# CREATING MULTI-MODAL LOGISTICS CENTERS: PROSPECT FOR DEVELOPMENT IN CENTRAL ASIA

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**Abstract:** All we have witnessed several summits of the so-called G-20 to overcome the crisis and attempt to delineate the "look" of new rules of the emerging new world economic system. However, according to many experts, these rules will not be able to radically change the current system of economic relations, which is based on the processes of globalization and economic interpenetration of the world. One can list the many elements of the system. Among them, as a manifestation of a growing specialization of production, and deepening of cooperative relations in the world the special role is played by multi-modal logistics centers (MLC), of both regional and global concern. If stock and commodity exchanges are the link in the global economy, meanwhile a multimodal logistics centers serve as their practical and technical support.

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Current processes of globalization, international cooperation, and socio-economic integration will inevitably lead to the need for adjustments of existing models of national economies with the perspectives of further development of its own economic potential and international competitiveness. This qualitative changes taking place in the modern economy, indicate that there has been a substantial rearrangement of the factors and sources that determine economic growth. Shrinking resources of traditional economic growth brings to the fore a wide range of innovative processes that are an integral and important part of economic transformation.

This issue is of some relevance for the countries of Central Asia. For the landlocked countries of Central Asia, economic and social well-being depends largely on the effectiveness of the functioning of transport corridors. Accordingly, in order to achieve economic and social progress the key priority must be given to high quality transport, processing facilities and storage in the hallways. In this vein, the establishment of multi-modal logistics centers (MLC) could help diversify the economies of the region and create the basis for its competitive and innovative industry that would create in the world economy particular "niche" and can quickly adapt to new economic conditions.

The most active and decisive steps in this direction have been adopted in Uzbekistan and Kazakhstan. It is known that Uzbekistan plans to establish an international intermodal logistics center at the airport of Navoi, which will not only be used as a transcontinental freight forwarding hub connecting South-East Asia with Europe, but also help create new high-tech industries in the republic and neighboring regions. In the area of the airport it is being established a free industrial economic zone (FIEZ). Kazakhstan is also in process of creation and development of backbone network traffic centers, consisting of regional freight logistics in the transport corridor West China - Western Europe. In particular, in Kazakhstan MLC will be established around the cities of Astana, Aktau and Almaty. Of course, the implementation of projects of MLC in Central Asia will be accompanied by a study of world experience in this field and its application in the context of local conditions. In this regard, it is interesting to review existing international practice of establishing MLC.

As it is known, the bulk of world trade and economic relations is carried out through the ports, resulting in a de facto monopoly of shipping. As a result of unprecedented growth in the global economy ports began to experience a number of problems in the functional part. In particular, the ports have become sources of the growing problems of access to ports on the land; they are no longer able to meet fully the demands of the inability of regional trade, developing along the corridor Europe-Asia. In the ports is also a very significant environmental problems and shortage of space for the expansion area.

Moreover, the characteristic feature of the current world economy is the globalization of production or the production chain. As transport costs decrease and conditions for the delivery improve it takes place the process of dispersal of production on the basis of narrow specialization of a specific territory. Transnational corporations can prepare the design of new products in its headquarters, but the manufacture and assembly of these products is carried out in different countries, with delivery of materials and components at the most reasonable price and best quality. This form of specialization is closely linked to trends in transport and logistics, which raises new challenges in the development of these areas.

All of these issues and trends are accompanied by the revision of the concept of maritime ports, removal from the territory of the port infrastructure some of its parts. Here the main focus was at the establishment of a certain internal areas away from the seaport, the so-called "Dry port" on the basis of multi-modal logic centers. And MLC is not limited to the provision of a purely transport services, whose functions may be expanded as the development of trade, and become the industrial and the industrial and financial zone.

Due to the lack of common approach to the definition of MLC, within the overall framework a multimodal complex can be described as a major portal, designed to handle large volumes of cargo. The area of logistics hub may exceed 1 million square meters. Products are not only stored and processed, and redistributed to other regions. The infrastructure of the complex varies depending on the business and holds a wide range of functional objects of focus. It can be storage and office space, a zone of customs control, refrigerators and freezers, dangerous goods storage area, show-rooms, wash cars, repair area for service vehicles, recreational facilities, etc.

The infrastructure of the complex may vary depending on the specific business location and the main tasks. This form of development allows the consolidation of all the freight in one place, to minimize time processing of goods, to increase the range of services.

An important characteristic of a major distribution center is the opportunity to handle the goods delivered by various modes of transport - road, rail, air, maritime. It is not surprising that in the development of this project the great attention is paid to its location. It must be located in strategically important locations for logistics: in the airport zones, locations of production facilities, marine ports, major highways (roads, railway lines) or the intersection.

While realizing such large projects, particular emphasis is given to social infrastructure. On the one hand, the logistics park may be located near major population centers, which partly solves the issues of employment, on the other hand, the complex could become the nucleus of a certain industrial district with developed infrastructure and various recreational areas.

What a practical value can represent a major distribution center to potential users? Because of an extensive transport infrastructure and available land for industrial purposes tenants can take advantage of a wide range of logistics services. Another advantage of logistics centers is to reduce the time for processing of goods, as well as all concentrated in one place, to carry out any operations on commodities could be as soon as possible. Logistics parks are areas for transshipment of goods from road to rail and vice versa, the largest logistics operators prefer to have on site customs warehouse space.

No less interesting are services of light manufacturing. For example, worldwide there is high demand for VAL-services (value added). Such services assume preliminary preparation of the product - repacking, labeling, assembling kits, stickers, inserting instructions in different languages. The need for VAL-services is particularly evident for large retail chains. Also at the park, one can organize assembly manufacture of technical devices that can be attributed to the value-added services.

The diagram shows the potential expansion of MLC as a result of its development. It can be seen from the schemes that in the initial stage MLC is only in the form of more storage space, which accumulates various cargo and containers for further shipment to the destination. The next stage of development of MLC is the provision of various services in this territory, which is the creation of value added products. The final two stages are already mature form of MLC with the process of establishing special economic zones with specific industrial and economic and financial tasks of innovation.

TABLE 1. EVOLUTION OF LOGISTIC CENTERS

| 1960s - 1970s | 1980s - early 1990s | Mid 1990s - present |
|---|---|---|
| | | Materials management<br>Distribution Services (national/global) |
| | Bonding | Import clearance<br>Bonding<br>Inbound transportation |
| Receiving | Receiving | Receiving |
| | Cross-docking | Cross-docking |
| Storage | Storage | Storage<br>Inventory management and control<br>Shipment scheduling |
| Order processing<br>Reporting<br>Picking | Order processing<br>Electronic data interchange (EDI) reporting<br>Picking | Orders processing<br>EDI Reporting<br>Picking |
| Order assembly<br>(Re)packaging | Order assembly<br>(Re)packaging<br>Stretch-shrink-wrapping | (Product) subassembly<br>Order assembly<br>(Re)packaging<br>Stretch-shrink-wrapping |
| Palletizing/unitizing<br>Label/mark/stencil | Palletizing/unitizing<br>Label/mark/stencil | Palletizing/unitizing<br>Label/mark/stencil |
| Shipping<br>Documentation | Shipping<br>Documentation<br>Outbound transportation | Shipping<br>Documentation<br>Outbound transportation<br>Export documentation<br>FTZ operation<br>JIT/ECR/QR services<br>Freight rate negotiation<br>Carriers/route selection<br>Freight claims handling<br>Freight audit/ payment<br>Safety audits/ reviews<br>Regulatory compliance review<br>Performance measurement<br>Returns from customers<br>Customer invoicing |

In practice, to review the development of transport and logistics industry one can refer to Europe and Asia as the regions of the most intense exchange of commodity flows. In Europe, initial plans or projects in the sphere of transport and logistics are associated with the development of infrastructure of maritime ports, the nature of trade and industrial cooperation. Against this backdrop, the recent trend in Europe has been the transfer of certain functions of seaports in the inner area, where there are established logistics centers or "dry ports". This is due to the growing problem of transportation of goods "of" and "to" port through the city, as well as the high cost to build new docks. The result is a favorable situation for the development of "dry port" or logistics centers, which can functionally replace the ports. According to the results of a study conducted by the UN in 2007, the development of logistics centers as the "dry port" in the interior regions of Europe can contribute to further economic growth in neighboring regions. The expansion of multi-modal logistics center can create the preconditions for growth in the issuance of regional products, where will be located the transportation infrastructure.

In Asia as in Europe, the main logistics centers are formed either directly in the port or in the surrounding areas. Trends of the development of this industry in Asia also confirm the idea of changing of the concept of port expansion and a more specialized nature of its functions. The following chart demonstrates the change in the concepts of ports in Asia over time. In Asia as in Europe, the main logistics centers are formed either directly to the port or in the surrounding areas. Trends in the development of this industry in Asia will also confirm the idea of changing the concept of port expansion and a more specialized nature of its functions. The following table demonstrates the change in the concepts of ports in Asia over time.

| | | |
|---|---|---|
| Past: | - Functional division between port and logistics centers | |
| Present: | - New port concept due to the environmental changes | |
| | - Provision of value added-services behind post areas | |
| Future: | - Free trade zone with diverse functions | |
| | Logistic center oriented (Singapore, Japanese ports) | Production oriented (Kaohsiung, Chinese ports) |

In general, it can be noted that, thus far the world financial and economic crisis has once again updated the problem of diversifying the economies of Central Asia and the holding of industrial and innovation policies in the region. Creation of multi-modal logistics centers on the basis of international experience fits into this context as the "Breakthrough project", which will connect the Central Asian countries to world science, technology and innovation processes. Given the fact that Central Asia is surrounded by or located in proximity to the regions, where today are generated basic economic, trade and financial flows, the post crisis development of the world economy will connect the region to those flows. In this vein, we can assume that this is a time when on can build an industrial and logistics infrastructure projects, which in post-crisis time will pay off with usury.

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