ECO4LOG - DEVELOPMENT OF AN EAST BORDER CORRIDOR 4TH PARTY LOGISTICS SERVICE APPROACH ALONG THE AXIS BRANDENBURG-SAXONIA-AUSTRIA WITH NEIGHBOURING ACCESSION COUNTRIES

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ABSTRACT. The idea of the project was created by the close co-operation of ECO4LOG partners in former Interreg and EU projects. The partners recognized, that a discrepancy exists in the border regions of the EU member and accession countries in Central Europe regarding the expected increase in goods flows and the partly missing transport infrastructure. A way out is the improvement of intermodal structures, the better use of intermodal facilities and the implementation of supplying IT-solutions. Such changes in the intermodal strategy can only partly initiated by the regions. An intermediary to reach the aims is a 4th Party Logistics Provider. 4PL are the new type of independent IT-driven business units, which are successful in the outsourced operation of supply-chain-management.

Key words: intermodality, international co-operation, interreg III C, logistics, 4 Party Logistics.

In the border regions between the member and the accession countries of the European Union in Central Europe and along this still existing boundary substantial increases are expected in good flows and in a demand for partly missing transport infrastructure. This applies in particular to the north south corridor along this line in the Interreg Area East which leads from Germany (Brandenburg/Saxonia)/Poland in the north via Czech/Slovakia/Austria/Hungary in the center up to the Adria with Slovenia/Italy (Friuli).

The existing infrastructure, consisting of transportation networks and logistics knots, in view of realized infrastructure investments in the accession countries (e.g. ISPA program), will not be sufficient for the coverage of the goods flows at present, if not efficient organization and computer science solutions are also provided. Such solutions should aim at an innovative, intelligent and above all intermodal networking of the infrastructural basis.

In principle, the project ECO4LOG wants to improve the region and country-spanning co-operation within the field of goods transport between the public administrations in the European Union border region East. By the creation of co-operation and information structures, respectively their initiation, public administration can take influence on the goods transport and promote the use of intermodal
systems. The intermodal logistics knots form the physical basis for it. In this regard, the public administrations can take over steering functions like 4th party Logistic service Providers (4PL).

The partners in the ECO4LOG project support the intensified use of intermodal and sustainable logistics and transport systems by such a 4 PL concept. The benefit is acceleration and efficiency increase of the intermodal transport flows by the elimination of organizational, administrative, tariff and informative weak points, especially at logistic knots.

Beside transport, respectively operational effects (lowering of transport costs, avoidance of traffic jams, lowering of capital commitment etc.) macro-economic effects can be expected like jobs creation, the increase of the competitiveness of the border regions and sustainable use of resources by a more efficient utilization of the existing systems.

ECO4LOG aims at integration and networking of successful new logistic service providers. These 4th Party Logistics Providers become generally accepted more and more with the control of enterprise-spreading Supply Chain Management Systems. They have got the ability to provide from one hand planning, the job control as well as the operations of the logistics chains for the forwarders. ECO4LOG plans a region crossing integration and networking of such new logistic service providers with the intensified use of IT solutions to promote intermodal goods transport.

Fig. 1. ECO4LOG corridor
Rys. 1. Korytarz ECO4LOG

The project ECO4LOG will examine the application of such an enterprise-spreading concept in four main components as an economical nucleus for the development of the border regions:

- analysis of the stages of development of the infrastructure (logistics networks and logistics knots / freight villages) and the logistic chains and means of transport,

- analysis of the impact of 4th Party Logistic Providers and propagation in the border region including sustainable business models with consideration of the characteristics of the individual cluster,

- usage of available and design of additional IT Tools for intermodal transportation planning and transport control,
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- the effects on the economics (creation of jobs) as well as the effects on the environment.

As regards the promoting of the transnational co-operation it is intended to join 2 cluster regions under the "project umbrella" ECO4LOG.

Cluster north
Germany (Brandenburg)-West Poland
Germany (Saxonia)-Czech

Cluster central-south
Austria-Hungary
Austria, Slovakia, Slovenia

Localization of partners participating in the project is shown on the picture 2.

Fig. 2. Localization of ECO4LOG project partners
Rys. 2. Lokalizacja partnerów projektu ECO4LOG

Transport and economic challenges/problems in the spatial region Interreg III East are to be identified in the respective clusters. Due to the intentions of the Interreg III C program no spatial proximity between the individual partners must exist, particularly the project has a transnational focus. The illustration shows the three selected cluster regions, which are in close relationship to the new accession countries.

The question on possible differences between the cluster regions (north, center and south) regarding the coming European Union extension is also relevant to the project. If necessary, significant differences can be identified here concerning infrastructure measures already made, effects for current or planned international, respectively regional location and logistic concepts. The possible exchange of experience and the know-how transfer is also important here, which arises from the
composition of the interregional consortium in order to discuss existing procedures, problems and to
generate innovative solutions.

A survey of the existing services in the individual logistics knot / transshipment terminals (e.g.: sea
and/or inland port, railway terminal, freight village etc.) and with the carriers should show the state of
the art concerning services and should supply reference points for the development of new services.
Beside the design of new innovative services for the network of logistics knots into the ECO4LOG
clusters, it is the task to compare these with each another (e.g.: benchmarking, best practice method
etc.) in order to be able to draw conclusions for possible improvement potentials.

The authorities and public bodies involved in the ECO4LOG approach play therefore an important
role, because they can include interested transport companies (logistic service provider, transshipment
centers, carrier as well as other public and/or private enterprises) into the implementation plan in the
individual clusters.

The project management promotes the coordination between the partners and the working on
mechanisms as well as the adherence to the approved work and time schedules by all involved parties.
The exchange with further projects shall increase the effectiveness of the project. Intermediate results
will be presented among experts.

One of the final results of the ECO4LOG project is recommendation for future actions. A few of
them are listed below.

1. Continuous modernization programs of state railways.
2. Attractive financing options (e.g. leasing or residual value approach).
3. Creation of a used rolling stock market.
4. Supporting purchase of intermodal wagons.
5. Modernization of rolling stock fleet.
6. Intensive regional marketing and promotion to local shipping and transport industry.
7. Conceptional integration of the terminal in national and international networks.
8. Reduction of last mile costs into terminals and reduction of operation costs in terminals e.g. by
   optimized shunting.
9. Planning and implantation of new logistics centers near terminal facilities.
10. Marketing network (e.g. European Bulls) of private rail operators and of State Railways.
11. One Stop Shop by different State Railways for international transport offers.
12. Synchronization of processes for international rail services.
13. Equal treatment in prioritizing procedures by rail infrastructure owners regarding international
    trains.
14. Same level of liberalization in all countries to allow constant growth of private engagement.
15. Reasonable processes for receiving operating licenses in each country.
16. Avoidance of any discrimination against private TOCs by operators.
17. Liberalization of the terminal market for private investors in Central and Eastern Europe.
STRESZCZENIE. Opisywany w artykule projekt ECO4LOG zajmuje się rozwojem koncepcji "4th party Logistics" w krajach Unii Europejskiej i krajach kandydujących położonych wzdłuż osi Brandenburgia - Saxonia - Austria. Oczekiwanym rezultatem projektu realizowanego przez 11 partnerów jest poprawa i wzmocnienie współpracy międzyregionalnej jednostek administracji publicznej zajmujących się problematyką transportu towarowego (intermodalnego), jak również przyspieszenie wzrostu efektywności intermodalnych przepływów transportowych. Celem projektu jest również eliminacja organizacyjnych, i informacyjnych słabych węzłów logistycznych oraz stymulowanie sieciowania dostawców usług logistycznych. Cel ten jest realizowany m.in. poprzez wymianę wiedzy o procesach logistycznych oraz stworzenie oprogramowania wspierającego współpracę.

Słowa kluczowe: intermodalność, współpraca międzynarodowa, Interreg III C, logistyka.