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MODEL OF TRAFFIC POLICY IN THE REPUBLIC OF MACEDONIA - BEFORE AND AFTER ECONOMIC CRISIS

Introduction

Transport, in its theoretical and practical aspects, is one of the basic factors of economy in every country. Furthermore, the effective economic growth and development, mostly depends on traffic policy and total development of the traffic.

The traffic in the Republic of Macedonia is in a phase of expansion. The need for enlargement of the Pan – European corridors VIII and X which pass through the Republic of Macedonia, the need of reconstruction and re-organization of the rail, modernization of air traffic, the need to introduce a modern transport technologies, directs the need of modern traffic policy, with goal to increase the economy potential and the state competition in the transport market.

Fig. 1. Republic of Macedonia.



Source: [http:// www.mtc.gov.mk](http://www.mtc.gov.mk)

Traffic policy in the Republic of Macedonia, as well as in the other transitional countries, is not sufficiently given enough attention, nor is practically applied all relevant factors which influence on the development of the traffic and transport. On account of the positive influence which the developed transport system can hold the economy of one country, it is necessary to research the role of the traffic policy in the Republic of Macedonia and its economy.

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Fig. 2. Republic of Macedonia in European road corridors.



Source: [http:// www.mtc.gov.mk](http://www.mtc.gov.mk)

Traffic policy model

The existence of the economy market inevitably follows the development of the traffic system. The necessity to include the Republic of Macedonia in the European traffic flows, as well as its interest to associate with the European Union is imperative which is set for the Government of the Republic of Macedonia and its citizens. The advanced inter correlation in the economy with the linearization of the goods and services flow, as well as creating conditions for capital flow, should follow with a previous consistent traffic policy. In spite of developed traffic policy, as well as for better organization of the traffic system, it is possible to increase current flow and to create new market flows, which could have an effect on the export – import balance.

The following scientific hypothesis was established: using scientific factors for traffic policy, sustainable development, by estimating the development and success of the economy and traffic in Macedonia, and the correlation of the traffic policy and the sustainable development of the economy in Macedonia, it is possible to suggest a new traffic policy model, which will positively influence the sustainable development of the traffic and economy in Macedonia and its adjustment towards the traffic and economy system in the European union.

The final goal of this research is a contribution to the process of including the Republic of Macedonia as an equal member of the European Union.

As a result of the research, a traffic policy system model has emerged, which interactively links the basic elements of the system incorporated in the traffic system and economy of the Republic of Macedonia and Europe. The traffic policy is a system consisting of great number of elements, but for this occasion following elements are researched: traffic infrastructure, traffic substructure in branches, transport subjects, containerized transport, Hucke-pack transport, bimodal transport, traffic services production and its price, environmental and sustainable development costs, legal framework of the traffic services production, logistical integrated traffic information system, management and guidance, organizational culture, gross domestic product, logistic intellectual capital, and other elements of the model.

In this paper as a model of the traffic policy, a mathematical model of matrix growth has been applied, because of its advantages. The matrix of growth enables far complex realization of the relation among the elements of the model and could serve as a basis for establishment of dynamic systems like the traffic policy system.

Table No. 1: Value of the traffic policy elements.

The Traffic Policy Elements	Input y_{it}			Прираст
	2007	2012	2017	Δy_{2017}
1. Traffic infrastructure	40	50	70	30
2. Traffic supra-structure	40	70	80	40
3. Transport subjects	30	50	70	40
4. Hucke-pack transport, bimodal transport	20	40	70	50
5. Traffic services production and its price	30	50	80	50
6. Environmental and sustain. development costs	40	60	80	40
7. Legal framework of the traffic services	20	40	70	50
8. Logistic activities in the area of traffic	30	50	80	50
9. Integrated traffic information system,	20	40	70	50
10. Management and guidance	30	40	60	30
11. Organizational culture	30	50	70	40
12. Gross domestic product	30	50	80	50
13. Logistic intellectual capital	40	70	80	40
14. Other elements of the model	30	40	60	30

Source: Forecast from the author.

The basic year in which the research was completed is the year 2003, being a year with final official data published by the Statistical Bureau of the Republic of Macedonia. As model inputs are used the values of the quantified elements of the traffic policy for 2007, the forecasted values for 2012, when the Republic of Macedonia should become an associate member of the European union, as well as the forecasted values for 2017, when it is planned for Macedonia to become a full member of the EU. While the values put for the year 2012 and 2017 are estimated on the basis of the reforms in the whole system of the country and on the statements of the members of the Government, the President of the Republic of Macedonia and the foreign representatives of the EU who monitor the reforms in the Republic of Macedonia. The differences between the element values of the year 2017 and 2007 constitute the vector of growth Δy_{2017} of the traffic policy. The vector growth product Δy_{2015} and the value vector $1/y_{2015}$ define the matrix of growth in the traffic policy in respect to the current values. When the values are calculated and expressed in percentages, direct (in relation to itself) and indirect (every element in relation to the others and vice –versa) growth rates are obtained, which are output elements of the model.

The function of the matrix of growth is two folded:

- It generalizes the concept of growth by means of direct and indirect growth rates.
- It enables the establishing of the dynamic systems, through which the directions of future of traffic policy development can be set up.

Causes for change of the traffic policy model

The time framework of this model is:

- 2007 – base year
- 2012 – year when the Republic of Macedonia should get a negotiation date with the European Union.
- 2017 – year when the Republic of Macedonia should became a member of the European Union.

But, the Republic of Macedonia has experienced certain phenomenas and left mark on the dynamics in society, as well as embodying this model of traffic policy. Moreover, the imposed issue over the name with the Republic of Greece has brought far reaching consequences in all sphere of living.

The government of the Republic of Macedonia has taken few steps, which were qualified as provocations. In the follow up, the reasons which directly or indirectly influenced on the embodying the suggested model of the traffic policy, that was previously rationalized, will be analyzed.

This was forecast for traffic policy model, but some changes are happening in Macedonia. Their influence has direct or indirect implications in the traffic and transport area.

An Indirect causes

Reasons for distructing the embodieng of the suggested model of traffic policy which indirectly influenced are:

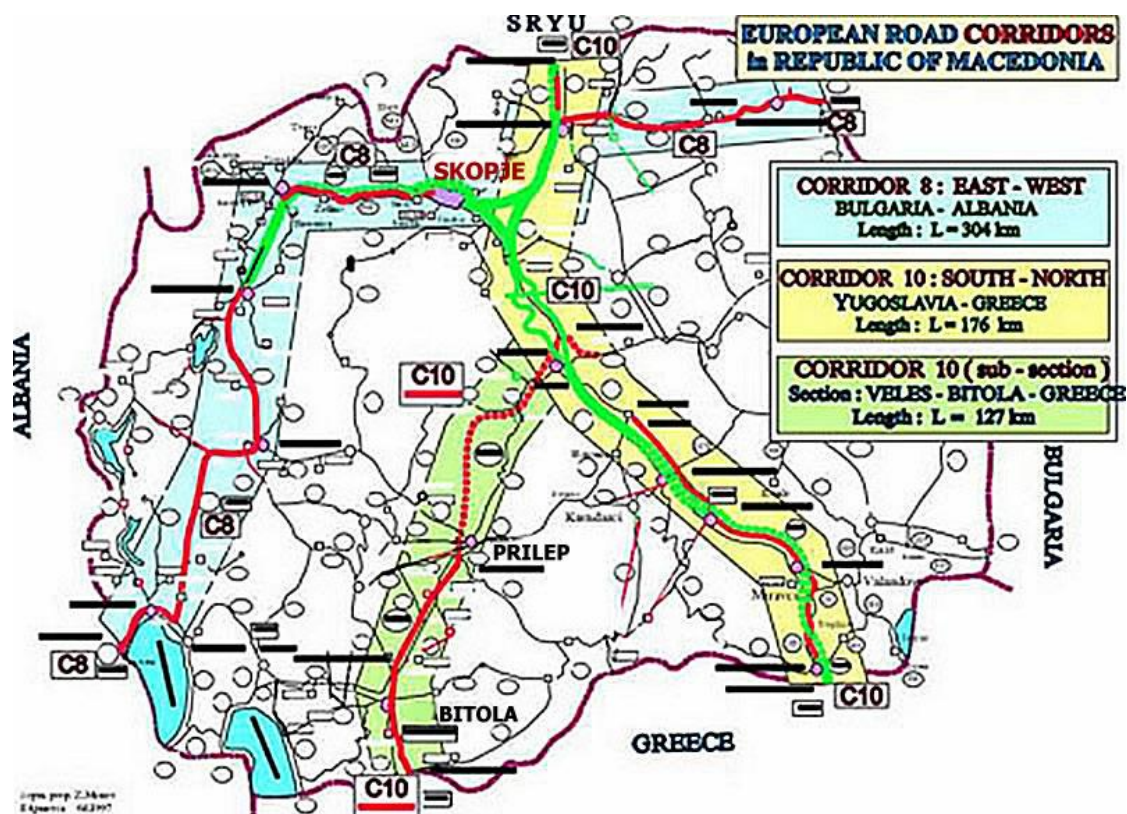
- not assigning the Republic of Macedonia in NATO alliance at the Buchurest summit in march 2008;
- early parliamentary elections in july 2008 which convincingly the rulling party VMRO – DPMNE won.
- Issue continuation with the Republic of Greece, which is resolving under United Nations monitoring and their special representative.
- Challenging and stretching the negotiation date of the Republic of Macedonia with the European Union, due to the name issue with the Republic of Greece.

A Direct causes

The government of the Republic of Macedonia formed the coalition party “ For better Macedonia”, conducted by the biggest party VMRO – DPMNE, took number of measures which were qualified as provocation from the Republic of Greece. These reasons directly influenced unrealiation of the traffic policy model in the Republic of Macedonia. These reasons are regarding the name changing of the objects from the traffic infrastructure. The reasons are as follows:

- Changing the name of the airport in Skopje, from airport Petrovec into airport “Alexander the Great”.
- Changing the name of the corridor X which passes through the Republic of Macedonia into corridor “Alexander the Great”

Fig. 3. European road corridors in Republic of Macedonia



Source: [http:// www.mtc.gov.mk](http://www.mtc.gov.mk)

Transport policy in the Republic of Macedonia - before and after the economic crisis

Transport policy is an interdisciplinary science and it depends on the above mentioned elements. This means that by changing these elements, changes also occur in the system of the traffic policy in the Republic of Macedonia.

Republic of Macedonia, this year on the 8th of September celebrated 20 years of its independence and autonomy.

The Strategy for further development of the Republic of Macedonia as a country in transition is inclusion in the European Union. With this, the set of guidelines is confirmed, because the traffic policy of the Republic of Macedonia should be complementary with the traffic policy of the European Union.

Republic of Macedonia is a country with a relatively satisfactory traffic system.

The Subsystem of road transport is the most developed subsystem in the overall traffic system. It is characterized by both pan-European corridors: Corridor East - West - number VIII and North-South corridor - the number X. Corridor X highway is built with a decision on the whole length except for a part.

The Subsystem of air traffic is the past couple of in recent years reached a development with the concession given to the two airports of the Turkish airline company "TAV": airport "Alexander the Great" airport in Skopje and "St. The Apostle Paul "in Ohrid. Skopje airport is fully reconstructed and put into operation on 8 September this year and it is the largest airport in the Balkan Peninsula.

The Subsystem of railway traffic is underdeveloped for the needs of users. A reconstruction of the railway infrastructure is required in near future to respond to contemporary challenges.

The global economic crisis had a significant impact on traffic in Macedonia. This influence refers to the delay of certain infrastructure projects that require large funds.

After a global economic crisis the realization of priority projects should be continued, aiming on a modernization of the entire traffic system.

This means that Macedonia will have developed traffic system that will allow smooth movement of passengers and goods throughout its territory, so it can answer the challenges of modern requirements of the European transport market.

Conclusions

The Republic of Macedonia has got the candidate status from the European Union in 2005. The development processes were moving according to the certain prognosis from the traffic policy model, which is presented in the paper. But, above mentioned reasons that are from different nature – directly or indirectly made their influence. The Republic of Macedonia slowed down the process of integration into NATO and EU.

Next year, republic of Macedonia expects date for negotiations for membership in the European Union. In the next five years we hope to fulfill all the criteria and become equal member of the European Union.

LITERATURE

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