## CONCEPT AND STRATEGY OF DEVELOPMENT OF ROAD INFRASTRUCTURE IN MUREŞ COUNTY TO REDUCE TERRITORIAL DISPARITIES AT MESOSCALE AND MICROSCALE<sup>1</sup> Part I. Theoretical background

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**Abstract:** Concept and strategy of development of road infrastructure in Mureş County to reduce territorial disparities at mesoscale and microscale. Road infrastructure is part of the territorial transport and communication infrastructure, which has the highest impact on development due to its specific features: accessibility, low costs for execution and maintenance, complementariness, diverse typology. These features promoted road infrastructure as the most advantageous pillar for supporting the intercontinental territorial development, which are characterized by various and unstable terrain, both at mesoscale and microscale. The strategy of development of Mureş County evaluated road infrastructure as the basic infrastructure in the development process. Starting from the analysis of current situation, along with all dysfunctions evaluated at a county level, this paper aims to develop a new concept of development of road infrastructure, theoretically based on the European and national framework regarding territorial development. The major objective of this concept is represented by the decrease of territorial disparities at both mesoscale and microscale within the county.

Rezumat: Concept și strategie de dezvoltare a infrastructurii rutiere în județul Mureș penrtu reducerea disparităților teritoriale pe microscală și mesoscală. Partea 1. Concepții teoretice. Infrastructura rutieră face parte din infrastructurile teritoriale de transport și comunicație care au cel mai mare impact asupra dezvoltării datorită caracteristicilor specifice: accesibilitate, costuri reduse de execuție și întreținerem complementaritate, diveristate. Aceste caracteristici fac din infrastructura rutieră cea mai avantajoasă componentă a dezvoltării teritoriale intercontinentale caracterizată de teren variat și instabil atât la nivel de mezoscară și macrăscară. Strategia de dezvoltare a Județului Mureș consideră infrastructura rutieră drept infrastructura fundamentală în procesul de dezvoltare. Începând cu analiza prezentei situații, împreună cu disfuncționalitățile de la nivel județean, această lucrare își propune să dezvolte un nou concept de dezvoltare al infrastructurii rutiere bazate teoretic pe concepția europeană și națională asupra dezvoltării teritoriale. Obiectivul major al acestui concept este reprezentat de diminuarea disparităților teritoriale atât la nivel de mezoscară cât și de macroscală la nivel național.

<sup>&</sup>lt;sup>1</sup> This paper is a synthesis of the chapter regarding technical infrastructure of the territory, roads section, included in the project no. 63129/2007, Mureş County Spatial Plan (PATJ)

**Keywords:** strategy of development, road infrastructure, territorial disparities, mesoscale and microscale

**Cuvinte cheie:** strategie de dezvoltare, infrastructură rutieră, disparități teritoriale, mezoscară și macroscară.

#### **INTRODUCTION**

Territorial infrastructure represents the *spine* of territorial development through its entire set of systems and technical networks, as well as its installations, located both on the ground and underground, on the streams, which enhance the access, transport and communication among different locations within a territory for the well functioning of social-economic activities. Due to the current pattern of spatial economic organizing, in terms of establishing locations for the exploitation of raw materials, processing centres and outlets are dispersedly distributed within the territory and, given the openness of the human social systems, territorial infrastructure represents the geospatial component that provides and supports the existence of these geosystems. Consequently, the degree of development and the complexity of territorial infrastructure depend on the status of other anthropogenic components of the space (settlements, the pattern of economic management of resources and territory, economic systems etc.).

The implementation of new enterprises in the territory and the accelerated development of some urban settlements go along with the extension of specific territorial infrastructure, which is designed to support this development.

Territorial infrastructure also contributes to introducing new territories into the economic circuit, by connecting them to the economic assemblies and the current systems of settlements, namely to correct deficiencies and increase their economic value.

The spatial configuration, as well as the typology and density of the territorial infrastructure constitute both a support and a guide for the economic recovery of a territory. On the other hand, the natural and anthropogenic capacities of a geographical space by the configuration of terrain, hydrographical network, the site of soil and subsoil resources, the reserves and protected areas, and settlements determine the spatial organizing model of the regional infrastructure and its rank.

The rank and degree of modernization of territorial infrastructure represent the orientation, stimulation or inhibition factor for the spatial development.

By providing support for the traffic of raw materials, energy, information, goods and people, territorial infrastructure offers and holds the balance of spatial differentiation between geographical areas that register surplus or deficiencies.

The lack of some infrastructure categories within a territory, along with their precarious state constitutes an inhibition factor for the development and transformation of that territory from a central area (which usually corresponds to a settlement) into a peripheral one, with divergent fluxes, of population, especially.

Therefore, the development of a territory mainly depends on the status, typology, rank and level of its infrastructure development. Infrastructure is the first to be implemented in the territory (as spatial configuration, type and rank) and that will further dictate how to develop the other anthropogenic components (settlements, the manner of economically exploiting the territory, the pattern of environment preservation). From this perspective, the

strategies for regional development and the orientation of investment funds must focus on the investments in infrastructure and, later on, in other elements.

#### **1. METHODOLOGY**

The future of a county is strongly determined by its ability to combine key factors of development, namely:

a. The capacity of processing information, hence the capacity of innovation.

b. The quality of life.

c. The capacity to establish connections with the neighbouring peripheral counties.

d. The capacity to establish domestic and international connections.

Any process of planning should take into account these factors.

In this context, the reason of development is characterized by the superiority the *"space of flows"* has against the *"space of places"*. This logic and its supporting forces tend to generate a highly polarized structure.

Nevertheless, we should primarily consider the major phenomenon of *proliferation of suburbs* and its effects. This phenomenon has many consequences on daily life, as it determines agglomeration and traffic jams, thus it significantly damaging the quality factors of environment and altering the land use.

Therefore, we should redefine the main functional structures and comply with the phase of urbanization process in which the city currently is (i.e. urbanization, establishing the periphery, deurbanization etc.).

The new schemes of spatial polarization as well as the functional specialization of the core and peripheral areas become crucial in this context.

The phenomenon of increasing the division of labour both at the level of national and European economy, challenged and enabled by the internationalization and integration of economy, shaping new high-speed transport infrastructure and transforming the economic system, due to technological development of all types of production, distribution and communication systems, requires a rethinking of the role city has in the national and regional economy and the restructuring of a new urban hierarchy.

The new influence areas and the new system of complementarities and competitions change the urban structure from a polarized urban-rural system characterized by a specific hierarchy, into a coherent network of towns along the axes of development.

The new trends of the dynamics of local and county development is based on several principles which are included in the local and county policies, which integrate the global dimension and which require a radical change of perspective of actors involved in the development process.

The literature has revealed *five basic principles*, considered essential to manage this mutation:

1. The pattern of infrastructure organizing should comply with the policies for the management of tangible and intangible resources.

2. Adjusting the size constraints, fact that still structures the local and county development process, as well as reviewing the relations between urban – suburban areas, urban - rural areas, and rural – rural areas.

3. Promoting the "deisolation" of the remote areas around the poles of activity, based mostly on the development of transport and telecommunication infrastructure.

4. The local development policies should be part of a major evolutionary and continuous strategy.

5. New integrated actions for local development, based on the key domains of the local dynamics, should be enhanced.

According to the recent document elaborated by the "European Research Group on Areas Favourable for Innovation" (ERGAFI), we highlight three types of territorial dynamics that seem to prevail at present:

1. Metropolitan dynamics: economic changes increase the capacity of attractiveness of the major metropolitan centres for reasons related less to the decrease of costs than to the *"functions of urbanization"*;

2. Technopolitan dynamics: this form of spatial organizing subscribes to a course based on science – the purpose of a technopole is to gather research and development resources, focused mainly on technological creation and not on industrial adjustment of existing technologies;

3. Dynamics of development based on the "industrial district"<sup>2</sup> - the dynamics of development in the areas suited for innovation.

#### 2. TRANSPORT NETWORK - CONCEPT

The role of transport routes and communication network in the economic and social development is crucial; nowadays, if transport infrastructure is functional, it becomes a *major advantage* in the national and international competition. Another specific aspect of this type of infrastructure is that it not only affects the local community but also the outsiders that use it, this somehow representing the "*business card*" of a territory.

The European Community assigns a significant role to transportation network in the social and spatial development of the territory.

In this respect, there have been developed a series of regional strategies aimed at the entire territory of Community and some of its regions.

One of the first documents elaborated was the Common Spatial Development Scheme, Potsdam 1999. In this document, there were outlined three goals for the spatial development and social policy in EU, namely:

• developing a balanced and polycentric urban system and a new town-village relationship;

• ensuring a balanced accessibility to infrastructure and knowledge;

• sustainable development, practical management and protection of natural and cultural heritage.

The issue of transport network was divided into the following sub-themes:

- difficulties regarding the network's integration;
- the increasing flow of transport and the signs of overload;
- the deficit of accessibility within the European Union;
- the concentration and development corridors.

<sup>&</sup>lt;sup>2</sup> The concept of "industrial district" refers to a method of spatial organizing towards the creation of a productive system, which benefits from the relationships developed in the proximity of the local area. Flexibility and technological capability are the specific features of this system's core.

The guiding principles for the sustainable spatial development of the European continent – according to ERGAFI, Hanover 2000, were stipulated in a framework that thoroughly analysed the issue of territorial technical infrastructure in terms of its role in diminishing regional disparities and promoting sustainable spatial development.

Among others, they underlined the following:

• promoting development generated by urban functions and by improving the relations between cities and villages; town-village partnerships play an increasingly important role, especially in a balanced structure of urban network, in the reinforcement of urban public transport network, in the revitalization and diversification of rural economy, in the development of recreational areas for urban populations, in the protection and management of natural and cultural heritage.

• promoting more balanced conditions of accessibility, which implies a more balanced planning policy in regional terms to ensure a better interconnection of small and medium-sized cities, as well as between both rural and island areas and the main axes and transport facilities (railways, highways, ports, airports, intermodal centres) and eliminating gaps in intermodal connections.

Lisbon Declaration on Networks for Sustainable Spatial Development of the European Continent: Bridges across Europe, the 14<sup>th</sup> ERGAFI Session - Lisbon, October 2006, was based on the principles and objectives proposed by the Committee of Senior Officials for the period 2004 - 2006 and focused on "*Networks for sustainable spatial development: bridges across Europe*".

The declaration covered the following aspects:

*I. The growing importance of networks.* Networks, formed by a number of nodes and of direct or indirect links between them, are a fundamental element of companies and an essential tool for the construction of "*bridges across Europe*" as they foster the sustainable interdependency between different elements and territories.

Each node of a network has limited resources; therefore it depends on the resources of other nodes. The role and efficiency of a network depends on the quality of each node's resources and of the quality of interaction between them. This assumption is valid in the contemporary knowledge society, in which the coordination of resources for research and development as well as the dissemination of information and knowledge is essential to creativity, innovation and competitiveness.

Providing a future for Europe requires the strengthening of interactions and exchanges at regional, national and European levels. Networks and "bridges" should be built for Europe's territorial and socio-economic development. The success of sustainable development depends on strengthening the interaction between different systems.

Virtual networks, as networks of cooperation, need *infrastructure networks* that foster communication and exchange. Transport, information and communication technologies are essential for the integration of the European territory. The extension of major transport routes contribute to the creation of qualitative pan-European connections.

Networks are instruments for good governance.

*II. Identifying the priorities for cooperation and network-building.* Cities and poles of regional development represent the primary nodes of national and transnational trade for the distribution of goods and services; they are also centres of knowledge, culture, information and innovation. City networks are very important in disseminating the best

practices, in formulating and promoting new ideas on the dynamics of sustainability, competitiveness, polycentric development and social integration. Urban cooperation and urban networks should be strengthened, such as the recent "European knowledge network on European politics".

Cities and regions will have new roles in an economy of global knowledge. Urban networks can be a particularly effective support for the accumulation of new knowledge and information in areas, such as: innovation, employment policy and economic growth, sustainable mobility, as well as urban regeneration.

The diversity of cultures and regional identities provide an invaluable potential for the territorial development. The networks of civil organizations and various social groups, as well as the social networks that evolve in social processes and phenomena form an unranked structure of complex social aspects of regional relations.

For Europe's identity and sustainability, it becomes strategically necessary to establish protected natural areas, even of different degrees of protection. Strengthening the *pan-European ecological networks* is supported by the construction of "*green bridges*", fact that has to be encouraged not only for the sake of conservation and biodiversity, but also to maintain the particular character of the landscape.

Landscapes, particularly the cultural ones, are an important part of European cultural and natural heritage, thus contributing to the European identity and its potential development. Their diversity and quality should become the basis of a "European network of landscapes" included in the European Convention on landscapes.

All European countries are misperceived by the issue of integrated rural development. Rural areas, often isolated, are generally low-density, characterized by ageing population and an underdeveloped urban network, in which the weak presence of economic and social actors emphasizes the strategic role of cooperation networks. The concept of the *"pole of rural development"* can be useful in the cooperation of rural areas with one or more small cities (towns).

It is essential to strengthen the capacity to produce, assimilate and disseminate knowledge on issues of planning and territorial integrated development. By using the European experiences in progress, Member States could participate actively in the setting up of pan-European networks, in the elaboration of public policies that contribute to a more integrated and balanced development.

*III. The contribution of networks to sustainable spatial development.* Pan-European networks can strengthen competitiveness and innovation, driving territorial cohesion, but, without it, could not be considered a miraculous solution to diminish *regional disparities*.

The asymmetrical shape of networks can be overcome by emphasizing their role in the cooperation between peripheral regions and as a tool for the dissemination of knowledge.

The European states must take into account how the networks of different levels operate and the possibilities for action between them. The transnational level is the one, at which the greatest number of experiences and innovative cooperation relationships can be achieved. Transnational networks can be created by integrating the strategic cooperation between cities and regions in establishing social, economic, environmental or cultural networks. These considerations should be considered in the development and implementation of spatial policies. Taking into account the issues above mentioned, we highlight the fundamental role ERGAFI has in the development and diversification of European dimension of cooperation networks and, in this respect, several *priorities of action* are established, such as:

• the recovery of the role that networks play in cooperation, in the central and peripheral regions and between them, so as to promote territorial cohesion and increase competitiveness, innovation and creativity in Europe;

• the coordination and cooperation between the members of a network and their public administrations at national, regional and local level, between public policies ranging from land-use planning to those that carry a certain impact at different levels of action. The thematic regional networks have to encourage continuous learning processes in the field of territorial planning;

• promoting several "environments for networking", specific to various areas of activity and administrative levels, which should be able to implement the necessary activities for networking. Member States shall take measures for the European territorial cooperation and neighbourhood policy to strengthen the pan-European cooperation networks.

The national main directions of development of The Communication and Transport Network were formulated by the National Development Plan (NDP) and their National Strategic Reference Framework 2007-2013 (NSRF); there were established six national development priorities, grouped within a range of areas and sub-priority areas, including the development and modernization of transport infrastructure. The development of local and county infrastructure (transport, environment, health, education, social work, urban rehabilitation, public utilities) is considered Priority I to reduce the existing disparities between Romania and the European Union, as sustainable economic development presupposes to support a good transport infrastructure to serve all economic sectors, as well as to facilitate access and communication in the county.

The overall objective of Priority 2 of the NDP is to ensure an extensive, modern and sustainable transport infrastructure, and all other requisites for sustainable economic development and an improved quality of life, so that the ratio of transport activity in GDP to increase from 3.6 billion (currently) to at least 7.0 billion by 2015.

Achieving this objective directly contributes to increasing the level of accessibility of Romania, ensuring inter-modality of the transport system and promoting a balanced development of all transport modes, improving the quality and efficiency of services, reducing environmental impact of transport, and ensuring a sustainable development of transport sector by restarting the short-term demand. Nevertheless, indirectly, this fact supports the ideal integration of the Romanian economy into the global economy and stimulates the growth of cross-border flows of people and goods, through the influence of transport supply on the economic agents, in terms of costs.

Specific objectives: upgrading the road network of national interest, ensuring railway inter-operability.

The development of transport infrastructure represents a prerequisite for the successful implementation of other development priorities in Romania for the 2007-2013 period, therefore contributing to an increased mobility of people and goods, to the integration of regional poles of growth into the trans-European transport network, to fighting against isolation and underdeveloped areas, and last but not least, to the development of regional and local transport infrastructure.

Romania has established the guidelines for communication routes, of European and national interest, by the National Spatial Development Plan (NSDP) Section I "Communication axes", as a support for a long-term complex and sustainable development, and also for regional development. At the same time, it represents the specific contribution of our country in developing the European space and the premises for subscribing to the dynamics of European economic and social development.

NSDP Section I "Communication axes" defines the foundations of the national network of communication routes, thus identifying the priority projects and the harmonization measures necessary for its development on short, medium and long-term. It proposes solutions to establish balanced economic relations in the territory, aiming at targets endorsed at the European level. Therefore, it creates the connection between the main national communication networks to three of the major transport European and pan-European corridors IV, VII and IX, crossing the Romanian territory, thus providing the link between Central and the East, North and West Europe. The provisions of section 1 are stipulated in accordance with agreements set in the pan-European transport conferences.

Much more, by Law no. 203/2003 (republished) on the implementation, development and modernization of transport network of national and European interest, there are established the priorities for the development of transport infrastructure on short and medium-horizon, by 2015. The future economic growth, the evolution of society and the changes in territorial development will exert an increasing pressure on transport, requiring a steady improvement of infrastructure and quality of services.

Sectoral Operational Programme for Transport Infrastructure (SOPT) (2007-2013) is the tool to develop the goals of the National Strategic Reference Framework of Romania (NSRF), setting priorities, goals and financial allocations for the development of transport sector in Romania. The total budget of SOP-T for the programming period 2007-2013 is estimated at around 4.9 mild. Euro, representing 18.5% of the overall budget calculated for structural operations in Romania for the period mentioned above. Out of this amount, 4 billion Euro represents the financial support of the European Community, while the national co-financing will reach approx. 0.9 billion Euro.

Community funding will be provided by the Cohesion Fund (CF) and European Regional Development Fund (ERDF).

SOP for transport infrastructure is based on the compliance of laws established by the European Council (the proposed Regulation 15931/05, in December 21<sup>st</sup>, 2005) setting up general provisions applicable to the ERDF, ESF and CF.

Along with the SOP for transport infrastructure, it was developed the OP (Operational Programme) for Regional Development. Both programmes are integrated into a common strategy of development so as to achieve a coherent transport system providing for spatial cohesion and inter-operability between transport systems of the European Union.

The main objective of SOP Transport - is to promote an adequate, modern and sustainable transport infrastructure in Romania, facilitating the safe and efficient movement of people and goods, at European standards, nationally and internationally.

SOP Transport is one of the most important pillars of the NSRF, having a large impact on the economic and social development of the country. For achieving the objective of SOP Transport, it is proposed that funds from the EU and the state budget to focus on the modernization and development of TEN-T, as well as the national infrastructure on all modes of transport.

SOP Transport aims to create conditions for increasing investments, promoting sustainable transport and spatial cohesion. As a result of modernization, the improved transport infrastructure will directly lead to the increase of competitiveness of the products processed and services provided, both in the key sectors of the economy and in all regions of Romania.

The decrease of noise and air pollution in cities, along with the increase in the use of public transport and the facilitation of modal exchange to other less polluting transport modes such as railway and water transport, will have a positive impact on the Romanian economy, in terms of environmental health and protection. The global effect will be the general improvement in the Romanian economy.

The rehabilitation of infrastructure will particularly:

• encourage capital investments required in the locations that are currently difficult to reach or register excessive traffic jams;

optimize transport services offered to customers;

• allow the development of improved logistics systems, resulting in lower costs of goods purchased and delivered;

facilitate cooperation between producers and deliverers;

• increase the potential for access and penetration of new markets.

The Romanian strategy of financial absorption can bring significant economic, social and environmental benefits. In addition, the strategy provides the conditions for the implementation of the concept of developing a Romanian transport system nationwide, which to be internally *coherent* and *inter-operable* with the Union European system.

The initiatives proposed for funding by the Cohesion Fund are concentrated in the priority axes already identified by the European Union, which have fundamental importance for the creation of spatial cohesion in Europe. Operations to be financed by the ERDF component of the SOP for transport infrastructure also aim at increasing the accessibility of the Romanian regions.

In addition, the *General Master Plan for Transport (GMPT)* for Romania is in progress and it will provide the provisions for the future development, yet, using the knowledge gained from the SOP for transport infrastructure as the basic criteria for determining the viable projects.

Modernization and development of TEN-T priority axes

Modernization and development of the national transport infrastructure outside the TEN-T priority axes. As the main objective of this priority axis, it is proposed the modernization and development of road, railroad, water and air transport infrastructure in the national network outside the TEN-T priority axes. This will increase the volume and the traffic speed of passenger and freight, in terms of safety and quality of service, including the railway interoperability. To achieve this objective, SOP Transport will consider the other operational programs and avoid duplication within their operations.

PRIORITY AXIS 3 subscribes to *the modernization of railway infrastructure for passengers both for national and TEN-T networks*. This priority seeks to promote the balance between modes of transport, provision of faster, more reliable and better quality services, at European inter-operability standards, for the national and international railway transport of persons, by modernizing the railway stock so that railway transport infrastructure could compete with road transport infrastructure, which is increasingly used.

PRIORITY AXIS 4 Sustainable development of transport sector aimed at implementing the principles of sustainable development of the transport sector in Romania, in accordance with the conclusions of the European Council at Cardiff (1998) and the European Strategy for Sustainable Development. It will promote a higher level of safety, and it will minimize adverse effects on the environment as well as promote inter-modal and combined transport.

Romania has to recover a huge gap in infrastructure, as compared to the rest of EU countries. For example, out of the road network of nearly 80.000 km, only 20% are national roads. The rest of them are county and local roads, whose level of utility decreased dramatically in the recent years. This is because only 21.000 km of roads have been rehabilitated. They are physically overused and because the number of roads in Romania has not changed for over ten years. Roads in tourist areas are now extremely crowded during the season. According to the size of the country, Romania has the lowest density of roads in all EU Member States, which is of 33.5 km/100 sq km.

At a national level, the highest density of public roads is registered by the regions of Bucharest-Ilfov - 49.9 kilometres, North-East - 36.5 kilometres and South-East Oltenia - 35.9 kilometres. Over 60% of roads and motorways in Romania are physically and technically overused.

#### 3. PRIORITIES FOR THE DEVELOPMENT OF MUREŞ COUNTY FOR THE PERIOD 2007 – 2013

#### 3.1. Strategic objective

As the socio-economic analysis of the county presents it, the evolution of the economic indicators has registered a decrease since 1990, after this moment a stabilization process being registered, still, with a remarkable the growth trend in the recent years.

Mureş County is located in a central strategic position, which may encourage the development of good road and railway infrastructure that should connect the most remote geographical sites of the country. Much more, this position may support new commercial activities and the mobility of population towards Mureş County for practicing tourism activities.

In recent years, the county's economy has gone through an intense process of restructuring of several large unprofitable factories, some of which having a negative impact on the environment. Both economy and society are profoundly marked by restructuring, but, due to the revitalization of industry and services, there is a substantial capacity to absorb the unemployed labour force. Once with the restructuring process, the traditional industrial centres have lost their character of dominance, thus increasing the social mobility, mainly from urban to rural.

Given the socio-economic disparities at the county level, and taking into account the objectives of regional development in Romania, established by Law 315/2004, the global strategic objective is:

To increase the economic growth of the county, so that the ratio between the most developed and the least developed areas to be reduced by the end of the programming period. The basic orientation of the strategy is the potentiation of the county strengths, in order to handle growth opportunities and minimize weaknesses effects by removing the factors that block the development.

In essence, this strategy aims to take measures in order to enable the economic recovery and improvement of the less developed areas, taking into account the social protection and conservation.

The measures formulated for the implementation of this strategy focus on five fields of action: infrastructure, economy, environment, human resources, and tourism.

#### 3.2. Specific objectives of the strategy

The specific objectives of the strategy are the following:

• to improve the overall quality of regional transport according to environmental protection rules;

• increasing prosperity of inhabitants in the county by developing small and medium enterprises and creating jobs;

• enhancing the role of tourism in the economy through direct investments, promotion and improvement of tourist services;

• increasing the living standard of rural population by diversifying economic activities in terms of preserving the natural and historical heritage;

• raising economic performance by supporting research, technology transfer and development of information networks for business;

• reducing unemployment by improving employment and adaptability of workers, promoting equal opportunities, improve training and combat social exclusion;

reduce disparities in the development of urban centres in the region;

• development and encouraging partnerships in the fields of research and technological innovation.

#### 3.3. Strategic priorities for development

The County Development Strategy, by its established priorities, encourages a powerful economy in the county, by using all human and physical resources in accordance with the environmental and heritage conservation, therefore leading to an increase of living standards of inhabitants. This strategy focuses on the following priorities and measures:

*1. Improving the local and county infrastructure (transport, environment, health, education, social work, urban rehabilitation, public utilities)* 

1.1. Development, rehabilitation and modernization of transport and communications infrastructure.

1.2. Improving the technical infrastructure and for environment protection.

1.3. Development and modernization of education infrastructure.

1.4. Development, rehabilitation and modernization of health infrastructure.

1.5. Reorganization and development of social infrastructure.

2. Business Support

2.1. Setting up and developing SMEs in the manufacturing and services sectors.

2.2. Promoting industrial products and services on domestic and foreign markets.

2.3. Developing business by establishing specific locations.

2.4. Supporting research, transfer of technology and networks of information for the development of business field.

3. Tourism development

3.1. Development of tourist infrastructure.

3.2. Development, diversification and promotion of tourist offer.

3.3. Improving services in tourism.

3.4. Conservation of natural historical and cultural heritage.

4. Sustainable development of settlements

4.1. Sustainable urban development.

4.2. Sustainable rural development.5. Increasing employment, developing human resources and social services

5.1. Promoting active employment measures for the available labour force and the development of initial and continuous training.

5.2. Improving and extending the system of social services.

5.3. Achieving specialized skills in the fields of management and business development.

## **PRIORITY** 1 – Developing local and county infrastructure (transport, environment, health, education, social work, urban rehabilitation, public utilities)

The sustainable economic development is based on high-quality transport infrastructure, so as to be able to serve all economic sectors, to facilitate access and communication within the county. Still, there must be created conditions for economic growth and employment, therefore the poor quality of infrastructure or the lack of it, preventing the development of many localities, this representing one of the main reasons for their lagging behind.

The inadequate network of roads in some areas and the difficult access to these determine the low mobility of people, impede the access to the available freight and services, reduce employment opportunities, damage the social and economic functions of communities and, hence, their internal cohesion. The financial support for new investments in the local infrastructure, as well as the environmental improvements lead to an increase in the economic and social activities, enhance relationships, thereby unlocking the unexploited potential.

Improving the road network represents a fundamental prerequisite for the future economy development of the county. Financing will improve the access to disadvantaged areas that have certain potential for development (i.e. Târnăveni town and its adjacent area, the lower and upper valley Mureş river, the neighbouring settlements of Stînceni, Lunca Bradului and Răstolița); much more, it will improve the access to industrial and tourist areas to increase the exploitation degree of their resources.

Sustainable economic development cannot be perceived but only as an integrated system that covers all economic sectors, transport and communication infrastructure as well as the administrative and social activities.

The development and diversification of industry, by improving the quality of tourism services and developing all services, are strictly dependent on the rehabilitation and extension of transport, communication infrastructure, and not only.

For enhancing trade activities, with direct implications on attracting foreign investors and for emphasizing the value of all tourist objectives in county, it is necessary to ensure accessibility to air, railway and road network, namely depending on the development and modernization of the International Airport - Târgu Mureş, road rehabilitation and expansion of telephone networks in all localities by using the appropriate technology.

Particular importance should be given to the management of secondary sources of energy. The interventions to rehabilitate infrastructure, improve the access to public facilities and regenerate the common environment is required, especially in regions that are lagging behind. To solve the above mentioned problems and achieve the set objectives, the interventions will focus on 3 measures of development.

There will be studies, financially supported, in order to identify transportation routes with maximum impact on county economic development, to facilitate exchange of goods and services, and, particularly, to rehabilitate the access routes to areas with a certain economic impact and to resorts and tourist areas. Financial support will be provided for supporting works both in the field of transport and communications and social infrastructure.

By improving infrastructure it will increase the county attractiveness for investors. The economic potential of the county will increase and facilitate connections between centres of regional importance; it will also improve the status of the disadvantaged urban areas. All these will lead to improving the quality of life and help building a common attractive environment, especially in the less developed areas. It will particularly focus on the following:

providing optimal accessibility of people to road, rail and air transport network;

• developing the communication networks in accordance with the policy of service development in the county;

• creating the necessary premises for the diversification of industrial and service supply, as well as for the intensification of domestic and international trade;

• the harmonization with European standards on water quality, waste water treatment;

• the modernization and rehabilitation of education, social and health infrastructure.

#### Objectives:

• to improve accessibility to areas and centres with economic potential and that register delays in development;

environment protection and preserving natural resources;

• improving health and social services, and access to education and training.

Expected Results:

• favourable environment to attract new investments, therefore creating new sustainable workplaces;

• improving transport infrastructure will create direct connections between the economic poles of development and the Pan-European corridors, having a direct effect on the improvement of business environment;

• the rehabilitation of transport infrastructure will result in advanced training and mobility of people and, therefore, better access to employment and education;

• the harmonization with European standards in the fields of quality drinking water and water waste aims to provide a higher living standard for inhabitants;

• the preservation, protection of environment by rehabilitation and use of clean technologies, and by setting up industrial activities in the degraded areas to provide a cleaner environment with direct effects on health of residents and increase their life expectancy;

• the implementation of actions will stimulate the partnership between public administrations, NGOs and private companies to create an infrastructure capable of ensuring waste management by using new and clean technologies;

• an increasing number of companies specialized in the collection and management of waste, hence, creating new jobs;

• actions will also have an indirect effect on increasing the education level of the population in terms of maintaining a clean and healthy environment;

• the modernization and rehabilitation of health and education infrastructure, in accordance with the needs of long and medium-term integrated economic and social development of the settlements, will result in an increased living standard of inhabitants;

• increasing the role of education in building regional competitiveness;

• improving the quality of health services in the county, especially in the less developed areas;

reducing inequalities in terms of access to quality health and education services.

# Measure 1.1. Development, rehabilitation and modernization of transport and communication infrastructure

Specific objectives:

• rehabilitation and development of local and county physical infrastructure in order to create a favourable environment to attract new investments, to promote growth and create sustainable jobs;

• improving transport infrastructure between the economic poles and the pan-European corridors, at a county level;

• to facilitate the access to industrial and tourist areas of interest and to the remote areas in the county;

• to support the development of the county service sector that ensures the creation and development of communications network;

• to connect the existing transport infrastructure to the future București – Borș highway;

• to improve the infrastructure of Mureş County and other counties of the region. *Type of intervention:* Support through Grant Schemes

#### Type of action and technical aspects:

The deficiency of transport infrastructure, particularly the road network, has led to a great loss of economic efficiency and generated a negative image of the locations for investments. There are major difficulties in the urban traffic and that of freight, in the absence of ring roads in cities like Târgu Mureş, Reghin, Sighişoara.

At the county level, the urban transport of passengers is held by buses and minibuses, the actual transport network at the county level being poorly developed, with deficits, particularly regarding the transport connections with remote areas.

Transport infrastructure will be supported especially as soon as it demonstrates its obvious and direct link with the economic development. Projects must fulfil the county needs, proving the widest possible impact, and they must anticipate and provide a broad partnership between local/ county/ regional levels and/or county/ regional/ national levels. The main concern will be related to road infrastructure, and also railroads and air infrastructure in the county.

So as to raise the living standards of rural residents, it is important to ensure the population of villages the optimal conditions for accessibility to the road network and the communication systems, yet, optionally to railroads. In this context, the financial support is intended to modernize county and communal roads, insisting on those that provide access to villages and isolated communities. It also fosters the development of communications in the remote areas and visiting attractions that are not yet included in current coverage areas.

#### *Eligible activities will be:*

• the rehabilitation and modernization of county roads that connect with the national road and railway networks, the future București - Borș highway, the European transport networks (TEN-T);

• the modernization and rehabilitation of local roads to increase their attractiveness as locations for new investments;

• the modernization of county and local roads to facilitate connections between the main urban centres, as well as between them and the peripheral areas, to create the basic conditions to allow the underdeveloped areas to attract investment flows in coming period, so as to ensure a balanced territorial and economic development;

• these road networks will facilitate the mobility and access of population to work places, health care, education, culture, recreation, as well as increasing the freight flow;

• the rehabilitation of roads of local interest to eliminate congestion and safely crossing localities.