

## Transport Network in Concept European Road

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**Abstract:** Formation of the Single Market for services, transport, includes the right of freedom to provide services throughout the Community. Liberalization of the transporter interacts with the construction of Trans-European Networks (TENS) which are generated by the process of European integration against the background of economy globalization. European Union gives priority to road transport networks into a single coherent and easy to move factors of wealth creators, to ensure resource flows between European countries and between them and the world. This complex dynamic process and is stimulated generating factors such as opening of national borders, increased competition, etc. Transport network is localized both in the class of networks established in stages, as political decision-making networks and in networks mainly economic category (pan-European). Currently EU countries work together in committees established for each of the 10 pan-European corridors for implementation of projects for new construction or modernization of transport infrastructure, conditions for the gradual homogenization of transport in the EU. It is estimated that 2010 will mark the upper limit of the quantitative development of European transport.

**Key words:** Integration, globalization, transport network, trans-european networks, transport corridors

### INTRODUCTION

Orientation towards addressing the complex issues of European transport system was fully stimulated by timeliness and importance for immediate and future development of the European economy as a whole.

Directives in this regard the EU as well as intense concerns researchers transit system proves its undeniable advantages in support of structural change in EU economic and social space.

In this context we intend to briefly address the concept of European transport network, the major objective of the training Policy Common Market for Single-transport services. Network concept is a modern concept in the theory and practice of European transport.

Creating European transport networks can be considered a major step in creating uniform European economy and reducing disparities between states.

### FACTORS GENERATORS OF NETWORK-BASED INTERNATIONAL ECONOMY

United Europe aims to provide high quality services at affordable prices to each of its citizens. Formation of single market for services - transport case - is in the foreground. An important element of the common transport policy, including the road is the right of freedom to provide services throughout the Community. Benn

have liberalized in this respect, car transport services, air, rail and sea. Liberalization of transport services interact with the construction of Trans-European Networks (TENS). The Maastricht Treaty acknowledges the importance of such networks (transmission, telecommunications, oil and gas supply, including the latest, computer, satellite transmission, etc.). Financing infrastructure development and trans priority was and is the European Investment Bank. Transport networks are generated by the process of European integration against the background of economy globalization.

Conducting two simultaneous processes, requires special efforts to harmonize and matching, because of mankind's aspirations must be consistent, regardless of socio-economic status of a current policy or that state of an area or another (Scholte, 1998). Globalization defines, in general, particularly the dynamic growth of interdependence of national states as a result of the expansion and deepening of transnational ties in the spheres of economic, political, social and cultural increasingly broad and varied, therefore the problems facing humanity becomes more global than national, demanding in turn a global rather than national settlement (Bari, 1997). The most significant changes associated with globalization have focused primarily industrial production: corporation national, has become multinational, has transformed the network belonging to the global network (Epure, 2002). The example should be

followed by other industries because the production involves developed transport network, communications and information, we can say without fear of being wrong, it's a spread effect. This is the image of the planet as a sphere covered with overlapping networks of transportation, communication, information, production, trade, finance, technology and science, expressing the whole of the world (Malița, 1998). We can say that we are witnessing the crystallisation of a network-based global economy.

Appears inevitable, a key element common to all attempts to describe the phenomena of globalization, and transnationalization, namely network. In the modern world people are united not only a global economy, but a global consciousness, the awareness that manages the same planet and have a common destiny. This awareness is evolving rapidly, adapts, is emerging ever more clearly, creating global alliances, and leading, ultimately, the birth of a network of understanding, integrating and road transport.

Global Modernity means, among other things, creating a unified and coherent networks that easily moving factors creators of wealth, under the most various forms: political decisions, information of all kinds, capital, human resources, technology, goods, items knowledge, etc.. Therefore, the European Union gives priority to the transport networks to ensure, among other elements, all the necessary flows between its components (state and national authorities, community institutions, businesses, citizens, etc.). Promotion and integration of elements of modernity - whether at the regional level - was a factor for progress for countries in Western Europe. Community networks in all areas of decreased distance and borders virtualised. Among the factors favoring the development of trans-European networks include: increased competition in most areas of activity, creating pan-European Market and the Company, the manifestation of the principles of free movement of goods, capital, services and people, increase economic exchanges inside and outside, the concrete requirements expressed by citizens in developing trans-European networks (in their capacity as tourists, traders, transporters, etc.), European Union enlargement towards Central and Eastern Europe (European Commission, 1999). TENs, considered economic and maintained by the European Union to be extended in the candidate countries have been named Pan- European.

The realities outlined in the sphere of international economic relations, moreover, indicate the manifestation of a special phenomenon, namely the transition from a system focused primarily on trade interdependence to a system focused primarily on network interconnections. It is a transition from a configuration of global economic relations dominated by traditional forms of commerce to a newly constructed complex of them, combining and

merging the domination of the increasing trade flows, technology, investment and services - guided and increasingly conducted through global networks. This is facilitated ongoing controlled now, and dramatic technological advances in the field of Informatics and Telecommunications (Korten, 1995).

The vast network of services encountered in international arena exponential pace, covering the entire world monetary sphere, banking, transport, telecommunications and informatics, trade in services, and strategies of large transnational corporations, have led some analysts to say that the economy world is moving towards a model of globalization based on network operation services. This is compounded by the fact that logistics in order to achieve global economic activities is already in the process of amplification. Clues that are in the process of crystallization an integrated global system more powerful and focused, rather than on interdependence networks revolving around trade and regional levels is observed, since the creation of the European Single Market objectives beyond the a simple common market-oriented trade. They cover not only the free circulation of material goods but also of people, capital and services. This anticipated new dimensions of relations between the member countries, which may be linked with concepts of interconnection and respective networks. Similar size, even if not of the same magnitude as at European level can be identified in the framework of the North American Free Trade Agreement (NAFTA) or other regional agreements concluded in recent years. Community networks can not be defined scientific rigor in all their mathematical formulas, such as the network of atomic power, the satellite network for air traffic control, etc. Also, some networks are not specific to the European Union and were not created as a result of joint decisions of the member countries of the Union or the Community Institutions. They have subsequently appeared as a result of operational objectives in the Treaty on European Union or derivatives thereof and secured as such by the Community Institutions Networks in this category may be regarded as par excellence carriers decisions, information, ideas and views between community leaders and institutions subordinate to (Cernăianu, 2007).

Therefore, the following factors generating individualized based international network of economic liberalization of economic policies (opening of national borders), the emphasis on technological progress (from this point of view, reducing transport and communication costs have facilitated more effective integration of international operations, and the transport components and finished products in search of economic efficiency, given the comparative advantages), increased competition (resulting from the combination of two factors above) and the influence of global governance (agents of globalization).

## **TYPES OF NETWORKS - TRANSPORT NETWORK**

An important category of networking within the European Union is distinguished by the fact that most economic and commercial purposes for which they were created. These are networks that serve the practical realization of the movement of capital, goods, services, information and people. In this category of networks include, among other trans-European transport networks, as will the road and rail networks, according to the weight they occupy in the community transport development policies, trans-European energy networks (power transmission lines power, pipelines, gas pipelines) and European information society, or the information society (a complex gear production, storage, transmission and use of information). Community policy makers emphasize the conclusion that the continued development of trans-European networks should also be an objective of the European Union as an entity independent not only of Member States (Treaty on European Union).

Transport network is localized, so both floors category established networks, as networks and political decision-making, networking and mostly in the economic category (Pan-European).

In Europe, interacting components of the network structure has to follow the trend in overall development, economic, and social policy, European Union, contributing to a relationship "feedback" to economic growth of all Member States. The period 1993-1994 can be regarded as a period of Europeanisation of transport networks, following the entry into force of the Treaty on European Union and its subsequent decisions of the Community by the Community institutions and Member States which accounted for clear tasks of building and upgrading of transport infrastructure including roads, especially in outlying areas of the Union and in connection with third countries or regions or where there were points of blocking traffic (European Commission, 1994). Economic of sector transport but unevenly developed types of transport, including the incoherently policies of the trans-European perspective, which led to disparities and imbalances in the distribution of transportation costs and enforcement of security in transport and environmental protection. We are seeing thus a period of dramatic expansion of road transport over rail transport, mainly due to lack of initiative towards modernization of the latter.

## **THE ANALYSIS OF ROAD TRANSPORT INFRASTRUCTURE THE TERRITORY OF THE COMMUNITY**

The nature, size and location of development projects of transport infrastructure has an economic motivation in

the sense that the volume of goods transported by road, sea and rail transport has increased significantly. Community Policymakers have recognized the road all the qualities (speed, efficiency, penetration), but could not accept the high costs per unit of goods shipped and damage the environment Economic progress must be made by road transport but in balance with the costs and risks that accompany it.

For a better understanding of road EU transport policy and criteria for selecting priority projects and propose an analysis of their infrastructure development in the Community (mostly highway), based on information in the table below that shows a hierarchy of fifteen EU countries where the indicator km of motorway per 1000 km<sup>2</sup> area (Table 1).

A first conclusion concerns the Benelux countries (Belgium, Netherlands, Luxembourg), which managed to develop the most dense network of motorways in Europe, has already reached saturation level. These countries have the top, which explains the existence of necessary resources networks for motorways. Followed by a significant group of countries with a network of highways with a density above the EU average (Germany, Italy, Denmark, Austria, France, Spain). We can say that these countries are still interested in overgrowth of highway networks. Attention should be directed to the geographically peripheral countries of the European Union (United Kingdom, Portugal, Greece, Sweden, Finland and Iceland), which is below the EU average and to be made at least at the level of other EU countries, mainly to ensure uniform conditions for the development of the Single Market and the practical realization of the four freedoms: goods, capital, services and people.

These are the reasons for which the priority railway projects were concentrated in central EU countries, while the priority of road projects concentrated in geographically peripheral countries.

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Table 1: The density of the highways in the territory of European Union countries

Country	Rank the density of motorways	Area (Thousand km <sup>2</sup> ) (Km)	Length of motorways (Km/1000 km <sup>2</sup> )	Density of motorways
Netherlands	1	41,5	2360	56,86
Belgium	2	30,5	1674	54,88
Luxembourg	3	2,6	115	44,23
Germany	4	357,0	11300	31,65
Italy	5	301,3	6439	21,37
Denmark	6	43,1	880	20,41
Austria	7	83,9	1607	19,15
France	8	544,0	8600	15,80
Spain	9	506,0	7293	14,41
United Kingdom	10	244,1	3334	13,69
Portugal	11	91,9	710	7,72
Greece	12	132,0	470	3,56
Sweden	13	450,0	1330	2,95
Finland	14	338,1	431	1,27
Iceland	15	70,3	80	1,13
Total	-	3236,2	46633	14,40

Source: European Commission

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It is estimated that 2010 will mark the upper limit of the quantitative development of European transport. A first signal is given by air transport, where there is a need traffic control at European level and a common European air space in which to operate the rules of free competition and a full security. However, the phenomenon of road transport pollution is not yet mastered the rules of road safety are not met, and already traffic jams everyday phenomena. It is projected that in 2010 the EU achieve an integrated transport structure that provides access to any user EU and enlargement will create all the necessary connections to the trans-European network member countries. These connections will be achieved through the development of pan-European transport corridors for the first time decided on the pan-European transport Conference in Crete in 1994. At present, EU countries are working together in committees established for each of the 10 pan-European corridors for implementation of projects for new construction or modernization of transport infrastructure in that country, the conditions for the gradual homogenization of transport in the Community .

## CONCLUSION

Natural factors, economic, socio-demographic, country-specific technical community, foster the implementation of their territory in a transmission line with European requirements. Achieving a rational and sustainable state of balance by fundamental reconsideration of values and objectives at local, regional, national and global levels, is valid for all available European countries and the European Union as a whole.

Reasoning in terms of long-term demand, the transmission features require co-financing the

modernization of transport for all subsystems and across the European Union. Make it possible to move existing networks, but important is accessibility, which involves an investment effort to allow simultaneous delivery of a variety of services for a large number of present and future users with very different requirements, the network effect argue investment efficiency. Also, the network effect is propagated both national spaces and outside, for all modes of transport.

Limited financial resources of member countries of the European Union have led to contracting for a part of the projects of foreign loans for the maintenance, renewal or extension of transport to strengthen the competitive position of all European transport system. Developed a household transport infrastructure strengthens, stimulates the economy and attract European investors interested. In this context, and Romania as EU member state has developed a strategy for rehabilitation and construction of national roads and highways, providing Europe and beyond a transmission to the standards required by the European Union.

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