

TRANSPORTS BETWEEN NECESSITY AND DESIRE

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Usage of new technology in the transport area represents an important challenge, which must be applied with purposes related to the environment protection, competitiveness, security and capacity. The new technology can also contribute to efficient logistic solutions in the transportation area. In our country the insufficient development of the infrastructure and the inefficiency of the means of transportation are obstacles for the socio-economical development and the social integration. This is one reason we need investments to ensure an adequate infrastructure – rehabilitation of the railways for the goods transportation and the development of the road infrastructure at all levels. The road transport became not only a vital instrument of production but also the main way of terrestrial transportation by guaranteed a strong mobility for the person and goods.

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The Romanian actual priorities are tied up by the creation of a functional market economy and by the capacity of dealing with the competitors from the European Union. To realize these objectives we need the existence of a development infrastructure in the transportation area, which is nowadays the basis of every economy, having a determinant role in development of the society and the human kind in general. It is an activity that appeared along with the human existence. The physical limitations of the human body regarding the distances crossed on foot and the quantity of transported goods, determined the development of a wide range of transportation means. The transportation sector has different aspects, simplifying and generalizing, we can talk about three major branches: infrastructure, vehicles and financial administration.

The transport constitutes an important branch of the national economy, due to ensure the development of the production processes and the organic bond between the raw materials, the processing and fabrication units and the distribution units of the goods through the country, in the volume, at time and the necessary directions, due to the interests and the development rhythm of the national economy.

A main characteristic of the transportation is the seasonal oscillation of the services requests, due to the frequency of solicitude in the peak season and in the extra season. The transportation services cannot be held; the means of transportation are moving along with the loaded merchandise no matter the usage level of the capacity of a transportation mean. At the end of the drive the transport service is done and the non-usage of the capacity of a transportation mean for a given period is no longer recuperate.

The trial of losses reduction in this sector of the transportation and its development can be done as introducing the permanent technical progress, where there are new means of transportation with new capacity, speed rise, comfort, security, traffic safety, and environmental protection, regularity as well as the assurance of the territorial cohesion of the Romania with the EU

members. All the above represents a general objective, an essential condition for the development of the transport infrastructure, the durable development of the economy and the improvement of the quality of life.

The importance of the transportation in the national economy

The evolution of the transportation is the result of society's maturation and the transports are a branch of the material production. Transports as a sector of the national economy, represents extend of the production processes until the productive or non-productive consume places, and any delay or deregulation of the transport had repercussions over the entire gearing of the market economy of a country.

We can say that in this situation the circulation of the goods and of people represents an essential condition of unfurling the normal life and the transport possibilities condition the economical cooperation between the branches of the material production and the exchange values and the harmonious evolution of the entire regions of the country.

Romania by its geography represents a crossroad zone of the international thoroughfare transportation that bonds North and South Europe as well as its West and East. The transport network ensures the relation with the neighbor's entire network and with those of the Europe and Asia.

Although Romania has the advantage of its geographical position, it has a poor system of transport and the lack of invested capital in this area become more and more a barrier for the economical evolution of the country. That's way the insufficiency development of the main roads can lead to lose the advantages offered by the geographical position on the transit routes West – East and North – South.

One of the fundamental elements of inter human relations are constitutes by the communication means, which ensures a unitary character of the entire complex of the social life. There are necessary investments; to ensure an adequate infrastructure that plays an important role for the integration of the internal market, and fortifies the geographical value of Romania as a transitory route rehabilitation of the railways for the goods transportation and the evolution of the road infrastructure at all levels. These necessities have unfurled different ways of connection among them the transportation become an important significance having a special influence over the infrastructure and the socio-economical geography.

The transport represents an important sector of the economy, due to its direct contribution to the Gross Domestic Product as well as its role in the circulation of goods and for the VAT of the other branches. Going to the capital economy and to the evolution of the economy and rises of the life quality, should lead and respond to the entrepreneurial system for the new requirements and it also appeared new types of affaire for the needs of the automobilists. There are constructions of utilities along the roads to cover some necessities as gas, food, and shelter.

Transports represent a main role because it assures the connection between producer and consumer, the movement of the raw materials to the processing centers establishing the connection between the cities of our country with other states.

The evolution of the economical exchange, of the tourism and the continual growth of the road traffic implied the construction of a highway in our country since 1966. if Romania had 113 km of highway in 1990, now it has 185 in advance, which means that the construction of highways in Romania is about 10 km a year.

The invention and the mass production of the vehicles have transformed the Romanian 's lives in the 20th Century. In the last century the traveling was expensive and difficult with a defections infrastructure – a lot of rural roads very difficult to travel.

The auto means of transportation develops technical and commercial high speed, which is very important for the transportation of the perishable goods.

The means of transportation have a well-defined role in the transportation activity; the usage of each mean of transportation is characterized by a series of advantages and disadvantages economic-organizational regarding the capacity, continuity, rapidity, commodity, economy, of the transport which limits the usage conditions in the national economy of the means of transport. The road transport becomes not only a vital instrument of production but also the main way of terrestrial transportation guaranteed a durable mobility for the people and goods.

The evolution of this infrastructure by rising the number of the buses, trolleybuses, trams, subways, and their status, the comfort, the number of the possible lines, the schedule used, the average capacity of a bus, the speed average in the city, the usage of the advanced technology, the number of the adequate stations and the distance between them, the existence of the refuges (covered, illuminated, with banks, ticket booth, or mechanic sellers machines), the information of the public over the public transportation network, the education of the workers of these vehicles, educational action for the traveler public, the implication of the authorities in the public transportation as the major interest, the usage of bicycles by creating special roads for it, as an alternative to the traffic jams, the reduction of the environment costs associated and the safety of the transportation.

The usage of the bicycle is hard to be done because is considered the “vehicle of the poor” and another reason it may be the lack of parking space, of special roads for bicycles, their theft, the perspiration produced to the user, the lack of quality equipments and of the information sources, as well as the lack of knowledge of the bicycle user for the legislation.

The usage of scooters is considered a necessity in the big cities, where it represents an excellent means of transportation by ruling it among the crowd ness of the city.

Another mean of transportation, which is considered an “antidote” for the traffic and why not for the weekend fun, is the ATV that is commercialized in different variants of motorization.

For some businessmen the usage of helicopters, of small airplanes, for the meeting affairs, for filming, or taking picture of some zones, becomes a necessity, not only a hobby.

In the last two decades in our country have appeared huge rises regarding the transportation and especially the road one. From their appearances – the automobiles – have been rolled for the gas consume, especially petrol.

Today in Romania there is a major percent of automobile owners, some have two or more. Their number raised considerably in the last year. The usage of such a great number of internal combustion engine which burn so much oil, it brought not only the rise of the carbon dioxide, but also other types of pollutants which affected the human health. Many productions were in the vicinity of the human density- the center of the cities.

Today’s system of transport examination is using three major themes: the usage of the energy, the impact over the health system and the reason we travel. Because more carbon emissions come from the transportation their part between the railway, highways, aerial and naval presents a perspective of the energy exchange or of the climate.

It is hard to establish the transportation impact over the climate exchange. The automobiles market was always in a continual rise and many passengers prefer traveling with their own cars. The usage of the public transportation by the passengers can lead to the avoidance of the crowd ness, jams and also can diminish the time between two points.

The completeness of the road infrastructure and the modernity of the roads to the European level can contribute to the speed rise of the goods and passengers, intensifying the internal competition but also creating new business opportunities for the Romanian companies. Along with the disappearing of the last restrictions in the services domain, the Romanian companies will become real competitors for the original firms in the countries with developed economies.

The transport demands rose as the development of the technologies, information and communication. (Information and Communication Technologies – ICT). Transport and the logistic services were strongly influenced by the spread of the electronic commerce that imposes

for the transport and services operators to distribute and shape the operations, the commercial strategies and the practice. In order to realize some touristy, affaires, treatments, education transportations we need to develop an Intelligent Transport System (ITS – Intelligent Transport Systems), which can be defined as an assemble of subsystems based on electronics, telecommunication, and information advanced technology and its purpose is to rise the efficiency and the safety of the transportation.

The base subsystems of the ITS structure are the following:

1. ATMS – Advanced Traffic Management Systems;
2. ATIS – Advanced Traveler Information Systems;
3. AVCS – Advanced Vehicle Control Systems;
4. CVO – Commercial Vehicle Operations;
5. APTS – Advanced Public Transport Systems;
6. EMS – Emergency Management Systems;
7. ETC – Electronic Tax Collection);

All these subsystems of the Intelligent Transport Systems must be place in applications for a better development of the road traffic.

The modernization of the road, naval, railway infrastructure will permit the optimization of the mean of transportation usage, the rise of the average speed and the fluidity of the traffic and the enlargement preferences of the beneficiaries in competitiveness conditions.

Thus, for using the road network at full capacity ATMS must offer a diversity of services such as:

- The traffic lights control according to the traffic requirements;
- Automatic control of the panel with variable messages and that of a guidance signs for the route;
- Video camera surveillance;
- Transport supervise;
- Geographic informational administration by using the GIS systems;
- Information about the evolutions of the transport;
- Radio information of the passengers;
- Television broadcast with transport information;
- Internet access at traffic information;
- Watching the vehicles using GPS or other systems;
- Automatic management of the parking;
- Automatic detection and incident management;
- Aerial surveillance operations with direct video transmissions;
- Automatic integration with the police and firemen squad;
- Integration with advanced systems for highways, etc

For the traffic surveillance and for the automatic gathering of the traffic data are using classic detectors with inductive loop, which collects every minute data regarding the occupational traffic jam and the speed used by the vehicles. There are also used in the traffics lights crossroads to command the traffic lights for the vehicles that enter on the secondary area. They are tested as radar sonic detectors.

The usage of the modern technology allows the control, the monitor of the traffic, providing data with classification and speed of the vehicles, automatic detection of the incidents and other advantages for the fluidization of the traffic, rise the circulation speed in the rush hours, diminish the accidents number, improve the incidents management and other special events.

ATIS - Advanced Traveler Information Systems is another principle according to the optimization of the traffic. It also uses different technologies (maps, schedules), which allows the passengers to inform about the transport network and the possibility to choose the most efficient means of transportation (car, train, bus), the route, the time, etc.

The passenger's information before or during the voyage can be a static one (with events planned that rarely are modified) or in real time (current information, available at some point).

These two types of information differ by the fact that the static one is considered a information before the journey take place, (constructions and planned maintenance activities that diminish the traffic lane; special events that generates a traffic increase; tax information (price, pay options, information regarding the transport – journey tickets, schedules, ticket buying options, routes;- information regarding the multimode transport, connections, services; regulations for merchandise transportation – restrictions over the high, weight, dangerous materials; information about the parking – geographical position, cost, possible routes to the destination). The information in real time can be used both before the journey and during it – (traveling conditions, possible alternative routes, respecting the schedule, the parking status, the anticipate duration of the journey until the destination, identifying the next stop of the train, bus, etc).

We can say that one of the main new policy of the transportation is the improving of the traffic safety, the diminishing of the accidents victims caused by the road transport and especially the encouragement of the new technology development by introduction of new secure vehicles and of the ITS systems (ITS – Intelligent Transport Systems). This type of system can allow the avoidance of the unexpected situations related by traveling and the assurance of its continuity, the reduction of the time spent on the transfer between different types of transportation.

The economical evolution of a country, of economy in general is not to be done without the transport. They assure the progress of the industry and agriculture production, the goods and people circulation. It has also facilitated the access to the natural resources and stimulates the exchanges.

The transport with a 7% weight of the Gross Domestic Product represents the second service category, after the commerce, as importance in the tertiary sector and at the same time an activity with a contribution to the economical growth equivalent as the agriculture. The transportations have a constant evolution in the annual rhythm of high-rise. The transport strategy starts from the premise of increasing the transportation activity in GDP from 7 % presently to minimum 10 % in 2015. As Romania to align at the average standards of the European Union, in order to extend and connect its own transport networks with that trans-European, it is necessary to apply for the financial program ISPA. This ISPA program started in 2000 and it is unfurling in several European states form Center and East Europe: Romania, Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Poland, Slovakia and Slovenia. Through this program Romania receive 240 million euros / a year, distributed almost equal between the infrastructure projects and that for the environment.

Conclusion

The transport represents the most important part of the contemporary society and of the economical activities organized against the distances. It is strong connected with the human society; it appeared along with it, it is not a purpose in itself but a way of developing a multitude a practical purposes. The first passenger's services started in Germany in 1910, the first passenger's route in the USA started in 1914.

The transport determines all the economic-social life, and its development constitutes an important objective of each economical policy state, assuming a particularity regarding the other branches of the economy. The main difference is the characteristic of being a service creator – defined as useful moving effects in space for the merchandise and people, terrestrial, naval, aerial, - and not tangible products.

The terrestrial transport is the widest one. People can move by themselves or using different means of transport that use human labor, such as bicycle, or can use the animal traction for carriages or other types of tools. The widest and the most efficient way of terrestrial transportation use vehicles with liquid fuel engines

The transport as sector, knows different stages of world development, the countries confronted by a series of impediments, which need to be removed to allow an evolution of the reciprocal economical relations.

An efficient transport infrastructure connected to the European transport network leads to a competitiveness economical growth, facilitates the integration in the European economy and allows the development of new activities in the internal market.

Differences that appear in these services from different countries are due to a number of factors: the existence of state monopole; the traditional structure of the market; the disparity of the fiscal, administrative and commercial rule; the general trust in national policies of modal orientation; a multitude of different technical rules, which sometimes can be incompatible; interests groups that prefer separation over the opportunities rise and challenges to competition.

To guarantee good functional conditions of this service, it was defined a series of rules that must be obeyed by the communitarian transporters regarding the security, professional skills, social dispositions, eliminating the technical, fiscal and social distortions of the free concurrence.

In this way it can supply transport services from a state to another by the communitarian transporters without discrimination.

These rules are about to be implemented to Romania by the end of 2013. They intend to satisfy the economical, social, and environmental needs of the society, diminishing in the same time to the minimum the unwanted impact upon economy, society and the environment.

Taking into account the fact that for the transportation sector it has allocated the most part of the EU funds, for thematically priorities, due to the precarious infrastructure and of vehicles states as well as the negative tendencies recorded in the last few years regarding the productivity of the consumed resources.

It desired the modernity of the transport sector with the purpose of gaining a high level performance over the environment protection, human health and passenger's safety. By developing the Modernity and maturation project of the priorities axes of trans- European transport (TEN-T) on Romania, in the purpose of unfurling a sustainable system of transport integrate with EU networks, to reduce significantly the time spent on traffic, the improvement of the safety and the quality of services to the main destinations at national level in EU framework as well as for the passengers and for the goods, and the diminishing the side effects over the environment as well as the accidents those with victims at 1 million passengers by 20 % until 2015.

To minimize the adverse effects of the transportation over the environment it has established a distinct strategy at national level – compatible to the new policy of the EU for the environment protection in the transport field, methods, monitor and control means for the polluted emission and greenhouse gas effect and for noise provoked by the transport activities. It will be done the cartography of the noise emission provoked by the transportation to establish the proximal modality to protect the population and the environment.

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