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## **THE CHALLENGES OF ORGANISING INTERNATIONAL TRANSPORT**

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Life in Ukraine currently continues under martial law. The military action taken by Russia on the territory of Ukraine affects the functioning of all spheres of the Ukrainian economy and the life of every Ukrainian. Ukraine's transport sector as an economic activity has changed dramatically in the face of Russian aggression. Logistical supply chains, which have been developed and improved over decades, have been completely destroyed [2].

The functioning of Ukrainian sea ports for international transport has been suspended, some ports operate only for handling and transshipment of grain crops by rail and road transport, and only three river ports operate, in terms of export operations, which are the ports on the Danube: Izmail, Ust-Dunaisky and Reniisky. Air transport is blocked and railways operate in crisis conditions with a lack of rolling stock, fuel and damage to infrastructure facilities. The functioning of road transport is characterized by the critical condition of roads, the abundance of destroyed bridges, the shortage of rolling stock and drivers, the crisis in fuel supply, the low capacity of customs infrastructure at the borders and poor transportation safety. For international road transport, the critical link is the Ukrainian state border. At present, the customs infrastructure does not allow efficient passage of road transport in both directions. The largest queues are observed at the Polish and Romanian borders, which amount to 10-17 km on average, due to the considerable time required for inspection of vehicles in the absence of the necessary number of service areas, automatic queue fixing systems, insufficient number of customs officers on both sides of the border.

Significant vehicle delays are observed when fuel sales are restricted or unavailable at petrol stations in Ukraine [1]. Also the constant change in road conditions due to fighting and shelling of road infrastructure requires drivers to be constantly informed in order to choose a vehicle route. Developing and implementing automated driver information systems and equipping vehicles with modern information systems will increase the efficiency of cargo delivery. Ukraine's transport infrastructure and existing approaches to the definition of systems for the delivery of goods in international traffic in a state of war need a radical restructuring in the operational and technological functioning, as well as a new approach to the definition of technical and technological schemes on the conditions of digitalization. For the purpose of increasing the efficiency of international freight traffic and for further development of transport and infrastructure complex of Ukraine, taking into account the adopted innovative way of their development, taking into account the need to

digitalize the technological process management of international cargo delivery and increase the competitiveness of domestic transport enterprises, the following model of goods, information and financial flows on the basis of digitalization and informatization and using.

Modern requirements for the planning and organization of the processes of delivery of goods in international traffic determine the main directions of formation of management measures to improve the efficiency of international transportation.

Economic and organizational environment:

- development and implementation of simplified documentation and clearance procedures at the crossing point;
- improving the efficiency of transport performance monitoring;
- information support for participants in the transport process;

Transport infrastructure:

- introduction of modern controls at crossing point;
- optimization of transport throughput capacity;
- rationalization of waiting times at the crossing point;

Transport companies:

- choice of rolling stock;
- route definition;
- choice of mode of operation;
- elaboration of transport-technological schemes.

When analyzing international transport operations, it is necessary to consider the characteristics that are critical to maintaining the desired level of sustainability and service and that more fully characterize the results of the work done from the customer's point of view. The most important factors in this respect are transport time and productivity. Information interoperability plays a significant role in increasing the efficiency of international transport. Interoperability refers to the ability of two or more systems or system components to exchange and use information. The property interoperability, along with portability and interoperability, is one of the most important attributes of open systems. The trend in information and communication technologies is to create an environment in which information is exchanged. These features are directly related to solving the tasks of formation and development of the components of the information society, first of all, the information system of relations between participants of the transport process. In this regard, more and more attention is now being paid to interoperability issues for systems of different scales and different purposes.

Rational assessment of the efficiency of the system of cargo delivery in international traffic allows us to identify the best ways to improve it and strengthen the company's competitive advantage. Of particular importance in this environment is the development and implementation of innovative digitalized delivery systems.

Ensuring interoperability is the fundamental basis for the creation and development of the development of automated information and analytical systems of various especially for the interoperability of international freight transport working in

the context of operational information exchange between subsystems of different components of the delivery system.

#### References

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## **HISTORY OF THE DEVELOPMENT OF LOGISTICS**

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The history of the emergence of the logistics direction. The concept of logistics has a long history. The word "Logistics" is Greek in origin. In Ancient Athens, there was a special position - "logistician", to which they were appointed annually by lot and their duties included checking the reports of other officials. In ancient Rome, officials performing administrative and religious functions were called logisticians. During the time of the Byzantine emperor Leo VI (866-912), logistics was defined as the art of supplying an army and managing its movements. German researcher Professor G. Pavel noted that the purpose of logistics in the Byzantine Empire was "to pay the salaries of the army, properly arm and distribute it, take care of its needs in a timely manner and in full measure, that is, to direct the movement and distribution of the armed forces. The word "logistics" exists in all major European languages, but has different meanings. The term "logistics" was used by famous scientists, philosophers, military leaders. So the outstanding German mathematician G.V. Leibniz (1646-1716) used this term in the meaning of "mathematical logic". In the XIX century. This term was used in his works by Antoine-Henri Jomini - a military theorist and historian, Swiss by origin (1779-1869), he worked in Russia since 1813, was in the headquarters of Alexander I. He was a military adviser to Nicholas and was one of the founders of the military academy in St. Petersburg (1828). Jomini defined logistics as the practical art of command and control, including a wide range of issues related to planning, command and control, supply, determination of troop deployment locations, army transport services, etc.

In 1884, the American Institute of the Navy introduced the concept of "logistics" for the needs of navigation. In 1904, at the Philosophical Congress in Geneva, the definition of logistics as mathematical logic was approved. The principles of logistics were widely developed during the Second World War in the field of logistics for the American army. The clear interaction of the military industry, rear and front supply bases, transport made it possible to provide the army with weapons, fuel and lubricants and food in a timely manner and in the required quantities, as well as in the supply and marketing activities of civilian enterprises. Therefore, in many Western countries, logistics gradually began to move from the military field to the sphere of economic practice. Initially, it took shape as a new direction on the