# ECOLOGICAL AND ECONOMIC ASPECTS OF CHANGING THE LAND'S LEGAL STATUS FOR THE NEEDS OF ROAD TRANSPORT

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Abstract Abstract: An analysis of the land transport structure which are owned or used by enterprises and organizations in the composition of land has been determined. Ukraine transport lands have been formed by ownership type. It was clarified that change in the purposeful use of land plots which are in state or communal property is carried out by executive authorities or local self-government bodies, which make decisions on approval of land utilization projects for the allocation of land plots and the transfer of these plots into ownership or provision for use in accordance with the Land Code of Ukraine. Changing the legal status for the needs of land road transport the policy and main priorities should be aimed at the creation and operation of such rules and standards that reflect both public interests and the interests of landowners and land users as well as European requirements, since in recent years transport infrastructure has evolved towards the European integration. The main interests should be environmental interests in ensuring the reduction of atmospheric air pollution by emissions of motor vehicles, the removal of agricultural and forest land for public use. Economic interests should ensure the construction of toll-free highways of the European format

The implementation of ecological and economic instruments is proposed, namely: instruments of economic guaranteeing, innovative and investment instruments of land relations development.

Key words: categories of lands, ecological-economic aspects, roads of motor transport, change of legal status.

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#### Formulation of the problem.

During the years of independence, the Ukrainian market economy at the start of its formation needs certain ecological and economic instruments that would allow it to develop and to function effectively and compete on the world market. Foreign experience shows that one of the main factors of a stable market economy and strengthening of innovative processes in society, increasing the competitiveness of regions and the country on the world market is the development of the institutional environment of the country. it is impossible to achieve effective action, long-term competitiveness in the domestic and world markets, without fundamental institutional reforms that take into account current environmental and economic realities. After all, all landowners and land users must be sure that their interests are protected by the country, and the laws are the same for everyone. Therefore, in the context of institutional reforms that take place in Ukraine, which has significant resource potential, in particular regarding the change of the legal status of land for the needs of road transport, it is important to implement the relevant changes in the existing norms, rules, standards, as well as in the priorities and policies of the country for effective institutional transformation. The implementation of the Association Agreement between Ukraine and the EU provides for an in-depth and comprehensive free trade area (due to the implementation of the Ukraine-2020 Sustainable Development Strategy).

Last research analysis. On the issues of ecological and economic principles, namely rational use and protection of land resources in Ukraine at different hierarchical levels work such domestic scientists as I.К. Бистряков, Д.С. Добряк, О.С. Дорош, Л.Я. Новаковський, А.Г. Мартин, А.М. Третяк, М.А. Хвесик та ін. In the majority of works the separate aspects of the problem of ecological and

economic principles of development of land management are considered. The study of environmental and economic aspects of changing the legal status for the needs of road transport, as well as the impact of vehicles on the environment and effective and safe land use in the adjacent areas to these areas was not carried out.

Purpose of the article. The purpose of this publication is the formation of environmental and economic factors that play an important role in changing the right status of land transport. In the large encyclopaedic legal dictionary it is noted that the legal status is a set of rights and obligations of individuals and legal entities [1, p. 693]. According to the norms of Article 79 of the Land Code of Ukraine and Article 373 of the Civil Code of Ukraine [4, 16], each land plot has the status established accordingly to it. Moreover, this applies to all that is on the land, namely, the surface (ground) layer within the site, the water objects, forests, perennial plantations on it, as well as the space above and under the surface of the plot, height and depth required for the construction of residential, industrial and other buildings and structures. In this case, the owner of the land plot has the right to use it in accordance with the intended purpose and legal norms determined by law. Article 19 of the Land Code of Ukraine defines an exhaustive list of lands of Ukraine for the main purpose and their division into nine categories. In addition, land categories may be private, communal and state property (Article 78, paragraph 3, of the LCU) [4]. It should also be noted that not every land can be used completely at its discretion, as each category of land has its own peculiarities that should be taken into account when it is used. Changing the legal status of land entails a change in the purpose of land and legal regime.

According to the Land Code of Ukraine, for the main purpose of the land transport belong to one of the nine categories of land (point "w" Article 19 of the LCU) [4]. Thus, according to clause 1 of Article 67 of the Code, land of transport belongs to the land provided to enterprises, establishments and organizations of railway, road transport, sea, river, aviation, pipeline transport and urban electric transport for fulfillment of the tasks assigned to them with regard to the operation, repair and development of transport facilities [4].

According with Article 4 of the Law of Ukraine "On Road Transport", road transport uses land of transport and other land in accordance with land legislation [7].

According to analytical data of the State Geocodist, Table 1 shows the structure of land in Ukraine that owned or used by enterprises and organizations. More than half of the land is made up of road vehicles - 377.1 thousand hectares.

				T		Urban land								
Owners or users of land	Total area, thous. he	0	Agricultural land		Forest and other forest`s area		Total		In partic. Transport and communication land		Water and open wetlands		Other kind of lands	
		th. he	%	th. he	%	th. he	%	th. he	%	th. he	%	th. he	%	
Railway transport	238,3	24,9	10,4	90,3	37,9	115,8	48,6	113,4	47,6	1,5	0,6	5,8	2,4	
Road transport	377,1	19,5	5,2	33,7	8,9	322,0	85,4	320,3	84,9	0,2	0,1	1,7	0,5	
Pipeline transport	6,7	0,3	4,5		0,0	6,4	95,5	4,8	71,6		0,0	0	0,0	
Sea transport	2,7	0,1	3,7		0,0	2,2	81,5	1,9	70,4	0,3	11,1	0,1	3,7	
Internal water transport	1,6		0,0	0,1	6,3	1	62,5	0,8	50,0	0,5	31,3	0	0,0	
Aviation transport	9,5	1,1	11,6	0,1	1,1	8,3	87,4	8,2	86,3		0,0	0	0,0	
Other kind of transport	2,5	0,2	8,0		0,0	2,3	92,0	1,8	72,0		0,0	0	0,0	

Table 1.The structure of Ukrainian transport lands, which are owned or used by<br/>enterprises and organizations in the landuse context

\* A source:: formed by the authors according to the data [17]

Table is shown us that transport land category are different types of land. For example, of the total area of road transport land, the urban land are made up the largest share - 85.4% (322.0 thousand hectares), 84.9% (320.3 thousand hectares) of which transport and communication land are occuoped. However, woodland and other forested areas are 8.9% (33.7 thousand hectares), agricultural land are 5.2% (19.5 thousand hectares) and less than 0.6% (1, 9 thousand hectares) other lands are occuped.

In general, Article 71 of the Land Code of Ukraine regulates that the road transport land include land under the structures and equipment of the power, garage and fueling facilities, bus stations, linear production facilities, service and technical buildings, service stations, gas stations, vichles, transport and expeditionary enterprises, car repair factories, bases, cargo yards, containers for grabbing, service and cultural, everyday premises and other facilities. The road transport's lands include land under the roadway, the roadside, earthworks, ornamental landscapes,

reserves, dams, bridges, tunnels, traffic junctions, culverts, retaining walls and other road structures and equipment located within the stripes.Lands are located outside the strips of landing if there are buildings that ensure the operation of highways. There are parallel by-pass roads, ferry crossings, snow-protecting structures and also plantations, anti-lubricants and anti-silos buildings, catching congresses; areas for parking and rest, enterprises and facilities of road service; houses (including residental) and construction of road service with production facilities; protective plantings [4].

Article 20 of the Land Code of Ukraine is regulated that the land assignment to one or another category is carried out on the basis of decisions of state authorities and bodies of local self-government, which are authorized to dispose of land plots. Changing of the intended land use is carried out by land management projects in relation to their allocation [4].

The procedure for changing the purpose is determined by the Land Code of Ukraine (Articles 20, 122, 150, 151, 186, 1861) [4], Laws of Ukraine "On State Land Cadastre" (Article 26) [8], "On Land Management" (Article 20, 22, 25-31, 50) [9], "On the regulation of urban development" [14].

Changes of the purpose land plots use which are defined by state or communal property are carried out by executive authorities or local self-government bodies, which make decisions on approval of land utilization projects in relation to land plots and the transfer of these plots into ownership or provision for use in accordance with the powers specified in Article 122 of the Land Code of Ukraine . In addition, Article 83 of this Code determines that lands which are owned by the territorial communities of villages, settlements, cities are a communal property and such land, for example, land under railways, highways, aviation and pipelines objects, do not have to be transferred in private ownership. Change of the land plots purpose which are intended of private property is carried out on the land owners initiative [4].

In accordance with Article 67, paragraph 2, of the Code, land transport may be public, communal and private property [4]. Table 2 shows the structure of land transport which is divided by ownership forms.

	Total		Forms of property								
Users and owners of	area of	state			private		communal				
land	land,	Amo-	Th.	%	Amo-	Th.	%	Amo-	Th.	%	
	thous., he	unt	he	%	unt	he	%	unt	he	%	
Railway transport	238,3	1089	237,5	99,7	3		0,0				
Road transport	377,1	3996	368,3	97,7	345	1,5	0,4	25	0,1	0,0	
Pipeline transport	6,7	954	6,5	97,0	16		0,0	3		0,0	
Sea transport	2,7	78	2,0	74,1	21	0,1	3,7	4	0,1	3,7	
Internal water	1.6	71	1.2	01.2	4		0.0	1		0.0	
transport	1,6	/1	1,3	81,3	4		0,0	1		0,0	
Aviation transport	9,5	172	8,5	89,5	2		0,0	2		0,0	
Other kind of transport	2,5	395	1,8	72,0	26	0,1	4,0	7		0,0	

Table 2. The land transport structure in Ukraine by ownership forms

\* A source:: formed by the authors according to the data [17]

The table 2 shows that a significant area of lands transport are in state owned which is equal 98.0%, 0.3% lands transport are in private ownership, 0.03% lands transport are in private ownership, 1.6% lands transport are on the rights of lease. It should be noted that road vehicles have a corresponding tendency in terms of ownership, only 1,500 hectares or 0.4% of these lands are privately owned.

In general, road transport is a transport industry that satisfies population needs and public production in the carriage of passengers and cargo by motor vehicles (Article 1 of the Law of Ukraine "On Road Transport") [7]. The functioning of the road transport is necessary to ensure an adequate standard of living and economic status. Therefore, when road transport lands need to change the legal status, it is necessary to take into account the ecological and economic aspects, namely the problems of the ecological nature, which entail problems and economic nature. For example, Table 3 presents the tendency of pollutants emissions and greenhouse gases into the atmosphere from transport sources of pollution for 2010-2015 years.

Table 3. Emissions of pollutants and greenhouse gases into the atmosphere fro	m
transport pollution sources	

	Emission								
Kind of transport	2010 ye	ar	2015 yea	ar	+, - changes (2015-2010 year)				
	t	%	t	%	t	%			
Road transport	2 313 759,9	90,9	1 475 213,7	88,7	-838546	-36,2			
Road transport for the economic activity subjects	580 335,8	22,8	399 309,1	24,0	-181027	-31,2			
Road transport for the population needs	1 733 424,1	68,1	1 075 904,6	64,7	-657520	-37,9			

Railways, aviation, water transport and production equipment	232 653,2	9,1	188 693,0	11,3	-43960,2	-18,9
Total	2546413,1	100,0	1663906,7	100,0	-882506	-34,7

\* A source:: formed by the authors according to the data [17]

The table 3 shows that the level of emission in atmospheric air decreases by 34.7% during this period, but the share of emissions from road transport remains at 90%, of all types. In general, environmental protection, rational land use and the environmental provision safety of human life are regulated by the following basic laws of Ukraine: "On Environmental Protection" [12], "On Land Conservation" [11], "On Protection of the Atmospheric Air" [10] and other. In addition, Article 96 of the Civil Code provides protection zones which had been created along transport land to ensure normal conditions of their operation, prevention of damage, as well as reduction of their negative impact on people and the environment, adjacent lands and other natural objects, the legal regime of which is determined by law Of Ukraine [4].

Consequently, at the changing of the land transport purpose , the policy and main priorities in Ukraine should be aimed at the creation and operation of such instruments, norms, rules and standards that would take into account both public interests, and the interests of landowners and land users, as well as European requirements. For example, atmospheric air pollution by motor vehicle emissions, the withdrawal of agricultural and forestry land for public purposes are represented environmental interests and in the construction of highway tolls of European format. In its turn, the ecological and economic aspects of land use should include a set of scientifically grounded measures which are aimed at eliminating excessive agricultural and forest land removal, as well as the impact of vehicles on the environment and safe land use in the adjoining areas of these areas.

In Ukraine, a perspective direction for the development and increase of the land transport vehicles trend, taking into account the ecological and economic principles, may be a public-private partnership, which, in addition to environmental and economic tasks, would solve the investment problem. For example, Turkey has tripled its GDP over 10 years and has invested US \$ 115 billion in investments in 193

public-private partnership projects, where transport is one of the investment sectors, including roads and road infrastructure (29 projects), ports and port infrastructure (21 projects), airports (19 projects), etc [3, c. 2].

For example, scientists and practitioners research the need to build a large ring road around Kyiv. The functional purpose of this road is the connection of the international transport corridors and the national transport corridor Europe - Asia into a single transport system of Ukraine, as well as ensuring the unloading of the street road network of the city of Kyiv from transit transport. The decision on the design and the roads construction was adopted in 2005, but the imperfection of the institutional environment in this area creates obstacles for the implementation of such a project.

Table 4 shows the foreign experience of public-private partnership projects in the transport sector, in particular the interaction between the authorities and the private sector for mutual benefits.

Table 4.Global experience in implementing public-private partnership projects in the
transport sector

Country	Projects of public-private partnership
Australia, the Netherlands, Ireland	construction of new and modernization of urban
	transport systems and objects of housing and
	communal services;
Australia, UK, France, Portugal, Greece,	construction of highways, railways, underground,
Finland, Ireland, Turkey, China, Japan	airports;
Spain	operation of paid roads;
Netherlands, Sweden, Denmark	projects in the field of rail transport;
China, Japan	construction of airports, railways, freight, intercity and
	local passenger transport; construction of tunnels,
	highways, bridges

\* A source:: formed by the authors according to the data [Ошибка! Источник ссылки не найден.; 3]

However, in order to ensure that the private sector participates in the implementation of socially important infrastructure projects in the transport sector, the state must create an institutional environment acceptable to both parties with certain legal frameworks and conditions for owners and users. In addition, the regulation of environmental, economic and land relations, as well as the settlement of land purchase problems for public needs, compensation and loss assessment, requires

the use of ecological and economic instruments, such as: economic guarantee instruments which are aimed at the accumulation and distribution of funds in case of occurrence ecological imbalance due to the adverse effects of natural and anthropogenic factors [6, c. 24]; innovative tools of land relations development are extremely effective means of streamlining and ecologizing economic processes on the ground. Relations between subjects of land ownership and land use should be developed on the basis of a mandatory approach to land use process, as well as observance of ecological safety principles and efficiency land use resources. [6, p. 28].

## **Conclusions**

The development of road transport is a strategic direction of the state economic policy in Ukraine, which requires significant changes in the declared areas of transport land. Changing the legal status for the needs of land road transport is allowed in accordance with the norms of land legislation. However, in modern economic conditions, it is important to gradually harmonize existing standards and policies by adapting the norms of Ukrainian legislation to the norms of the acts of the European Union, namely: for further improvement of the institutional environment, efficient use of resources and reduction of technogenic impact of motor vehicles. Studying the experience of European countries, it should be noted that the main priorities and programs are aimed at the creation and operation of environmentally friendly technologies, and not the fight against the possible consequences of incorrectly carried out actions. A perspective direction for the expansion of road transport land may be a public-private partnership, which, in addition to environmental and economic problems, would solve and investment, which will be further research.

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## М.П. Стецюк, Н.Ф. Іщенко Еколого - економічні аспекти зміни правового статусу земель для потреб автомобільного транспорту

Анотація: Здійснено аналіз структури земель транспорту, що перебувають у власності чи користуванні підприємств та організацій за складом земельних угідь. Сформовано землі транспорту України за формами власності. З'ясовано, що зміна цільового призначення земельних ділянок державної або комунальної власності провадиться, органами виконавчої влади або органами місцевого самоврядування, які приймають рішення про затвердження проектів землеустрою щодо відведення земельних ділянок та передачу цих ділянок у власність або надання у користування відповідно до Земельного кодексу України. При необхідності зміни правового статусу земель для потреб автомобільного транспорту політика та головні пріоритети мають бути направлені на створення та ведення в дію таких норм, правил та стандартів, які б відображали як суспільні інтереси, так, і інтереси землевласників та землекористувачів, а також європейські вимоги, оскільки протягом останніх років транспортна інфраструктура розвивається в напряму європейської інтеграції. Основними мають бути екологічні інтереси забруднення атмосферного повітря викидами забезпечення зменшення автотранспорту, вилучення земель сільськогосподарського та лісогосподарського призначення для суспільних потреб та економічні будівництво автомагістралей європейського платних формату. Запропоновано впровадження інструментів еколого-економічного характеру, а саме: інструменти економічного гарантування, інноваційні та інвестиційні інструменти розвитку земельних відносин.

*Ключові слова:* категорії земель, еколого-економічні аспекти, землі автомобільного транспорту, зміни правового статусу.

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### М.П. Стецюк, Н.Ф. Ищенко Эколого - экономические аспекты изменения правового статуса земель для нужд автомобильного транспорта

Аннотация. Осуществлен анализ структуры земель транспорта, находящихся в собственности или пользовании предприятий и организаций по составу земельных угодий. Сформированы земли транспорта Украины по формам собственности. Установлено, что изменение целевого назначения земельных участков государственной или коммунальной собственности осуществляется, органами исполнительной власти или органами местного самоуправления, принимающих решение об утверждении проектов землеустройства по отводу земельных участков и передаче этих участков в собственность или предоставление в пользование в соответствии с Земельным кодексом Украины. При необходимости изменения правового статуса земель для нужд автомобильного транспорта политика и главные приоритеты должны быть направлены на создание и введение в действие таких норм, правил и стандартов, которые бы отражали как общественные интересы, так и интересы землевладельцев и землепользователей, а также европейские требования, поскольку в течение последних лет транспортная инфраструктура развивается в направлении европейской интеграции. Основными должны быть экологические интересы - обеспечение уменьшения загрязнения атмосферного воздуха выбросами автотранспорта, изъятия сельскохозяйственного лесохозяйственного для земель U назначения общественных потребностей и экономические - строительство платных формата. автомагистралей европейского Предложено внедрение инструментов эколого-экономического характера, а именно: инструменты экономического обеспечения, инновационные и инвестиционные инструменты развития земельных отношений.

*Ключевые слова:* категории земель, эколого-экономические аспекты, земли автомобильного транспорта, изменения правового статуса.