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IMPACT OF MARIBOR'S GEOGRAPHIC AND TRANSPORT POSITION ON THE CITY ECONOMIC DEVELOPMENT

ABSTRACT

Structural changes of economic activities within the new social order of the second half of the 20th century play an influential role in the restructuring of industry and increase the share of service sector in the economy. They shape the international market and trigger the globalisation of the society. Thus, the age of industry restructuring processes as a factor of changing the landscape physiognomy or its transformation respectively, has begun.

The transition to post-industrial society is marked by the third technological industrialisation. New socio-economic conditions have already driven the industry to shift its geographic position. Traffic - as the industry location factor - is changing its role. The development of transport, traffic and logistics is becoming the key factor in the process of restructuring the economic development of the city of Maribor.

KEY WORDS

post-industrial period, globalisation, economy restructuring, industry location factors, labour force commuting, logistic centre

1. INTRODUCTION

Human economic activity plays an influential role in the development of civilisation and changes the function and physiognomy of the environment. At the beginning of the millennium, it is reflecting the globalisation marked by the open global economic market.

The most intensive development of civilisation has been triggered by industrialisation that shaped new human relations and changed the function and physiognomy of the environment. Progress of science and technology triggered the structural changes of economy, in particular, the desindustrialisation, growth of the service sector and shaping of the new world market.

The transformation of industry has great impact on hierarchy of the industry location factors. Industrial

areas worldwide are changing their physiognomy. Industrial zones in well developed countries are evolving into development multipliers, and they are operating together with research, economic and business activities. These industrial zones represent the centres of power, they shape and direct the economic development, and they form their own gravitation spheres. However, in the areas facing economic collapse or stagnation, such industrial zones became a threat to the environment and a barrier to further development of the society. In addition, the purpose of land utilisation is changing rapidly.

Contemporary physical planning of infrastructural links and networks as well as of international nodal points enable faster economic development and restructuring of the former industrial towns.

The globalisation process leads towards the opening of national space in terms of all layers and phases of human creativity. The development of infrastructure and information society affects relations and links with the environment. The relationship between rural and urban areas, central settlements, mobility of labour force and quality of life are changing.

2. TRAFFIC AS AN INDUSTRY LOCATION FACTOR

According to the theory of industrial locations elaborated by A. Weber, traffic has always been the decisive factor when defining the advantages of a certain place with regard to the location of industrial plants. Many researchers considered transport costs an ideal factor for determining or selecting the best location among available areas rich with raw materials, market potential and available labour force. Many of the former industrial zones were established in the areas where transport costs or costs for transporting labour force, goods and raw materials were low. Traffic played an essential role also in the positioning and de-

velopment of the industry and tertian sector in Maribor.

New socio-economic environment also affected the placing of industry into the geographic domain. Traffic infrastructure or transport as an industry location factor is changing its function, however, its importance in terms of economic development is pretty much the same. Transport has become an important part of infrastructure, and the developed infrastructure improved the access, particularly in developed regions. "Today, traffic is of vital importance only for industrial branches using heavy raw materials and semiproducts, and for industry where the share of transport cost is above 5 or 10 percent (textile industry, electrical engineering industry up to 1%, machine industry 1.8%, foundries 3.1%, paper industry 4.1%, non-metal industry 5.0%, chemical industry 7.0%, ironworks 10.2%": Bailey, A.S. Guesnier, B. Paclinck, J.I.I.P., Sallesz, A. 1988).

Transport policy implemented by various transport organisations with regard to various kinds of goods (postage-stamp rate, blanket rate, costs against distance rate) should also be taken into consideration. The last and also the most usual system - costs against distance - may be implemented in three different ways: linear, digressive and progressive increase of transport costs. Companies use different methods also in the field of delivery of goods: f.o.b.- free-on-board (a condition of sale where the seller pays for transportation and insurance of the goods until they are loaded onto the ship); c.i.f. - cost, insurance, freight (where the seller pays for loading and transporting the goods and arranges marine insurance - the price of goods does not depend on the distance); basing-point system (where transport costs are calculated according to distance from the agreed fixed loading point). When calculating traffic costs, however, one has to separate the actual transport costs, terminal costs (loading, unloading) and overhead costs (insurance, agents, warehousing, storage charges, demurrage charges¹).

In order to achieve the more rational and profitable transit of goods or material in all stages of the economic process, growing tendencies towards lowering of costs of physical distribution, mainly by using the latest scientific findings in the field of process organising have been noted in developed countries. Numerous authors (Sax, Voigt, Marx) have constantly indicated the importance of transport industry. They defined the working process of transport industry as the process of mastering the space and considered its useful effect to be inseparably linked to the production process. The concept of business logistics, as the concept broader than transport or traffic itself is therefore becoming more and more appreciated. Thus, the introduction and recognition of integrated transport means a harmonised and with the economic circum-

stances aligned development of all transport stakeholders together with their functional and process coherence.²

3. DAILY COMMUTING OF MARIBOR INDUSTRY LABOUR FORCE

Reflecting the independence from the former Yugoslavia and transition to the market economy, Maribor economy is coping with structural changes of its industry. In order to join the global economic and social processes, the connection of the region onto the infrastructural and information networks is of utmost importance.

The role of transport as a location factor has gradually diminished, in particular, in favour of the labour force. Modern industry engages highly skilled personnel able of innovative and development creativity. At the turn of the millennium, the urban centres are becoming the poles of economic power around which labour force is greatly concentrated.

Should the Slovene highway cross and road-railway links in Slovene cities be completed, the major part of Slovenia would fall under the so called one-hour isochronal zone. One-hour travel from one place to another enables exceptional mobility and possibility of job selection within Slovenia. Mobility of labour force or jobs is one of the basic issues regarding future employment and employability in Europe, especially when considering the optimising of comparative and personal advantages (employees, enterprises, locations) on the market.³

Large daily commuting of labour force is significant for Maribor economy. In 1994, 26.8 % of all the employee commuters to Maribor (mostly from the municipalities of Ptuj, Pesnica, Slovenska Bistrica, Ruše and Lenart). In 1997, the share of commuting workers increased up to 35.4 %. All of the places mentioned above are located within 20 kilometres from Maribor. The majority of commuting workers coming to work from more faraway locations were from Ormož, Gornja Radgona and Ljubljana.

The share of workers (in the total number of employed persons in Maribor) commuting from Maribor increased from 5.7 % in 1994 to 7.4 % in 1997. The acute economic circumstances and political changes had a great impact on the workforce mobility. At the same time, an increase of investments in transport infrastructure and in number of vehicles have been recorded.

The ratio between daily commuters to Maribor and Maribor citizens employed in other municipalities is as high as 5:1. The majority of Maribor citizens is employed in Ljubljana (almost 28 % of all commuting

Table 1 - Employees by domicile and place of employment

	1994	1995	95/94	1996	96/95	1997	97/96
Registered employees in Maribor	47,205	46,481	98.5	40,247	86.6	38,415	95.4
Men	23,519	23,100	98.2	19,558	84.7	19,129	97.8
Women	23,686	23,381	98.7	20,289	86.8	18,286	95.1
Employed in Maribor	43,784	42,812	97.8	36,468	85.2	34,455	94.5
Men	21,279	20,818	97.4	17,653	84.8	16,680	94.5
Women	22,405	21,994	98.2	18,815	85.5	17,775	94.5
Employed outside Maribor	31,498	30,597	97.1	29,212	95.5	27,663	94.7
Men	28,321	28,129	99.3	26,894	95.6	24,635	95.3
Women	3,421	3,669	107.2	3,779	103.0	3,960	104.8
Commuter workers	16,035	15,914	99.2	19,638	123.4	18,843	96.0
Men	10,119	9,779	96.6	11,559	118.2	10,983	95.0
Women	5,916	6,135	103.7	8,079	131.7	7,860	97.3

Table 2: Breakdown of commuting workers by municipalities

Municipality	1994		1995		1996		1997	
	1	2	1	2	1	2	1	2
Celje	55	145	59	164	62	163	59	182
Duplek						1403	51	1321
G.Radgona	91	260	79	237	18	224	23	179
Gorišnica						176	3	161
Kidričevo						572	33	522
Kungota						875	157	805
Lenart	177	1555	188	1509	194	1475	220	1450
Ljubljana	961	217	1008	2660	1129	315	1171	343
M-Sobota	83	194	75	248	56	122	26	116
Ormož	13	367	13	341	16	329	17	309
Pesnica	592	2766	692	2709	162	1296	211	1232
Ptuj	302	3026	348	3018	180	1395	205	1337
Rače						3212	120	1149
Radlje		289		289			5	
Ruše	523	2036	533	2106	506	2207	498	2127
S.Bistrica	217	2100	219	2049	186	1964	200	1918
Starše						856	29	810
Šentilj					350	722	391	675
Videm						262	12	262

1 – Maribor inhabitants employed in another municipality

2 – Inhabitants from other municipalities employed in Maribor

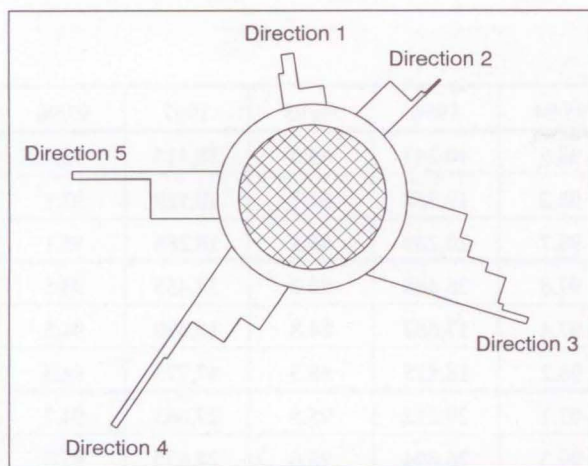


Figure 1 - Daily commuting to Maribor

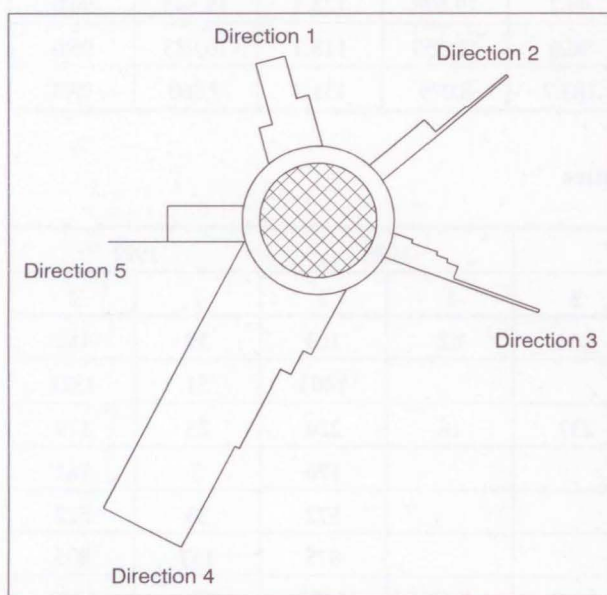


Figure 2 - Daily commuting from Maribor

Explanation to Figures 1 and 2 (clockwise)

- Direction 1: Kungota, Šentilj, Pesnica*
- Direction 2: Lenart, Gornja Radgona, Murska Sobota*
- Direction 3: Duplek, Starše, Kidričevo, Ptuj, Videm, Ormož*
- Direction 4: Rače, Slovenska Bistrica, Celje, Ljubljana*
- Direction 5: Ruše, Radlje*

workers), 10 % in Pesnica and Ruše, and less than 10% in Ptuj, Slovenska Bistrica and in Lenart.

3.1. Land-logistic centre in Maribor

The planned International Land and Logistic Centre of Slovenia at the intersection between European corridors V and X will certainly play an important part in promoting and enhancing the economic development. In addition, it will speed up the necessary connections with the European market. Investments fore-

seen for the construction of the Centre will provide at least 6,500 new jobs, speed up the service and cargo flux and thus ensure positive impact on the current stagnating economic and social position of the Maribor region.⁴

The International Land and Logistic Centre comprises three projects: construction of duty free business-industry zone Maribor; expansion of the railway terminal; expansion and upgrading of the Maribor airport.

Maribor's geographic position will have a positive impact on the establishing, operations in development of land and logistic centre in southeastern part of Maribor. The centre will be located within the following contours: between inroads M-19 (Šentilj-Maribor-Ljubljana-Koper) and M-3 (Dravograd-Maribor-Ptuj-state frontier); at the important international road and railway intersection; and in the vicinity of the airport. The centre would spread along the triangle between Ptujška and Tržaška cesta to the Maribor airport. The entire surface of the area covers 6.3 km².

The appropriate layout and organisation of the centre are the prerequisites for regular functioning of transaction and transfer flows of international trade. Furthermore, the success of the International Land and Logistic Centre Maribor would primarily depend on the development of transport subsystems in the centre itself, or in the immediate vicinity. In addition, it would be necessary to provide the appropriate infrastructure. Direct connection to the postal and telecommunication traffic subsystem has already been assured. Already approved direct connection to the optical cable would facilitate the qualitative transfer of information. The proposed location is also equipped with the entire relevant energy infrastructure.

4. CONCLUSION

Reflecting the transition to the market economy, Maribor industry is seriously trying to develop its competitive capacity as the prerequisite for access to international market and transition to post-industrial era. To this end the following factors are to be considered: industry location factors based on microlocation characteristics, characteristics of neighbouring areas, in particular those related to the environment protection and access to the area.

Having in mind the proportional development of economy and transport worldwide, the economy and transport are indeed closely related.

Communication and information era requires the ability and skills for transfer of technology and knowledge, new ways of company organisation, more effective and efficient business operations as well as highly skilled personnel.

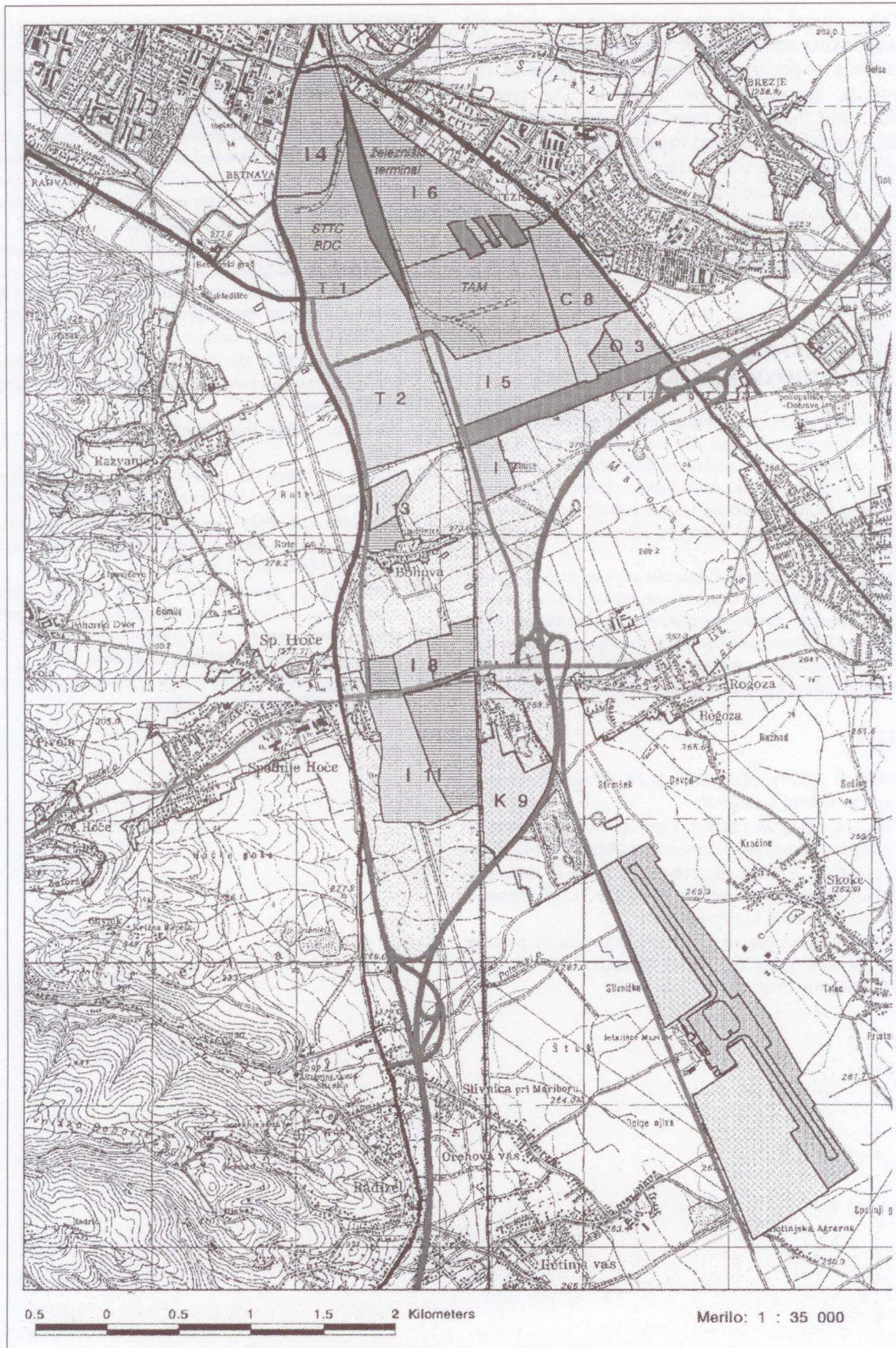


Figure 3: The land-logistic centre in Maribor

The optimal development cannot be achieved without taking advantage of the competitive advantages based on geographic and transport position, environment, knowledge and tradition. The city of Maribor and the region constitute such factors that would attract investors and capital. The construction of infrastructure network that is connected to the main development axis of the European terrain along with the development of transport and advanced technology to support logistic services already indicate changes and new terms of business.

POVZETEK

GEOGRAFSKO-PROMETNI POLOŽAJ MARIBORA VPLIVA NA GOSPODARSKI RAZVOJ MESTA

Strukturne spremembe gospodarskih dejavnosti v novih družbenih odnosih v 2. pol. 20. stol. vplivajo na prestrukturiranje industrije in terciarizacijo gospodarstva, oblikujejo mednarodni trg in sprožajo globalizacijo družbe. Nastopilo je obdobje procesov prestrukturiranja industrije, ki so dejavnik spreminjanja fiziognomije pokrajine oziroma njene transformacije.

Tretja tehnološka industrializacija pomeni prehod v post-industrijsko družbo. Novi družbeno ekonomski pogoji so vplivali na spremembe namestitve industrije v geografskem prostoru. Promet kot lokacijski dejavnik industrije spreminja svojo vlogo. Razvoj transporta, prometa in logistike je ključni dejavnik prestrukturiranja gospodarskega razvoja Maribora.

NOTES

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