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## SLAVONSKI BROD - POTENTIAL INTERNATIONAL LOGISTICS CENTER

# SLAVONSKI BROD – POTENCIJALNI MEĐUNARODNI LOGISTIČKI CENTAR

#### **ABSTRACT**

Slavonski Brod is the largest city of Brod-Posavina County and the sixth largest city in Croatia, located at the crossroads of intercontinental and interregional transportation route connecting Central and Eastern Europe. Slavonski Brod was a major center and market town once, but today there are more different developed economic activities that are not fully exploited, such as a border river Sava which should be used for the formation of a logistics center. Projects for the creation of logistic center are prepared, the implementation of this type of center would increase the standard of living and increase employment in one of the least developed counties in the Croatian.

There is an insufficient interest of the relevant institutions and administrative bodies for investment in inland transport infrastructure that would create the basic conditions for recognizing Slavonski Brod as the international logistics center.

There are projects in the city that promote the interests for the development of the international port in it, but they are awaiting realization because of the lack of financial resources. Apart the port activities, it will contribute to investments in machinery and equipment of industrial plants which are waned by the advent of privatization.

The aim of this paper is to analyze and determine the objective reasons for untimely implementation of projects which would help creating and strengthening the Port Brod, and provide measures and activities of relevant authorities for the affirmation of international logistics center in Slavonski Brod.

Analysis of the problem and research objectives definition leads to two research objects. The first object of the research is Slavonski Brod, whose historical and current analysis of

economic and logistics activities will determine the consequences of the current economic situation in the Brod-Posavina County.

Another object of research is an international logistics center which should affirm Slavonski Brod with the proposed guidelines.

During research of facts and possibilities that currently exist, for the formulation of the research results in this paper, the following research methods are used in a different combination: historical method, the method of analysis and synthesis, classification and description method.

Keywords: Slavonski Brod, logistics center, economic growth

#### SAŽETAK

Slavonski Brod je najveći grad Brodsko-posavske županije i šesti grad po veličini u Hrvatskoj koji se nalazi na raskrižju interkontinentalnog i interregionalnog prometnog pravca, povezujući srednju i istočnu Europu. Nekad je bio značajno središte i trgovište, a danas ima više različito razvijenih gospodarskih djelatnosti koje ne iskorištavaju u potpunosti prirodne potencijale, kao što je pogranična rijeka Sava; koja bi se trebala iskoristiti za formiranje logističkog centra, za čije stvaranje postoje pripremljeni projekti koji čekaju na realizaciju, a čijom bi provedbom porastao standard života i povećala se zaposlenost u jednoj od najslabije razvijenih županija Republike Hrvatske.

Nedovoljan je interes nadležnih institucija i upravnih tijela za ulaganja u infrastrukturu riječnog prometa koji bi Slavonskom Brodu stvorio osnovne pretpostavke za afirmaciju u međunarodni logistički centar.

U gradu postoje projekti koji promiču interese za razvoj međunarodne luke u njemu i koji čekaju na realizaciju zbog nedostatka financijskih sredstava. Istima bi se osim lučkih djelatnosti pridonijelo ulaganjima u mehanizaciju i opremu industrijskih postrojenja koja su stupanjem privatizacije oslabila.

Cilj ovog rada je istražiti i utvrditi objektivne razloge za nepravodobno realiziranje projekata koji bi pomogli stvaranju i jačanju Luke Brod, te ponuditi mjere i aktivnosti resornih tijela za afirmaciju međunarodnog logističkog centra u Slavonskom Brodu.

Iz analiziranja problema i definiranja cilja istraživanja proizlaze dva objekta istraživanja.

Prvi objekt istraživanja je Slavonski Brod, čijom će se povijesnom i trenutnom analizom gospodarskih i logističkih djelatnosti utvrditi posljedice sadašnjeg gospodarskog stanja u Brodskoposavskoj županiji.

Drugi objekt istraživanja je međunarodni logistički centar u koji bi se sa predloženim smjernicama trebao afirmirati Slavonski Brod.

Pri istraživanju činjenica i mogućnosti koje trenutno postoje; a za formuliranje rezultata istraživanja u ovom radu su u različitoj kombinaciji korištene sljedeće znanstvene metode: povijesna metoda, metoda analize i sinteze, metoda klasifikacije te metoda deskripcije.

Ključne riječi: Slavonski Brod, logistički centar, gospodarski rast

#### 1. The possibilities of building a logistics centre in Slavonski Brod

#### 1.1. Slavonski Brod port authority's objectives and services

Slavonski Brod port captaincy was established in 1924. It is situated on the waterway of Sava, operates from the 211. to 477. km, and it has its berths in five counties, six cities and across 262 km of Sava waterway. Slavonski Brod port captaincy is actually a district office of the Ministry of Maritime Affairs, Transport and Communications and Internal Navigation Office, which, together with the Government of the Republic of Croatia has acknowledged the potential value of Slavonski Brod Port as an economic driver for local economy, employment and growth of national income.

(Ivančić, 2009, 360-361) Slavonski Brod port captaincy has made ambitious plans for the future of the port and has requested Deloitte & Touche Croatia to conduct a study whose main goal would be the assessment of suggested long-term and short-term port growth sustainability.

Table 1 Planned space and transactions of Slavonski Brod Port t

| The size of the overall port territory                                | 1.286.000 m <sup>2</sup> |
|---|--------------------------|
| The size of the warehouse for merchandise transfer                    | 56.000 m <sup>2</sup>    |
| The size of the warehouse space for containers                        | 40.000 m²                |
| Free port zone  | 720.000 m <sup>2</sup>   |
| Landing pier  | 1.800 m <sup>2</sup>     |
| • the amount of merchandise transshipment in the 1 <sup>st</sup> year | 400.000 t                |
| the amount of merchandise transshipment after 10 years                | 3,500.000 t              |

Source: Ivančić, 2009, 355-356 (made by the author)

Slavonski Brod Port is categorized as an international waterway Class IV, which means that the port captaincy has to secure ship passage of maximum 85 m length, 9,5 m breadth and ensure water depth between 2,5 and 2,8 m. (Deloitte, 2003, 8). The main duties of Slavonski Brod Port Captaincy are:

- 1) making proposals and documents for the development of a river system on internal waterways
- 2) providing continual unrestricted traffic and supervision of trade associations which perform various harbor services

The most important goals of Slavonski Brod Port Captaincy (Deloitte, 2003, 8) are:

- 1) employment increase (directly in the port area and indirectly throughout the whole Croatia)
- 2) achieving the added value for the region and the whole Croatia (through value added logistic services, subsidiary industrial branches, social sector, etc.)
- 3) state income growth through port and port service taxation

Today, Slavonski Brod is an oil trans-shipment port, with one working dock (dock number 9), which is used for the delivery of raw oil from oil fields in Slavonia to Sisak Refinery for processing.

#### 1.2. Models and prerequisites for the actualization of port services

#### 1.2.1. Prerequisites for the provision of port services in Slavonski Brod

Requirements for carrying out port services and completing goals in Slavonski Brod Port captaincy in order to increase business are following:

- 1) adequate state investment
- 2) adequate private operator investment and
- 3) permanent economic growth

State government should, when it comes to Slavonski Brod Port Captaincy, achieve macroeconomic goals with active internal water port policy, i.e. exercise broad regulatory authority politics and not conduct port policy by assigning assets, while the Port Captaincy goals should be directed towards financing and governing the port.

The main goal of Port Captaincy should be the full refund of all the costs made due to the port (capital costs with adequate capital drawback which would help maintain costs discipline, attract

foreign investment, stimulate innovation in functional fields and avoid spending port authority assets in order to accomplish third party goals (Deloitte, 2003, 8-18)

#### 1.2.2. Models of managing the port and its property

Tool port is a proposed model for port governance and ownership of infra and supra structure in Slavonski Brod Port Captaincy because this mode will offer the possibility to invest and launch port activities which will enable the port to function as an economic focal point, therefore becoming a logistics centre and even an industrial centre. First of all, the Government should invest into launching economic activities aimed at transport services, value added logistics and industry, which will turn Brod Port into a public service port. But, due to forthcoming EU accession, the Port should be market oriented, i.e. it should allow private firms to invest in order to launch their business.

#### 2. The advantage and influence of Slavonski Brod Port

#### 2.1. The advantages of the initiator and the accomplishment of added harbor values

In order for Slavonski Brod Port to use its initiator advantage, it should first offer a framework program for the port, its services and added values which would be accomplished through port investment. For this to be done, the Captaincy needs a vision combined with a port development and growth strategy. By using the development strategy, Port Captaincy and the Government should create a policy which will define permanent relations with interested parties, create the identity of the Port and fulfill the vision of Slavonski Brod Port Captaincy, i.e. transform the port Slavonski Brod into an important regional logistics centre. Strategic framework for transport development has been adopted in 1999, before the beginning of the integration processes, through a document called Strategy of Transport Development in the Republic of Croatia, which mentions the biggest disadvantage of Croatian transport system, i.e. disintegrated transport network. (Ivančić, 2009, 72) This problem will be solved, according to the newly accepted strategy, by setting long term goals, such as the integration of a combined river-sea network, the so called Danube-Adriatic Sea Corridor. The accomplishment of this long-term goal would also complete the mission of Slavonski Brod Port Captaincy whose aim was to attract cargo and business activities which would bring employment and prosperity to the whole region. At the third IPC forum, the need for merchandise distribution centre has been highlighted, especially in the continental part of our country, where there is a crossing of important European corridors (X and Vc - traffic routes which go through Slavonski Brod). This would enhance merchandise traffic and develop an international network which would connect the ports and Croatian traffic infrastructure with the international traffic corridors. (IPC Danube - Adriatic Sea: Merchandise terminals in Slavonski Brod, 2006)

Table 2 Goods traffic in inland waterway ports

000t

|       | Total   | National | traffic |           | International | l taffic |           |  |  |
|-------|---------|----------|---------|-----------|---------------|----------|-----------|--|--|
| Year  | traffic | Total    | Loading | Unloading | Total         | Loading  | Unloading |  |  |
| 2007. | 1635    | 330      | 167     | 163       | 1305          | 864      | 441       |  |  |
| 2008. | 1017    | 278      | 137     | 141       | 739           | 318      | 421       |  |  |
| 2009. | 661     | 255      | 128     | 127       | 406           | 197      | 209       |  |  |
| 2010. | 657     | 287      | 142     | 145       | 370           | 156      | 214       |  |  |
| 2011  | 595     | 185      | 93      | 91        | 411           | 121      | 290       |  |  |

Source: DZS, 2011 (made by the author)

The overall merchandise business on inland waterway ports in 2011 records a 9.44 % decrease in relation to the same period in 2010. The internal merchandise business records a 35.54% decrease, while international merchandise business records an 11.08% increase over the same period.

Over the last seven years Slavonski Brod Port was transhiping more than 6 million tons of cargo, mainly gravel and raw oil. There was also some special cargo transhipment in 2010 and 2011. (Kovačević, 2011)

#### 2.2. Direct and indirect effects of Slavonski Brod Port potentials

Due to private sector interest for port investment, Croatian government has launched a program to attract direct foreign investment into privatization procedure and Greenfield investment, and offered following incentives for foreign investors (Deloitte, 2003, 52):

- concessions for using natural and other resources, with the implementation of specific rates and tax subsidies
- freedom of establishing an association or branch-office with minimum capital
- the freedom of acquiring property and free asset disposal in Croatia
- 5 years or longer tax exemption for foreign investors using free trade zone, which depends on the amount of money invested

Direct effects which ensure added values are incomes created by port fees, land lease, manipulative atonements (for equipment owned by the state), trade association incomes and employee pays which bring tax income. Apart from those, all added port services are taxable. The most direct effect of Brod Port will be made by port services which are labor intensive, i.e. create a big number of work places. (Deloitte, 2003, 25)

Indirect effects are tied to port authority and employees who contribute to national consumption, together with industry which attracts numerous other services which create added value and in this way encourage business.

The potential made by direct and indirect port effects will ensure a supply of competitive, reliable, high-quality transport services and added value logistics services, which will be accomplished by ensuring prerequisites for creating harbor services: infrastructure, facility and operator availability.

### 3. Actions recommendation for affirmation of Slavonski Brod as an international logistics centre

#### 3.1. Activities for building a port in the area of Slavonski Brod

The complete Croatian waters project has arranged a municipal water infrastructure project worth 30 mil Euros, EU should take part through IPA fund with irretrievable assets worth 15.5 mil, while the rest is to be financed through government budget (12.5 mil) and the budget of Slavonski Brod (2 mil). Capital development project includes the construction of water supply network and municipal water infrastructure, the building of eight pumping stations, water tanks, water-purifying apparatus and the acquisition of the equipment for sewage maintenance (Capital development projects cofinanced by EU funds, 2010).

Slavonski Brod as the region's economic and cultural centre should base its future economy on competitive production centre based on new technologies and by spreading the education sector adapt to the needs of the economy. The provision of historical, sport and recreational content should ensure a touristic offer for the development of added value which will contribute to the creation of international logistics centre. Prerequisites for the development of the city economy and Brod-Posavina County are the construction of transport and municipal infrastructure which would foster business environment for strengthening entrepreneur and craftsmen competitiveness and programs which would encourage educated labor force to use the city's potential in the most effective way in order to create sustainable development.

#### 4. Conclusion

Apart from natural resources, the advantage of Slavonski Brod Port is the competitive initiator advantage, which should be used to develop economy, because with an attractive transport location it could develop into the first international logistics centre in this region, and occupy a huge market share of transport and logistics services, while other ports with similar resources, due to financial problems, don't have the same opportunity. The same applies to Brod Port, which, due to financial issues, cannot develop into a logistics centre. Nevertheless, current negotiations, and the help expected from the pre-accession EU funds give hope for the final realization of this long-expected project.

Slavonski Brod Port, at the moment only oil and oil derivatives trans-shipment port, has all the predispositions needed to make new harbor services which would be of use on local and national level. Therefore, investment which will trigger production and create new values, as well as enable combined river – railway transport is needed.

#### REFERENCES

Deloitte & Touche, (2003): Studija izvodljivosti: Luka Slavonski Brod, pp. 8-52

IPC Dunav-Jadran, (2006): Robni terminali u Slavonskom Brodu,

http://www.desb.hr/MEGAZONA/index.htm (accessed 22 February 2013)

Ivančić, D. (2009): Hrvatski riječni vukovi opet plove, Davorska plovidba d.o.o., Zagreb

Kovačević, M. (2011): *Pretovareno više od 6 milijuna tona tereta*, Luka Slavonski Brod, Posavska Hrvatska,

http://www.posavskahrvatska.hr/Novost.aspx?kat=2&id=2\_2011061711525 (accessed 23 February 2013)

Poslovni dnevnik, (2010): *Kapitalni razvojni projekti sufinancirani sredstvima EU*, http://www.poslovni.hr/vijesti/kapitalni-razvojni-projekti--sufinancirani-sredstvima-eu-157219.aspx (accessed 22 February 2013)