

FUTURE-ORIENTED ECO-DEVELOPMENT OF UKRAINE'S INLAND WATERWAY TRANSPORT

Kharkiv National Automobile and Highway university

Анотація

Розглянуто стратегію розвитку внутрішнього водного транспорту України. Проведено порівняльний аналіз європейських та вітчизняних документів щодо стратегії екорозвитку та запровадження «зеленого» транспорту

Ключові слова: внутрішній водний транспорт, мобільність, екорозвиток, клімат, «зелений» транспорт, транспортна стратегія.

Abstract

The development strategy of inland water transport of Ukraine is considered. A comparative analysis of European and domestic documents on the strategy of environmental development and implementation of "green" transport is performed.

Keywords: inland waterway transport, mobility, eco-development, climate, "green" transport, transport strategy.

Introduction

The documents prepared by the Commission of the European Parliament in Brussels on June 25, 2021 highlight the European Water Transport Development Program, which should take into account trends in climate management and climate management [1].

Results

This message to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions noted that a fundamental transformation of European transport systems is imminent. Their development should go towards mobility with zero emissions. This requires an integrated multimodal approach to promote the use of more sustainable and less congested modes of transport. Inland waterway transport (IWT) has long been recognized as one of the most efficient modes of transport in terms of CO₂ emissions (per tonne of cargo transported), along with rail transport, has been highlighted as a priority area in the EU's efforts to decarbonize the transport system.

The European Green Deal calls for decisive action to shift a significant proportion of road freight (currently 75% of inland freight traffic) to inland navigation and rail through measures to increase the capacity of inland waterways from 2021 year. The Strategy for Sustainable and Smart Mobility, which was adopted on 9 December 2020, laid the foundation for how the EU transport system can achieve its green and digital transformation and become more resilient to future crises. It highlighted the need to increase the use of more environmentally friendly modes of transport and indicated that inland waterway transport and shipping by sea should grow by 25% by 2030 and by 50% by 2050. Zero Emission Mobility is also the main goal of the adopted Zero Pollution Action Plan on 12 May 2021, and the document indicates that, despite the environmental benefits, the overall share of the EU inland waterway transport sector has not achieved the desired growth levels in recent years, remaining stable at around 6%. The Commission noted that decisive complementary action is needed to better address the challenges that hinder the attraction of higher freight traffic volumes and the opportunities associated with the transition to zero emissions and the digital economy. It noted the practical experience of Bulgaria and other countries in achieving increased mobility of inland waterways, transport and emphasized that it is extremely important to preserve these achievements

and in the future to use the untapped potential both along the TEN-T corridors and in those central regions of states where inland waterways can help in greening transport logistics.

Multimodal logistics must be part of this global transformation. Today, the lack of transshipment infrastructure and, in particular, domestic multimodal terminals is clearly felt in some parts of Ukraine, and its development should be given priority attention.

Today experts note the problem of increasing climate change and extreme weather events, which seriously affect the ability of stable functioning and reliability of services provided. Due to objective and subjective reasons, the age structure of the inland fleet is relatively outdated, with most ships built before 2000 and poorly equipped for the planned transition to zero-emission mobility. However, as highlighted in the Strategy for Sustainable and Smart Mobility [2], all modes of transport, including inland waterway transport, will require modernization to significantly reduce their dependence on fossil fuels and better internalize external costs, for example, by introducing the principle of “pollutant pays” and the user pays principle. This condition is necessary in order to achieve the Climate Neutrality and Zero Pollution Program by 2050. Renewing the barge fleet and improving access to renewable and alternative low-carbon fuels will require significant investment, highlighting the importance that a stronger inland shipping sector should also be able to offer quality jobs, career opportunities and high social safety nets and safety standards to attract well-trained people.

The National Transport Strategy of Ukraine for the period up to 2030 [3] emphasizes that the transport industry of Ukraine is one of the basic sectors of the economy, has an extensive railway network, a developed network of highways, seaports and river terminals, airports and a wide network of air connections, cargo customs terminals, which creates the necessary prerequisites to meet the needs of transport users in the provision of transport services and business development. The development of inland waterway transport is one of the priorities of the National Transport Strategy of Ukraine until 2030, approved by the order of the Cabinet of Ministers of Ukraine dated May 30, 2018 No. 430, and the National Economic Strategy for the period until 2030, approved by the Resolution of the Cabinet of Ministers of Ukraine dated March 3, 2021 No. 179. At the end of 2020, the Law of Ukraine "On Inland Water Transport" was adopted, which defines the legal, economic and organizational framework for the functioning of inland waterway transport and is aimed at creating favorable conditions for its development, meeting the needs of citizens in affordable, high-quality and safe transportation.

So, in the Black Sea and Azov basins and the Danube delta there are 13 seaports, the total cargo handling capacity of which is more than 230 million tons per year. The territory of Ukraine stretches 2,714.5 kilometers of inland waterways classified as navigable. There is a developed network of ferry services, sea container lines connecting Ukraine with partners in the Black Sea region.

Conclusions

There is a need for STATE planning for the development of water transport in Ukraine. The development of a Strategy and Action Plan in this sphere, which is extremely important for the state economy, will initiate an active phase of synergy with the European Union in the main approaches to solving this problem. This will initiate a comprehensive solution to existing problems in the transport industry, in particular in the context of the introduction of the European integration course and the implementation of the Association Agreement between Ukraine, on the one hand, and the European Union, the European Atomic Energy Community and their member states, on the other hand, ratified Law of Ukraine dated September 16, 2014 No. 1678-VII (hereinafter referred to as the Association Agreement), as well as changes in the geopolitical environment in the region.

Inland waterway transport (hereinafter - IWT) needs to be developed to support the Ukrainian economy by increasing the number of transport and logistics alternatives in order to create a more efficient and sustainable logistics transport system. IWT has a good potential to reduce logistics costs, fuel consumption, air emissions, congestion, noise and emergency events. The development of river transport providing "green" transport is a prerequisite for climate management and mitigation of climate change through the improvement of transport infrastructure. These processes in Ukraine can have a significant positive impact also on social development and preservation of the natural environment in Ukraine.

REFERENCE

1. Communication from the commission to the European parliament, the council, the European economic and social committee and the committee of the regions. NAIADES III: Boosting future-proof European inland waterway transport. COM(2021) 324 final/2. Brussels, 25.6.2021.

2. Communication from the commission to the European parliament, the council, the European economic and social committee and the committee of the regions Sustainable and Smart Mobility Strategy – putting European transport on track for the future. COM/2020/789 final. Brussels, 9.12.2020.

3. On approval of the National Transport Strategy of Ukraine for the period up to 2030: order of the Cabinet of Ministers of Ukraine № 430-r. Kyiv, 30.5.2018.

Vnukova N. – professor of the Department of Ecology, Kharkiv National Automobile and Highway university, e-mail : vnukovanv@ukr.net;

Kozlovskiy O. – postgraduate student of the Department of Ecology, Kharkiv National Automobile and Highway university, e-mail: alex.kozlovskiy@gmail.com.

Внукова Наталія Володимирівна – доктор технічних наук, професор, завідувач кафедри екології, Харківський національний автомобільно-дорожній університет, Харків, e-mail: vnukovanv@ukr.net;

Козловський Олександр Володимирович – аспірант кафедри екології, Харківський національний автомобільно-дорожній університет, Харків, e-mail: alex.kozlovskiy@gmail.com.