problem that is solved by toughening of sanctions. Toughening of punishments for the road rules violation was considered to be the most important preventive measure to reduce the number of road accidents.

**Keywords:** Transport, traffic safety, measures, accident rate, traffic.

### Introduction

Automobilization is an important element of the development of a society. The motor transport is one of the largest branches of a social production influencing all spheres of human activity and development of a society as a whole.

Increase of the traffic system effectiveness is one of the main national goals. The main activities aimed to solve the problem are to reduce downtime of cars under cargo and technological operations, to cut down empty runs, to optimize the use of vehicle loading and capacity, to develop optimum schemes and routes of transportations increasing safety level of cargo and passenger carriage as well as to increase the level of mechanization and rhythm of handling operations.

### Researches Survey

Ensuring traffic safety is one of the forms of realization of a state unified policy in the sphere of protection of life, health and property of citizens by prevention of road accidents and decreasing severity of their consequences. This direction of human activity is of great social and economic significance.

According to World Health Organization, road accidents result in death of more than two million people

annually. In Russia tens of thousands of people die in road accidents every year. Only in 2005 nearly 35 thousand of Russians died in road accidents. The number of violation of traffic laws made up 40 million.

The consequences of road accidents (RA) connected with death and wound of people, loss and damage of material values cause a significant damage to the national economy. According to experts' calculations, the extent of annual economic damage from road accidents in Russia makes more than 2% of GDP. The country loses about 400 billion rubles every year.

The cost assessment of consequences of road accidents (death and wounds of people, their disability and rehabilitation, economic and other factors) is used in all countries with the developed auto mobilization as one of the main criteria at decision-making in the course of public administration. It allows making the corresponding calculations when developing target programs, projects and preventive actions in this sphere at various levels of management.

Diversity and complexity of the public relations in the sphere of traffic safety cause a great number of normative legal documents regulating activities in this sphere. All these documents represent the system which includes the Constitution of the Russian Federation, federal laws, decrees of the President of Russia, resolutions of the government of the Russian Federation, federal and regional departmental (interdepartmental) normative legal documents. Besides the Russian legal documents this system includes the international documents on traffic safety which the Russian Federation joined [7].

### Methods and materials

Due to various reasons use of transport is followed by considerable social, economic and ecological negative consequences. According to the results of the world statistics hundreds of thousands of people annually die and tens of millions get wounds in road accidents. Gas contamination in many large cities exceeds the admissible level in dozens times. Noise level on highways of big cities considerably exceeds the admissible limit. Besides, auto mobilization of a

society demands huge resources of energy and raw materials as well as the considerable areas of land [1, 3].

Another important task is to decrease the negative consequences of auto mobilization. Among them the problem of traffic safety has become the most difficult and global. To solve the problem in modern conditions it is required to develop new engineering and system approaches taking into account all complex of interaction in the "People – Automobile – Road – Environment" [2].

Motor transport companies can execute a number of measures aimed to reducing the number of accidents. These measures can be divided into three groups:

- ensuring reliability of drivers (improvement of system of training and retraining of drivers and mechanical engineers, improvement of the rest and work schedule, medical and sanitary service and health control);
- ensuring safety of cars, improvement of their technical state;
- improvement of cargo transportation management and drivers control as well as improvement of road conditions.

The main goal of the companies carrying out cargo transportation is to ensure transportation safety. Safety of transportation includes both prevention of road incidents and ensuring quantitative and qualitative safety of goods.

The main ways to solve the problem of transportation safety can be as follows:

- creation of the uniform state traffic security system executing planning, financing, coordinating, management and control of activity in the sphere of traffic safety;
- increase of transport culture of all traffic participants; improvement of the legislation concerning changes of norms and traffic regulations, standards on vehicles, standards on exhaust emission, introduction of reasonable penalties for violations for the purpose of increase of responsibility of officials and private individuals;
- using economic methods of management in the sphere of traffic safety for the purpose of ensuring economic effectiveness of measures aimed to prevent accident rate in motor transport companies irrespective of form of ownership;
- improvement of quality of drivers professional selection and training; compulsory education how to act correctly in critical situations;
- improvement of automobile design, first of all, its active, passive, post-emergency and ecological safety, equipment of a car with modern means of communication;
- constructive improvement of highways (ensuring necessary quality of a road carpet and its safety in use, construction of by-roads round the cities, highway crossings on different levels, automated traffic control systems). Special attention should be paid to detection and elimination of the centers of accident rate, reconstruction of the most dangerous sites of roads;
- improvement of the system collecting and analyzing the records about road accidents for the purpose of detection of their reasons and development of effective actions for their elimination;
- improvement of the system of communication and warning to help victims of road accidents.

"The charter of the motor transport" assigns the following duties to motor transport companies:

- selecting expedient type and models of automobiles appropriate to the volume of transportations;
- providing faultless and serviceable vehicles for loading and transportation of the type of freights;
- ensuring the proper constructive and technical state of vehicles thus contributing to traffic safety;
- providing compliance of vehicles to sanitary requirements;
- providing timely arriving of vehicles to all points of loading and unloading according to the contract for goods transportation.

"Rules of cargo transportation by motor transport" regulate the organization of transportation of goods; define duties, rights and responsibility of the companies, organizations and persons using services of motor transport, describe rules of drawing up reports and claims. [5].

## Results and discussion

Owners of transport companies are forbidden in whatsoever form to force or encourage drivers to violation of traffic safety requirements. Motor transport companies should pay special attention to the assessment of compliance of road conditions on vehicles routes to the traffic safety requirements. The activity of the traffic security service of the motor transport company should be focused on organization of accounting and reporting about road accidents. Well organized accounting of road accidents is a basis for objective assessment of the effectiveness of work on accident rate prevention. In the company it is necessary to form an efficient system of accounting and reporting based on systematic maintaining the following primary documentation:

- log-book of road accidents;
- log-book of violations of the traffic rules by drivers;
- personal cards of drivers;
- reports on road accidents to higher instance.

For receiving rapid and objective information about the level of transport discipline and vocational training of the drivers of the transport company it is necessary to keep personal cards of drivers containing all main data on their professional activity from the moment of beginning of their work in the company.

In order to make the data about road accidents and gross violations of traffic regulations complete, the traffic safety service of the transport company have to verify the data systematically (at least once a month) in local departments of the State Road Safety Police by making records in the relevant log-books with the indication of the valid date of the registered event and all necessary data related to it.

Service investigation of a road accident. The director conducts a service investigation in case of every road accident which happens with the participation of a car belonging to the company. The purpose of service investigation is to establish circumstances, conditions and reasons of the road accident, to detect violations of the established norms and rules regulating traffic safety and to

determine the persons who are guilty of the violations (drivers, mechanical engineers or other officials). When conducting a service investigation all omissions in work on accident rate prevention in the company can be revealed.

## Conclusion

The world experience confirms the necessity of a complex approach to the solution of various problems in the field of traffic safety in the companies. In the developed countries the coordination of works on accident rate prevention is carried out by the relevant committees, bureaus, councils. Nowadays in the Russian Federation the active steps are taken to create a uniform approach to planning and implementation of measures aimed to prevention of road accidents in the companies.

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