FOREIGN EXPERIENCE IN ROAD TRANSPORT SAFETY AND MAIN AREAS OF ITS INTRODUCTION IN UKRAINE

Abstract. Purpose. The article is aimed at studying the European experience in road transport safety and identifying ways of its introduction into domestic practice. Results. The author studies foreign experience in road transport safety. The main areas of transport policy of some European States are analysed. It is underlined that the problem of reducing road traffic injuries is being addressed through the development and adoption of interdepartmental programmes, the follow-up thereof involves various State authorities and administrations. The main areas of introducing positive international experience in domestic practice are determined. It is established that priority areas for road safety can be grouped into: 1) compliance with traffic rules. The main measures in this area are: eradication of legal nihilism, raising of legal awareness, promotion of road safety, improvement of supervision and control of the use of seat belts, child restraints and other protective equipment, speed control and the detection of drunk driving; 2) improved safety of vehicles. This requires increasing the visibility of the vehicle on the road; improving vehicle design, equipment and systems; 3) road traffic risk reduction and a safe road environment. This area proposes to give priority to public transport; to strengthen the system of issuing driver’s licences; to use innovations in urban planning and land use; 4) medical care improvement. To this end, medical units should quickly come to the scene of the accident and provide immediate assistance to the injured; treatment and rehabilitation of the injured in accidents. Conclusions. It is concluded that in order to improve the system of road transport safety, the following tasks should be solved in Ukraine: to expand the regulatory and legal framework for road transport safety in accordance with the progressive standards of developed European States; to identify transport policy priorities that shall meet high safety standards; to introduce innovative technologies in the field of in road transport safety; to implement an effective system of control and supervision of road transport safety in accordance with European standards. Key words: transport, road transport, safety in transport, road traffic safety, transport safety, road transport safety.

1. Introduction

The problem of road traffic safety and effective protection of the life and health of Ukrainians have become particularly acute in recent years. The main reason is that every year the quality of roads is deteriorating, and no progress in expanding the road network and infrastructure of our State is made. Moreover, problems in road safety are related to the inadequacy of the legislation governing these relations.

It should be noted that road traffic injuries are much lower in most developed European countries because transport safety policies are more efficient and effective. For example, the United Nations characterises road safety as a global crisis.

The analysis of the European experience in road transport safety allows for the effective use of experience of other countries and its implementation in the modern realities of Ukraine.

The article is aimed at studying the European experience in road transport safety and identifying ways of its introduction into domestic practice.

Some specificities of foreign experience in road transport safety have been studied by scientists such as O.V. Berest, Y.L. Bryndikov, M.M. Dolhopolova, V.V. Yehupenko, V.A. Khashkanov, M.P. Klymchyn, N.I. Kozhukhovska, M.V. Lazarenko, P.P. Lutsiuk, V.V. Masliuk, M.A. Mykytyntiuk, V.A. Myslyvyi, O.I. Milenin, O.M. Moisiuk, A.M. Podolliak, O.Y. Salmanova, L.I. Sopilnyk, M.M. Stetska, Y.I. Khomiak, and others. However, they all reveal only certain aspects of the administrative and legal framework in this field.
2. World experience in road transport safety

The advisability of implementing foreign, in particular European, experience in the field of transport and in road transport safety is stated in National Transport Strategy of Ukraine up to 2030 No. 430-r of 30 May 2018. According to the law-makers, the introduction of European standards will create modern infrastructure, fair market conditions and free market competition, effective development and coordination of the activities of the different transport modes together with the implementation of an effective system of State regulatory mechanism and management, which will provide the basis for the development and functional growth of the national transport system of Ukraine. In addition, improving the efficiency and quality of transport services will enable its competitiveness, stimulate Ukrainian exports and contribute to the development of domestic production and trade (Cabinet of Ministers of Ukraine, 2018).

It should be noted that in Europe, international organisations play a major role in the development and implementation of road safety policies, and the World Health Organisation has been identified as the coordinator for road safety.

Therefore, taking into account the pan-European level, it is advisable to cover the experience of the organisation operating in the EU territory, such as the Euro Contrôle Route (ECR). It was established by the four Ministers of Transport of the Benelux countries and France, as well as their inspection services, to cooperate effectively in the implementation of control measures for the transport of goods and passengers by road. The ECR brings together European road traffic control organisations and aims to improve road safety, harmonise control procedures, share experience and skills, comply with road transport legislation and promote fair competition (State Service of Ukraine for Transport Safety, 2018).

The constituent document of the organisation is the administrative agreement establishing the Euro Contrôle Route. The main objective of this administrative agreement was to create and maintain a high level of transport safety in connection with the use (at its own expense and at the expense of others) of road vehicles in Europe. In addition, the administrative agreement provides for:

- Introduction of regular and reliable exchange of information;
- Development and implementation of joint and coordinated activities among member countries and with other stakeholders through the optimal use of available technologies;
- Joint training programmes for inspection bodies and encouraging cross-border exchanges of experience;
- A single control procedure;
- Development of a common standard for equipment, including the promotion of joint technological development;
- Introduction of ongoing consultations on the relevant situation, proposals and recommendations (State Service of Ukraine for Transport Safety, 2018).

A positive factor in the work of this Ministry for Ukraine should be considered, first of all, the integration of the national transport control bodies into the system of this organisation, which will allow to adopt and implement most of the European standards in the field of road transport safety, as well as to improve the monitoring and supervising presence of the State in this sector (Skrypa, 2018, p. 41).

The problem of reducing road traffic injuries is being addressed through the development and adoption of interdepartmental programmes, the follow-up thereof involves various State authorities and administrations. In most European countries, road safety programmes are an autonomous act, and in a number of countries the programme is part of larger projects. Programmes are adopted and approved at the highest level of government. For example, in Mexico the programme is approved by the President; Resolutions are adopted by the Government in Bulgaria, Finland, by the Parliament in Denmark, Italy, Sweden, etc. In addition to national road safety programmes, many States have regional and even local programmes approved by regional or local executive authorities (Kashkyna, 2008).

With regard to funding, each State determines the sources for the programmes to be funded. In most countries, the measures are implemented from the State budget (Finland) or from public authorities and extrabudgetary sources (Italy).

For example, the German Federal Ministry of Transport includes the Central Office, which deals with personnel policy, social security, finance, security and law, management, transport policy and economics, rail and inland navigation, maritime transport, air transport, roads and waterways. An advisory body, the Conference of Ministers of Transport of the Länder, coordinates federal and regional transport policy in Germany (Ovechar, 2017, p. 20).

In addition, the Ministry of this country has a Federal Motor Transport Authority whose tasks are:

- Licensing of new types of vehicles and their parts;
− Inspection of technical control and quality assurance departments, motor vehicles provided by manufacturers;
− Maintenance of a central register of vehicles, a central register of traffic violations on the transport and central register of driving licences;
− Issuance of certificates and publications of statistical materials (Tovstukha, 2011, p. 177).

British experience in road transport safety is specific. It is noticeable due to the involvement of both public and private actors in this sector. On the part of official bodies, the Ministry of Transport is responsible for transport safety, the main tasks of which are:
− Development and implementation of public policy;
− Improvement of English bus transport through State regulation and financing of this industry;
− Maintenance high standards of safety and security in transport, in particular road transport, etc. (British government, 2019).

In Sweden, the use of photo radars for road surveillance has proved to be an effective way to combat speed violations. Photo radars are widely used on Swedish highways. In this case, sections of the road, where there are photo radars, have appropriate warning signs, reacting to which, drivers automatically reduce the speed to avoid penalties. Public opinion polls indicate that the majority of drivers have a positive attitude towards photo radars, considering them to be assistants in traffic (Koniaev, 2013).

In Germany, the system of video and photo recording of road behaviour and traffic violations, as well as penalty points, has a long history. According to the principles of German traffic rules, video and photographic radar monitoring should primarily educate drivers, not punish them. In addition, its use is necessary in particularly dangerous areas with a large number of accidents. In Germany, about 3,500 fixed radars are used to record traffic violations both on motorways and in built-up areas. A board with a special inscription informs motorway participants about the control and observation. At the same time, there is no need for warning in localities. The technique is constantly improving, for example, there are systems photographing motorcycles, that is, from the back. In addition to fixed radars, the police make extensive use of mobile stations and hand-held devices. Mobile stations are placed both on tripods on both sides of the road in inconspicuous places, and in the very police cars (Saakov, 2016).

In fact, automated traffic control can be considered one of the most effective mechanisms for ensuring road transport safety. In Ukraine, the so-called TruCAM radar have only recently been introduced. Cameras for recording speeding on Ukrainian roads began to be installed on October 8, 2018. TruCam Laser Radar Patrol monitors roads in difficult areas and high accident risk areas. These radars are located at accident concentration points and accident-prone sections of roads of international importance. TruCam devices will be used only with the placement of road signs reporting photo-video recording of violations, on sections of roads of international importance and in cities with an increased rate of accidents due to speeding. To prevent abuse and corruption risks, TruCam contains an AES encryption algorithm, making it impossible to interfere with the system and any data correction.

At the level of national legislation, many countries reduce the problem of road safety regulation to codified provisions. Positive examples exist in Bulgaria, Denmark, Finland, Spain and other foreign countries. The French experience is of particular interest, where the main document is the Traffic Rules, consisting of 5 volumes, the Rules on Road Maintenance, the Departmental Instruction on Road Signs and Signals and the Criminal Code. The five volumes of the French Traffic Rules, which are divided into legislative and regulatory parts, contain a set of provisions governing all traffic-related matters (Machulskaia, 2006, p. 11).

Estonia has adopted laws on each mode of transport (public, freight, etc.) and on roads. Moreover, separate laws regulate: violation of administrative law; transport insurance; liability of road owners or administrators and road users for the maintenance, use and protection of roads, and parking of vehicles (Koniaev, 2013).

Furthermore, a European mechanism for establishing a fine for traffic offences is specific. The amount of the fine may be determined on the basis of the offender’s annual earnings, monthly salary; general financial situation and minimum wage established in the State. As a result, drivers for the same violations can get different fines, but in reality, they will have the same “material” and psychological effect.

3. Priority areas for road safety in Ukraine.

For Ukraine, this experience is quite unusual, and its adoption in the domestic experience requires providing a regulatory definition of the procedure and conditions for determining the amount of fines.

Therefore, priority areas for road safety can be grouped into:

1) Compliance with traffic rules. The main measures in this area are: eradication of legal nihilism, raising of legal awareness, promotion of road safety, improvement of supervision and control of the use of seat belts, child restraints and other protective
equipment, speed control and the detection of drunk driving;
2) Increased safety of vehicles. This requires increasing the visibility of the vehicle on the road; improving vehicle design, equipment and systems;
3) Road traffic risk reduction and a safe road environment. This area proposes to give priority to public transport; to strengthen the system of issuing driver’s licences; to use innovations in urban planning and land use;
4) Medical care improvement. To this end, medical units should quickly come to the scene of the accident and provide immediate assistance to the injured; treatment and rehabilitation of the injured in accidents.

In support of this grouping, three basic principles can be identified to develop national road safety programmes: analysis of the causes of accidents; development of cost-effective measures; aimed at achieving the goal; monitoring the results of measures, modifying the chosen areas.

Since January 2015, the implementation of the project Twinning “Support to the Ministry of Infrastructure of Ukraine on improving the level of road transport safety” has begun in Ukraine to increase the level of road transport safety and bring national legislation into line with EU provisions and requirements. The aim of the project is to improve the safety of commercial road transport in Ukraine in accordance with EU technical requirements and best international practices in order to reduce the number of accidents and fatalities caused by them. With the participation of experts, a draft Regulations on the Safety Management System has been made on the basis of draft Model Regulation on the Traffic Safety Management System for Road Transport and elaborated in accordance with European practices. A number of seminars were held during which experts presented best practices in accident investigation in EU countries, including the use of modern technologies. Moreover, the experts provided Ukrainian colleagues with information on the operation of accident databases in Europe and examples of relevant encryption books (Ministry of Infrastructure of Ukraine, 2016).

Therefore, the review of foreign experience in road transport safety on the example of the European Union and individual member countries (Germany, Sweden, Great Britain, Norway) as well as other States (Belarus, Uzbekistan and the United States) enables to identify a number of positive factors that could be replicated and introduced into the State’s legal system.

4. Conclusions
Thus, to improve the system of road transport safety in Ukraine, taking into account the experience of European States, the following tasks should be accomplished: to expand the regulatory and legal framework for road transport safety in accordance with the progressive standards of developed European States; to identify transport policy priorities that shall meet high safety standards; to introduce innovative technologies in the field of road transport safety; to implement an effective system of control and supervision of road transport safety in accordance with European standards.

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ЗАРУБІЖНІЙ ДОСВІД ЗАБЕЗПЕЧЕННЯ БЕЗПЕКИ НА АВТОМОБІЛЬНОМУ ТРАНСПОРТІ ТА ОСНОВНІ НАПРЯМКИ ЗАПРОВАДЖЕННЯ ЇГО В УКРАЇНІ

Анотація. Мета. Мета статті полягає в дослідженні європейського досвіду забезпечення безпеки на автомобільному транспорті та визначенні шляхів його запровадження у вітчизняну практику. Результати. У статті автором досліджується зарубіжний досвід забезпечення безпеки на автомобільному транспорті. Проаналізовано основні напрямки транспортної політики низки європейських держав. Вказано, що проблема зниження дорожнього травматизму вирішується шляхом розробки і прийняття програм, які мають міждоменний характер, у її реалізації беруть участь різні органи структурі державної влади управління. Визначено основні напрямки запровадження позитивного міжнародного досвіду у вітчизняну практику. З'ясовано, що пріоритетні напрямки забезпечення безпеки дорожнього руху можна розділити на такі групи: 1) дотримання правил дорожнього руху; основними заходами, що забезпечують цей напрямок, є: викорінення правового нігілізму, підвищення рівня правосвідомості, пропаганда безпеки дорожнього руху; 2) підвищення рівня безпеки транспортних засобів; 3) зниження ризику дорожнього руху та створення безпечного дорожнього середовища. У цьому напрямі мається на увазі: надання пріоритету громадському транспорту; посилення системи видачі посвідчень водія; використання інновацій у містобудуванні та землекористуванні; 4) удосконалення системи медичної допомоги. Для цього слід забезпечити оперативність прибуття медичних підрозділів на місце ДТП та надання невідкладної допомоги потерпілим; організацію та забезпечення лікування та реабілітації осіб, які постраждали під час дорожньо-транспортних пригод. Висновки. Зроблено висновок, що в Україні з метою удосконалення системи забезпечення безпеки на автомобільному транспорті необхідно вирішити такі завдання: розширювати нормативно-правову базу у сфері забезпечення безпеки на автомобільному транспорті; відповідність діяльності підприємств та організацій, обслуговуючих транспортні системи, до нормативних актів у місцевому та державному права; впровадження інноваційних технологій у сфері забезпечення безпеки на автомобільному транспорті, заміна маневри та контролю за безпекою на автомобільному транспорті у відповідності до європейських стандартів.

Ключові слова: транспорт, автомобільний транспорт, безпека на транспорті, безпека дорожнього руху, транспортна безпека, забезпечення безпеки на автомобільному транспорті.

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