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**HARMONIZATION OF EDUCATION AND THE LABOR MARKET IN
THE TRAINING OF BACHELOR'S STUDENTS IN TRANSPORT
TECHNOLOGIES: EXPERIENCE OF THE NATIONAL TRANSPORT
UNIVERSITY WITHIN THE ISDEGO PROJECT**

Modern challenges of urbanization, the growing mobility of the population, the digitalization of transport systems, and the need to ensure environmental

sustainability are shaping new requirements for the training of specialists in the transport sector. Under these conditions, the integration of sustainable development principles into the content of educational programs for the training of future professionals becomes particularly relevant. One of the key international instruments supporting such transformations is the Erasmus+ programme projects, aimed at modernizing higher education systems.

The National Transport University participates in the international project ISDEGO – *Implementation of Sustainable Urban Development Goals in Transport Bachelor Degree* (Project 101179915), implemented within the framework of the Erasmus+ KA2 programme “Capacity Building in Higher Education: Partnerships for the Transformation of Higher Education.” The aim of the project is to integrate the principles of sustainable urban development, in particular Sustainable Development Goal No. 11 (SDG 11), into the curricula for bachelor’s degree programmes in transport technologies. The main focus is placed on the development of new competencies that correspond to the current needs of the labor market and the challenges associated with the development of urban transport systems.

One of the important stages of the project implementation was the organization of a series of thematic workshops and discussions by the participating Ukrainian universities, involving representatives of industry, public authorities, businesses, and civil society organizations. These activities were aimed at fostering an open dialogue between the academic community and stakeholders regarding the modernization of the content of educational programmes. In particular, in April 2025, the National Transport University hosted an online seminar entitled “Harmonization of Education and the Labor Market: New Competencies for Sustainable Urban Development,” during which current requirements for the training of transport sector specialists and opportunities for integrating sustainable development principles into the educational process were discussed.

As part of the preparatory stage of the study, specialists from the National Transport University participated in the analysis of 29 international documents related to the development of education, the labor market, sustainable development, and the digital transformation of the transport sector. The analysis included documents from the European Union, international organizations, and analytical reports reflecting current trends in the development of the transport industry. The results of the study made it possible to identify key directions for the transformation of educational programmes and to formulate the competencies required for training a new generation of professionals.

The analysis has shown that the contemporary development of urban transport systems is characterized by several key trends. First, the principles of sustainable development are becoming the foundation of strategic planning for urban mobility. Second, there is an active digitalization of transport processes,

involving the use of intelligent transport systems, big data, geoinformation technologies, and digital modeling. Third, the role of interdisciplinary approaches is significantly increasing, combining engineering, environmental, social, and managerial aspects of transport planning. In addition, so-called “soft” skills—such as communication, teamwork, critical thinking, and adaptability—are gaining increasing importance

Based on the conducted analysis, the National Transport University proposed a system of key competencies to be developed in the process of training bachelor’s students in the field of Transport Technologies. An important feature of this approach is that each identified competency is supported by specific practical skills and learning outcomes that can be integrated into academic courses and the practical training of students.

In order to уточнить the relevance of the proposed competencies and to obtain feedback from the professional community, representatives of the transport sector and expert organizations were involved in the discussion. The participants of the seminar emphasized the importance of updating educational programmes in accordance with the current challenges of urban mobility development, in particular the need to take into account the principles of environmental sustainability, road safety, inclusiveness, and accessibility of transport infrastructure.

Stakeholders paid particular attention to the need to develop digital competencies among future professionals. In particular, the importance of using geographic information systems, transport modeling, big data analysis, and specialized software for transport flow planning was emphasized. In addition, representatives of the sector highlighted the importance of practice-oriented education, expanding cooperation between universities, enterprises, and local authorities, as well as involving students in real-world projects in the field of urban mobility.

The conducted discussions confirmed that the modern training of specialists in the transport sector should be based on a comprehensive approach that integrates technical knowledge, environmental principles, social aspects, and managerial competencies. Such an approach enables the development of professionals capable of effectively operating within complex urban systems and contributing to the implementation of sustainable development strategies. Thus, the experience of the National Transport University within the implementation of the ISDEGO project demonstrates the importance of active interaction between the university and representatives of the labor market, public authorities, and civil society organizations in the process of modernizing educational programmes. The organization of thematic workshops and expert discussions contributes to the development of relevant content for the training of bachelor’s students, aligned with the current challenges of urban transport system

development.

The integration of sustainable development principles, digital technologies, and interdisciplinary approaches into the training of future transport sector professionals creates the preconditions for the formation of a new generation of specialists capable of developing effective solutions for safe, inclusive, and environmentally sustainable urban mobility.

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