Создание интегрированной транспортно-логистической системы России как основа экономической безопасности и устойчивого социально-экономического развития

Аннотация. Дальнейшее развитие экономики России, в частности, освоение северных, сибирских и дальневосточных территорий и новых объектов минерально-сырьевой базы, становится невозможным при использовании существующей транспортно-логистической системы страны. Поэтому имеется настоятельная необходимость развития транспорта, логистики, инфраструктуры как базы роста экономического потенциала территорий страны. В статье даны концептуальные направления развития логистической системы Российской Федерации, формирования единой системы товарного движения, создания логистической инфраструктуры и на этой основе — дальнейшее развитие всей экономики страны. Развитие и создание единой транспортно-логистической системы России предлагаются на основе использования программно-целевого подхода. Целесообразно разработать государственную программу «Логистизация Российской Федерации до 2030 года», в которой необходимо предусмотреть комплексное развитие всех видов транспорта, логистической инфраструктуры, транспортных артерий и сопутствующих производств, объектов сервиса, социальной инфраструктуры, создание федерального логистического центра, проводящего единую политику товародвижения и осуществляющего управление единой транспортно-логистической системой, центра международных перевозок. Реализация указанных мероприятий создаст основу для дальнейшего устойчивого развития энергетики, промышленности, сельского хозяйства, т.е. станет стимулом интенсивного преобразования экономики всей страны.

Ключевые слова: экономика; логистика; транспорт; регион; инфраструктура; программно-целевой подход; логистический центр; государственная поддержка; инновации; экономическое пространство.
Creation of an integrated transport and logistics system as the basis of Russia's economic security and sustainable socio-economic development

Abstract. Further development of the Russian economy and the development of the northern, Siberian and Far Eastern territories and new facilities of the mineral resource base in particular, becomes impossible when using the present transport and logistics system of the country. Therefore, there is an urgent necessity to develop transport, logistics, infrastructure as a basis for the growth of the economic potential of the country's territories. The article provides conceptual directions to develop the logistics system of the Russian Federation, to form a unified system of merchandize transportation, to create a logistics infrastructure and to promote further development of the entire economy of the country on this basis. It has been proposed to create and develop a unified transport and logistics system of Russia on the basis of the program-target approach. It is expedient to develop the governmental program “Enforcement of Logistics in the Russian Federation until 2030”, in which it is necessary to envisage a comprehensive development of all types of transport, logistics infrastructure, traffic arteries and related industries, service facilities, social infrastructure; to set up a federal logistics center, which will secure a single product distribution policy and will run a unified transport and logistics system; to establish an international transportation center. The implementation of all mentioned above measures will create the basis for further sustainable development of energy, industry, agriculture, i.e. it will be a strong incentive to transform the economy of the whole country.

Keywords: economy; logistics; transport; region; infrastructure; program-target approach; logistics center; governmental support; innovation; economic area.

Introduction. The need for Russia's entry into world economic relations has determined the path to integration into the world economic area. Similar to integration into international financial circulation and information transfer systems (for example, the Internet), Russia faces the need to integrate into the international logistics network the movement of people and goods with the relevant infrastructure, institutional mechanisms and information subsystems.
However, the state of roads, transport, logistics centers in Russia is still unsatisfactory. For the further development of the country's economy, the development of the Northern and Siberian regions, as well as participation in international transport and economic relations, it is necessary to create a developed transport and logistics network that meets the needs of industry, agriculture and the population.

**Creation of a unified transport system in Russia.** A special place in logistics is occupied by transport, which carries out physical movement and movement of people and goods across the country. The territorial part of Russia, capable of connecting the countries of Europe and Asia, the Caucasus, the middle East, Central Asia, India, China, Korea, Japan, is very attractive and effective for the allocation of world capital and the development of commodity production. It is located between European and Asian countries and through international transport corridors can promote trade, economic, scientific and cultural exchange between States and peoples. Transport communications are the logistics basis for ensuring Russia's foreign economic relations and its integration into the global economic system. The economic situation of the country depends most directly on the functioning and development of the transport system. The development of transport infrastructure should be aimed at ensuring the common economic space of the country. This contributes both at the national level and in individual regions to the challenges of international economic integration.

The implementation of export-import relations, including the transit of goods in the direction of Asia—Europe and South—North, is still limited due to the insufficient capacity of port facilities to be developed. The Northern sea route can become an independent Eurasian corridor linking the States of the European Union and the Asia-Pacific region, as the Russian part of the Arctic in the long term will be a powerful mineral resource base not only for Russia but also for the planet as a whole.

High-tech Eurasian transport system can combine all modes of transport and international transport corridors [4, p. 40—47]. Integrated hubs with unified dispatching control systems, transport and logistics centers and universal automated terminal and warehouse complexes with commodity exchanges and wholesale markets located in close proximity to them should unite railway, road and aviation modes of transport [5].

One of the main directions of development of the transport system is to improve the technical level of vehicles and equipment, the use of modern transportation, management and information and telecommunication and digital technologies. The transport system should be focused on the use of products of domestic manufacturers of transport equipment and equipment. Transportation of goods and passengers on the territory of the Russian Federation should be carried out by domestic carriers. To this end, it is advisable to establish administrative measures such an order that would allow to prepare for the provision of transport and forwarding services by Russian carriers to
foreign customers.

To improve the structure of the fleet of vehicles and fleet it is advisable to develop them in the following areas:

- **on railway transport** — increase in the share of modern high-performance freight locomotives, freight cars with increased load capacity and reliability in the Park; increase in the share of high-speed passenger rolling stock; expansion of the fleet of passenger cars, suburban and inter-regional electric trains of increased comfort;

- **in Maritime transport** — the construction of large tankers of a series «Baltmax» and «Bosphormax» in order to ensure export growth of oil cargo; construction of a specialized gas carrier vessels for export of hydrocarbons from Yamal, Sakhalin and other fields; the construction of the ferries of the new generation; construction of new generation icebreakers to ensure transportation from the Arctic shelf;

- **on river transport**— creation of new types of vessels of increased efficiency, vessels intended for operation in areas with small depths; expansion of the use of heavy-load trains; creation of a new generation of comfortable river tourist vessels;

- **on road transport** — increase in the share of heavy-duty trucks in the freight fleet, expansion of the range of specialized semi-trailers for long-distance and international transport; increase in the number of specialized cargo chassis, including equipped with self-loading and a range of interchangeable bodies for servicing the retail trade, small business, farms, utilities;

- **in air transport**— creation and operation of a new family of economical aircraft.

Domestic water transport plays a special role for Russia. In a market economy, the use of the world’s longest inland waterways and an effective river—sea fleet in the national cargo system can provide a number of additional advantages:

- possibility of direct non-transshipment transportation of cargo from the berth of the Russian enterprise on the river to the foreign domestic port or even directly to the berth of the consignee company;

- significant fuel and oil savings in the use of large transport capacities, as one medium — sized river-sea vessel is equal in cargo capacity to the whole railway echelon;

- significantly better environmental impact as water transport is cleaner than rail and road transport;

- ability to provide remote and hard-to-reach areas, including during the spring flood;

- growth of production and town-forming potential in the field of explored mineral deposits and forests in the river basins;

- development of water tourism and recreation on the water or near the water, increasing revenues due to this;

- expansion of interregional and international economic relations, which
are not always possible for land communications.

It should be noted that in countries with rivers, water transport is a priority in national economic policy and attracts public and private investment. Without wider use of inland waterways and river — sea fleet, Russia’s national transport system cannot be considered complete.

**Development of logistics infrastructure.** The progressive direction of improvement of freight traffic is the integration of production and transport processes on the principles of logistics with the development of their infrastructure. One of the main tasks of the Department is to implement a coordinated state policy in the field of transport services, industrial development of territories, inter-sectoral communications and infrastructure. First of all, it is necessary to develop a political solution for the development of the transport system as the basis for the economic development of the country. For its implementation, project management mechanisms should be provided to ensure coordination of Federal, regional and private economic interests. The state should be the initiator of business proposals, but it is advisable to create several international consortia for the development and implementation of joint projects.

Economic sanctions forced the country’s leadership to make the food and industrial goods supply base, mainly for domestic producers. However, this is not easy, we need the appropriate infrastructure, which is not yet enough. [2, p. 40—45; 7]. Do we have so many storages, refrigeration units, elevators, logistics centers, bases, warehouses, etc.? Major investments are needed in the construction of these facilities. But before you invest, you should develop competent projects of their location, taking into account their proximity to consumers, storage and processing facilities, as well as transportation opportunities. That is, there is a need to solve a complex problem of the Federal scale, since it will be necessary to create a single logistics network in the country, that is, the logistics of the entire economic space.

Construction of market infrastructure should be carried out on the basis of the state program «Logistics of the Russian Federation until 2030», which should be developed. It is important to note that the spontaneous, uncoordinated creation of disparate infrastructure in each region, economy, ignoring international technical standards and organizational practices, is not only the necrosis of large investments, but also the aggravation of trade and transport isolation of economic structures both at the local and interregional level, and from the rest of the world, which is equivalent to limiting the economic opportunities of Russian entrepreneurs and weakening the economic (in particular, food) security of Russia.

In the future, the creation of a complex of logistics infrastructure should be aimed at the formation of a Single national combined cargo network. Coordination of the regional logistics infrastructure and goods movement in the country should be carried out by the Federal logistics management center, which is recommended to create.
Regions are clearly interested in the development of the transport system, as a result of its implementation will be able to solve the most complex and resource-intensive problems of communications, construction of industrial facilities and develop social infrastructure. Infrastructure development requires significant involvement of highly qualified personnel in the creation of additional 2—3 million jobs, which will require the development of higher, secondary and special education [3, p. 222—228].

Creation and implementation of transport and technological infrastructure, includes the following main areas:

- construction of Railways, roads, fiber-optic communication line;
- reconstruction of existing Railways and roads to meet new requirements;
- development of regional transport infrastructure, including in the areas of raw material base development in the North and East Asia, as well as in the areas of national projects;
- increase the capacity and optimal specialization of the sea ports to meet growing volumes of transportations of foreign trade cargoes (grain, coal, processing of cargoes in containers), the transition of the transportation of Russian foreign trade cargo with foreign on the Russian ports;
- formation of a network of hub distribution centers for air transportation (hereinafter-airports-hubs), construction of new airport cargo and passenger terminal complexes, reconstruction of runways;
- capacity building of existing and creation of additional terminal complexes, including container terminals;
- further development of logistics and information technologies, the entire infrastructure of transit transport in order to accelerate the guaranteed delivery of transit goods, ensure their safety, improve the quality of service;
- modernization of the production base of border crossing points of vehicles, improvement of customs inspection and clearance procedures, bringing them in line with international practice;
- introduction of modern technologies of customs clearance and control of goods and vehicles using electronic logistics support systems [6, p, 21—23].

For the functioning of arteries, you need to create the packages of different kinds of services which can be rendered in the model of multifunctional zones of road service the city, suburbs, non-residential, catering, trade, hotels, objects of medical care, household maintenance, auto service, rental, communication services, etc. Must also include housing for staff and the appropriate social infrastructure. This will be an integral part of the development of adjacent territories and regions and the strengthening of interregional cooperation.

**Economic consequences of the country’s logistics in the context of spatial development.** The transition to modern international logistics technologies allows any region (and the country as a whole) to have the following consequences.

1. Improvement of commodity circulation and cost reduction due to:
   - ensure the completion of the cycle «the production of raw materials
purchases-processing-production — sales of finished goods»;
- significant reduction of transportation, handling, handling, forwarding, customs and security costs in the structure of product prices;
- reducing the number of unnecessary intermediaries and empty flights, stocks, improving the safety of goods and ensuring control of the location and condition of the goods at any time.

2. Development of regional economy due to [8, p. 23—32]:
- consolidation of participation of large and medium-sized businesses in the development of the regional economy;
- attraction of domestic and foreign cargo flows and investments as a result of infrastructure preparedness;
- growth of financial turnover, taxes and fees in the regions.

3. Development of production due to:
- optimization of logistics operations at industrial enterprises;
- use of automated production management systems (ACS).

4. Creation of new production capacities and jobs in a number of sectors of the real economy:
- processing of local raw materials;
- construction and engineering infrastructure;
- transport development;
- engineering, communication;
- light industry and consumer services;
- agricultural and food industry;
- market infrastructure (packaging, packaging, processing wholesale and retail);
- business service.

5. Development of urbanization, development of rational planning of cities, settlements and location of productive forces:
- development of city logistics [1, p. 67—74];
- creation of modern social and business infrastructure (housing, communications, passenger transport, retail trade, recreation, catering, service).

6. Improvement of the ecological condition of the territories due to the removal of production facilities outside the city, transfer of part of the cargo to river and rail transport, dispersal of petrochemical terminals, wide use of sealed containers.

The construction of transport arteries and complex logistics hubs will cause the need and opportunity for the development of industry, agriculture, construction and services, in particular:
- the development of hydropower, nuclear and fossil fuel energy generation; construction of wind, solar, wave etc. power plants;
- increase in oil and gas production; deep processing of gas, oil;
- the development of exports of HVA products;
- increase in coking coal and ore production; development of metallurgy in
Siberia, the Far East and the North of the European part of Russia;
  - expanding the use of modern technologies in mechanical engineering;
  import substitution; development and production of modern high-speed vehicles;
  - rational use of forest resources in the production of materials; restoration of forest resources;
  - growth in residential and domestic construction, construction materials;
  - creation of modern livestock and poultry production facilities for the needs of Russia and export; increasing the collection of agricultural products;
  - creation of infrastructure, increasing the number and volume of storage and processing facilities.

It should be noted that the improvement of the work of individual logistics links cannot serve as the ultimate task of optimizing the movement of goods and obtaining the expected effect. Only the combination of the stages of the cycle «development of local resources» — «procurement» — «production» — «warehousing» — «transportation» — «implementation» forms a complete self-supporting synergetic cycle and gives a significant effect.

The socio-economic effect of the full logistics of the Russian economy is commensurate with the effect of such stages of scientific and technological progress as electrification, industrialization, chemicals, computerization of the national economy. A logistics network can be likened to an energy network, but if energy is transferred in the specified network, then in logistics — material flows.

**Conclusion.** The creation of a high-tech Euro-Asian transport system can be a core project of innovative development of the economy of industry, construction, transport, sustainable development of the economic space of the regions of Russia.

At the same time, it is necessary to provide an integrated approach to the formulation of mechanisms for the integration of transport and warehouse facilities in Russia into the world standardized logistics system, maximum susceptibility to positive foreign experience in this field.

It is proposed to develop a Federal target program «Logistics of the Russian Federation until 2030», which provides for the comprehensive development of logistics infrastructure covering the entire territory of the country, taking into account the prospective development of open fields, industrial and agricultural areas, transport arteries and related industries, service facilities, social infrastructure. The program is recommended to reflect the creation of the Federal logistics center, conducting a common policy of goods movement and co-ordination of all logistics centers of the Federal and regional scale. Russia's unified logistics system should also have an international transport centre that coordinates traffic along international transport corridors with extensive use of the relevant infrastructure. It is advisable to develop a special section on the development and functioning of the Northern sea route and adjacent territories. The implementation of this program will not only save Russia from the crisis,
but will also encourage the development of energy, industry, agriculture, that is, leading to the transformation of the economy of the whole country.

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