Kuchkova O.V.

FORMATION OF THE CONCEPT OF A REGIONAL TRANSPORT-LOGISTIC SYSTEM

Ukrainian State Chemical Technology University, Dnipro

Intensive development of the market of logistics services in the country creates objective organizational and economic preconditions for the formation of a regional transport-logistic system in Ukraine as the most effective innovative-oriented form of integration of participants of the market of transport-logistic services, providing on the basis of innovations and coordination of economic interests of all counterparties the supply chain has a maximum synergistic effect. The formation of the proposed system will improve the passage of the main traffic flows in the regional transport and logistics system and coordinate the regional movement of material and related information and service flows. Effective coordination and management of traffic flows within each region is possible only taking into account the specifics of the functioning of each particular region. The system should operate with the use of the latest logistics planning, organization and management of material, financial, information and service flows.

Keywords: logistics, region, logistics complex, strategy, commodity trade.

Introduction

Modern market conditions require Ukraine to form a competitive logistics system with the further entry into the international global macro-logistics system, which will enable Ukraine to develop a competitive transport system and efficient infrastructure, to strengthen international relations with other trade regions and countries. The necessity of sustainable innovation development of the Ukrainian economy is dictated by the fundamental features of the country. The expansion of domestic and international trade, as well as Ukraine's integration into the global global market, form the need for logistics with an innovative approach [1]. For successful innovation development of Ukraine and regions of the country, new approaches and management technologies based on world experience are needed.

Analysis and research of publications

Exploring theoretical, methodological and methodological principles of the functioning of international transport-logistic systems in the context of regional development was analyzed by such authoritative domestic scientists as M. Dovba, Y. Kricavsky, R. Larin, O. Nikiforuk, Yu. Pakhomov, A. Rumyantsev, A Philipenko, O. Shnirkov, who in his works considered various aspects of the problems of the functioning and development of transport and logistics systems, the formation of international transport corridors and infrastructure for servicing foreign trade the integral integration of Ukraine's international economic logistics complexes into the pan-European and world transport and logistics systems. However, a number of aspects of the regional development of international business logistics complexes in the conditions of the market transformation of the Ukrainian economy are still insufficiently considered and require detailed study.

The purpose of the research is to provide scientific substantiation of expediency of development of economic logistic complexes in the regional aspect.

Presenting main material

The European vector of Ukraine's integration necessitates the creation of a transport and logistics system that enables the unification or interaction of all participants at different levels of product or service sales. The formation of a transport and logistics system requires the definition of patterns and peculiarities of development in the conditions of European integration, which determines the relevance of the topic and its value.

Transportation can be defined as a key integrated activity associated with the movement of material resources, work in progress, or finished goods by a certain means of transport in the logistics chain. It consists, in turn, of complex and elemental activities, including forwarding, cargo handling, packaging, transfer of ownership of cargo, insurance [2].

Based on the above, transport logistics can be considered as a well-defined sphere of activity covering three main areas [3]:

[©] Kuchkova O.V., 2018

- the process of planning, organization and execution of correct, efficient and rational transportation of goods (goods) from the places of their production to the final point;

- strict control over all transport and other operations performed during the transportation of goods using the most advanced means of communication, information and other information technologies;

- Providing all documents and information to the cargo owner.

The intensive development of the market for logistics services in the country creates objective organizational and economic conditions for the formation of a regional transport and logistic system (RTRS) in Ukraine as the most effective innovationoriented form of integration of market participants in transport and logistics services, which provides, on the basis of innovations and coordination of economic the interests of all contracting parties supply chain the maximum synergy effect.

The RTLS development strategy should cover both the immediate and long-term goals. It is impossible to determine these goals without national and regional benchmarks and integral ideas about the prospects for socio-economic development of the region. In this regard, the strategy for the development of RTLS should be formed together with the regional development strategy.

RTL represents an innovative form of organization of production forces, which is designed to maximize the efficiency of transport and logistics potential of the regions in order to increase the competitiveness of manufactured products and expansion of markets for its sale, ensuring economic growth of depressed territories, elimination of local unemployment, etc. The scale of development and the boundaries of RTLS are determined by the gravity zone of enterprises oriented towards the services of the basic level. Basic links perform the function of «commodity dumping» and simultaneously carry out refinement of products manufactured by primary commodity producers, to market requirements. The main advantage of the basic link is that many small and medium-sized commodity producers, forming the core of economic growth, eliminate the need for additional costs for product development, which can serve as a reason for the growth of output and its implementation.

The main goal of the strategy of creating a RTLS is to increase the competitiveness of not only the region but also the national economy in the market of transport services, which envisages the integration of the Ukrainian economy in the direction of network cooperation of actors in the form of single regional transport and logistics information systems. At the same time, the task of not only optimizing freight and transport flows, reducing logistics costs,

unloading the transport network, but also gives impetus to the development of the economy of the region, which activates the creation of new competitive advantages.

The regional micro logical system will allow the construction of a single logistics framework for the region as a whole. The formation of the proposed system will improve the passage of the main freight traffic on the RTLS and coordinate the regional movement of material and related information and service flows. Effective coordination and management of traffic flows within each region is impossible without taking into account the specifics of the operation of each particular region. Since the national logistics system can not take into account the specifics of each region, it is necessary to look for ways to improve logistics management within a particular region. Formation of this kind of system will allow to the greatest extent satisfy the needs of local consumers in the transport and logistics service and bring its development to the European level at the expense of the peculiarities of the economy of each region. From a systemic approach, the regional transport and logistics distribution system should be considered as a component of a national logistics system with a self-sufficient logistics infrastructure.

Thus, RTLS is a set of logistic functional subsystems of a regional commodity network consisting of links, integrated material and associated flows to obtain maximum synergistic effect on the basis of establishing partnerships between participants in the transport and logistics process[4]

Integration of participants in the regional system of goods and goods movement requires the coordination of interests between the contractors of the system and the creation of the necessary organizational preconditions for managing the transport and distribution process. The fundamentals of the organizational and economic mechanism for the effective functioning of RTLs are intended, on the one hand, to ensure maximum freedom and independence of all participants in the promotion of commodity flows and the creation of a competitive environment, and, on the other hand, to coordinate with the interests of the region.

The functional subsystems of the RTRS will be represented by the objects of the transport infrastructure and technological system of the region; intermediaries of the logistic service for the provision of logistic services in the process of cargo handling and movement of goods in the system; regional distribution centers. Provide subsystems in this case are scientific, technical, financial, information, personnel, regulatory and legal.

Allocation of spheres is largely conditional, since elements of the functional and provide subsystems of RTLS are closely interconnected and integrated into integrated logistics chains. It is also possible to expand the logistic functions of individual elements of the system, in which their scope will cover several functional and provide subsystems or the entire regional logistics system as a whole, with the appropriate combination of logistic functions.

The formation of the RTLS of the region is based on the development of logistic management of the movement of goods. The concept of logistics management of the formation and development of RTLS is aimed at integrating the participants of the system of goods and goods movement on the basis of establishing mutually beneficial partnerships between them, while ensuring their interest in achieving the ultimate goal of the functioning of the system - maximum satisfaction of the consumer market in goods and services while minimizing costs and time. The objects of the movement of goods are commodity-material flow and its related informational, financial, and service flows.

Each separate region has different levels of

economic and social development. All of them have a variety of integration links not only with the regions of their country, but beyond them, which raises the importance of regional transport and logistics systems, which are engaged in servicing not only internal but also interregional material and related flows. Logistics can solve both internal and external economic tasks of the region. The ratio of such problems for regions is shown in Fig. 1 [5].

The tasks presented in the figure relate to the improvement of the economic and ecological situation in the region.

The primary tasks of the transport and logistics system should be:

- development and modernization of infrastructure (automobile and railways, river and airports, objects of roadside service – points of food, trade, hotels, parking lots, objects of advertising, warehouses and distribution centers);

- creation of modern logistic terminals;

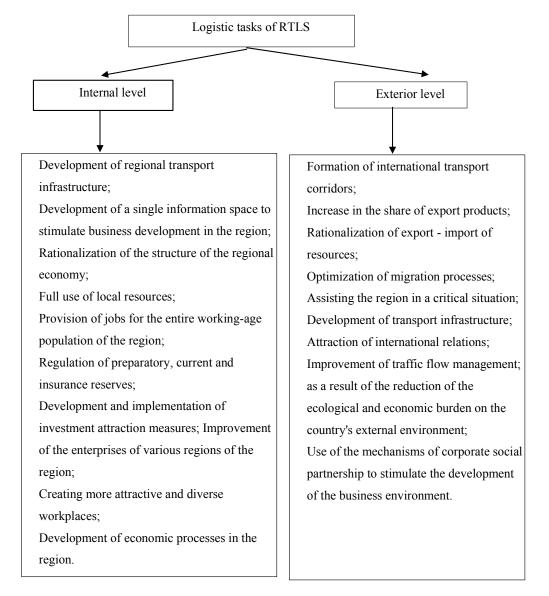


Fig. 1. Logistic tasks of RTLS

- geographical expansion of the scale of transportation;

- stimulating innovation and introducing new technologies into the logistics industry.

The conducted research showed that in the regions the objective preconditions for the establishment of a reference network of RTLS as an integral part of the unified economic space of the country were formed, which, including as a subsystem, all types of transport, multimodal transport nodes and transport and logistics complexes, would be effectively solved by all assigned to it tasks in the interests of the region, the country and the international community. The Regional Transport and Logistic System (RTLS) is a large complex macrological system consisting of a complex of functional subsystems that are represented by

numerous interconnected and interacting elements (links) of the regional commodity network, integrated material, information, service and financial flows and provide the receipt the maximum synergistic effect in the system as a whole on the basis of establishing mutually beneficial partnerships between all participants transport-logis ychnoho process by reaching a compromise on the realization of the ultimate goal — maximum customer satisfaction in the quality and quantity of services provided.

The main system-forming elements of RTLS are national, regional and territorial enterprises located on the territory of the region.

Factors contributing to the formation of a regional transport and logistics system in the Dnipropetrovsk region:

- favorable geopolitical position of Dnipropetrovsk region;

- proximity of the region to actively developing regions;

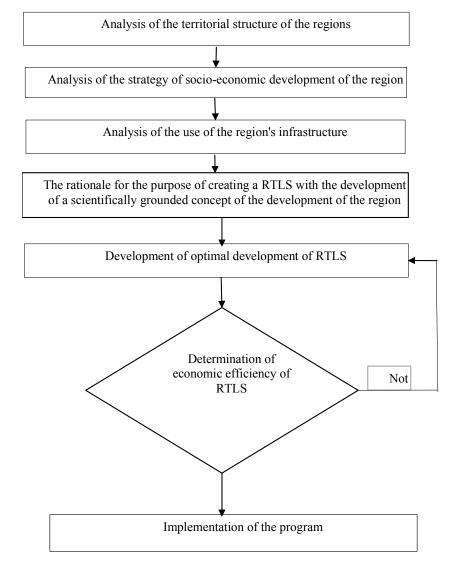


Fig. 2. Stages of the development of the RTLS program (adapted by the author on the basis of Larin R.R. Theoretio-methodological basis of the formation of regional logistics systems.) Dissertation for Economic Sciences: 08.10.01 – Donetsk, 2005. – 490 (c)

- transition from the sectoral system of management of the regional economy to the predominantly cluster management policy;

- the development of new productions on the basis of innovative technologies and the further creation of priority industrial clusters;

- comfortable ethno-social climate;

- availability of free labor force;

- relatively high educational level of the population;

- the presence of large industrial enterprises with elements of high-tech industries;

- development of the metallurgical industry;

- transit possibilities of national and international scale;

 high potential for the creation of joint ventures and the implementation of international projects.

Establishment of a regional transport-logistic system on the territory of the Dnipropetrovsk region on the basis of forming a single information and regulatory space with subsystems of financial and human resources provision will become the necessary points of growth of the region's economy, capable of causing business and commercial activity, attracting additional freight flows and necessary for the development of investment infrastructure, the creation of new jobs and the inflow of additional labor resources from other regions of the country. Stages of the development of the RTLS program are shown in Figure 2

Given the relatively high need for investment in supporting the formation RTLS need to develop sustainable financial schemes projects of transport and logistics infrastructure, involving public-private partnerships. The transport and logistics center of the region should include:

- transport company, which will directly carry cargo transportation;

- logistics company, whose activities within the framework of the center will be aimed at ensuring the provision of services for the organization of transportation, warehousing, handling of loading and unloading operations, etc .;

- repair and service enterprise, which will provide maintenance and repair of rolling stock of transport in full and with the necessary quality level;

- the forwarding company, which within the framework of the center will provide services for documentary registration and customs support of transportation, ensuring the safety of cargo in the process of transportation;

- an insurance company that will provide insurance protection for the material interests of shippers and consignees in the form of full or partial compensation for damage caused in the process of cargo transportation.

RTLS should operate with the use of the latest

logistics technologies for planning, organization and management of material, financial, information and service flows. RTLS activities should be aimed at maximizing the synergistic effect based on the establishment of partnerships between the transport – logistics process with maximum customer satisfaction in service quality.

Conclusion

Consequently, the formation of a regional transport and logistics system has the following advantages:

- reduction of the cost of movement of goods in the general chain supplier-consumer, possible reduction of prices for various goods as a result of reduction of expenses for their delivery;

- reduction of the term of the product through the reduction of the temporary parameters of the logistics chain;

- growth of total volume of goods turnover and, consequently, improvement of the economy of the region; - formation of a material balance in the region by balancing the demand of consumers and supply of suppliers;

- resource supply of the region at a higher level of quality of services.

The intensive development of the market of transport and logistics services in Ukraine creates objective organizational and economic conditions for the formation of transport and logistic clusters in the regions of Ukraine as the most effective form of integration of participants in the market of transport and logistics services, providing on the basis of innovations and coordination of economic interests of all counterparties the supply chain has a maximum synergistic effect.

REFERENCES

1. *The role* of innovative logistics in the formation of regional clusters of multilateral partnerships // Siberian Trade and Economic Journal. -2013. - No. 1 (17). - P.143-148.

2. Larina P.P. Logistics: Textbook - D.: VIK, 2005. - 335 p.

3. *Palant D.O.* Necessity of application of the system of global positioning of transport logistics in Ukraine // Bulletin of the NTU «KhPI». -2012. - No. 68 (974). - P.155-160.

4. *Corporate* logistics. 300 Answers to Professional Questions / For Colleagues. And Sciences. Editorial board prof. B, I. Sergeeva. – M.: INFRA-M, 2004. – 976 s.

5. Skorobogatova Regional Logistic Innovation. – [Electronic resource. Skorobogatov – Access mode: http:// d s p a c e . n b u v . g o v . u a / b i t s t r e a m / 9 4 3 5 9 / 0 8 -Skorobogatova.pdf?sequence=1

> Received 26.04.2018 Reviewer: Dr.e.s., prof. V.I. Dubnytskyj

ФОРМУВАННЯ КОНЦЕПЦІЇ РЕГІОНАЛЬНОЇ ТРАНСПОРТНО-ЛОГІСТИЧНОЇ СИСТЕМИ

Кучкова О.В.

Інтенсивний розвиток ринку логістичних послуг в країні створює об'єктивні організаційно-економічні передумови для формування в Україні регіональної транспортно-логістичної системи як найбільш ефективної інноваційно-орієнтованої форми інтеграції учасників ринку транспортно-логістичних послуг, що забезпечує на основі інновацій і узгодження економічних інтересів усіх контрагентів ланцюга постачань максимальний синергетичний ефект. Формування запропонованої системи дозволить поліпшити проходження основних вантажопотоків по регіональної транспортно-логістичної системи і скоординувати регіональне рух матеріальних і супутніх інформаційних і сервісних потоків. Ефективна координація і управління вантажопотоками всередині кожного регіону можлива тільки з урахування особливостей функціонування кожного конкретного регіону. Система повинна функціонувати із застосуванням новітніх логістичних технологій планування, організації і управління матеріальними, фінансовими, інформаційними і сервісними потоками.

Ключові слова: логістика, регіон, логістичний комплекс, стратегія, товарорух.

ФОРМИРОВАНИЕ КОНЦЕПЦИИ РЕГИОНАЛЬНОЙ ТРАНСПОРТНО-ЛОГИСТИЧЕСКОЙ СИСТЕМЫ

Кучкова О.В.

Интенсивное развитие рынка логистических услуг в стране создает объективные организационно-экономические предпосылки для формирования в Украине региональной транспортно-логистической системы как наиболее эффективной инновационно-ориентированной формы интеграции участников рынка транспортно-логистических услуг, обеспечивает на основе инноваций и согласования экономических интересов всех контрагентов цепи поставок максимальный синергетический эффект. Формирование предложенной системы позволит улучшить прохождение основных грузопотоков по региональной транспортно-логистической системы и скоординировать региональное движение материальных и сопутствующих информационных и сервисных потоков. Эффективная координация и управление грузопотоками внутри каждого региона возможна только с учетом особенностей функционирования каждого конкретного региона. Система должна функционировать с применением новейших логистических технологий планирования, организации и управления материальными, финансовыми, информационными и сервисными потоками.

Ключевые слова: логистика, регион, логистический комплекс, стратегия, товародвижения.