Tanja Poletan Jugović, Ph. D.
Faculty of Maritime Studies Rijeka
Studentska 2
51000 Rijeka

Preliminary communication
UDK: 656.022.83(497.5:4)
Received: 11th April 2006
Accepted: 12th April 2006

THE INTEGRATION OF THE REPUBLIC OF CROATIA INTO THE PANEUROPEAN TRANSPORT CORRIDOR NETWORK

A greater mutual dependence of the world's and European marketplace as well as the increase in the international trade, as one of the basic goals of the European Union traffic policy, emphasizes the inner traffic connection as well as the traffic connection between other European countries with a modern transport network. In this context, the significant European interest has been shown within the European traffic policy for the traffic position the Republic of Croatia holds, as well as its transport corridors that, by passing the Croatian territory, integrate Croatia with the European traffic and economic system. According to the above mentioned facts, this paper analyses the European traffic policy and the aspects of the European interest shown for the traffic position of the Republic of Croatia, the geo-traffic aspects of the Paneuropean transport corridor network as well as the exploitation possibilities of current and potentially new corridors that pass through the Croatian territory. According to that, significant conclusions are being derived regarding the level of the integration of Croatia into the Paneuropean corridor network, including the existent corridors as well as the potentially new ones that would also significantly contribute to a better integration of the Croatian transport network into the European corridor network.

***Key words**: transport corridors, Croatia, Europe, Paneuropean transport corridor network*

1. INTRODUCTION

Since the elemental postulate for the European integration is the creation of quality communications between European states, in order to valorise its favourable geographical position and to have gained appropriate traffic significance on the European territory, to have accomplished a total integration into modern Europe as well as economic benefits from spreading the European

marketplace, the Republic of Croatia has to, without any doubt, take steps toward a quality traffic connections with Europe.

To have achieved the above stated goal, a great significance lies in the inclusion of Croatia into the transport networks and European traffic system projects as well as into the verified Paneuropean corridors.

As regards the problem, subject and object of the research described in this paper, a scientifically paradigm for setting the **basic hypotheses** has been defined, as follows:

A modern infrastructure of the Paneuropean V., X. and VII corridors means a fundamental traffic and economic postulation for a complete integration of the Republic of Croatia into the Paneuropean transport corridor network.

The problem and subject of research respect **two real objects of research:**

The Republic of Croatia and the Paneuropean transport corridor network.

In order to emphasize the importance of the traffic valorisation of Croatia in the European and wider contexts, the paper further analyses the traffic and economic aspects of the European traffic policy and European interest for the traffic position of Croatia together with the exploitation characteristics of the existing Paneuropean corridors that pass through the Croatian territory as well as the relevance of other existing and potentially new corridors (that are expected to be included into the European corridor network) that might have relevant influence on the main Croatian corridor valorisation as well as on the valorisation of the total Croatian traffic system in general.

2. EUROPEAN TRAFFIC POLICY AND INTEREST FOR CROATIAN TRAFFIC POSITION

The traffic policy of the European Union and the European traffic and economic interest in the traffic position of the Republic of Croatia are the basic assumptions for the Croatian traffic valorisation within the European traffic environment.

The traffic policy programme of the European Union states, especially its part that relates to the international relations development, connecting states that are not EU members, puts the traffic infrastructure into the first plan. Therefore, a special attention needs to be directed to the Transeuropean Transport network (TEN – Transeuropean Transport Network) and the Paneuropean corridors concept that integrate Croatia into the European traffic system.

Along with the EU members number increment, the national transport networks are being integrated in order to form TEN. The transport network plan was made in 1996 by the European commission and was corrected in 1997. The integration dynamics will depend upon every EU member state, and the year

2010 is determined as the final dead line for the network construction. The main goal is to develop necessary roads and to connect national networks into one single European network, which would remove the choke points and the distant regions would be also connected into the common European traffic system. Moreover, the EU members are in constant effort to expand the European transport network to the states that are not EU members. This is especially applicable to the Middle and Eastern Europe states that combine into significant marketplace. At the same time, significant transit corridors to Asia pass through the Middle and Eastern Europe states. In order to achieve this, the **Paneuropean network of transport corridors has been created.**

The European traffic interest in the position of Croatia is clear since Croatia is the only middle European, Panonian-Danube and Adriatic-Mediterranean state that has a direct contact with the southeastern territory. Due to its geographic position, the Republic of Croatia is a state of diverse contacts between which, during the 20th century (with adjustable relevance), the impact is put on two corridors:

- the longitudinal one – from Western and Eastern Europe towards the Black Sea and the European south-east, and
- the transversal one – from the parts of Middle Europe, the Pannonian and Baltic region and the parts of Eastern Europe towards the Adriatic coast and the Mediterranean region in a wider sense.

The economic interest and the EU connection with Croatia are displayed in the EU as being the Croatian main marketplace partner. Therefore, the expansion of the Paneuropean corridors network in these states, in short and middle terms, conditions the economic growth and the employment growth as well as, helping with the economic integration of the states candidates for the EU. The total value of trade between Croatia and the World amounted in 2003 to something below UDS 20,4 billion, which was by 30.5% higher than the previous year. Over 85% of the total trade is between Croatia and the European countries (where 88% refers to Croatian export and 83% to Croatian import), while 55% of the total trade is between Croatia and the European Union countries.[1]

All this implies to the conditionality of the Croatian economic growth and the European states, where international traffic connections represent an important factor for such a trade.

1 http://www.mvp.hr (25.06.2005.)

3. GEO-TRAFFIC CHARACTERISTICS OF THE PANEUROPEAN TRANSPORT CORRIDORS NETWORK

The Paneuropean transport corridors represent a complete project that in a way impersonates the European alliance process that all states of this Continent have accepted. Such corridors determine the lowest and most qualitative movement of people and commodity flows on roads, railways and inland waterways, contributing, therefore, to the multiple advantages of the territory it is positioned on.

The Conférence Européenne des Ministres des Transports (CEMT) held in Prague in 1991 was the conference at which the Paneuropean transport corridors network was established. After that, two Ministerial Session of the European Conference of Ministers of Transport followed on Crete in 1994, and in Helsinki in 1997. At the **Second Paneuropean conference of Ministerial Session of the European Conference of Ministers of Transport** held in Crete in March 1994 for the area of middle and eastern Europe, a draft was proposed on the road and railway network (for non EU members) development till the year 2010. With the purpose of enabling the further mobility of people and to encourage trade development and contribute to the success in the traffic, economic and social fields on the European territory, this Conference proposed nine transport corridors. With this proposal, the territory of Croatia and Bosnia and Herzegovina (because of the civil war taking place in those countries at that time) was left out. While for the Bosnian and Herzegovinian territory no corridors were anticipated, in its surroundings several ones were anticipated: the Trieste – Ljubljana – Budapest – Bratislava (that passes through Croatia in a very small part: Čakovec – Kotoriba), the Sub-Danube and Drač – Tirana – Skopje (FYR of Macedoina) – Sofia corridor. [2]

At the following **Third Ministerial Session of the European Conference of Ministers of Transport** held in Helsinki in June 1997, the corridors defined on Crete had been completed. The mutual cooperation between Croatia and Bosnia and Herzegovina resulted in the official acknowledgement of their traffic relevance where the following corridors were inserted into the network:

- Corridor V_B: **Rijeka – Zagreb** – Budapest,
- Corridor V_C: Ploče – Mostar – Sarajevo – **Osijek** – Budapest,
- Corridor X : Munchen – Ljubljana – **Zagreb** – Beograd – Solun,
- Corridor X_A: Graz – Maribor – **Zagreb**.

2 Božičević, J.: Prometno povezivanje Republike Hrvatske i Federacije Bosne i Hercegovine, Zbornik radova, Znanstveni skup Revalorizacija geoprometnog položaja Hrvatske i Bosne i Hercegovine u interesu obiju država, Zagreb, Znanstveni savjet za promet, 1996., p.16. [2]

The Paneuropean network of transport corridors includes states from Eastern, Southeastern and parts of Middle Europe. It is formed because the EU member states (Western Europe states) classified into the TEN wanted to expand themselves to new territories. The final goal was to create a unique transport network in Europe that would be created by integrating the TEN with the Paneuropean networks, once the technical standards and parameters of the Paneuropean networks are consistent with the ones in the TEN as well as when standards from the AGC (European Agreement on Main International Railway Lines, Geneve, 1991) and the AGTC (European Agreement of Important International Combined Transport Lines and Related Installations, 1994) aremet accordingly.

The Paneuropean transport network includes 10 Paneuropean transport corridors. Table 1 shows the territory (states) that certain corridors pass through. Table 2 shows corridors in relation to the main characteristics of the traffic infrastructure.

Table 1. States that certain Paneuropean corridors pass through

CORRIDOR	STATES the CORRIDOR PASS THROUGH
I	Estonia, Finland, Latvia, Lithuania, Poland, Russia
II	Republic of Belarus, Germany, Poland, Russia
III	Germany, Poland, Ukraine
IV	Austria, Bulgaria, Czech Republic, Greece, Germany, Hungary, Romania, Slovakia, Turkey
V	Italia, Slovenia, Hungary, Ukraine, **Croatia**, Bosnia and Herzegovina, Slovakia
VI	Czech Republic, Slovakia, Poland
VII	Austria, Bulgaria, **Croatia**, Serbia and Montenegro, Hungary, Germany, Moldavia, Romania, Slovakia, Ukraine
VIII	Albania, Bulgaria, Macedonia, (connection to Greece, Italy and Turkey)
IX	Republic of Belarus, Bulgaria, Finland, Greece, Lithuania, Moldavia, Romania, Russia, Ukraine
X	Austria, Bulgaria, Greece, **Croatia**, Serbia and Montenegro, Macedonia, Hungary, Slovenia

Source: Status of the Paneuropean Transport Corridors and Transport Areas, Vienna, TINA Office Vienna, 2000

Table 2. Main characteristics of the Paneuropean transport corridors

CORRIDOR	I	II	III	IV	V	VI	VII	VIII	IX	X
Road	+	+	+	+	+	+		+	+	+
Railway	+	+	+	+	+	+		+	+	+
Air	+	+	+	+	+	+		+	+	+
Waterways	+	+	+	+	+	+	inland	+	+	+
Railway length (km)	1,710	2,300	1,650	4,340	3,270	1,800	-	1,270	6,500	2,360
Road length (km)	1,630	2,200	1,700	3,640	2,850	1,880	-	960	5,820	2,150
Inland waterways (km)	-	-	-	-	-	-	2,415	-	-	-
Number of air ports	6	3	4	10	5	6		4	4	4
Number of harbours	11	2	9	8	3	5	44	2	2	1

Source: Status of the Paneuropean Transport Corridors and Transport Areas, TINA Office Vienna, Vienna, 2000

The Paneuropean Transport Network Concept is developed in order to help the EU membership candidates to set up the foundations for their future infrastructure that would stimulate trade between members, expand commodity flows, enable easier flow of traffic means and enhance social relationships. The Paneuropean transportation network consists of the following components:

- the Paneuropean transportation corridors, located on the territory of the new independent states, joined members of the EU or potential candidates for the EU membership;
- the TINA network (Transport Infrastructure Need Assessment) includes: the Paneuropean transport corridors and additional infrastructure components in the states being the potential candidates for the EU membership;
- the four Paneuropean transportation areas (Paneuropean Transport Areas--PATRAS) that cover the maritime traffic;
- the Eurasian connection known as TRACECA (Transport Corridor Europe Caucasus Asia).

4. EXPLOITATION CHARACTERISTICS OF THE EXISTING PANEUROPEAN CORRIDORS

The traffic valorisation of Croatia, in comparison to the European traffic flows, has always and justifiably expressed its Pannonian and Adriatic area and its transit significance in relation to the two significant transport corridors:

- the longitudinal one – connecting Western and Eastern Europe with the European south-east and further with the Middle East and the Asian Continent;
- the transversal one – connecting the Baltic Sea through the middle Danube region with the Adriatic Sea.

As a part of the Paneuropean network of transport corridors, there are three Paneuropean corridors passing through the territory of the Republic of Croatia established on the Third Paneuropean conference:

1) **V. Corridor:**
   - connection to the basic V corridor V_B branch – Murakeresztur – Kotoriba – Čakovec – Pragersko,
   - branch B (Corridor V_B) – Budapest – **Zagreb – Rijeka**,
   - branch C (Corridor V_C) – Budapest – **Osijek** – Sarajevo – **Ploče,**
2) **X. Corridor**:
   - basic – Salzburg – Ljubljana – **Zagreb** – Beograd – Niš – Skopje – Veles – Thessaloniki;
   - branch A (Corridor X_A) – Graz – Maribor – **Zagreb,**
3) **VII. Corridor – the Danube river corridor.**

Corridor V is a multimodal corridor defined as one of the "European priorities", whose construction and reconstruction is anticipated by 2015. [3] It involves the intermodal corridor that starts in several cities of Southern and South-eastern Europe. The main branch goes from Venice (Italy) via Trieste (Italy) and Ljubljana (Slovenia) to Budapest (Hungary).

The Helsinki conference in 1997 decided that, besides the basic branch of V. corridor, two more branches of that corridor should be included into the Paneuropean corridors network. Both those branches pass through the Republic of Croatia and are known as Corridor V_B and Corridor V_C.

With the inclusion of **Corridor V_B** into the Paneuropean corridor network, the inland waterways traffic route Rijeka – Zagreb – (Goričani/Nagykanizsa) – Budapest had gained acknowledgement regarding its significant role in the connection of the Port Rijeka with the Middle-Europe hinterland, as its significant transit and gravitation area where real assumptions for an intensive de-

3 http://www.esteri.it (07.07.2005.)

velopment and valorisation are made. With the integration of the capital traffic infrastructure in Croatia, the Paneuropean corridor V_B is very important for the Croatian economy, and is supported by the information that the Port of Rijeka, with its services, provides to the Croatian economy a sum of HRK 1,5 billion per year, which means that the Rijeka traffic branch daily income amounts to HRK 4 to 5 million.

Corridor V_C, Budapest – Osijek – Sarajevo – Ploče, is a connection of Northern, Middle and Southern Europe and it represents a significant value as regards the economic and traffic valorisation process with the middle-European territory. Furthermore, the fact that it connects the middle-European territory with the Adriatic Sea, the fore stated Corridor represents the traffic priority of the infrastructure for Bosnia and Herzegovina. The V_C Corridor bears a similar significance to Croatia and Hungary. Concerning the significance for Croatia, the above mentioned Corridor enables the shortest and most rational connection of Eastern Croatia and Dalmatia , while Hungary is connected with Bosnia and Herzegovina, the Adriatic Sea and the Port of Ploče in Croatia.

The studies conducted from 1968 to 1998 had shown that it is economically justifiable to build high capacity roads (highways and railway fast tracks) on Corridor V_C. The significance and "potential" of the V_C Corridor is visible from the data that 56% of the total population live on the axis of this corridor in Bosnia and Herzegovina as well as 59% of the total number of the employed people that contribute by 63% to the GDP. Corridor V_C passes through Bosnia and Herzegovina via river valleys, and through Croatia and Hungary over lowland and it represents the socalled "natural corridor". This corridor has roads and railway tracks that bear the mark of the European transportation network. The length of the highways in the V_C Corridor passing through Bosnia and Herzegovina is approximately 330 km, and the length of the railway track for the speed of 160-180 km/h is approximately 360 km. [4]

Corridor X is the "youngest" among the corridors accepted at the conference in Helsinki, including the Balkan area into the Paneuropean corridors network. This corridor connects the northwest with the southeast Europe, where the main branch connects Salzburg, via Ljubljana, Zagreb, Belgrade and Skopje, with Solun. The branch of the X Corridor, passing through Croatia, is the shortest inland connection with Greece. [5] Concerning commodities and passengers, the X Corridor has always been considered as a very important one for Croatia. At some time it was considered as a "political corridor", and during the civil war

4 Gačanin, E.: Osnovni transportni koridori kroz Bosnu i Hercegovinu na liniji Srednja Europa – Jadran, Povezivanje srednjoeuropskih država s Jadranom, Zbornik radova HAZU, Zagreb, 1998., p. 192.

5 Status of the Paneuropean Transport Corridors and Transport Areas, Vienna, TINA Office Vienna, 2000

on the territory of the Former Yugoslavia the traffic was very low and this corridor circumvented. The additional problem was that this corridor passed through the states (Croatia and Yugoslavia) not included into the PHARE programme and other programmes that encourage traffic projects. [6] The X Corridor covers 300 km of roads and railway tracks. In Croatia it starts on the highway in Bregana and the railway station in Dobova, and it ends on the Yugoslavian border with the highway in Lipovac and the railway in Tovarnik. The railway branch of the X Corridor is yet to be completed for the highway part from Velika Kopanica – Lipovac (connection with Yugoslavia) and Krapina – Macelj (connection with Slovenia). The plan anticipates the year 2006 for its completion.

Besides passing through the territory of Croatia, the inland Corridors V and X, pass also through the Paneuropean **Corridor VII (the Danube corridor)** in a form of an inland waterway: the Rhein – Main – Danube – Black Sea channel and it represents one of the largest European transport corridors. The entire length of the waterway has been opened since 1993. The water main is approximately 3,500 km long, from Rotterdam to Sulina (Black Sea) and it passes through 10 states with approximately 500 million people. With the opening of this waterway many significant structural changes on the European traffic marketplace took place, since an assumption has been created in great part for cheap mass cargo transportation that can be transported via railway for smaller part and to inland river and channel waterway for longer part. In this way, certain capacities are liberated for high-value container cargo which has very positive effect on the introduction of bimodal technologies in the European traffic system. With the Danube channel, Croatia is, via the Rhein – Main – Danube channel, connected with the Danube and Rhein waterways that connect powerful harbours and industries from Holland (Rotterdam) with the Black Sea (Costanza). The inland waterways of the Republic of Croatia are integrated into the European inland waterways of the VII Corridor based on the signed multilateral European contract regarding the main inland waterways of international significance (AGN)[7]. The Danube connection with the Croatia inland area will be properly conducted when the Danube – Sava channel is going to be built from Vukovar to Šamci, in the length of 61,5 km.[8]

6 Strategic Plan (Final Report) – Port of Rijeka, Bohn, Domazet&Associates Gmbh, Munich/Rijeka, 29th September 1998

7 AGN - European Agreement on Main Inland Waterways of Internation Importance, 19 January,1996.

8 Krakić, D., Z.: Remenar, Hrvatska prometna politika u okviru transportnih prometnih koridora, Automatizacija u prometu, Zagreb, Korema, 2000.

5. EFFECTS ESTIMATION OF THE POTENTIALLY NEW CORRIDORS REGARDING TRAFFIC VALORISATION OF CROATIA

Traffic is extraordinary sensitive to changes in broad surroundings. The same applies to traffic routes whose valorisation has also been conditioned by different changes in their surroundings. Those changes are applicable to different political and economical conditions on the traffic services marketplace, to the effects of new traffic branches (corridors) onto existing transport corridors and flows of commodities and so on. Therefore, it is interesting to observe how some of the potential transport corridors could have an influence in the future on the valorisation of the existing Paneuropean corridors that pass through Croatia and on the integration of the Croatian traffic system in general. Therefore, one fact needs to be propounded: in the long-term development conception of the European (international) transport network, along with the existing transport corridors through Croatia, other traffic branches ought to be valorised. This primary refers to one potentially new international corridor the **Adriatic – Ionian Corridor** and to the extensive branches of the existing corridor $\mathbf{V_{B1}}$ branch: **Rijeka – Kopar – Trieste and $\mathbf{V_{B2}}$ branch: Zagreb – Split (Dubrovnik)**.[9]

Besides the corridors integrated into the Paneuropean corridors network at the Third Paneuropean conference, two corridors were not accepted: [10]

- the new Adriatic – Ionian Corridor (Trieste – Rijeka – Split – Dubrovnik – Bar – Duressi - Igoumentisa),
- the V_{B2} branch: Zagreb – Split (Dubrovnik) or the extension of the X_A corridor (Zagreb – Split).

Since these are corridors of importance to Croatia, numerous activities that Croatia, as the interested party within the Adriatic area and supported by other states of the Adriatic – Ionian incentive, needs to organise and execute in order to include those corridors into the Paneuropean corridor network.

Croatia still emphasises great value, but also the shortcomings of the 1997 Helsinki decisions, when the Paneuropean corridors network did not include the Adriatic – Ionian corridor, even though it is necessary from the stabilisation and development point of view. The Adriatic – Ionian corridor connects 7 countries of the Adriatic – Ionian incentive. Therefore, the Ministry responsible for this

9 Strategija razvitka Republike Hrvatske „Hrvatska u 21. stoljeću“, Projektni zadatak – Promet, Zagreb, 2001., p. 25.

10 Mlinarić, D.: Utjecaj buduće Jadransko-jonske ceste na prostor Županija šibensko-kninske i zadarske, Ministarstvo pomorstva, prometa i veza, listopad, 2001., p. 5.

corridor in the Republic of Croatia is persistent in its efforts to obtain the inclusion of this corridor into the Paneuropean corridor network.[11] This incentive was signed by 5 Ministers (from Croatia, Bosnia and Herzegovina, Montenegro, Albania and Greece) at the Conference in Ljubljana (Slovenia) on 26th May 2004. The Ministers from Italy and Slovenia are also expected to sign this incentive for the inclusion of the Adriatic – Ionian corridor into the Paneuropean corridor network.

With the valorisation and inclusion of the Adriatic Ionian corridor and the X_A corridor branch into the European traffic system, positive effects would be achieved regarding the integration of Croatia into the European traffic system and assumptions for the realisation of new, for Croatia important, traffic development would be made. Those assumptions are: connection of the middle and southern part of Croatia, development of the Adriatic territory from Istria to Dubrovnik initiating therefore the definition of the significance of the longitudinal connection of the seven countries for the Adriatic – Ionian incentive from Italy to Greece.

The Adriatic – Ionian traffic branch is the second most important traffic route for the Primorsko-goranska County, but the first for the tourism development along the entire Adriatic coastline. It connects the mountaineous and northern-Adriatic area with the Ionian and Montenegrin territory expressing appreciable potential for tourism. The route itself passes through the territory without mayor climatic or configuration difficulties. Since 1993 Italy has supported the incentive of connecting the above mentioned 7 states bordering on the Adriatic and Ionian Sea, the so called Adriatic-Ionian incentive (AII), that implies all maritime and inland connections in the function of connecting the entire political and economical development complex on an interstate level. With the traffic and area unification of all the existing and potentially new traffic capacities, from Trieste to Igoumenitse, that define the Adriatic – Ionian corridor, there are great chances of being included into the Paneuropean corridor network.

As the territory of a regional economical cooperation, the region surrounding the Adriatic and Ionian Sea consists of at least eight states (Italy, Slovenia, Croatia, Bosnia and Herzegovina, Serbia and Montenegro, Macedonia, Albania and Greece) encompassing the territory from the Adriatic to the Ionian Sea with a total of 50 million inhabitants. The necessity for better traffic connections of the Adriatic – Ionian territory was expressed in the Foreign Affairs Ministers' Statement from Ancona (Italy) of the year 2000.[12] The stabilisation of the Adriatic – Ionian territory is one of the strategic and political goals of the EU, where the final result should be a stabilisation of the political and safety situation

11 http://www.mmtpr.hr (15.12.2005.)
12 Mlinarić. D.: Utjecaj buduće Jadransko-jonske ceste..., op.cit., str. 5.

in south-east Europe.[13] Therefore, it needs to be highlighted that the Stabilisation and Cooperation Agreement signed by the Republic of Croatia and the EU and Adriatic – Ionian incentive in 2001, is not a competitive project, but on the contrary, it is complementary in most of its elements. Plans of regional cooperations, such as the AII, can serve to the Paneuropean integration in the way of being complementary with the EU, since most of the AII members are preparing for meeting the conditions of entering the EU. Therefore, it can be stated that AII represents a relevant factor for the entire European infrastructure.

Concerning the Adriatic – Ionian highway (AIH), choke points of the Rijeka region would be eliminated via modern (available, safe and fast) design of the Istria and Rijeka tourist, harbour, traffic and industrial pool and by opening them to the (i) traffic routes along the north-western Mediterranean and to the (ii) maritime traffic to Croatian ports. Moreover, the further improvement of the Adriatic highway, the extension to Greece, will create further conditions for shorter and modern inland traffic connections of the north-west with the south east Europe. With the development of the AIH, one can expect further incensement of traffic on Corridor V, and considering that, the infrastructure assumptions for the detour of the commodity flow, as a longitudinal route, to Corridor V (whether via V_B from the Port of Rijeka to Bosiljevo – Zagreb from Split or via the V_C branch from the Port of Ploče) as a transversal one, would be met. Furthermore, the vast economical area from the Adriatic to the Ionian Sea represents a significant strategic dimension for the Port of Rijeka, and therefore for the Rijeka traffic branch. This would also actively participate in the traffic system of the EU, contributing to the Balkan stabilisation, further EU expansion and stronger cooperation between the EU and Eastern Europe.

Besides the Adriatic-Ionian corridor, a significant influence on the V_B corridor valorisation as well as on the Croatian traffic system, could also have the branches from the V_B corridor - V_{B2} and V_{B1}.

Corridor (branch) $\mathbf{V_{B2}}$ on the **route from** (Zagreb) – Oštarije – Knin – Split /Šibenik – Knin – Zadar also requires certain investments, especially regarding the road infrastructure. According to the strategic plan for the development of highway networks in the Republic of Croatia, constructions have started on the Zagreb – Split – Dubrovnik highway. The route of the above mentioned highway and the Rijeka – Zagreb highway is a unique one, up to the connection point Bosiljevo II where the highways separate into two branches: Rijeka and Split. From Split, the road corridor V_{B2} should continue to Dubrovnik. The road from Ploče, over Dubrovnik to Debeli brijeg (a border with Montenegro) should be 75 km long. Considering that almost 40% of its length (30 km) should include

13 Šarić, M.: Značenje Jadransko-jonske regije u perspektivi Europske unije, Ceste i mostovi, 49, 2000, 5-6, str. 68.

tunnels and viaducts that are, naturally, more expensive than road being constructed over lowland, it is not surprising that a debate, regarding the return on investment, has risen. Should daily averages of world traffic be taken into consideration for potential highways, the cost effective highway is the one that has approximately 15,000 vehicles daily. Therefore, this highway is not a cost effective one. According to some opinions, the necessary average of vehicles per day concerning the Ploče – Dubrovnik road will not be reached, not even in the next 10 years. Experts from Hrvatske ceste and Ministry of the Sea, Tourism, Transport and Development have calculated that on that specific route during the year 2001, on average of 4,350 vehicles had passed, in 2002 – 4,620 vehicles, and in 2003 - 5,100 vehicles. With a constant traffic increase, only 9,250 vehicles might be expected in the year 2008.[14] Although with the expected traffic quantity the highway from Ploče to Dubrovnik is too expensive and not cost effective, experts still consider that this highway construction is effective on long-terms, and it is rather sure that the works will start in 2006. The main argument for this is the Strategy of the Territorial Development of the Republic of Croatia anticipating a highway to Dubrovnik.

The V_{B1} branch represents the route Rijeka – Kopar – Trieste and it is significant to mention that, considering its state of development and certain plans regarding the road and railway part of this branch, it will for sure have a positive impact on the V_B corridor traffic. The realisation of the basic and starting point from Primorje to Lika in Croatia and from Trieste: Rupa – Rijeka – Senj – Otočac, in between the network of the Italian and Slovenian highways and covering the middle parts of Adriatic highway to Split, has been accomplished. The Rupa – Jušići highway in its total length of 14,5 km will contribute to a competitive traffic service on the V_{B1} branch, where positive effects on the commodity flows are to be expected for the vital Croatian branch – the V_B corridor. [15] Regarding the railway branch of the V_{B1} corridor it is significant to mention the idea of the two routes of railway tracks the Rijeka – Kopar – Trst and Rijeka – Josipdol – Zagreb/Split unite. The above mentioned idea has been presented and accepted within IMONODE project and INTERREG IIIB.[16] In 2003. this idea was presented by the Institute for Sustainable Development and Landscape planning of the Primorsko-goranska County at the NAPAN con-

14 Večernji list, 29.05.2003.

15 Uloga Hrvatskih autocesta u Projektu «Rijeka Gateway Project», Rijeka, Hrvatske autoceste d.o.o., 2003.

16 Project IMONODE (Efficient Integration of Cargo Transport Modes & Nodes) is project of efficient integration of cargo transport (regarding different transport modes and transport centres) in Midlle Europe, Adriatic and Danube area, and also North-Eastern Europe (CADSES Central Adriatic Danubian South-Eastern European Space Area) for period 2000 -2006.

ference held in Trieste,[17] where great interest has been shown for this idea. As regards the existing track Rijeka-Trieste, this railway track on the V_{B2} corridor would be shorter, faster and at a lower altitude. The effect of this railway on the V_B corridor is almost not even necessary to explain. Connecting the ports of Rijeka, Kopar and Trieste into an interstate system of harbours becomes inevitable and can only make the V_B corridor stronger and include Rijeka and Zagreb into it. Besides, this track will open other alternative solutions to the traffic routes between the sea and the inland waterways on the Sava and the Danube on the X. and VII. Corridors. This would then represent a new railway component on the future Adriatic – Ionian corridor.

The V_C Corridor is another corridor that would have a positive impact on the Croatian commodity flows considering that under the assumption of appropriate capacities in the port of Ploče, this corridor, as well as the V_B corridor, represents an access to the sea for middle-European states. The highway construction on the V_C corridor, that goes from Budapest via Osijek, Sarajevo, Mostar to Ploče, is in interest of all the states that would pass over. The V_C corridor construction is the most significant for Bosnia and Herzegovina, since with this highway Bosnia and Herzegovina would be accordingly connected with Middle Europe. The Port of Ploče is a port situated on the southern part of the Adriatic Sea, and its primary gravitation zone is Bosnia and Herzegovina. Its future development will mostly be dependent upon commodity flows from its gravitation background. Even though the current situation in the Port of Ploče cannot be compared to the one in the Port of Rijeka (considering the capacities, traffic…) but it is to be estimated that the highway construction on the V_C corridor could influence Croatian commodity flows, especially when it concerns the transit to middle-European states, especially to Hungary. In other words, conditioned by the appropriate capacities and infrastructures of the port of Ploče as well as by appropriate shipping lines, the V_C corridor might be an interesting corridor not only for Bosnia and Herzegovina but could also attract some of the commodity flows from a wider middle-European transit marketplace.

6. CONCLUSION

Supported by the European integration process and single marketplace establishment, the European traffic system has started developing connections with the previously separated eastern and western parts. These connections, as the most important European interest, are primary applied to creating a unique and reciprocally connected transport network where all physical, technical, eco-

17 NAPAN (Northern Adriatic Port Area Network) International Conference, 14-15 May, 2003.

nomical, organizational, legal and other obstacles are being removed. This also creates a postulate for the valorisation of a favourable position and significance of the Croatian territory within the European traffic system in the sense of the European interest for, and especially in the interest of the Middle European and Danube region states.

Current corridors that have a vital significance for the Croatian valorisation on the European traffic marketplace are corridors X, X_A, V_B, V_C, VII, the significance of which is confirmed by the fact that these corridors are included into the Paneuropean corridors transport network. Among the above mentioned corridors, a special attention is paid to the V_B corridor which represents the capital traffic infrastructure of Croatia and by means of which the traffic connection between the middle-European and the Adriatic areas is accomplished in a narrow sense and between the middle-European and Mediterranean area in a wider sense.

Besides these corridors, significant positive effects on the traffic valorisation of Croatia should surely also have the potential new corridors and the branches of the existing corridors that pass over the Croatian territory. Within that, the Adriatic-Ionian corridor should be mentioned as well as the V_{B2} branch that, at the Third Paneuropean Conference, were not adopted and included into the Paneuropean corridors network. In this sense, Croatia should, as the interested party and supported by other countries of the Adriatic-Ionian incentive, work on these two corridors to be included into the Paneuropean corridor network because of all the positive effects that these corridors would have on the Croatian traffic and economic system. Positive effects can also be expected from the realisation plan of the road and railway construction as a part of the V_{B1} branch (Rijeka – Kopar – Trieste). In interest of the combined traffic development on the Rijeka traffic route, besides the connection of the maritime traffic with the road and railway traffic system and certain improvements on the road and traffic infrastructures, it is significant to mention that for the connection of the Danube region with the Adriatic region, the inland waterways are also significant, that means Corridor VII. In this sense, a qualitative connection of the Kvarner Bay area with the Danube region via the Vukovar – Šamac canal and with canals to be constructed on the Sava river within the next period of time, would create additionally new pulses to the integration of the Republic of Croatia into the European traffic system.

BIBLIOGRAPHY

1. Božičević, J., Prometno povezivanje Republike Hrvatske i Federacije Bosne i Hercegovine, Zbornik radova, Znanstveni skup Revalorizacija geoprometnog položaja Hrvatske i Bosne i Hercegovine u interesu obiju država, Zagreb, Znanstveni savjet za promet, 1996.
2. Gačanin, E., Osnovni transportni koridori kroz Bosnu i Hercegovinu na liniji Srednja Europa – Jadran, Povezivanje srednjoeuropskih država s Jadranom, Zbornik radova HAZU, Zagreb, 1998.
3. Krakić, D., Remenar, Z., Hrvatska prometna politika u okviru transportnih prometnih koridora, Automatizacija u prometu, Zagreb, Korema, 2000.
4. Mlinarić, D., Utjecaj buduće Jadransko-jonske ceste na prostor Županija šibensko-kninske i zadarske, Ministarstvo pomorstva, prometa i veza, listopad, 2001.
5. Šarić, M., Značenje Jadransko-jonske regije u perspektivi Europske unije, Ceste i mostovi, 49 (2000), 5-6
6. http://www.esteri.it (07.07.2005.)
7. http://www.mmtpr.hr (15.12.2005.)
8. http://www.mvp.hr (25.06.2005.)
9. New Railway of Great Possibilities and Lower Attitudes Between Rijeka – Kopar – Trieste, NAPAN International Conference, Trieste, 2003.
10. Status of the Paneuropean Transport Corridors and Transport Areas, Vienna, TINA Office Vienna, 2000.
11. Strategic Plan (Final Report) – Port of Rijeka, Bohn, Domazet&Associates Gmbh, Munich/Rijeka, 29th September 1998.
12. Strategija razvitka Republike Hrvatske „Hrvatska u 21. stoljeću“, Projektni zadatak – Promet, Zagreb, 2001.
13. Strategija razvitka Republike Hrvatske, Ministarstvo pomorstva, prometa i veza, Zagreb, 1999.
14. Uloga Hrvatskih autocesta u Projektu «Rijeka Gateway Project», Rijeka, Hrvatske autoceste d.o.o., 2003.

Sažetak

INTEGRIRANOST REPUBLIKE HRVATSKE U PANEUROPSKU MREŽU PROMETNIH KORIDORA

Međusobna ovisnost svjetskog i europskog tržišta te porast međunarodne razmjene kao jedan od temeljnih ciljeva prometne politike Europske unije, sve više u prvi plan ističe unutrašnje prometno povezivanje i prometno povezivanje s ostalim europskim državama suvremenom mrežom prometnica. U tom je kontekstu, unutar europske prometne politike značajan europski interes za prometni položaj Republike Hrvatske i prometne koridore koji prolazeći njenim teritorijem integriraju Hrvatsku u europski prometni sustav i tržište. U skladu s time, u ovome se radu analizira europska prometna politika i aspekti europskog interesa za prometni položaj Republike Hrvatske, geoprometne značajke Paneuropske mreže prometnih koridora te eksploatacijske značajke postojećih i potencijalno novih koridora koji prolaze teritorijem Republike Hrvatske. Temeljem toga izvode se značajni zaključci o stupnju integriranosti Hrvatske u Paneuropsku mrežu prometnih koridora, uključujući postojeće koridore, ali i potencijalne nove koridore koji bi također trebali bitno pridonijeti integraciji hrvatske prometne mreže u europsku prometnu mrežu koridora.

***Ključne riječi**: prometni koridori, Hrvatska, Europa, Paneuropska mreža koridora*

Pomorski fakultet u Rijeci
Studentska 2
51000 Rijeka