

## INTERFACES BETWEEN LOGISTICS CENTRES AND LITHUANIA ECONOMICAL DEVELOPMENT

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### 1. CONCEPTUAL CONSIDERATIONS

In order to promote Lithuania's position that is like an East Baltic key player in East-West and South-North cargo transportation the establishment of the regional logistic centres in the biggest towns is envisaged. They must be located near the international transport corridors and will promote intermodal cargo transportation and will benefit Lithuania from the large amount of traffic currently transiting country, by offering (value-added) services to transport operators and cargo owners.

### 2. BENEFITS OF LOGISTICS CENTRES AND INTERMODAL TRANSPORT

The sea, inland waterways, rail, road and air transport modes are the business tools to move the cargo from the place of origin to the destination. The transport modes require loading and unloading areas-ports, different size and purpose logistics centres and cargo terminals – where the units will be handled.

One of the main objectives of the long term transport development programme is to develop a framework for an optimal integration of different modes of transport in the regional logistics centres so as to enable an efficient and cost-effective use of the transport system through seamless, customer-oriented door-to-door services, favouring competition between transport operators and cargo owners [1].

Transport and logistics is not oriented to the forcing of a specific modal split but rather for improving the connections between all modes of transport and integrating them into a single system providing optimal use of rail, road and short sea transport in order to meet modern logistics requirements for door-to-door deliveries [2–4].

Regional logistics centres in Lithuania must find its market place among the conventional international longer distance railway and water transport and the local shorter distance transport market that is ultimately suited for road transport. Shipments that depend strongly on early and/or timely delivery (time-sensitive, high value goods) in general favour road transport, whereas shipments requiring primarily the lowest possible transport costs (cost-sensitive, large quantities of lower value goods) can generally be well-served by the rail or maritime transport. The advantages of the rail and maritime transport (relatively low costs, high capacity, safety, energy efficiency and low environmental pollution) are combined in the regional logistic centres with road transport (high flexibility, speed, organisational simplicity of door-to-door transport).

The organisational simplicity for the shipper of goods, once the various organisations involved in the regional logistics centres have properly organised and co-ordinated their activities, has been the main driving force for the creation of the logistics centres and growth of intermodal transport.

Both, for the supplier and user of regional logistics centres services and of intermodal transport, and for the society as a whole, the development of logistics centres and intermodal transport has proven to offer substantial benefits, particularly because of its (relative) quality or the relative merits of the (competing) transport modes is constantly developing in an operating environment subject to continuous change, such as increasing congestion on the road network, or the introduction of new pricing policies and/or regulations.

Logistics centres and transport is an integral part of most economic activities. Therefore, adequate logistics services provision is a pre-requisite for sound economic development. When traffic volumes are increasing to the point that congestion arises, it is the greatest importance to ensure the accessibility of the major economic centres. This is possible only when there are alternatives for the congested transport system; regional logistics centres and intermodal transport is such an alternative. It can offer benefits to all parties involved (the so-called stakeholders).

The stakeholders are the shippers of goods, the intermodal transport operators, possible intermediaries, and public authorities as well.

All parties involved in transportation can expect to benefit from the development of logistics centres. It will contribute to a sustainable growth of transport capacity, as has happened in European Union countries during the last two decades. Intermodal transport is strongly supported by policy makers especially because of its socio-economic benefits for society as a whole. In most cases external costs of the different transport systems (particularly those caused by the road sector) are not accounted for in the direct costs for the user. Users of transport systems base their choice of preferred mode of transport on direct costs only. Intermodal transport will be preferred only when it is cheaper than the alternatives, while its level of service is higher or acceptable.

It would be too optimistic to assume that the regional logistics centres in Vilnius, Kaunas and Klaipeda could attract potential handling volumes to a maximum extent. When considering the effective cargo volumes that can be attracted to the regional logistics centres the following aspects have to be taken into account:

- Much depends on the origin and destination of the cargo. Cargoes originating in Lithuania are most likely not effective business for the logistics centres since the delivery distance may be too short to justify additional handling procedures.

- Part of the existing traffic is the result of an optimisation process. Some transport operators have already established their own cargo distribution or logistics centres and facilities to handle their transport fleet. These volumes are difficult to detract from the existing routings, since not so much the owner of the cargo but the transport operators have to be convinced to abandon existing structures and move their business into the regional logistics centres located in Vilnius, Kaunas and Klaipeda. In this context especially the large international trading companies stevedoring and freight-forwarding firms have proven to be very reluctant to use the services of regional logistic centres since they usually control large cargo volumes justifying the establishment of their own (road) cargo distribution centres.

- Another aspect relates to the flexibility of road traffic. For example, some commodities may be time sensitive, requiring fast shipment, which can only be guaranteed by trucking the goods. Moreover, the flexibility of the truck enables the cargo owner or transport operator to change dispositions/routings on very short notice, even when the cargo is already on the road.

- Tariffs and freight rates play an important role when deciding on the routing of cargo. It can be assumed that there will always be some cargo groups, which potentially can be handled in the regional logistics centre, but due to an unfavourable tariff or pricing structure will by-pass the logistics centres. For example, a trucking company engaged in unbalanced traffic may be willing to offer dumping rates for return freight, which normally would have been shipped by rail through the logistics centre. Altogether, the above-mentioned aspects significantly limit the share of cargo volumes that can be attracted to the regional logistics centres in Vilnius, Kaunas and Klaipeda.

It will strengthen the competitiveness of the Lithuania for the serving the international transit cargo flows. Lithuania position allows easy international access to areas of major industry and trade centres with all kinds of transport modes. By establishment three logistics centres in Lithuania it can be implemented and explored the entire intermodal transport network in the region. It will increase the efficiency of transport infrastructure, which will contribute to optimisation to the cargo flows distribution as West–East same as North–South directions. Regional Logistic Centres will fulfil the logistical needs and requirements of international and local transport companies on worldwide basis. The logistical solutions that will be created in the centres will make considerable improvements to eliminate logistics and transport bottlenecks and make it attractive the location for many new enterprises. Each of the logistics centres can become a centre of economic activity, with an integrated regional logistics for transport supply and demand potential for competitive business and markets.

The initiative related to the development of a logistics centres network in Lithuania can contribute to the following:

- develop regional business service qualities and increasing the competitiveness of the Lithuania, strengthening inter-regional co-operation and exchanges on concrete projects linked to business logistics;
- build trust and confidence among people in the Lithuania: trust in fact reduces transaction costs and reduces;
- risks association with innovation. Cultural exchange is also an effective way to build trust and confidence across diverse regions and nations and joint marketing initiatives can be pursued (through website, networking, business and trade, centres of knowledge and innovation);
- a better educated population: growth sectors and industries demand a highly skilled and educated work force which this project can encourage through co-operation with business centres, university, etc. Specifically software development can be developed, especially for the logistics sector. An atmosphere of “lifelong learning” is important to allow communities and firms to develop the critical mass of knowledge and skills needed to supply the new knowledge-based economy;
- integrate the Lithuania transport infrastructure and corridors with the main European Transport Corridors, increasing quality of transport services;
- contribute to concentrate through the creation of a logistic centres in Klaipeda, Kaunas and Vilnius long distance and international intermodal freight flows to a biggest transport terminals and logistics centres in Europe, establishing logistics networks and improving accessibility to the customers by adding missing links and expelling bottlenecks;
- develop competitive conditions for sustainable international cargo transport and transport solutions that may attract customers in competition with other alternatives, characterising the logistics centres as sustainable in economic, ecological and social terms;
- develop improved and co-ordinated intermodal travel service on small scale and local as well as on regional and interregional levels;
- co-operate across sectors to develop a corridor planning policy comprising land use, transport and natural protection policies, as well as co-ordinated planning procedures that integrate spatial and transport sector planning process. The common procedures may include joint efforts related to strategic assessment of various types of impacts, open access to information and co-ordinated decision making processes;
- contribute to develop environmental and social criteria to guide the spatial and transport sector planning related to the expected increase of international freight traffic along the main corridors.

### 3. CONCLUSIONS AND RECOMMENDATIONS

1. It is identified that the creation regional logistics centres in Lithuania is one of the main measures of improvement for the business and transport-related infrastructure in the country.

2. Regional logistics centres will be the first public Logistics Centres in Lithuania established under the contemporary requirements and will provide the needed co-operation with big trading companies and other logistics centres in and outside Europe.

3. Transport Corridors No I and No IX must be very important for a Logistics Centres in Lithuania will have significant impact on the business linked as to the separate regions and to the whole country.

4. The benefits deriving from an increase of international transit traffic will be also related to the complementary and boosting activities of logistics services associated with the development of logistics centres network in Lithuania.

5. The Logistic Centres in Vilnius, Kaunas and Klaipeda must be created and run in coherence with the most logistically, commercially and environmentally efficient logistics centres in Europe and for such reasons it must comply with European standards and quality performance to provide the framework for commercial and sustainable transport solutions.

## References

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