National Regional Development Strategy
of the
Slovak Republic
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Introduction

The regional development of Slovakia is significantly affected by the EU regional policy. The accession of Slovakia to EU in 2004 put forward the regional dimension of social and economic processes more intensively than before.

The basic law that enabled a full application of the regional policy principles in the Slovak Republic in the process of harmonisation of national legislation with *acquis communautaire* and the participation of the country in the cohesion policy of the European Union was the Act No. 503/2001 Coll. *on the promotion of regional development*. It was further necessary to draw up a document, through which SR would draw resources from the structural funds and the Cohesion Fund of EU. For the reduced programme period of years 2004 – 2006 this document was the National Development Plan and the Community Support Framework, which represented an agreement between the European Commission and the Government of SR on priorities for the use of financing from the structural funds.

For the programme period of years 2007 – 2013 the National Strategic Reference Framework was drawn up as a basic document for drawing of financial resources from the structural funds and the Cohesion Fund of EU.

However, resources from the EU funds should be only regarded as supplementary resources, as also results from regulations of the European Community. It is very important to promote the regional development at national level by activation of own internal resources of development.

The Slovak Republic was clearly missing a document at national level, dealing with financing of the regional development from resources other than supplementary resources such as the EU funds. In 2008 the Government of SR adopted the new Act No. 539/2008 Coll. *on the promotion of regional development* that creates an environment and conditions for more effective regulation and implementation of the regional policy and allows the self-governing regions and communities to use their competences in favour of their own development to a greater extent than the existing legislation. This act defined the National Regional Development Strategy of SR (hereinafter “National Strategy”) as a basic document for the promotion of regional development at the national level.

The National Strategy is a basic strategic document, whose aim is to comprehensively define the strategic approach of the State to the promotion of regional development in SR. Its task for the region at level NUTS 3¹ is:

- To identify its internal potential and specify its potential competitiveness in SR;
- To provide its specific characteristics and resulting main competitive advantages in the Slovak Republic as well as in a broader European context;

¹ NUTS – introduced by the Decree of the Statistical Office of the Slovak Republic (SO SR) No. 438/2004 Coll., establishing the classification of statistical territorial units in connection with needs of the EU regional policy. In SR the following levels are specified: NUTS 1 - Slovak Republic, NUTS 2 – Bratislava region, West Slovakia, Central Slovakia, East Slovakia, NUTS 3 - VÚC (self-governing regions), LAU 1 - districts, LAU 2 - communities.
• To define its strategic development objectives and priorities.

The National Strategy was drawn up in the partnership and cooperation with the socio-economic partners. The analytical parts of the National Strategy were prepared in cooperation with an external supplier. In the process of preparation the document was repeatedly commented upon by the socio-economic partners within the expert group on regional policy.

The National Strategy was prepared in accordance with other strategic and conceptual documents, e.g. in the area of cohesion policy it builds upon the National Strategic Reference Framework of SR 2007 - 2013 (including the operational programmes), in the area of territorial development it is coordinated with the updated Conception of territorial development of Slovakia 2001 and with a document entitled Draft vision and strategy of the development of Slovak society. The National Strategy was also prepared on the basis of the Lisbon Strategy of EU and its preparation for Slovakia in documents such as the Strategy of development of competitiveness of Slovakia until 2010, the National Reform Programme of SR and the Modernisation Programme Slovakia 21.

The relation of the National Strategy to these documents is interactive, which means that, on the one hand, it builds on the fundamental principles and priorities contained in these documents and, on the other hand, it brings a regional dimension in these documents through the draft national strategy of regional development and creates a framework for their effective implementation with stress put on specifics of the individual regions.

The National Strategy will also be a basic document for the preparation of a new programme document for the use of financial resources from the EU funds after the year 2013.

The National Strategy consists of several chapters. The document begins with presentation of main factors of the regional development of SR and existing regional disparities and continues with a prognosis of economic development in regions of SR, depending on the type of implemented cohesion policy. The chapter Priority areas of the development of SR briefly evaluates the starting situation and relevant trends in the priority areas that should be stressed in the development of SR in accordance with the Lisbon Strategy. This chapter also specifies problems that require a priority solution in the individual areas and contains basic recommendations for solution of the specified problems.

The core of the document is the chapter Vision and regional development strategy and chapter Priorities and objectives of the regional development strategy of SR. The chapter Vision and regional development strategy presents a long-term vision of the promotion of regional development of SR, specifies the basis of the regional development strategy and its strategic objective, and defines the most important development priorities in the individual priority areas. The chapter Priorities and objectives of the regional development strategy of SR contain a brief socio-economic analysis of the individual regions at level of NUTS 3 and the evaluation of their internal potential, specific characteristics of each region, specification of main development factors and competitive advantage of the regions. It defines strategic development objectives for each region and proposes its development in the specified priority areas.

The following chapters of the National Strategy deal with the institutional and organisational support of its implementation. For the needs of future evaluation of the implementation of the National Strategy and evaluation of fulfilment of the defined objectives and priorities the
Monitoring and evaluation system with specification of measurable indicators and method of verification of their fulfilment is outlined. It also specifies potential sources of financing of the regional development. Its annexes Analysis of economic development in regions of SR, Prognosis of economic development in regions of SR and Indicators at national level and at level of regions NUTS 3 are also an important part of the National Strategy.

The National Strategy formulates objectives, priorities and development activities that will have to be implemented in order to safeguard the policy of sustainable regional development in SR based particularly on the growth of economic performance and social cohesion. For more effective and efficient implementation of the regional policy that will help the elimination of unjustified intraregional disparities it will be necessary to further develop the objectives and priorities of the National Strategy at level LAU 1.
1. Main factors of the regional development of SR and main regional disparities

The basis of an effective regional policy is an analysis of relevant factors of development, i.e. identification of key factors that have important, positive and stimulating effects on regional development. Factors of regional development vary in time, which is related to the level of knowledge of socio-economic processes. On the other hand, factors of regional development are subject to changes due to the development of structures and their interaction.

The level of development of Slovak society and knowledge of socio-economic processes confirm that basic factors of the regional development of SR on the way to knowledge-oriented economy are:

- Human resources
- Research, development and innovation
- Basic infrastructure and services.

The importance of the individual factors for regional development results from the nature of human resources. Human resources are an active factor of further development, which distinguishes them from other factors of passive nature (that alone do not show a targeted change of state). They can transform other sources or are an inevitable element of their functioning. For the specified basic factors of regional development of SR it is necessary to put stress on a green growth economy.

The following items also have a significant effect on the growth and economic performance of regions:

- Globalisation (regions are more sensitive than countries)
- Technological changes (growth of the sector of services and knowledge-oriented economy, where technology-oriented regions“ become more competitive)
- Decrease of active population.

But technology and innovation capacity alone are not sufficient for the growth and development of regions, because a region must have a potential to create a “high-quality“ population – to maintain and win talented people, to be well connected to global markets, to have an adequate business environment, infrastructure, and a well-functioning labour market.

People and companies concentrate on places where they win and can use different advantages that are important for them. Besides main factors, it is important for the regional development and its main actors to define the determinants of competitiveness of regions, and to regularly measure and analyse main trends of economic performance with unequal regional development on the basis of:

- Overall growth trends
- Analysis of components of GDP growth (also at regional level)
- Assessment of impacts of main determinants of regional development and growth.
The traditional regional policy so far concentrated on the support of construction of technical infrastructure and formal education, but innovation and other determinants of growth prove to be closely related to a spatial dimension and concentration, which indicates that growth of certain regions, is based on these determinants of growth.

Regions can be classified by different criteria such as degree of urbanisation (predominantly rural, other rural, predominantly urban regions)\(^2\), by the dynamics of GDP growth (fast growing, slowly growing regions), attractiveness and accessibility, etc.

Besides the growth of national GDP, main components of the growth of regional development (based on comparison of common characteristics of fast growing and slowly growing regions) are particularly the growth of employment and the growth of productivity.

Further main components of the growth of regions are:

- Functioning labour market (employment) – especially supply and demand, combined growth of the rate of employment, economic activity and share of workforce on total population at working age;
- Growth of population is another typical characteristic of high-performance and fast developing regions,

For slowly growing regions they are represented by:

- Regional factors (productivity, rate of employment, growth and quality of population, growth in the share of workforce on total population at working age, economic activity of population) that play a more important role than national factors, because slowly growing regions often suffer from a decline of economic activity and lower labour productivity.

The growth components are different for the individual types of regions. For urban regions the main factors of growth are labour productivity and flexible labour market, and their growth is not menaced in spite of the decline in other factors. For rural regions these factors are labour productivity and outflow of qualified labour force, but the growth of employment has a key importance for them and they are much more sensitive to a decline in the other growth components.

Growth opportunities exist in all types of regions. All types of regions will be supported at the same time and using means that will not be detrimental to stronger regions. The support will be implemented on the basis of the principle of pro rata financing from the EU funds, where stress will be put on actual impact and effectiveness of used financial resources. For all the types it is necessary to exactly define:

- Key determinants of growth
- Time required for them to start generating growth
- Most successful combination of growth components (including the sector structure).

For an effective and efficient regional development policy it means:

\(^2\) According to the OECD (Organisation for Economic Co-operation and Development) methodology that classifies regions by degree of urbanisation to predominantly rural regions with more than 50% of rural population, other rural regions with 15 – 50% of rural population and predominantly urban regions with less than 15% of rural population.
- An integrated/comprehensive approach including the support of all growth components in the right time and sequence according to defined development priorities;
- Investments in human resources made in accordance with a defined existing or potential competitive advantage of the region;
- Promotion of science and research (S&R) and innovation (in the first phase in accordance with the desirable sector structure) in key industries of the region;
- Promotion of building infrastructure (technical, social and environmental) and related supporting services as a part of an integrated/comprehensive approach;
- Concentration and maximisation of benefits from regional assets (internal resources) and internal potential of regions.

**Communities** that represent one of three levels of public administration have an irreplaceable position in the area of creation of conditions for the economic and social development of a territory. In the territory of SR there are 2,891 communities and cities (year 2008) of different size categories, with a significant share of small communities. Approximately 56% of total Slovak population presently live in cities.

The high degree of decentralisation of public administration brought extensive competences and responsibilities to representatives of both regional and local self-government. According to the Act No. 369/1990 Coll. on communal establishment and Act No. 539/2008 Coll. on promotion of regional development communities are an integral part of regional policy and regional development. Economy of communities accounts for a significant part of public finance. Like VÚC (self-governments), communities provide outputs and services in public interest within the scope of their original competences or within delegated competences of state administration. All the highest public investments and industrial parks are situated in cadastres of particular communities that created suitable conditions for them to implement them. Communities employ more than 140,000 employees, but they are also an important partner of the government in the area of active labour market policy and placement of the long-term unemployed on the labour market.

**Main regional disparities**

According to a differentiation of the individual factors influencing the regional development depending on different starting conditions, position and degree of urbanisation, the development in the individual regions of Slovakia manifested itself in different dynamics and changes in the structure of their economy. Apart from the ongoing process of reduction of disparities in different forms within the regional policy, it is very important to reduce tensions among regions and to eliminate disparities that in the Slovak conditions are often a result of insufficient analyses and presentation of disparities.

The understanding and presentation of disparities is predominantly influenced by the way in which they are specified for the needs of the EU Cohesion Policy. It is particularly observed between Bratislava and the other administrative units of SR, where disparities of the administrative units are distorted by their specification for the needs of EU and by the used indicator of generated GDP.

Intraregional disparities (within NUTS) at the level of functional urban regions between the level LAU 1 (districts) or in a comparison of urban and rural regions can be regarded as more significant disparities.
The west-east and the north-south gradients of development can be observed in the Slovak Republic. This gradient of socio-economic development has a prominent economic core that is formed by the Bratislava region and its neighbouring countries. The economic prosperity and investment flows increasingly widen the disparities between this area and the economic performance of East and South Slovakia. The growing disparities particularly manifested themselves in the number of profit-making organisations per 1000 inhabitants, in labour productivity in industry and construction and in the generation of GDP per capita. The development of these economic indicators was also reflected in the socio-economic area through rather significant disparities in the unemployment rate and the number of finished flats per 1000 inhabitants. The only economic indicator where regional disparities are gradually eliminated is the number of traders per 1000 inhabitants.

From the perspective of the individual regions, the Prešov region has the worst position in the regional structure of Slovakia. Based on available statistical data it achieves the lowest values and its position further deteriorates or stagnates.

The Prešov region still maintains its leading position in the natality rate (issue of Roman population) but its position becomes weaker, because it is the most loss-making Slovak region in terms of migration. In this sense it appears as a source of labour force for the other regions and it may keep this position also in the future, providing it will offer labour force with higher qualification.

There are several causes of lagging behind of the Prešov region, as well as of whole East Slovakia, together with the Banská Bystrica region. They are related to:

- Marginal eccentric position of the region, which however could be improved by a suitable strategy in relation to the border regions and by a targeted cross-border cooperation;
- Low accessibility via large transport infrastructure (especially motorways), in particular from the perspective of Western markets and larger mobility of labour force, where it is necessary to consider its important for the regional development, as well as concentration of population with low social status.

These problems are closely related to the need of finding a priority solution in the neighbourhood of cross-border regions with similar problems. The low competitiveness of these regions can also represent a development opportunity in case of a correctly conceived regional policy.

A detailed analysis of economic development of regions at level NUTS 3 is shown in Annex No. 1.

West-east and north-south disparities actually exist in SR, but they must be assessed in real contexts. It is also necessary to take into account that the national economic growth is distributed in space and that centres of this growth have an enormous importance for growth of the whole economy, for extension of the development to other regions of SR, for the scope of redistribution processes, etc.

Main causes of unequal development of regions and the rise of regional disparities are:
- Significant decline in production and employment in heavy industry – coal production, iron and steel production, mechanical engineering, chemistry, that dominated and still is the core industry in the economic structure of regions (Trenčín, Žilina and Košice regions);
- Decline in textile and electrical production which had serious impacts on economy and employment, clothing and boot industries, as well as impacts on regional employment (Prešov, Košice and Trenčín regions);
- Decrease in the number of employees in agriculture, especially in mountain and submountain regions and lowlands, with a relatively high representation of this industry in the Nitra, Banská Bystrica and Košice regions;
- Development of the tertiary sector that absorbed a major part of employees released from ineffective production plants. The development of the tertiary sector was concentrated in big cities and agglomerations;
- Uneven development of private enterprise, especially small and medium enterprises, where a sufficiently strong sector of small and medium companies specialized in production of tangible assets and in industrial services could not be developed;
- Quality of human resources (level of education, business tradition) and of local self-government (orientation to conceptual approaches, strategic planning, etc.);
- Low equipment of a territory with infrastructure and absence of a comprehensive approach in revitalisation of settlements;
- Unfinished network of motorways and express ways that slow down traffic and create barriers to accessibility of certain regions;
- Low interregional mobility of labour force related to limited access to housing in sites offering job opportunities and to increasingly low access to local public transport services, which negatively affected the areas with low density of population and larger distances between communities;
- Persisting unsatisfactory environmental situation, particularly in areas with unfavourable industrial structure and in so-called old industrial regions (Trenčín and Košice regions);
- Existence of a series of territorial and technical specifics and problems impeding the development of certain regions. These include among others consequences of mining activities, extreme ruggedness of landscape (share of mountain and submountain areas in the region), which causes traffic problems in terms of accessibility and economic effectiveness of regions (Žilina and Banská Bystrica regions);
- Different geographic position of regions within SR and in relation to the EU Member States and main European transport corridors.

Main attributes of regional disparities also influence regional processes in the area:
- Existence of strong polarisation between the capital city Bratislava and the other regions in a series of indicators that are main for the living standard of population (GDP/capita, average wages, unemployment etc.); this polarisation is not a Slovak-specific phenomenon; we can encounter a similar phenomenon in many EU countries;
- Existence of material disparities among districts in several regions in terms of income per inhabitant;
- Regions affected by deep and extensive restructuring of industry have a high, slowly decreasing unemployment rate. The required structural changes cannot be implemented quickly and effectively or their implementation was suspended;
- Rural environment increasingly differs from the urban environment; communities in rural areas have unfavourable business conditions; depopulation and ageing of rural population;
- Lower economic level of border areas/districts;
- Persisting insufficient connection of regions to trans-European routes and to the capital city, which considerably contributes to a lack of interest of investors, especially foreign ones, in certain sites;
- Existence of disparities in the share of people with university education, particularly in cities,
- Decrease of population in small settlements is accompanied by stagnation of care for a significant part of landscape and its ecosystem functions;
- Persistence of disturbed environment due to industrial and other activities in the territory and due to the development of motor transport (Bratislava).

A summary evaluation of regional development of SR can highlight:
- Slow deepening of regional disparities in social status of population (situation in the Bratislava and Trnava regions improves faster than in the other regions, some of which lag behind more than they should, in spite of their potential, e.g. the Nitra region);
- Considerable deepening of disparities in economic performance within regions;
- Dynamic deepening of disparities in the regionally differentiated economic attractiveness;
- Complicated and limited use of the internal development potential of communities and regions;
- Reduction of disparities in the quality of environment (in the whole SR).

The increase of regional disparities in production, productivity and employment has negative effects on the competitiveness of regions. If we want to achieve an adequate convergence of regions and overall economic growth, we must increase investments in production and human capital in accordance with defined market position of regions and their competitive advantage, intensify innovation processes and extend the use of new ICT as well as all new technologies.

In order to maintain or strengthen their position (economic development and employment) in the European competitive environment, regions of SR must fulfil two conditions that complement each other. The first condition is the existence of technical infrastructure adequate to their defined competitive advantage (transport, telecommunications, energy, environmental, etc.) and human capital (school, social and health infrastructure). The second condition is that in new knowledge-based economy regions must be able to innovate and use the existing as well as regional know-how and follow the path of sustainable development. For achievement of these two conditions they need to have an effective institutional and administrative framework at all levels of support and implementation of regional policy.
2. Prognosis of economic development in regions of SR depending on the type of implemented cohesion policy

The regional cohesion policy) has been long presented in Slovakia as one of priorities and is contained in the Government’s policy statement. One of its primary objectives is the elimination of regional disparities. The regional model B_IER_REG_09q3 developed on the basis of the econometric model of Slovak economy BIER_ECM_09q3 (for details see Annex No. 2) enables the analysis and prognosis of different approaches to the regional cohesion policy. Three different scenarios were defined that allow to estimate the most suitable approach to the implementation of cohesion policy from both the national economic and regional points of view.

Prognostic scenarios

In the present period of global economic recession it is difficult to predict future development of main world economies. The more difficult it is to predict future development of a small and highly open economy such as Slovakia. Short-term prognoses are currently revised with almost monthly periodicity, usually downwards.

The instability of external and internal factors determining future development in the mid-term horizon can give rise to higher forecasting risks. The basic scenario shows the most probable development of economy of SR based on the existing assumptions on the development of the internal and external environments (Annex No. 2). The prognosis taking into account the EU requirements covers a time horizon until the year 2020. The development of multi-variant scenarios enables the comparison of development in regions of SR at level NUTS 3 for differently focused regional and economic policy of the State, so the prognostic exactness of the basic scenario is not of paramount importance in this case. Which is relevant are disparities in the development between the individual multi-variant scenarios:

Variant scenario No. 1 is oriented to a strong cohesion policy aiming fast elimination of regional disparities with use of supporting EU funds and through reallocation of public finance. The regional policy will use all available instruments such as higher reallocation of share taxes in favour of the weakest regions.

Variant scenario No. 2 is oriented to the promotion of development of regional centres together with a moderate cohesion policy, especially through the use of supporting means. Only means that are not detrimental to the weakest regions will be used.

Variant scenario No. 3 is based on the variant scenario No. 2 and combines the use of supporting means with higher effectiveness through the regional self-governments (quality regional policy of higher territorial units – envisaged synergic effect).

In the basic scenario, like in the other three variant scenarios, we monitored the expected influence on overall welfare of society at level of the individual regions and the whole Slovak economy (growth in GDP, development in the weakest region, unemployment rate and development of wages). All the variant scenarios were compared with the basic scenario.
and with each other, with stress put on the effectiveness of allocation of financial resources in regions of SR.

Comparison of the individual scenarios and conclusions

Based on comparison of results of the individual scenarios (Annex 2) we can evaluate the most suitable scenario in terms of its expected benefits for Slovakia and for the individual regions. In this case a comparison of the weakest regions and improvement of their potential convergence to the rest of Slovakia will be expected with the highest interest.

The exact impact of regional policy is very hard to quantify and it was not the purpose of the submitted analysis. Which is important is forecasting of basic trends of potential development and identification of key relations and limitations under different conditions, which allows to evaluate the best scenario. Three variant scenarios of potential development of regional policy were submitted. None of the scenarios achieved the best results in all analysed indicators.

Variant scenario No. 1 envisaged the use of most of available instruments of regional policy, such as higher reallocation of share taxes in favour of the weakest regions, which resulted in a lower national labour productivity and in reallocation of labour market. The result of this scenario is the highest cohesion within the country, but to the detriment of overall growth. Consequently, the economy lost a part of total production of GDP against the basic scenario at a slightly lower labour productivity. An advantage was the achievement of lower unemployment in economy of weaker regions and creation of a higher number of jobs according to the European System of National and Regional Accounts (“ESA 1995“ or simply “ESA“).

As regards the scenario No. 2, the development of labour market was slightly better than in scenario No. 1 and a higher labour productivity was achieved. But this scenario was clearly defeated by scenario No. 3.

Scenario No. 3 showed the best results in nearly all indicators. The higher growth “pulled forward” weaker regions that achieved a higher economic growth than in scenario No. 1 with higher labour productivity and growth of wages. In the weakest regions a lower number of jobs were created compared the scenario No. 1, but a clearly higher overall economic effect was achieved also for weaker regions.

From the perspective of sustainable regional cohesion the scenario No. 3 seems to be the most suitable. It is oriented to the promotion of development of regional centres in concurrence with a quality and integrated policy implemented by regional self-governments. The condition is that sufficient room will be left to regional self-governments in the national strategy and that this room will be used by quality and purposeful strategies of regional self-governments creatively taking into account their regional specifics.
3. Priority areas of the development of the Slovak Republic

In accordance with the Lisbon Strategy setting the aim of creating a competitive, job-creating and knowledge-oriented economy that is characterised by growth, social cohesion and respect of environment, the Slovak Republic will have to further pay attention to the development of:

- Human resources
- Business environment
- Science, research and innovation
- Environment.

3.1 Human resources (population, employment, education, social infrastructure, standard of living)

In SR human resources represent more than 2 million actors (if we only take into account economically active population), who continuously change in terms of their number, structure and quality. The population is an important social capital. For this reason future socio-economic development of regions primarily depends on the development of human resources, also at regional level (their needs, interests, interaction of the individual actors).

It is unquestionable that most indicators of regional development and results of regional policy reflect the behaviour of inhabitants (number, quality and structure of human resources) in different areas such as labour market, education, migration, consumption of goods and services, etc.

Starting situation and relevant trends

In the years 2004 – 2007 positive results in the area of employment were achieved, not only in Slovakia, but also in EU. The net increase in employment in 2007 amounted to 3.5 million persons and in the first half of year 2008 the creation of new jobs continued in spite of the first manifestations of crisis, though at a lower rate. In the second half of year 2008 and during the year 2009, and expectedly in 2010 significant risks of decrease in employment and exports of Slovakia are expected in sectors that considerably contribute to employment.

General results of labour market, labour productivity and quality jobs are not necessarily in contradiction with each other, but they are in mutual synergy and have an important share on the competitiveness and attractiveness of regions. Regions that achieve better results in the area of quality jobs also belong to the best ones in terms of the employment rate and level of productivity (the Bratislava region).

It becomes apparent that, with the exception of the Bratislava region, monthly labour costs per employee in the individual regions are almost at the same level, which proves that all regions have the potential for growth of employment and that monthly labour costs are not a barrier to the increase of their competitiveness and growth.
Four years after the accession of SR to EU also proved that mobility of labour force had a positive impact, not only on the labour market in SR, but also on labour markets and economic development of the other EU member countries, where main beneficiaries were Ireland and the United Kingdom and, to a lesser extent, Germany and Austria. Neither the expected future development indicates that migration flows and mobility will exceed the absorption capacity of labour markets in EU and Slovakia. Particularly the economic motivation to the movement of labour force from Slovakia to other EU states diminishes and it even becomes evident that reverse flows of qualified labour force to regions of SR start to increase.

Quality of jobs is firmly embodied in the European employment strategy and defined by four key aspects:

- Socio-economic security (including the amount and distribution of wages)
- Education and vocational training
- Working conditions (including labour intensity)
- Harmonisation of professional and private life/balanced representation of men and women.

Judged by the share of the individual regions on employment in SR, the “largest employer“ is the Bratislava region (19.2 %), while the Banská Bystrica region is ranked last (10.2 %).

In the evaluation of development of the number of vacancies (not taking into account the number of new created jobs), the Bratislava region is also placed first, well ahead of the remaining Slovak regions. Based on comparison of Q2 2009 and 2009, the Prešov region had the lowest number of
jobs and the largest decline in the number of vacancies between years was registered in the Prešov, Žilina and Trenčín regions.

**Graph No. 3 Development of the number of vacancies by regions**

![Graph No. 3 Development of the number of vacancies by regions](image)

Source: ŠÚ SR

Particularly worrying is the persistent disproportion between education and actual professional requirements on the labour market, which, among others in combination with the low flexibility of labour market, may lead to an increase of socially excluded groups of population.

**Social infrastructure**

A well-balanced social and cultural infrastructure is the pre-requisite of the creation of similar living conditions for all inhabitants of SR and helps the creation of adequate social certainties, education and possibility of development of lifestyle and lifetime chances. Social infrastructure of a territory is not directly managed, with the exception of health infrastructure where the state still has a significant influence.

In regions that assumed competences in the area of secondary education system the network of secondary school is gradually optimised according to needs of the regions.

At local and regional level the network of nursery and elementary schools is also optimised in connection with the ongoing school reform that involves changes in financing of the individual types of schools.

Disparities with dominance of the capital city Bratislava, followed by regional cities, are also manifested in higher education institutions.

In the last five years the network of health facilities went through the most significant changes in the area of social infrastructure, but its effectiveness, accessibility and quality did not considerably improve at regional level.

The Slovak Republic has a wide network of social service facilities and establishments providing the social legal protection of children and social guardianship that are operated by public and private persons. The scope, number and capacity of these establishments are gradually extended according to needs resulting from conditions and capacities of each region.

Although the prevailing form of social care is residential care, the development of a field, ambulatory form of social services and the implementation of measures of social legal
protection of children and social guardianship in a natural and open environment, which allows the clients to stay in their natural environment and closest to their families, has been enforced in the recent period. State institutions, self-governing institutions and the non-government sector play an important role in this area.

**Public health**

The European policy in the area of public health is oriented to the implementation of public health policies in the individual EU member countries, legislation, cooperation with international organisations and structural support (Executive Agency for the Public Health Programme).

The Public Health Authority of SR drafted the Conception of State Policy of SR that is implemented through its regional authorities at the level of regions.

The state health policy is a strategic development policy of society (e.g. like the economic policy etc.) that formulates long-term and short-term objectives, strategies and priorities of the State aimed at health care and at promotion, protection, development and restoration of health.

The objectives are defined as follows:
- To enforce the orientation of health care to prevention and early diagnostics
- To highlight the key role of public health service in the process of the state public health care
- To improve and develop cooperation among health care providers, institutions developing activities on the field of public health service and decision-makers
- To improve the health care system and accessibility of health care to citizens
- To increase the quality and safety of provision of health care at all its levels
- To place and use financial resources in such a manner that everybody has equal access to affordable, medically efficient and cost-effective health care
- To set priorities in the area of health service, objectives, sufficient resources and standard criteria for measurement of progress (including the establishment of a single health information system).

On the basis of the level of public health, where dominant causes of mortality are chronic diseases, is it necessary to enforce issues of chronic diseases as one of priorities of the whole society. However, when setting priorities we must not confine ourselves to chronic diseases, because in view of the present trend of globalisation and removal of barriers between cultures the public health service still has to face its “traditional enemy“ i.e. communicable diseases. In dealing with public health issues it is necessary for the State health policy of the Slovak Republic to contain a smaller number of objectives and priority areas, sufficient resources and standard criteria for measurement of progress. It is recommendable to develop action plans for the implementation of priorities. In view of the criteria mentioned above, the following four priorities are set for the new wording of the State Health Policy of the Slovak Republic:

1. Chronic diseases
2. Infectious diseases
3. Environment and health
4. Tobacco and alcohol.
The regions should not only deal with issues of optimisation of the network of health facilities and their ownership, but also concentrate to:

- The support of development and introduction of binding standard diagnostic and therapeutic procedures and to extend the use of standardised procedures of diagnostics and treatment of the most frequent diseases
- The implementation of the latest trends in health care management at regional level (effectiveness, quality and accessibility)
- The connection of their regional policies, particularly in the area of human resources (social infrastructure) and environment, with the areas of public health policy (drinking water, health programmes for young people, etc.).

Comprehensive regional analyses in the area of public health are published every year by the Public health Authority of SR according to the individual areas in its annual report.

Problems/problem areas requiring a priority solution:

- Mismatch between the needs of labour market and available labour force in the area of new/required skills
- Insufficient monitoring and prediction of future needs of labour market
- Persistent high rate of long-term unemployed
- Low quality and availability of different forms of gaining access to employment – insufficient flexibility of labour market, low rate of combination of different types of instruments of active labour market policy with other sources for the promotion of employability
- Low dynamics of creation of new jobs
- Lack of supporting services for labour market at regional level (information and consulting services) provided to all groups of population
- Insufficient support of professional mobility, low flexibility and mobility of labour force;
- Absence of analysis of the quality of existing and new created jobs
- Insufficient ability and motivation of economic subjects to creation of productive and quality jobs,
- Low support of large interministerial projects that will bring economic growth and employment (qualified labour force) to the region
- Persisting deformations of labour market (low support of development of alternative forms of employment, high tax burden, insufficient or no support (other than financial) of self-employment, etc.)
- Limited supply of vacancies for certain groups of qualified labour force
- Low effectiveness, accessibility and quality of health care facilities
- Growing pressure on development of social infrastructure and new services and measures in all regions of SR, lack of modern services and measures in the social area
- Low sense of responsibility for own health
- Insufficient coordination and non-system approach to development of comprehensive social services and health care at regional level.

From problems requiring a priority solution to prognoses

The area of demography and human resources seems to be one of critical factors of further sustainable development of regions of SR. Scenario No. 3 based on a selective support of chosen regions seems to be optimal for this area, while the variant scenario No. 1 seems to be risky. The implementation of the variant scenario No. 2 would not lead to a considerable
improvement or deterioration of the desirable (expected) development. If we assessed impacts of the individual variant scenarios in relation to employment and labour market issues, the scenario No. 1 would be evaluated as optimal.

**Recommendations for solution of problems in the area of human resources**

The development of human resources should be aimed at the shift from use of cheap labour force to the growth of competitiveness of the region and to sufficient training of human resources in accordance with defined competitive advantage of the region. A change in the approach of all actors on the labour market and perception of employment as lifelong education and career development, flexibility and motivation supported by accessible social infrastructure is important. It is not within power of the labour market policy alone, it also depends on the change of approach all priority areas (including the regional level) – the priority must be the creation of conditions for at least stable growth of regional economy. Employment will grow if the limit benefit per employee exceeds limit costs of this employee (growth of minimum wage in case of decrease or stagnation of regional GDP is therefore also questionable). Higher territorial units as “new actors“ on the labour market should be able to better recognise barriers and opportunities on the regional labour market and take the initiative and increase the influence of non-state subjects. The achievement of desirable development in the area of social infrastructure should be oriented to the application of basic criteria – effectiveness, accessibility and quality of services with stress on the defined competitive advantage of the region and environment and on elimination of unjustified regional disparities, including the mismatch between supply and demand for selected services, particularly at regional level.

The successful political and economic integration of SR to EU brought among others the extension of possibilities of migration for work (with predominant economic motivation), experiences that migrating workers have brought and will bring after their return home, and cash transfers to the domestic economy. The negative effect was and is the “brain drain“ reflected in the loss of public expenditures on education of this labour force. This problem might be solved at the regional level e.g. through the implementation of regional innovation strategies – creation of conditions for the foundation of new innovative companies. Another aspect of migration processes is potential increase in the number of migrants on the domestic labour market, to which neither society, nor regional policies are sufficiently prepared.

If the development activities were not also aimed at the development of social infrastructure, this development would have a negative impact on the quality of life and on the development of human resources.

The following period may be characterised by so-called “wage abstinence“, because on the part of employers there will be natural barriers to a fast increase of jobs and the growth of wages may lag behind the growth of productivity. However we assume that domestic companies will imitate foreign companies and that disparities between them will be gradually reduced.

The lack of job opportunities for high-qualified labour force may bring an increase of inequality in the area of earnings of the individual groups of population, instead of the desirable growth of the quality of life of population and well-being. More serious problems may arise in selected groups of workers, especially older workers (above 50 of age), long-term unemployed and low-qualified workers.
At local level, many opportunities for the development of new economic activities and useful employment in a territory are created by the natural development potential of cities and communities. The use of the natural development potential of a territory is also beneficial for the educational process and for a better preparation of students for the regional and local labour market. The promotion of these economic activities in a territory should be implemented through standard and innovative supporting and motivation tools.

They can also more effectively harmonise some of sector policies, especially when enforcing the integrated approach at local or regional level. It particularly concerns the labour market in areas related to protection of environment and cultural heritage, restoration of landscape, development of public infrastructure, informatization and development of tourism. The implementation of the promotion of employment in these areas will require a closer cooperation of different ministries and sectors. By the implementation of these economic activities communities and cities in cooperation with the Slovak government can contribute to an effective reduction of regional disparities and to positively support the economic growth of the individual regions of Slovakia.

Economic activities and employment related to the natural potential and needs of cities and communities synergically influence:
- Elimination of environmental problems and landscape stress, increase of protection of hardly renewable natural sources of the country (especially protection of soil against water erosion)
- Increasing the energy and raw-material savings and better diversification of energy sources and increasing the share of renewable sources
- Preventive limitation of risks of natural disasters, limitation of their negative impacts
- Reduction of important economic and social disparities in regions
- Utilisation of unused economic potential of a territory
- Increasing the share of new technologies and introduction of innovation in public administration in processes of local and regional development.

By affinity and character these activities can be divided into the following areas:
1. Revitalisation of brown parks
2. Comprehensive development of tourism
3. Implementation of flood prevention measures, regeneration of environment and environmental planning
4. Energy management of communities, energy savings and renewable sources of energy
5. Waste management of communities, separated collection and disposal of wild waste dumps in communities
6. Provision of affordable municipal waste water treatment for all communities
7. Reconstruction, maintenance and completion of local roads
8. Regeneration of settlements – housing construction, completion of public utilities, restoration and maintenance of verdure and public areas
9. Development of culture and sport
10. Improvement of strategic planning and development of informatization at local and regional level.

Conclusions

The strengthening of the prognostic and forecasting capacity of regions, deepening of international cooperation, mobilisation and suitable combination of all instruments (not only of the employment and labour market policies) and proactive handling of the mismatch in the
area of employment through integrated regional employment strategy can lead to sustainable and stable development of the region and growth of its competitiveness and attractiveness in the form of creation of quality jobs in promising or key sectors according to needs of the regional economy.

In view of the ongoing development and trends three main conclusions can be drawn:

- In the mid and long-term horizon a huge potential for creation of jobs, including new and replacement jobs, exists at the level of regions.
- Requirements for skills, abilities and qualifications will considerably increase for all types and levels of employment, which will require higher investments in education.
- It will be necessary to better harmonise the supply and demand for skills on the labour market that will be increasingly dominated by services, also through the system of monitoring and evaluation of needs of the labour market and cooperation of all concerned parties.

Deserved attention will have to be paid to issues of development of lifelong education and lifelong consultancy systems, as well as to new types of services of employment in “region-specific” combination with other social services as open regional systems.

Special attention should be paid to the promotion of social inclusion of persons menaced by social exclusion or socially excluded persons through the development of social services and social legal protection of children and social guardianship, including the development of infrastructure of welfare facilities, and to the support and harmonisation of family and professional life.

The quality and level of social infrastructure are manifested particularly in the areas of development of human resources, education and employment. In spite of rather significant regional disparities in social infrastructure that is conditional on a long-term development, settlement structure and specialisation of regions, these disparities are not always main for development of the region, particularly in terms of accessibility and effectiveness.

### 3.2 Business environment (economic performance and competitiveness)

**Starting situation and relevant trends**

Economic performance and regional competitiveness are important factors of regional development. Regions, cities and municipalities compete in foundation, acquisition, maintenance and supporting of economic subjects just like enterprises and other organisations on the market. High-performance and competitive regions create conditions, particularly for economic subjects that stabilise and generate new jobs, new opportunities for use of the potential of regions, and have a fundamental influence on prosperity, well-being and living standard of regions and communities. Regional competitiveness describes among others the ability of regions to generate income and maintain the level of employment in the area of national and international competition.

**Regional competitiveness is closely related to four main factors:**

- Structure of economic activities
- Level of innovation
- Degree of accessibility of region
Level of education of labour force

A competitive region is attractive not only for its citizens, but also for enterprises and other institutions (it attracts investments, knowledge, etc.). Its typical characteristic is location of firms and migration.

A detailed analysis of economic development in regions at level NUTS 3 is shown in Annex 1.

Gross domestic product

The basic indicator for comparison of regional competitiveness and socio-economic level of regions was and is gross domestic product (GDP).

Based on available economic indicators the Bratislava region was placed first among regions of SR and on leading places among the EU regions at level NUTS 3 and the Prešov region was ranked last. At level NUTS 2 it was East Slovakia. If we compared all regions of SR only on the basis of the indicator GDP per capita or GDP per capita in PPP, we would get the same result. But if regions of SR are compared by the competitiveness index\(^3\), the position of the Prešov the region would improve and the Banská Bystrica region would be placed last.

In terms of cumulated change in GDP regions of SR can be classified to the following categories:

\(a)\) Regions whose increase in GDP significantly exceeds the increase at level of SR

Based on available data from years 1995 – 2005, the capital city Bratislava and hence the Bratislava region showed the highest dynamics. The high dynamics of GDP growth is typical for a metropolitan character of region and the only urban region of SR with significantly different structure of economy that allows a substantial acceleration of growth which could continue in the following period in case of implementation of a suitable regional policy.

\(b)\) Regions whose increase in GDP is comparable with increase of GDP at level of SR

In the five year period under review the Trnava region that profits on a significant inflow of foreign direct investments (FDI) and proximity of the Bratislava region came close to this category. It was followed by the Trenčín region that used for its growth particularly its well-implemented infrastructure in combination with FDI inflow, and by the Banská Bystrica region. The Košice region that also profited on FDI inflow was placed just behind it.

\(c)\) Regions whose increase in GDP is lower than increase of GDP at level of SR

\(^3\) Several international competitiveness indices such as Global Competitiveness Index annually published by the World Trade Organization (WTO) at level of States or ECI – European Competitiveness Index that is evaluated at national and regional level (NUTS 2) are currently published. On the basis of this index the Bratislava region was ranked on the 10th place among 120 evaluated EU regions in the years 2006 - 2007. West Slovakia was then ranked on the 107th place, East Slovakia on the 108th place and Central Slovakia on the last (114th) place. Basic evaluated areas were accessibility and attractiveness, economic performance, innovation, science and research and level of education. Our evaluation of competitiveness of Slovak regions for needs of NSRR SR was based on the EU evaluation in so-called Atlas of Regional Competitiveness that has been regularly issued by EU since 2005.
The Nitra and Žilina regions are classified to this category. The Prešov region was placed last with the lowest growth (0.9%).

**Gross domestic product per capita (GDP/capita)**

This indicator can be used to take into account the performance of a region in relation to the number of its inhabitants. In case of a longer time series we can also analyse the development of dynamics in current and fixed prices, but this indicator shows a development comparable with dynamics of development of GDP of the individual regions.

Experts have been discussing the conclusive value of these two indicators for years and proposals for new indicators such as GDP per capita in PPP EU 25 = 100 (in per cent), GDP per capita in productive age, tax power, etc. appear.

In regional comparison of economic performance a fundamental regional disparity - metropolitan region vs. the other regions exists in SR. The Bratislava region together with Bratislava city is the only region that achieved and achieves a level of the average of the former EU 15 with a share of 25% of GDP of the whole SR. Performance of this region was ranked on the first place in the European comparison, even in front of Prague (2005 - 2006).

If we use as the basis the competitiveness of regions of SR and their internal potential, a concentrated support of the development tourism would help especially the slowly growing regions of SR and rural regions from the perspective of growth of GDP per capita. There is a potential for the increase of its share on GDP from present 2.8% to 8 or 9% within 10 to 15 years, which would mean a year-on-year growth of this sector, also on national GDP, of at least 0.5 per cent and thus contribute to the growth of employment.

**Average gross monthly wage of employees in regions of SR according to labour force sample survey methodology**

Besides the main indicator GDP we can use other indicators that characterise economic performance of regions and indirectly also the living standard of inhabitants of the individual higher territorial units. Average gross monthly wage as a part of disposable income of population in 2008 by regions and gender copies the economic performance of regions of SR – the highest wage is in the Bratislava region (SKR 28 841) and the lowest wage is in the Prešov region (SKR 17 994). Interestingly, the rather low average gross monthly wage in the Nitra region (SKR 19 170) is higher in comparison with the Banská Bystrica region (SKR 18 826).
Enterprises

The state of business environment that consists of individuals and legal persons is an important element of performance of regions. In the period under review the number of traders increased, but the highest increases were registered in the years 2003 – 2004, especially in the service sector. The increase in the number of enterprises was particularly influenced by FDI inflow to the automotive industry and by the increase in construction industry. While in 2001 the largest number of traders was registered in the Bratislava region, in 2008 it was in the Žilina and Prešov regions.

The business environment is dependent on traders and undertakings and main source of economic performance and creation of jobs are small and medium enterprises. The development in business sphere was different from the development of traders, especially due to other location factors, financial needs and spatial relations. More than a third of enterprises are registered in the Bratislava region. In the other regions the distribution of enterprises is more or less even. A decrease was registered in Košice, the Banská Bystrica region and the Trenčín region.

From the perspective of sectors the most significant change was registered by the Bratislava region in the service sector – increase of the share of financial services to the detriment of business services, decrease of enterprises in industry and construction. Similar changes were registered by the Trnava and Žilina regions, while the Trenčín and Nitra regions registered a significant decrease of industrial enterprises.

Export performance of the individual regions of SR

Significant disparities in terms of territorial distribution of exports exist among the individual regions of SR. From this perspective we can identify two basic factors that determine these disparities:

- Geographic position of the region and resulting relations to foreign markets
- Allocation of production capacities that are generally focused on export or related to foreign customers.
Regions with highest exports are regions with a high share of automotive, electrical and metallurgical industry such as the Bratislava, Trnava, Žilina and Košice regions.

The orientation to services, new products and new markets might increase the export performance of the individual regions, particularly in the Prešov region.

**Technical infrastructure**

A quality, accessible and integrated transport infrastructure is one of key factors that influence the development of economy of the State and the individual regions at optimal use of their socio-economic potential. The promotion of construction and modernisation of transport infrastructure with supraregional importance directly influences the inflow of foreign capital and reduction of disparities among the individual regions. These consist in uneven accessibility and quality of transport infrastructure and cause among others a low mobility of labour force and goods, lower effectiveness of transport processes and negative environmental impacts of transport.

From the perspective of regional development, in particular the regional transport network and provision of quality services in public passenger transport are important for the improvement of accessibility of public infrastructure.

**Current trends in transport** can be summarised as follows:

- Growing mobility of society
- Growing importance of individual transport to the detriment of public, road and railway transport, especially due to the growth in flexibility and mobility of labour force and the need to secure supplies for automotive industry in the JIT (just in time) system
- Underfinancing of maintenance and repairs of roads.

The condition of existing, relatively dense road network is mostly unsatisfactory, as regards the quality of road surface. As for the routing and condition of buildings, the state of road network is satisfactory. The unfinished network of motorways and express ways slows down the traffic and creates barriers to accessibility of some regions such as the Prešovský and Košice regions and certain areas of the Žilina and Banská Bystrica regions, as well as the connection of these regions to neighbouring states or international corridors.

The importance of railway transport decreased in the last years, but it still plays an important role in goods and passenger transport. The attractiveness of railway transport could be increased by promotion of the “green growth“ life style (investments in renewable sources of energy, low-carbon technologies and green infrastructure) and reduction of transport times.

The air transport registered a big boom in the last five years, also in connection with the arrival of low-cost airlines and putting into operation of new regional aerodromes (Sliač, Žilina). But the most significant growth was registered by the Bratislava Airport that profits from the attractiveness of the capital city.

The contribution of water transport to the transport operation is insignificant. Only the river Danube (or the river Váh) has good prospects and unused opportunities, but only if its use is furthered in the regional development policy.
Other transport modes (e.g. cycling) cannot be regarded as an alternative to public mass transport or individual motor transport, but rather as its complements, which is related to insufficient and unsatisfactory infrastructure, ruggedness of landscape, long-term tradition of use of public transport and, last but not least, to climatic conditions in Slovakia. The cycling transport in cities develops very slowly and in a differentiated manner, depending on the interest of the self-government or third sector and on technical conditions of the individual cities, in spite of their positive influence on the health of population.

Integrated transport systems (ITS) that will connect public mass transport in big cities to transport in their catchment areas, can play an important role in regional development. ITS projects are under preparation in some regions (Bratislava, Prešov and Košice regions).

**Water management**

The persisting problem of all regions, in particular the rural ones, is the underdeveloped system of sewer networks and waste water treatment plants, which is also the cause of the high level of pollution of water courses. The share of inhabitants connected to sewerage with a waste water treatment plant in SR increased (in 2007, 500 WWTP were situated in the territory of SR). But significant regional disparities also exist in this area.

**Gas supply**

The situation in gas supply improved in all regions, but air pollution, particularly in winter period, still occurs in rural areas. In spite of the satisfactory situation in gas supply we can observe dependence of the quality of air on the price of natural gas. It is clear that price is one of main factors of installation of further gas pipelines (apart from dependence on gas supply from the Russian Federation).

**Telecommunications**

In the last five years telecommunications infrastructure went through an important development marked by development of mobile communications and high-speed Internet. These services gradually decreased the importance of classic fixed lines and traditional voice communication and the number of mobile telephones presently exceeds the population of SR.

The relative backwardness of SR and its regions in use of information and communication Technologies is caused not only by insufficient infrastructure in certain regions, but also by persisting high prices of Internet compared with average income of population, “mistrust“ and insufficient experiences of certain groups of population, but also by absence of relevant content and public services provided by electronic means. The equipment of households by computers and Internet connections that depend on income of the household, level of education and overall ability of members of the household to adapt to changes in technologies and their use, is also regionally differentiated.

**Use of cultural heritage and natural potential for business in the area of tourism**

By its heterogeneity and ethnically and religiously varied structure of population, Slovakia is a typical Central European country. Due to its specific historical development, Slovakia preserved this variety more than the other neighbouring countries, also in all forms of culture and uniqueness of cultural heritage.
In Central European societies the concept of national culture includes cultural heritage, i.e. valuable cultural phenomena stemming from older historical periods, such as manifestations of sacral art and architecture, artefacts from aristocratic or bourgeois environment and technical monuments. Special attention is usually paid to traditional and folk culture, i.e. to cultural phenomena, in particular from the environment of traditional regional farming cultures.

Several strategic documents exist in the area of culture that deal with culture and its individual components and pay less attention to the use of culture and cultural heritage in relation to other sectors and policies, such as tourism.

Tourism comprising transport, accommodation, boarding, recreation and services for tourists and other related activities is today one of the largest and most dynamically developing economic sectors that directly use cultural heritage and natural potential of the individual regions.

Tourism regarded as a sector of the future in the world becomes an important and irreplaceable factor of regional development in many Slovak regions and in the whole economy of Slovakia.

Potential representation of educational, cultural and historical tourism, whose potential has not been fully used by Slovakia, is important in all regions of SR and its promotion can help regions, in particular the rural ones – it can support the growth of employment and specifically oriented services, where the Žilina region and the most lagging Prešov region have the highest potential.

But the development of tourism must also respect possibilities of the territory and its functional use limits contained in planning and environmental documentation.

Problems/problem areas requiring a priority solution:

- Low economic performance and competitiveness of Slovakia in most regions is caused by the insufficient use of internal potential and exacerbation of these problems is the key limit of higher productivity and growth of competitiveness of Slovak economy,
- Slowly growing total productivity of production factors
- Insufficient FDI inflow and other investments to new sectors and to selected regions and their unsuitable structure
- Persisting low flexibility of low-qualified labour force and its insufficient adaptability, persisting low professional mobility of graduates and high rate of long-term unemployed,
- Insufficient definition of dynamic comparative advantages (especially intellectual human capital)
- Low restructuring of sector structure, particularly in long-term backwarded regions of SR, and low adaptability to new conditions (globalisation, growth of competition, orientation to new segments and markets, etc.)
- Insufficient promotion of revitalisation of brown parks and comprehensive regeneration of settlements
- Unpreparedness of the business sector to react to new challenges, opportunities and threats
- Under-utilization of existing technical infrastructure from the perspective of logistics of territory, its effectiveness and accessibility
- Insufficient attention paid to pursuing new promising trends and to strengthening of export performance of regions of SR, use of advantageous geographic position (interconnection of the North Sea and the Black Sea by railway and water transport)
- Low share of environmental solutions on the implementation of technical infrastructure projects, low rate of use of environmentally friendly forms of transport
- High and growing share of individual/motor transport
- Insufficient attention paid to environmental and telecommunications infrastructure
- Insufficient institutional and civil support of the development of education and culture;
- Low-quality and in certain aspects inadequate tourism infrastructure and underdeveloped services
- Lack of professionals and experts for management of the development of tourism and for management of tourist facilities (particularly information and marketing facilities)
- Absence of marketing conceptions of development of SR and its regions as European destinations
- Low level of partnership among the actors in tourism
- Limited financial resources for development of enterprise
- Lack of carrier regional projects leading to the creation of tourism products
- Lack of financial resources for maintenance and renewal of cultural heritage
- Under-utilization of new information technologies in tourism (e.g. tourist reservation systems, including the regional level, absence of a coherent network of tourist information centres, etc.).

A substantial barrier to summary productivity is the low level of innovation activity and the decrease of business activities in foundation of small and medium enterprises. Slovakia has been lagging behind in science, research, innovation, growth of quality of products and services, and in use of internal resources since 1995.

**From problems requiring a priority solution to prognoses**

**From the perspective of growth of economic performance and competitiveness of regions of SR the scenario No. 3 seems to be optimal.** The implementation of regional policy according to scenario No. 2 would not bring the required considerable improvement for regions lagging behind. Scenario No. 1 that will lead to a growth of employment, but without positive effects on labour productivity and growth of added value, seems to be the most risky from the perspective of the desirable and expected development.

The selection of one scenario from the perspective of social infrastructure for disadvantaged regions is more important than its selection from the perspective of building technical infrastructure, so the implementation of scenario No. 1 seems to be most suitable but we propose the implementation of scenario No. 3 for the reason of long-term sustainability of growth and growth of competitiveness.

**Scenario No. 3 seems to be the most advantages for the area of culture and cultural heritage,** because it creates the best opportunities for the development of culture and tourism in the individual regions of SR.
Recommendation to solution of problems in the area of business environment, economic performance and competitiveness

The attainment of objectives specified in strategic and conceptual documents at all levels requires a coordinated effort of all relevant actors. The catching up with economic performance and increasing of international competitiveness will require system conditions for a permanent growth of productivity (higher than in EU) supported by qualitative changes and improvement of business performance. The common target should be to make effort at the highest promotion of proper functioning also of the regional market, respecting the principle of economic freedom and personal responsibility, clear property relations (including the protection of private property) and equality of chances, as well as exerting pressure on higher effectiveness of investments (particularly on the part of the State), proactive approach to gaining foreign capital related to application of new technologies and promotion of science and research in main sectors and, in particular, substantial acceleration and overall simplification of conditions for business.

A pre-requisite of the achievement of the desirable economic development of Slovakia will also be maximum access to education and knowledge, in particular to knowledge in disciplines and sectors specialized in human and technological capital. Changes on the labour market and adequate intervention of public administration into economy (including prevention of corruption and unfair practices) will also be important.

One of important pre-requisites is and will be a stable financial market, in particular the development of capital market that will more actively contribute to the growth of investments in the form of domestic savings in the future.

For the achievement of a long-term competitiveness of Slovak economy it will be necessary to prepare alternatives for sufficient and secure oil and gas imports, to create conditions for development of tourism and other new services and to promote the change in the sector structure, especially in the most vulnerable (sub)regions and regions that have been lagging behind for a long period, also by orientation to export, production of new goods and services for new markets.

Competitiveness – the role of regions in the area of economic development means to concentrate first of all on their economic performance. A competitive advantage of regions grows up from the value that a region is able to create for its “clients” (companies, citizens).

Competition strategy of a region must define:
- Attractiveness of region in terms of the quality of life for its inhabitants and long-term prosperity of enterprises
- Main factors that determine its competitiveness (competitive advantage), including its competitive position.

The position of a region in wider relations can also significantly affect the long-term sustainability of its competitive advantage.

Competition strategy of regions cannot be therefore aimed merely at the promotion and development of all strengths and potential opportunities, which would lead to average and below-average results on the “regional market“, but also at actual strengths – priorities of the development and attainable opportunities that must be covered “fully and exclusively“ by this
strategy. In its competition strategy the region must answer the basic question – in which and how it will compete with other regions and what will ensure its sustainable growth or self-reliance based on the internal development potential.

The plan to achieve a sustainable economic growth is still valid. A sustainable economic growth can only be achieved by cooperation of all actors of regional development at all levels.

It also becomes evident which regions and which region-specific business activities lead to a sustainable development, not only in terms of profit. Sound business environment requires strong and attractive regions and only prospering regions with strong business interests are competitive.

Desirable synergetic effect in the respective region will be achieved by active cooperation and participation of regions, cities and communities that will recognise their role in regional development and create comprehensive sectional development strategies.

The achievement of desirable development in the area of technical infrastructure should be oriented to the application of basic criteria – effectiveness, accessibility and quality of services with stress on a defined competitive advantage of the region and environment and on the elimination of unjustified regional disparities, including the mismatch between supply and demand in selected services, particularly at regional level.

One of serious problems in the area of culture is the problematic prediction of impacts of integration and globalisation processes on the whole society and hence on its relation to culture and cultural heritage. But we assume that both processes, i.e. globalisation and strengthening of national identity or regional identity and specifics of regional culture with a larger or smaller impact of other cultures, will be applied in the area of culture and cultural heritage and that qualitative changes will occur in culture. Better coordination and management of central and regional actors and their activities, effective and coordinated cooperation of state and self-governing bodies and institutions, private sector as well as citizens’ associations and non-profit organisations, and a long-term campaign showing benefits of philanthropic activities in relation to cultural heritage would bring a positive change. For preservation of identity, development of culture and care of cultural heritage of regions and settlements it is important to develop cooperation also at level of EU, e.g. through a common institutional framework.

The orientation to use of new information and communication technologies, promotion of science, research and innovation in care of cultural heritage and development of specific activities in tourism would also significantly contribute to the development of culture and related tourism. The promotion of activities of international organisations for science and research in the area of culture in the territory of SR also plays an important role.

The world crisis that had a significant impact on Slovak economy became a new risk and the basic task will be to prevent the collapse and to maintain regional performance at least at the pre-crisis level. Apart from anti-crisis measures, it will be necessary to implement comprehensive consolidation and adjustment programmes, in spite of the resistance of certain groups of population or interest groups, and to concentrate on maximum use of all regional assets such as human resources, innovation, diversification of sector structure, labour productivity, increasing of the rate of employment, especially of young people and women in order to strengthen the competitive advantage of regions by balanced support of both growing and lagging regions and by better regional management.
If development activities are aimed at the development of technical infrastructure as a priority area and fewer investments are made in social infrastructure, this development would have negative impact, particularly on the quality of life and development of human resources. The development of technical infrastructure should be very closely linked to the actual comparative advantage and competitiveness of regions and investments must “be recovered“ in the form of income of the regions without increasing their expenditures.

The misunderstanding of the value of national or regional identity and its weakening to the detriment of collective identities and a significant and inadequate commercial pressure on the use of cultural heritage may present a serious problem.

Conclusions

If we only assessed the level of competitiveness of the individual regions on the basis of GDP indicators we could unambiguously state that not only the GDP indicators, but also other main indicators derived or closely linked to GDP describe significant disparities among the individual regions. As important should be regarded particularly disparities related to long-term dynamics of development, because the continuing trends and used instruments of regional policy may considerably worsen the existing disparities in the future, due to which Bratislava and the Bratislava region may lose their present international position. Another important indicator is labour productivity.

From this point of view we can divide regions into the following groups:

- Bratislava region as the only region achieving the EU average that also shows the highest labour productivity according to ESA. It is followed by the Trnava region with the second best value achieved in both indicators.
- Trenčín and Nitra regions – these regions show a small difference in labour productivity against the average according to ESA and GDP. A drawback of the regions was the lower past performance and unsuitable sector structure.
- Žilina and Košice regions – these regions shows lower dynamics of growth in the period under review, but showed a potential for more significant acceleration in the recent period.
- Banská Bystrica and Prešov regions – these regions achieve below-average to very below-average values of the said indicators; they did not terminate the process of restructuring and their long-term performance can be characterised as weak, also for the reason of the high share of rural areas.

Based on the evaluation of their competitiveness regions of SR can be divided into 3 groups:

- High-competitive regions – the Bratislava region;
- Medium-competitive regions – the Trnava, Trenčín, Žilina and Košice regions;
- Low-competitive regions – the Nitra, Banská Bystrica and Prešov regions.

The Trnava region has the best prospects for advancement to a higher group.

Main priority areas in terms of growth in performance and competitiveness in the following period will be employment, education and science, research and innovation in both production and services.
The quality and level of technical infrastructure have a significant influence on the business environment, perceived quality of life and environment. In spite of the important regional disparities in technical infrastructure conditional upon a long-term development, settlement structure and specialisation of regions, these disparities are not always decisive for the development of a region, especially in terms of accessibility and effectiveness. The level of development of regions in terms of technical infrastructure should be therefore assessed within a certain context (by priority areas) and then in accordance with present and future needs of its development. Each region of SR considerably lags behind in some type of infrastructure, which is manifested by a significant mismatch between regional supply of and demand after a specific type of services.

3.3 Research, development, innovation – knowledge-oriented economy

Starting situation and relevant trends

Two basic attributes of the development of science and research, followed by the implementation, innovation and creation of a knowledge-oriented economy, is undoubtedly the amount of financial resources used for such oriented activities and the number of employees in science and research. From this point of view we can observe significant disparities among the individual regions.

Like education, science, research and innovation have a main strategic importance for the future of Slovakia. Attention and form of support to this strategic area in SR have been formed for a very long period. It is proved by the fact that the first basic laws were adopted as late as in 2001 (e.g. Act No. 203/2001 Coll. on Agency for Promotion of Science and Technology). These basic documents had the merit of drafting priorities of the national science and technology policy in the State programmes of research and development for the years 2002 – 2005 with outlook until 2010. In this context sectional state programmes (Building information society, Quality of life – health, nutrition, education, Development of progressive technologies for high-performance economy, Use of domestic raw materials and sources, Application of progressive principles of production and transformation of energy and Participation of social sciences in development of society) and thematic state programmes (Development of personalities and talent of young employees and doctorands in the area of research and development, Comprehensive solution of the support of effective use of research and development infrastructure, Prognosis of the development of use of science and technology until the year 2015 and Topical issues of the development of society) were formulated.

In the following years the issues of science, research and innovation were gradually developed in several strategic and conceptual documents. One of the last documents at national level was the Innovation strategy of SR for the years 2007 – 2013 approved in 2007. Its individual measures were developed in the Innovation policy of SR for the years 2008 – 2010 that was adopted by the Government of SR in February 2008.

The approbation of the individual regional innovation strategies and the possibility of financing of their implementation from external sources (EU funds) were of large benefit for the regions.
In a document entitled “Long-term national science and technology policy until the year 2015“ it is stated that in the following five years it would be necessary to establish a national innovation system, including regional innovation structures (incubators, innovation centres, consulting centres and other elements) with the aim to bring the innovative activities and supporting activities closest to enterprises, in particular SME.

Bratislava and the Bratislava region have the best position in the area of innovation. The innovation potential, the innovation climate and activities of other regions of SR do not achieve the level of the Bratislava region.

Problems/problem areas requiring a priority solution:
- Low innovation climate in Slovak economy,
- Persisting resistance of existing structures and financing of science, research and innovation,
- Insufficient attention paid to scientific and innovative education at all levels, in both the public and private sectors
- Low intensity of international cooperation and insufficient involvement of Slovak subjects and experts in the development of the European research area
- Insufficient presentation of important international institutions of science, research and innovation in SR
- Underdeveloped infrastructure for science, research and innovation and for implementation of supporting programmes at regional level,
- Absence of the management and coordination system at regional level,
- Insufficient use of innovation in services (public and private), including the low application of innovation processes in public administration management systems, insufficient conditions and possibilities for the application of integrated approaches
- Low share of innovative enterprises on total number of existing or emerging enterprises.

From problems requiring a priority solution to prognoses

The variant scenario No. 3 seems to be optimal in terms of growth of innovation performance and competitiveness of Slovak regions. The implementation of regional policy according to scenario No. 2 would not bring the required significant improvement to lagging regions and scenario No. 1 seems to be the most risky in view of the desirable and expected development. Moreover, in case of implementation of scenario No. 3 the labour productivity will grow faster, even in the slowest growing region, with positive links to the growth of GDP and average wages and at a lower growth of employment.

Recommendations for solution of problems in the area of research, development and innovation

The neglecting of systematic support and the insufficient attention paid to this area were reflected in the position of SR among the EU countries. The most significant negative trend was a strong resistance of existing structures and forms of financing to science, research and innovation and the fact that investment incentives for the most important FDI were not made conditional upon the promotion of science, research and innovation.

In comparison with the approved innovation policy and strategy it is necessary to intensify the support and motivation to the establishment of multi-sector partnerships, to the increase of
transparency and equality of chances for all types of entities to receive financial resources, to concentration of financial support for science, research and innovation not only in the industrial sector, but also to services, in accordance with the preparedness of regions, their innovation potential and defined competitive advantage, and to accelerated implementation of regional innovation strategies with use of external sources, including the effort of regions at establishing important scientific, research and innovation institutions or their branches in regions of SR. Regional innovation centres (RIC) could also play an important role in the enhancement of innovation and competitiveness of regions.

The persisting lack of support and financial resources or the high-selective support of certain programmes/projects can mean an increased business activity and innovation performance, but a long-term lagging, generation debt related to the brain drain, unfavourable demographic development and dependence on external sources of financing could have a very negative impact on the transition of SR to the knowledge-oriented economy with a higher share of sophisticated services with higher added value and creation of more quality jobs.

Conclusions

If we assess the competitiveness of the individual regions in terms of conditions for the development of science and research and innovation we can again divide regions into basic groups. At the same time we must stress that in regions science and research and innovation are gradually concentrated in innovation centres, especially in regional cities. These innovation centres should play an important role in the creation of networks and clusters, the functioning of which can significantly influence the economic and social environment, attractiveness and competitiveness of the regions.

On this basis, regions can be divided as follows:

- Bratislava region – this region has a dominant position in science and research and in the representation of business entities specialised in innovative business in the conditions of SR.
- Trnava and Žilina regions – regions with above-average conditions for the development of science and research in Slovakia.
- Nitra and Košice regions – these regions have favourable conditions for the development of science and research.
- Other regions of SR – regions with average or weak conditions for the development of science and research in Slovakia.

Employment, education and business environment must become main priority areas in relation to research, development and innovation–knowledge economy.

3.4 Environmental protection and planning

Starting situation and relevant trends

In the recent years higher attention has been increasingly paid to a global change of the environment at national and international level. The number of global institutions and international commitments of SR in the area of environment constantly grows.
Since the mid-1990s the trend of improvement of certain indicators such as growth of emissions from individual motor transport, reduction of green public areas, production of non-returnable packages etc. has slowed down or stopped in many countries, including Slovakia.

In 2007 Slovakia officially had eight areas designated as menaced (stressed), i.e. areas with disturbed or strongly disturbed environment.

**Map No. 1 Quality of environment and stressed areas**

![Map of Slovakia showing stressed areas](image)

Stressed areas represent 10 – 11% of the territory of SR. Information on their location in the individual regions is shown in the following table.

**Table No. 1 Stressed areas by regions**

<table>
<thead>
<tr>
<th>Stressed area (ZO)</th>
<th>Area* (km²)</th>
<th>Number of inhabitants</th>
<th>Location of SA in regions – share in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bratislava</td>
<td>488</td>
<td>432 000</td>
<td>Bratislava 93 %, Trnava 7 %</td>
</tr>
<tr>
<td>Dolné považie</td>
<td>1 261</td>
<td>247 000</td>
<td>Nitra 66 %, Trnava 34 %</td>
</tr>
<tr>
<td>Pohronie</td>
<td>450</td>
<td>272 000</td>
<td>Nitra 51 %, Trenčín 49 %</td>
</tr>
<tr>
<td>Ješava-Lubeň</td>
<td>203</td>
<td>186 000</td>
<td>Banská Bystrica 100 %</td>
</tr>
<tr>
<td>Rudňany-Gelnica</td>
<td>357</td>
<td>52 000</td>
<td>Košice 95 %, Prešov 5 %</td>
</tr>
<tr>
<td>Košice-Prešov</td>
<td>1 044</td>
<td>425 000</td>
<td>Košice 81 %, Prešov 19 %</td>
</tr>
<tr>
<td>Zemplín</td>
<td>1 040</td>
<td>173 000</td>
<td>Košice 83 %, Prešov 17 %</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4 980</strong></td>
<td><strong>1 808 000</strong></td>
<td></td>
</tr>
</tbody>
</table>

* The area includes a territory in the 5th and 4th degree of quality of the environment

Source: Slovak Environmental Agency, 2007
Stressed areas include most of regions of SR with developed industry and high degree of urbanisation, i.e. paradoxically areas with a high development potential - from human resources and position to a favourable relief, rich water sources etc. On the other hand, a large part of a territory that is classified to the category with a high standard of environment, has a low development potential or a lack of one of the natural components, e.g. lack of drinking water, radon radiation, etc. The marginalisation of territories can continue in different directions also on the basis of chosen regional policy in the area of environment.

In view of the climate changes and their consequences such as decrease of certain available sources (rich sources of drinking water), but also in view of different interests in the land use, adequate attention should be paid to areas such as agriculture, water management and forestry, to economic activities in the territory, concentration of population, etc.

In spite of the important social and socio-economic changes Slovakia did not witness a very dramatic growth in urban population to the detriment of the country. More significant changes occurred in the internal structure of cities (growth in GDP and consumption, concentration and reduction of free areas, increase of municipal waste and energy consumption, etc.).

Environmental infrastructure in all regions improves in direct proportion to available resources, particularly in the area of drinking water supply, construction of sewers and WWTP in communities with more than 2000 population equivalents, where the number of gas connections significantly increased.

Environmentally friendly transport modes (water, railway, combined or cycling) are still underrated in transport infrastructure.

Old environmental burdens, unsolved compensations and management of protected sites, as well as zonation (including NATURA 2000 sites), low public awareness on potential use of renewable energy sources and reduction of energy intensity as an element of competitiveness and growth of regions are serious issues at regional level.

**Problems/problem areas requiring a priority solution:**

- Environment - inefficient implementation of environmental policies and inefficient strengthening of environmental infrastructure and ineffective management of the environment and landscape, including the neglect of promotion of ecosystem services of the landscape and systematic water drainage from the landscape;
- Technological threats and risks – use and transfer of environmentally unfriendly production and technologies;
- High raw material and energy intensity of production and low attention paid to energy savings;
- Low rate of use of renewable sources, including suitable energy sources;
- Unbalanced development of settlement environment, inadequate use of local development potential;
- Poor quality of care o environment,
- High share of protected sites and NATURA 2000 sites in selected regions SR and their poor management, unsolved zonation;
- Low public awareness of the environment and its effects on the quality of life in the region;
- Insufficient integration of environmental aspects into economic and sectoral decisions;
- Insufficient integration between social aspects and the environment.

From problems requiring a priority solution to prognoses

A multi-variant scenario of implementation regional policy that will enable adequate and suitable investments in environmental planning and protection, is most suitable for the area of environment. From this perspective the scenario No. 3 seems to be the most suitable.

Recommendations for solution of problems in the area of environment

In the area of environment special attention should be paid to a comprehensive solution of the individual thematic areas (water, air, waste management, protection of environment and biodiversity and environmental management) by the implementation of a comprehensive strategy in a specific territory, putting stress on the following tasks:

- To verify and revise prices for environmental services based on the “polluter pays” and “user pays” principles and economic and social limitations;
- As a part of the process of decentralisation of powers by their delegation to regions and communities to ensure a gradual and adequate introduction of obligations and income;
- To increase the number of communities with elaborated and approved development plans;
- To clarify the share on financing and other responsibilities between the private and the public sectors in the area of air protection projects specified in national environmental action programmes;
- To introduce more quantified objectives and schedules into strategies and programmes dealing with air protection, energy, transport and policy in the area of climate change;
- To continue the change of the fuel basis to natural gas and renewable sources of energy (e.g. biomass), taking into account its consequences for employment and the environment;
- To continue the separation of the use of energy from economic outputs in Slovak economy by increasing the energy efficiently in different sectors through suitable incentives and programmes;
- To prepare water management plans for the individual catchment areas, taking into account the interests of flood protection, to apply integrated management of water sources and land stock;
- To strive for the development of separated municipal waste collection and to enforce the treatment of separated waste as secondary energy sources, including the use of the recycling fund, to recover and use wastes, to finalise the development of efficient instruments in the area of prevention of wild dumps;
- To draw up a comprehensive program of mapping of contaminated sites of industrial origin, to assess potential risks for the environment and to propose corrective measures;
- To intensify the coordination and communication between ministries and state agencies involved in land management, protection of nature, management of water courses and water sources;
- To develop activities and voluntary initiatives with participation of private forest land owners for the purpose of integration of biodiversity protection into forestry plans and procedures;
- To improve management of protected areas and NATURA 2000 sites by gradual introduction of environmental protection programmes that will allow the use, development and protection of these sites;
- To further examine possibilities of introduction of environmental taxes, e.g. by transfer of tax burden from labour to the environment;
- To develop and implement the setting of prices for environmental services (e.g. water supply, waste water treatment, solid waste disposal), to proceed with price setting fully based on costs, paying adequate attention to social issues and to the balance among the economic, environmental and social progress;
- To continue the implementation of the action plan for the environment and health;
- To continue the strengthening of environmental public awareness with use of different instruments;
- To examine possibilities of creation of job opportunities related to the environment (e.g. use of biomass, eco-tourism, protection of nature).

The lack of high-qualified employees in so-called “green institutions“ and so-called “green technologies“, or in new types of enterprises specialised in environmental services seems to be a problem. Another serious problem is unsettled property relations and property rights, including financial compensations for protected areas (national parks and protected landscape areas).

**Conclusions**

An effective implementation of environmental aspects into all development policies and use of pro-environmental economic instruments in the economic practice might lead to preferring environmentally friendly production, technologies, products, services and consumption patterns at regional level. At the same time, the growth of employment in the new sector of production and services, so-called “green jobs“, and indicators of the environment would gradually improve.

Future investments in economy of regions must also be assessed in terms of their environmental impacts SEA (Strategic Environmental Assessment) elaborated to this strategic document and related legislation. We must also note that potential investors will invest especially in areas that have a qualified and sound labour force as a result of good condition of the environment.
4. Vision and regional development of strategy of SR

4.1 Long-term vision of the promotion of regional of SR

The vision represents an expected state that the Slovak Republic is to achieve in the long term. It defines a framework for definition of strategic objectives and priorities for a period of the following 20 years and procedures for their achievement. The long-term vision of regional development of Slovakia can be formulated as follows:

"Slovakia as a country with a high quality of life of population in all regions. A regional policy that enables each region to use its conditions in favour of its sustainable economic, social and territorial development, and hence of the development of the Slovak Republic as a high-developed economically, politically and socially coherent state, self-confident member of the European Union."

Where:

- An integrated approach oriented to sustainable social, economic and territorial development of regions will be applied in planning processes;
- Regions will be able to effectively use their internal potential as their competitive advantage with the aim to increase the quality of life of inhabitants;
- Cities and their conglomerations will be an important accelerator of a comprehensive regional development and quality relations will exist between a city and its background and between cities in the framework of a polycentric settlement;
- Country will be a place for contented life and work of its population, with accessible infrastructure, diversified economy, quality environment and well-preserved and maintained cultural and historical heritage;
- Intraregional disparities of the individual region will be reduced.

The promotion of regional development at national, regional and local level will be aimed to implementation of measures in the area of employment, education, science, research and innovation, enhancement of energy effectiveness, use of renewable natural sources, promotion of business, improvement of the quality of environment and enhancement of the effectiveness of functioning and of the quality of performance of public administration. The support will go to all regions of SR in accordance with main objectives and priorities specified for the individual regions by the National Strategy. In the following period these main objectives and priorities should be also respected by programme documents at level of SR for the use of supplementary EU resources.

4.2 Basis of the strategy

The National Strategy will steadily strive for the enforcement of the principles of sustainable development using the whole positive development potential of SR. It will require the activation of all internal sources of communities, regions and state at national and regional
level and the use of all available external resources, also in the process of implementation of both the present and the future EU regional policies.

The basic level of implementation of the National Strategy will be regions/higher territorial units at level NUTS 3 as administrative units co-created by the structure of settlements in their territory. The philosophy, approaches and principles, on which the regional development strategy of SR is based, respect the role and responsibility of the individual regions for the development of their territories.

Up until now, cooperation between regions and actors of the individual sectoral policies or coordination, particularly in the economic area, has not been effectively implemented within the regional policy. The National Strategy has the ambition to establish a basic conceptual framework for the implementation of this cooperation.

The National Strategy should be a basic long-term conceptual document of the implementation of the Slovak regional policy. It determines objectives and priority areas of regional development and main ways of their fulfilment.

The application of principles of sustainable development is one of basic attributes of the regional development strategy in SR. As sustainable will be regarded a development based on a stable economic growth, economical use of natural sources and reduction of their excessive consumption, respecting of cultural and social needs of population and efficient environmental protection. A development stimulating the social process of learning and self-organisation in the conditions of environmental, economic and social limits of the present society.

The draft strategy creates a basic framework for the implementation of regional policy of SR as an independent regional policy of an EU Member State and as an integral part of the EU regional policy, which should complement each other.

4.3 Strategic objective of regional development

For the fulfilment of the long-term vision of regional development of the Slovak Republic, that directs the development of regions towards the increase of their performance potential, competitiveness, the following strategic objective has been defined:

By an integrated and result-oriented approach to the regional development and using the internal potential of regions to increase the adaptability, competitiveness and performance of regions until the year 2030, while increasing the quality of life of their population and respecting the principles of sustainable development.

The strategic objective of the National Strategy will be implemented through a result-oriented system aimed to the implementation of main priorities and objectives of the regional development – for the purposes of increasing the economic potential, social standard and competitiveness of regions of SR.

These priorities and objectives reflect the strategic aims of the regional policy of SR, respecting the aims of the strategy of sustainable development of SR and strategic principles
of development of EU (Lisbon and Goteborg strategies, EU policy of economic and social cohesion), where the addressee is all regions SR.

4.4 Priority areas of regional development

The realisation of the long-term vision and the attainment of the strategic objective of the National Strategy are divided into five priority areas that should become its basic pillars of implementation.

Basic priority areas are defined as follows:

<table>
<thead>
<tr>
<th>Priority area 1</th>
<th>Science, research and innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority area 2</td>
<td>Human resources</td>
</tr>
<tr>
<td>Priority area 3</td>
<td>Employment</td>
</tr>
<tr>
<td>Priority area 4</td>
<td>Competitiveness, growth and business environment</td>
</tr>
<tr>
<td>Priority area 5</td>
<td>Environment - climate change, renewable sources of energy</td>
</tr>
</tbody>
</table>

Science, research and innovation

Promotion of research, science and innovation as a help to Slovakia’s regions on the way to the enhancement of national prosperity and to a sustainable growth

Priorities

- Promotion of regions with a high innovative potential and a high level of preparedness

Measures

- Approbation and financing of projects in accordance with updated regional development strategies preferably based on their preparedness and innovative potential with the aim to maintain or create a competitive advantage of the individual regions;
- Increasing the support with the aim to engage the regions in important international projects, initiatives and networks in the area of research, science and innovation;
- Promotion of building the science and research infrastructure;
- Interconnection of the areas of education and HR development through regional and local initiatives for the promotion of innovative education and business,
- Support of innovative solutions of an integrated system of landscape management and settlement regeneration.

Human resources

Education and development of human resources (sound and qualified labour force) as a prerequisite of sustainable growth and competitiveness of a region
Priorities

- Social cohesion in regions based on the equality of opportunities
- Cultural heritage of regions, support of present culture and cultural institutions
- Housing and social infrastructure in regions
- Development of lifelong education and lifelong consultancy
- Promotion of investments in human capital
- Promotion of investments in public health
- Social inclusion of persons menaced by social exclusion or socially excluded persons.

Measures:

- To eliminate unjustified disparities in the level of social development of regions with the aim to maintain their social cohesion and stability;
- To preserve the cultural heritage of regions and the continuity of cultural development of regions, to promote the maintenance and revitalisation of traditional and handicraft skills;
- To promote the development of housing and social infrastructure for stabilisation of families and population growth in regions;
- To interconnect education with requirements of the labour market, to extend the supply of initiation and other education and to build up a system of lifelong education in regions in accordance with the development of a knowledge-based economy and needs of the labour market;
- To provide a sufficient number of qualified people for the development of economy and to promote science, research and innovation, including innovation in education;
- To ensure an increased motivation and improvement of conditions of general practitioners;
- To promote the social inclusion of persons menaced by social exclusion or socially excluded persons through the development of social services and social legal protection of children and social guardianship, including the development of infrastructure of facilities in the social area and to support the harmonisation of family and professional life;
- To pay special attention to issues of education, to provision of social services and to the implementation of measures in the area of social legal protection of children and social guardianship for excluded communities, with a special regard to marginalised Roman communities.

Employment

Employment and flexicurity for cohesion of regions

Priorities

Long-term priorities:

- To provide a systematic support for the foundation of SME and trades and promotion of employment in these enterprises and trades, particularly in promising sectors;
• To develop concrete projects for selected target groups with stress on the promotion of competitiveness of the region
• To implement measures for prevention of long-term unemployment
• To develop a model for monitoring of needs of the labour market and for their harmonisation with the supply of regional education
• In the framework of the regional employment strategy to draw up a conception of lifelong education and lifelong consultancy
• To increase the accessibility, effectiveness and quality of social infrastructure.

Short-term objectives:

• To maintain jobs in economic subjects with a main contribution to employment in the region;
• To use EU funds for the promotion of lifelong education and lifelong consultancy preferably for the promotion of professional mobility and the creation of quality jobs in promising sectors and industries from the perspective of regional economy and competitiveness,
• To pay special attention to issues of employment in rural areas.

Measures

- To develop and implement projects of employment for menaced groups of population, particularly in the Banská Bystrica, Košice and Prešov regions;
- To draft a procedure for the pooling of funds for the implementation of regional strategies of employment from different sources;
- To develop models based on the principles of flexicurity.

Competitiveness, growth and business environment

Competitiveness and attractiveness as a prerequisite of sustainable growth and improvement of the business environment

Priorities

• To create conditions for a dynamic economic development of regions of SR in accordance with their competitive advantage;
• To increase the competitiveness of small and medium enterprises in defined sectors according to regional specifics;
• To support industrial services and marketing capacities of small and medium enterprises in the process of their internationalisation and to increase their export capacity;
• To develop business properties with stress on the use of brownfields,
• To develop tourism infrastructure and products in relation to the specifics of regions and their cultural and natural wealth;
• To develop agriculture and forestry in rural regions;

4 Brownfields – in the European perception a brownfield is an abandoned, underused or empty site with or without environmental stress, where its previous use ended and market was unable (without intervention whatsoever) to give impulse to its new use. However, with the help of PPP projects or different other activities of the State and EU it can be prepared for further use.
To finalise the connection of regions to the European transport network and relevant markets and to implement a systematic modernisation and ecologisation of transport infrastructure with stress on increasing the safety;
To develop information technologies in regions.

Measures

- To improve the business environment for the development of enterprise and inflow of capital with higher added value preferably to regions with qualified labour force and persisting high unemployment rate;
- To reduce the vulnerability of the SME segment and to increase its share in regional economy;
- To eliminate the lack of comprehensive services for entrepreneurs and investors and to coordinate these services;
- To prepare investment and development opportunities for the increase of economic performance of stagnating or lagging regions;
- To implement the revitalisation of brown parks (new use of unused buildings and areas) and settlement regeneration;
- To activate a hidden economic potential of tourism and spa for the regional development;
- To increase the competitiveness of agricultural production and to develop non-productive functions of agriculture and forestry;
- To improve the accessibility of the European transport network from all regions of SR, to increase the accessibility, capacity and speed of communication systems in regions;
- To ensure high accessibility of settlements and provision of basic transport services, to decrease the accident rate, time losses and health risks of transport;
- To maintain the level of public transport services in regions, to stop the decrease of the share of mass transport in division of transport outputs and to promote regional integrated transport systems.

Environment, climate change and renewable sources of energy

Quality of life of population as a part of an attractive region – place for life

Priorities

- Development of energy and water management networks and facilities in regions
- Protection of natural wealth and adaptation of landscape structure to the climate change
- Renewable sources and environmental technologies
- Promotion of the development of green growth economy
- Improvement of environment and growth of the quality of life in regions
- Environmental education, education and further education.

Measures

- To increase the reliability and the rate of connection of population to the individual distribution systems in regions;
- To strengthen the comprehensive protection of Slovakia’s natural wealth in accordance with international commitments and to assess conditions and limits of its use (NATURA 2000);
- To increase the use of renewable sources and environmentally friendly technologies in all, in particular economic, activities (especially in the production and energy sector in all regions of SR);
- To improve the quality of environment as one of basic conditions of the growth of quality of life of population of Slovak regions;
- To achieve a higher level of environmental awareness of population of Slovak regions in all age categories and areas of activities;
- To adapt the landscape structure to the climate change with the aim to decrease flood and drought risks and to increase general erosion control and the retention capacity of agricultural and forest landscape and built-up areas for retention of storm water and surface waters in water streams.
5. Priorities and objectives of the Strategy of development of the individual regions of SR

5.1 Priorities and objectives of the Strategy of development of the Bratislava region

Basic characteristics of the region as at 31. 12. 2008

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area of the region (in km²)</td>
<td>2 052.7</td>
</tr>
<tr>
<td>Population of region (in thousands of inhab.)</td>
<td>616,6</td>
</tr>
<tr>
<td>Population density in region per km²</td>
<td>300,4</td>
</tr>
<tr>
<td>Number of communities</td>
<td>73</td>
</tr>
<tr>
<td>Registered unemployment rate in %</td>
<td>2,3</td>
</tr>
<tr>
<td>GDP per capita in 2006</td>
<td></td>
</tr>
<tr>
<td>- (in PPP, in current prices)</td>
<td>35 144,0</td>
</tr>
<tr>
<td>- Comparison with EU 27 in per cent</td>
<td>148,7</td>
</tr>
</tbody>
</table>

The Bratislava region is predominantly an urban, competitive and fast-growing region of SR with prospects to become one of the most competitive regions also at the EU level, with high attractiveness and position in the centre of the EU development activities.
Analysis of economic and social situation and evaluation of the region’s internal potential

By the number of inhabitants the Bratislava region (BR) ranks among smaller regions (11.4 per cent of total population of SR). It has the highest share of women (52.5 per cent) and population density of 300.4 inhabitants per km² which is 2.7-times the national average. It is a highly urbanised and the only predominantly urban region of SR (82.3 per cent of Slovak population live in the cities). The natural increase of population moderately grows (1.71 ‰) and the overall rise in population increased too (9.3 ‰). In 2008 BR achieved the highest migration gain (7.62 ‰) of all regions of SR. Trends of reproductive behaviour of population cause the ageing of population. In 2008 children aged of 0 – 14 years accounted for 12.9 % and population in productive age for 74.5% of total population of the region.

The ageing of population of BR will continue in the future. Around the year 2020, the estimated average age will be 46.5 years against the average age of 39.86 years in 2008, which is presently the highest value in SR. The growth in gross birth rate, that represented 11.14 ‰ in 2008, developed positively in BR. Demographic trends will negatively influence the provision of labour force sources from own territory and requirements for commutation of labour force, not only from the adjacent, but also from more remote regions of SR will increase. The demographic development will put increased requirements on provision of social and health care to population at post-productive age.

BR is characterised by the highest employment (employment rate of 72.1 %), the highest average nominal monthly wage (EUR 1,139.59) and the lowest registered unemployment rate (2.3%), with the highest share of applicants for job with completed secondary education (46 %). Based on the labour force sample survey (LFSS), BR had the highest level of economic activity 65.3%) in SR in 2008. In this year services (79.8 %) had the highest share on employment, 19.1% of population were employed in industry and construction, 1.1% in agriculture, and 25% of all workers had university education. Also thanks to the capital city Bratislava, BR will maintain its position in the area of employment for a long period and will create new jobs, especially in the service sector, and depend on labour force sources from other regions of SR.

Monthly income per person has grown at national and regional level since 2004 and in BR they represented an amount of EUR 465.6 in 2008, at the lowest growth rate. The growth in income was accompanied by growth of household costs that achieved the highest level in BR (EUR 416.8) within SR. From this amount 19.8 % were used for food and non-alcoholic drinks (lowest in SR) and 18.5 % were costs of housing (lowest in SR). An exception was costs of culture, recreation and sport with a share of 11.5% (highest in SR).

Education in BR is characterised by a developed network of all types of schools with links to the scientific-technical basis for science and research. The regional distribution is related to the age structure of population. BR has the lowest number of schools, but the number of children increased in the recent period (6.5 %). It also reports the lowest number of elementary schools and registered more than a 20% decrease in the number of students. The structure of secondary schools consists of the highest number of grammar schools in SR (44) with the highest share of students (18 %) and graduates (17.3 %) on the total number of students and graduates in SR. As regards the secondary vocational schools, BR belongs to regions with the lowest number of students and graduates with a share of about 10%. BR has 9 universities. From the year 2004 this number was increased by six new universities and 13 new faculties that are frequented by more than a third of all university students of SR (65
thousand), with a high share of women (60.9 %). BR also leads in the number of graduates from universities. In 2008 it represented 32.7% of graduates from daily courses and and 25.2% graduates from external courses.

BR has an important position in culture of SR. Also thanks to the capital city Bratislava it is a region with a high concentration of fairs, expositions and festivals and with a cultural and historical potential. The Slovak National Theatre (and 20 other theatres) and the Slovak Philharmonic Orchestra with its international music festival enjoy international reputation. The region has a ramified network of museums (24) and galleries with increasing number of visitors. On the other hand, BR has the lowest number of libraries (3.3%) and registered users (9.5%). The fortifications of Devin Castle and Bratislava Castle, the Červený Kameň Castle and many other castles and sacral monuments are important tourist attractions.

Health care in the region is provided by a network of all types of health facilities, a major part of which has the nation-wide coverage. BR has 23 hospitals and 6 centres for medical treatment, but no spa. The health facilities are dominated by outpatient clinics. The bed fund capacity of health facilities gradually decreased and represented a total number of 5 491 beds in 2008. Generally BR has the highest number of health establishments in SR.

Housing construction in BR registered a huge increase in the last years and 5 563 new flats were built in 2008 in BR, which is the largest number in SR. The average dwelling area of flats decreased.

BR contributed to generation of added value by 26.3% and in 2006 it achieved the highest GDP per capita in SR (35 144 in PPP), which represented 148.7% of the average of EU 27 and ranked BR among TOP 20 EU regions.

Business activity is at high level. A total number of 48 648 business entities (legal persons) operated in the region, which represented 28.6 % and the highest share in SR, with the highest share of corporations and 63 573 business entities (physical persons). Nearly a half of business entities with foreign participation are located in BR (7.4 thousand enterprises).

BR achieved the highest absolute volume of investments and year-on-year growth of investments from all regions, which represented more than 30% in the year-on-year growth. The dynamics slowed down in the years 2007 - 2008. BR is still very interesting for the placement of foreign investments.

BR has the lowest area of agricultural land in SR (3.9 %), the lowest share on agricultural production of SR (5.6%) and the lowest share on revenues from sale of primary industry products.

BR achieved the highest industrial revenues in SR (36.4%). The labour productivity from revenues for own services and products amounted to TEUR 266. In 2008 BR also had a high concentration of employees in industry (16.3 %) and above-average wages (EUR 921.22). The region had 282 enterprises that together achieved the highest values of gross turnover, added value and intermediate consumption. All these indicators gradually increased.

Production in construction was also concentrated in BR with more than a 25 per cent share (production by own employees) and a 27 per cent share of production based on supply contracts and achieved the highest labour productivity per employee (EUR 52 210).
BR is one of the most visited regions of SR; although it had the lowest accommodation capacity it achieved the largest number of visitors (22.4%).

BR can be expected to maintain its position of an economically and socially developed region, also in comparison with the average of EU 27. Industrial production will be further dominated by automotive and chemical industries. Some negative events, such as outflow of investors to economically more attractive regions, such as Bulgaria, Romania, Croatia, but also Ukraine, Serbia and Montenegro, will also probably occur.

Innovative potential of the region is the highest in SR and should be aimed to the development, in particular of information and communication technologies, nanotechnologies, biotechnologies, technologies reducing the energy intensity of production and increasing consumption of energy from renewable sources, technologies decreasing negative environmental impacts, etc.

As restructuring of the industrial basis of BR is oriented to the introduction of innovative technologies in production processes and to the development of high-tech industries, the research and development and the transfer of achieved technical and technological innovation into practice through small and medium enterprises becomes very important. Bratislava and environs has structural problems in the area of research, development and innovation comparable with the rest of Slovakia - insufficient instrumentation and technical infrastructure of research and development.

The development of sectoral structure in the region is also favourable and BR is fast forwarding to a knowledge-oriented economy.

The transport position and the representation of the capital city Bratislava in the region create conditions for use of transport, especially from the perspective of international transit. All transport modes are represented in the region, with the water transport partially implementing outputs in maritime and coastal transport having a specific position.

BR has the shortest length of roads among regions of SR, but it also has the most motorways (110.1 km) and the least first-class roads. BR is also best ranked in the number of vehicles (17.2 %) and cars (17.6 %). From the perspective of transport services BR achieves the highest outputs in freight transport and the lowest outputs in passenger transport.

Technical transport infrastructure does not reach the required level (roads, motorways, railways, etc.), because it involves multi-billion investments that are hard to concentrate on these projects, but a more significant change is expected in the future.

In the area of services and tourism an improvement of the quality of provided services and customer care and better and faster communication by electronic means between customers and suppliers of services can be expected. Moreover, better language skills and organisation of services can be expected from service providers.

Despite the decrease from recent years, BR together with the Košice region reports the highest electricity consumption. The region also has the highest consumption of gas (42 %), together with consumption of diesel oil, heating oils, electricity and heat.
BR is the largest municipal waste producer (271.3 thousand tones, 444 kg per inhabitant), but also achieves the highest percentage of its utilization (54.4%) and far exceeds the values achieved in other regions. It also holds for the percentage of population connected to the public water and sewage network (99% and 86.8%). BR is ranked second in waste water treatment. The region reports the lowest values of solid emission production (2.4%) and carbon monoxide production (1.6%).

Based on experiences from floods in the previous years, the updated Flood Protection Programme of SR until 2010 puts greater stress on measures aimed to the protection of regions with the highest concentration of population and areas with important economic potential. In accordance with the principles of environmental regionalisation BR is classified among 8 most stressed regions in SR.

**Main disparities of BR:**

**In agriculture**
- Decrease of cultivated areas and number of reared livestock (poultry, pigs and beef cattle) and import of cheaper subsidised foods from the initial EU countries;

**In industry**
- Relatively extensive industrial production concentrated directly in Bratislava requires an extensive transport (of materials, supplies, persons, etc.) which creates a negative environment with increased air pollutants from production processes and road transport emissions; this disparity must be eliminated in the future by a transfer of production processes outside from Bratislava;
- Missing accreditations and certifications with international validity cause limitations in international trade;
- Innovation and technological lagging causes a growing energy and raw-material intensity of production;

**In services**
- Disparities in the relation of the city and environs caused by uneven distribution of services and educational institutions;
- Low level of informatisation of the production sector;
- Decrease of competitiveness of small and medium enterprises caused by a high expansion of multinational companies, but often also by the low quality of provided services;
- Low quality of public services provided to citizens and business sector;

**In technical infrastructure**
- Insufficient capacity of the road network and absence of a core transport system in Bratislava cause an increase of environmental stress due to the development of transport and industrial production (increase of emissions and noise);
- The poor quality of second and third-class roads often causes road accidents;
- Insufficient flood protection on the rivers Danube and Morava and hence the insufficient system of landscape and environmental protection;
- Unsatisfactory cross-border accessibility of the region and insufficient investments in reconstruction, renovation and modernisation of educational, cultural, health and social facilities;

**In social infrastructure**
- Unfavourable demographic prognosis of the development of the number of economically active population;
- A significant share of post-productive population in Bratislava requiring solution of social issues;
- Security of population at retirement age: quality of provided services, advantages and construction of social facilities;
- Much higher share of the unemployed in communities than in Bratislava;
- Considerable outflow of labour force abroad due to proximity of state border and absence of replacement for high-qualified labour force;
- Low investments in flats for rent, regeneration of the housing stock and slow reconstruction of cultural and historical monuments, which is caused by a lack of own financial resources for co-financing of development and investment projects;
- Disparity between the capital city and the country, especially in the area of employment and wages.

Main factors of the development of BR:

In agriculture
- High agricultural production potential in the areas of vegetable, fruit and wine growing opens possibilities for the development of housing based on rural settlement;

In industry
- The developed industrial production and the varied economic basis with long-term tradition provides the opportunity for the transfer of technologies to more promising industries based on the use of the EU funds in the service sector;
- The high concentration of foreign investments creates conditions for the use of new technologies and innovation;

In services
- The high-developed business and non-profit sector creates conditions for an increase of international trade and intensification of cooperation;
- The geopolitical position potential enables direct contacts with developed regions and intensification of foreign investments and international cooperation, especially with Austria, in particular in the area of development of tourism;

In technical infrastructure
- The crossing of road, railway, water and air transport corridors allows a better participation in international cooperation;
- The position potential of the region;

In social infrastructure
- The high share of population with university education and the concentration of science-research capacities create conditions for the use of new technologies and renewable sources of energy in accordance with environmental principles, based on the use of the human and economic potential;
- The qualified and relatively cheap labour force attracts investors, in particular the foreign ones;
- The strong cultural and social potential resulting from the high concentration of cultural and social institutions allows the use of this potential for the development of tourism and foundation of international institutions;
- Accessibility of educational, social and health facilities.

Specific characteristics of the region
Based on comparison with regions of the developed EU countries and regions of SR we can state that BR uses its development potential only partially. The largest reserves of the region consist in the Under-utilisation of innovative potential in spite of the fact that it has the highest concentration of science and research capacities in SR. The result is its weak penetration into industry and services in sectors concentrated in the region. In comparison with global trends of increasing the quality of public services through informatisation and with the development in the neighbouring countries the region has a low level of informatisation.

The highest unused development potential of BR consists in:
- Rich natural and historic-cultural heritage, including protected areas (potential for the development of tourism);
- Strategic position in the centre of EU development activities;
- High-qualified labour force (the highest share of population with university education),
- High concentration of science, research and innovation institutions;
- Possibilities of international cooperation, particularly in the area of science, research and innovation.

**Competitive advantage**
The competitive advantage of BR consists in the concentration of institutions with national importance, strategic position in the centre of EU development activities, high innovative potential, cultural and historical wealth and high-qualified labour force.

**Strategic objectives:**
1. Development knowledge-oriented economy
2. Development of services and tourism
3. Integrated and ecological transport and reduction of energy intensity.

**Expected impacts:**
- Maintenance of the position of one of the most competitive regions of SR and EU
- Improvement of demographic development
- Increase of the use of innovation potential of the region and increase in the share of innovative enterprises up to the level of EU average
- Implementation of transport infrastructure for the development of integrated and ecological transport,
- Improvement of the quality of environment.

**Priorities in priority areas (PA):**

**PA 1: Science, research and innovation**

With a stress on areas specified in the approved Innovation Policy of SR, BR should aim its strategic development activities to the following areas: logistics, information and communication technologies, automation, control and measurement, chemical and biotechnological engineering, social sciences and education.
BR should use as much as possible the potential of a territory situated in the centre of EU development activities and in the proximity of important science, research and innovation centres in Vienna and Budapest, concentration of science-research institutions and universities in combination with high-qualified and language-skilled labour force.

Apart from innovation in industry, BR should focus on innovation in services, science and research, and in social areas.

In view of the possibilities of international cooperation it is necessary to develop an international technological or innovation incubator, or to make effort at location of internationally important research institutions in the region.

**PA 2: Human resources**

BR should aim its strategic activities to the development of human resources, with stress put on science, research and innovation and growth of the service sector in all industrial sectors, social services and health care. Increased attention should be paid to the ageing population.

In spite of the high concentration of educational institutions BR has not in place an open system of lifelong education and lifelong consultancy and its development in the area of human resources is based on commutation of employees, in particular of young people, from other regions of SR. The establishment of partnerships and networks will allow, also at level of the region, more effective use of high-qualified labour force with impact on the other Slovak regions, and vice versa.

In the area of public health BR should incorporate, at regional level, into its conceptual documents the strategies of population health promotions in all policies in cooperation with the Regional Public Health Authority (RPHA).

**PA 3: Employment**

BR should concentrate on the creation of new jobs, putting stress on the growth of employment in science, research and innovation and in the sector of services for innovative business and promising enterprises. Increased attention will have to be paid to employment of older population (aged of 50+).

BR will report a lack of labour force, particularly in social services and health care, and in professions with lower required qualifications, where it will remain dependent on commutation of labour force from other regions.

**PA 4: Competitiveness, growth and business environment**

BR should focus its strategic activities with stress put on the promotion of SME and creation of business environment in the sector of services for innovative business and promising enterprises, innovative enterprises and enterprises specialized in the development and production of the latest technologies, but also consulting and educational services.
BR should proactively and strategically direct FDI to new high-innovative industries related to main sectors and services.

**PA 5: Environment, climate change and renewable sources of energy**

BR should focus its strategic activities, with stress on the increase of use of renewable sources of energy and raw materials in all industrial sectors, on the promotion of ecological transport (particularly in the capital city), on the promotion of all initiatives leading to introduction of environmentally friendly technologies, not only in the production sectors, but also among population (households). It is necessary to draw up strategic documents in the area of management of protected areas in BR.

### 5.2 Priorities and objectives of the Strategy of development of the Trnava region

**Basic characteristics of the region as at 31. 12. 2008**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area of the region (v km²)</td>
<td>4 146.7</td>
</tr>
<tr>
<td>Number of inhabitants of the region (in thousands)</td>
<td>559.9</td>
</tr>
<tr>
<td>Density of population in the region per km²</td>
<td>135.0</td>
</tr>
<tr>
<td>Number of communities</td>
<td>251</td>
</tr>
<tr>
<td>- in it cities</td>
<td>16</td>
</tr>
<tr>
<td>Registered unemployment rate (in %)</td>
<td>4.3</td>
</tr>
<tr>
<td>GDP per capita in 2006</td>
<td>18 246.0</td>
</tr>
<tr>
<td>- (in PPP, in current prices)</td>
<td></td>
</tr>
<tr>
<td>- Comparison with EU 27 (in %)</td>
<td>77.2</td>
</tr>
<tr>
<td>Biggest cities:</td>
<td></td>
</tr>
<tr>
<td>• Trnava</td>
<td></td>
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<tr>
<td>• Piešťany</td>
<td></td>
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<tr>
<td>• Dunajská Streda</td>
<td></td>
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<tr>
<td>• Hlohovec</td>
<td></td>
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<tr>
<td>• Senica</td>
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</tr>
</tbody>
</table>
The Trnava region is predominantly rural, competitive, fast growing region of SR with prospects to become the second most competitive region in SR, with high attractiveness, favourable position near the centre of EU development activities and possibility of cross-border cooperation with the Czech Republic, Hungary and Austria.

Analysis of economic and social situation and evaluation of internal potential of the region

In terms of its population the Trnava region (TTR) is the smallest region of SR (10.3 % of total population of SR), abut with population density of 135 inhabitants per km² it belongs to densely populated and predominantly rural regions (48.6 % inhabitants live in the cities). The natural increase of population slightly increased in two districts only, so the region has been showing, in spite of one of the highest population growths (1.2 %), a natural decline in population (-0.2 ‰) for a long period. It had the second highest rise in migration (2 893 persons) in 2008, behind BR. Children aged of 0 – 14 years only accounted for 14.1 % of total population of the region in 2008. The region had the highest share of population in productive age (73.7%) that exceeded the average of SR.

In terms of average wages TTR achieved the lowest wage in health sector in whole SR, despite the high growth index from all sectors and industries. TTR is characterised by the highest employment (employment rate of 68 %), average nominal monthly wage (EUR 754.48) and registered unemployment rate (4.3 %), with the highest share of applicants for job with complete secondary education. TTR reported a growth of economically active population. Based on LFSS, the rate of economic activity in SR was 62.5 % in 2008. In 2008
services had the highest share on employment (54.4%), the number of persons employed in industry and construction was 40.4 % and in agriculture 5.2%.

**Monthly income** per person had been growing since 2004, at both national and regional level, and represented the amount of EUR 367.6 in 2008. The growth of income was accompanied by growth of household costs that achieved the level of EUR 318.7 in TTR, of which 24.5% were costs of food and non-alcoholic beverages and 20.9% were costs of housing (the least in SR). In comparison with other regions of SR they are at the level of the Košice region, on the second place behind BR.

**Education in TTR** is characterised by a developed network of all types of schools. The regional distribution is related to the age structure of population. TTR has a low number of nursery schools (292), with number of children accounting for 10.5% of total regional population. It also has a low number of elementary schools (241) and the number of students in the region decreased by more than 9 000. The structure of secondary schools consists of a lower number of grammar schools in SR (22) with a lower share of students (8.2%) and graduates (7.9%) on the total number of students and graduates in SR. In the category of secondary vocational schools TTR ranks among regions with a growing number of students and graduates (approximately 10.6%). TTR also has 4 universities. Since 2004 it has 2 new universities and 7 new faculties that are frequented by more than 10.4% of all university students in SR (22 thousand), with a high share of women (62%).

**Health care** in the region is provided by a network comprising all types of health facilities, a major part of which with nation-wide coverage. TTR has 6 hospitals and 6 centres for medical treatment, as well as 2 internationally important natural spas (Piešťany, Smrdáky) and 1 health resort (Piešťany). The health facilities are dominated by outpatient clinics (899) and the bed fund capacity of health facilities gradually decreased and represented a total number of 5 330 beds in 2008.

TTR has an important position in **culture** of SR, especially thanks to the city of Trnava. The regional city of Trnava has belong to the most important business and cultural and historical centres of Slovakia since the Middle Ages and still ranks among the most visited cities. The network of facilities consists of theatres (3), the number of which increased by 1 since 2007. It also has a ramified network of museums and galleries (48) with a growing number of visitors. On the contrary, TTR has the second lowest number of libraries (253) with Internet connection and the lowest number of registered users (54 thousand) behind BR. The region also has 3 astronomical facilities.

**Housing construction in TTR** registered a huge growth in the recent years. A total number of 2 739 new flats was completed in 2008 in TTR and the average dwelling area of flats decreased to 63.7 m².

TTR participated in the creation of added value by 12.5% and in 2006 achieved the second highest **GDP per capita in SR (18 246 in PPP)**, which represented 77.2% of the average of EU 27 and meant the fulfilment of the presently valid criterion for competitive EU regions.

The **business activity** is at average level. The region has 15 135 business entities (legal persons), that represented 8.9%, and 45 570 business entities (physical persons) that represented 10.8%. TTR also has 1 522 business entities with foreign participation.
TTR achieved **the second highest absolute volume of investments** and its share on provided investment incentives was 32.68% (in the years 2001 - 2006) and 27.53% in 2007, which is the highest share together with the Košice and Žilina regions. But the region remains attractive for foreign investments, too. In the future the rate of additional investment multiplication effects in the region will depend largely on the ability to increase the share of intraregional supplies, through the promotion of involvement of regional companies in supplier chains (promotion of subcontracting) or through the attraction of new suppliers to the region.

The development of sectoral structure in the region was also positive. It went through a fast sector restructuring and strengthened the position of the most important sectors (energy, automotive industry and electrical industry, followed by selected segment of consumer-goods industry).

The Trnava region ranks among **agriculturally productive regions** with a total area of agricultural land of 291 916 ha and with a share of agricultural land in SR (8.29%). It also has the fourth highest share on agricultural production of SR and the third highest share on revenues from sale of primary industry products (EUR 322.2 mil.). It also has an important position in plant and animal production.

TTR achieved **the second highest industrial revenues in SR** (16.5%). The labour productivity from sales of own products and goods amounted to TEUR 155. In 2008 TTR had a relatively high number of employees in industry (12.7%) and the third highest wages (EUR 680.47). The region has 743 companies with foreign participation and a total number of 10 991 enterprises, which are values comparable with the other regions of SR.

**Production in construction** achieved an average share of 8.41% (production by own employees) and a share of 9.46% based on supply contracts and labour productivity per employee (EUR 26 080).

The Trnava region had the **lowest number of visitors** (6.7%), although it does not have the lowest accommodation capacity.

Generally the Trnava region can be expected to maintain its position of an economically and socially developed region. It approaches closest the average of EU 27. The industrial production will continue to be dominated by automotive, electrical and energy industries, although it is menaced by outflow of investors to economically more attractive regions.

**Science and research costs** only account for 5.67% of total S&R costs in SR. TTR is the only of all Slovak regions where these costs has been decreasing since 2006, despite of the highest share on current costs (72.1%).

**Innovative potential of the region is rather low** and should be oriented to the development, particularly in automotive, electrical and energy industries, of technologies reducing the energy intensity of production, increasing consumption of energy from renewable sources, reducing negative environmental impacts, etc.

Trnava and environs have structural problems in the area of research, development and innovation comparable with the rest of Slovakia - insufficient instrumentation equipment and research and development infrastructure.
The transport position, in particular the proximity of BR, and the dense road and railway network create conditions for maintenance of the position of a significantly exposed region in terms of national and international transport. All transport modes are represented in TTR, with a specific position of water transport, the importance of which increased after the implementation of the waterworks Gabčíkovo that improved conditions for the development of water transport on the Danube. The region has an international airport (Piešťany). The total length of roads in the Trnava region is 1 951 km, of which 67.2 km of motorways and 291 km of first-class roads. TTR has an average number of vehicles (11.6 %) and passenger cars (11.6%). From the perspective of transport services it achieves freight transport outputs comparable with the Žilina region and passenger transport outputs comparable with the Košice region, but the second lowest behind BR, with a decrease registered in both areas.

TTR reports a low consumption of electricity, natural gas (6%), diesel oil (8,3%), heating oils, electricity (6.5%) and heat.

TTR is an average municipal waste producer (225.2 thousand tones, 404 kg per inhabitant) and achieves a low percentage of its utilization (7.4%). It does not hold for the percentage of population connected to the water mains (96.8%). Only 53.2% of inhabitants are connected to the public sewerage network, which is less than in the Banská Bystrica region. The region should also pay attention to waste water treatment. TTR has a low production of solid emissions, sulphur dioxide and other emissions.

Main disparities of TTR:

In agriculture
- Decrease of cultivated areas and number of reared livestock (poultry, pigs and beef cattle) and import of cheaper subsidised foods from the initial EU countries;

In industry
- Absence of accreditation and certification with international validity cause limitations in international trade;
- Lagging in innovation and technologies causes the increase of energy and raw-material intensity of production;

In services
- Disparities between the city and its environs caused by uneven distribution of services and educational institutions;
- Low level of informatisation of the production sector;
- Decrease in competitiveness of small and medium enterprises caused by high expansion of multinational companies, but also by the poor quality of provided services;
- Low quality of public services provided to citizens and business sector;

In technical infrastructure
- Insufficient capacity and telecommunications infrastructure;
- Low quality of second and third-class roads is often the cause of road accidents;
- High environmental stress in agricultural landscape;

In social infrastructure
- Much higher share of the unemployed in communities compared to Trnava and other cities;
- Significant outflow of labour force to other countries caused by the proximity of state border, without replacement for a high-qualified labour force;
- Insufficient investments in flats for rent, regeneration of the housing stock and slow reconstruction of cultural and historical monuments, which is caused by a lack of own financial resources for co-financing of development and investment projects;
- Insufficient cooperation of entities inside the region;
- High unemployment rate with unbalanced supply of jobs, particularly in rural districts.

Main factors of the development of TTR:

In agriculture
- Good soil economic production potential in vegetable, fruit and wine growing creates conditions for the development of housing based on rural settlement;
- High agricultural potential allows growing of virtually all kinds of ecological foods and animals;
- Development of biotechnologies;

In industry
- Developed industrial production and varied economic basis with a long tradition allows the transfer of technologies to promising sectors with use of EU funds in the area of services;
- High concentration of foreign investments creates conditions for the use of new technologies and innovation, particularly in automotive, electrical, food, energy and pharmaceutical industries;
- Possibility of strengthening of exports;

In services
- The geopolitical position potential enables direct contacts with developed regions with the possibility of intensification of foreign investments and international cooperation;
- Use of geothermal springs at the fulfilment of valid legal conditions (Act No. 538/2005 Coll.) for further development of traditional balneology and environmentally friendly rural tourism;

In technical infrastructure
- The crossing of important international and national railway lines and roads allows a better participation in international cooperation and positive relations with the capital city of Slovakia;
- Position potential of the region;

In social infrastructure
- The high share of population with university education creates conditions for use of new technologies and renewable sources of energy in accordance with environmental principles based on the use of the human and economic potential;
- Qualified and relatively cheap labour force is still attractive, particularly for foreign investors;
- The strong cultural and social potential resulting from concentration of cultural and social institutions allows its use for the development of tourism and foundation of international institutions with links to the Bratislava region;
- Accessibility of educational, social and health facilities;
- Stabilised demographic development and favourable age structure;
- Strong potential of cross-border cooperation.

Specific characteristics of the region
Based on comparison with regions of the developed EU countries and regions of SR we can state that TTR uses its development potential only partially. The largest reserves of the region consist in the Under-utilisation of innovative potential in main areas. The result is its weak penetration into industry and services in sectors concentrated in the region. In comparison with global trends of increasing the quality of public services through informatisation and with the development in the neighbouring countries, the region has a low level of informatisation, the level of informatisation in TTR is low and insufficient for its further development.

The highest unused development potential of the region as the basis of its competitive advantage is:
- Rural development and development of selected economic activities in agriculture,
- High share of population with university education,
- Strong potential of cross-border and international cooperation,
- Intra-regional relations between development centres and the country.

Competitive advantage
The competitive advantage of TTR is its advantageous geographic position near the EU development activities and the high share of foreign capital and high-qualified labour force in strategically important sectors.

Strategic objectives:
1. Development of human resources in new strategically important sectors
2. Development of environmental infrastructure and regional logistics
3. Strengthening of the position of science, development and innovation.

Expected impacts:
- Maintenance of the high economic growth and growth of the quality of life in the region
- Improvement of the environment
- Use of international cooperation and the internal potential for the development of a knowledge-oriented economy
- Introduction of eGovernment and improvement of the quality of services provided to rural population.

Priorities in the framework of priority areas (PA):

PA 1: Science, research and innovation

TTR should focus its strategic activities, with stress on areas specified in the approved Innovation Policy of SR, among others on increasing the energy security, use of renewable sources of energy, automotive and energy industries and areas of education for energy security and automotive industry, new ecological materials. As a part of promotion of its competitive position, TTR should concentrate on the transfer of progressive technologies and building of the capacity for participation at important international projects.
PA 2: Human resources

TTR should develop human resources, putting stress on science, research and innovation and growth of the sector of services for main industries, such as automotive, energy and selected segments of consumer-goods industry. Close cooperation with the business sector in development of an open system of lifelong education and lifelong consultancy will have a key importance for the preparation and development of human resources.

In the area of public health TTR should incorporate, at regional level, into its conceptual materials strategies of promotion of population health in all policies in cooperation with the Regional Public Health Authority (RPHA).

PA 3: Employment

TTR should implement its strategic activities with stress on the creation of new jobs in science, research and innovation and in the sector of services for main industries such as automotive, energy and selected segments of consumer-goods industry. In view of the proximity of Bratislava there is also a potential for development of employment in social services and health care.

PA 4: Competitiveness, growth and business environment

TTR should promote SME, the development of the business environment and growth of share of SME, particularly in the sector of services for main industries and new innovative enterprises. In view of the proximity of Bratislava there is also a potential for the promotion of business in social services and health care.

PA 5: Environment, climate change and renewable sources of energy

TTR should implement its strategic activities with stress on increased use of renewable sources of energy and raw materials in all main industries such as automotive industry, selected segment of consumer-goods industry and public services. It is also necessary to draw up strategic documents in the area of management of protected areas in the region.

5.3 Priorities and objectives of the Strategy of development of the Trenčín region

Basic characteristics of the region as at 31. 12. 2008

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area of the region (in km²)</td>
<td>4 502,2</td>
</tr>
<tr>
<td>Population of the region (in thousand persons)</td>
<td>599,9</td>
</tr>
<tr>
<td>Population density in the region per km²</td>
<td>133,2</td>
</tr>
<tr>
<td>Number of communities</td>
<td>276</td>
</tr>
</tbody>
</table>

Biggest cities:

- Trenčín
- Prievidza
- Považská Bystrica
- in it cities

Registered unemployment rate in % 18
GDP per capita in 2006 5.0
- (in PPP, in current prices) 14 023.0
- Comparison with EU 27 in % 59.4

Map No. 4 Trenčín region

Source: own output

The Trenčín region is other rural, competitive, fast-growing, industrial region of SR with prospects to become a competitive region at level of SR, with high attractiveness and advantages position for investors, long-term below-average unemployment rate, but situated out of the centre of EU development activities and with possibility of cross-border cooperation with the Czech Republic.

Analysis economic a social situation and evaluation of internal potential of the region

The Trenčín region (TNR) with population accounting for 11.1 % of total population of SR and population density of 133.2 inhabitants per km² ranks among densely populated regions. By the degree of urbanisation it is classified to the category “Other rural region“ (56.8 % inhabitants live in the cities). Also this region is characterised by ageing of population, with a slightly decreasing share of the child component and a slowly growing share of population in post-productive age. The natural decline in population of the region shows a value of – 0.77 ‰ and reflects a long-term trend. In 2008, children aged of 0 – 14 years accounted for 13.6% of total population of the region and the region has the highest share of population at productive age (73.3 %). Only several districts, not the region as a whole, benefit from migration.
Most inhabitants of the region are employed in industry (around 50 %) and public services – education have a high share on employment (10 %). Registered unemployment is low and achieved the level of 5.0% in 2008. In case of TNR it will be necessary to create job opportunities, particularly for economically active population that commutes to work to other regions (approximately 22 000 of economically active population). TNR reported an increase of economically active population to 299.3 thousand persons, which represented 49.9 % of total population of the region.

Average nominal monthly wage in 2008 was EUR 700.08, i.e. slightly above the Slovak average. Based on LFSS in 2008, the rate of economic activity represented 58.2% in SR. Industry, services and construction were evenly represented in the structure of the employed in economy, although the share of services is lower, rather than dominant, in comparison with the other regions. Most inhabitants of the region are employed in industry (around 36%) and public services (23 %) and services in general (56 %) have a high share on employment.

**Monthly income per person** have increased since 2004, at both national and regional level, and represented the amount of EUR 338.6 in 2008 in TNR. The growth of income was accompanied by growth of household costs: in TNR they represented EUR 317.3, of which 23.3% were costs of food and non-alcoholic beverages and 18.9 % costs of housing, which are above-average costs of food in SR, the second highest behind TTR.

**Education in TNR** is characterised by a developed network of all types of schools. The regional distribution is related to the age structure of population. TNR has a low number of nursery schools (282, i.e. 9.8 %). The number of children accounts for 10.3%, which is the lowest value in SR. The region also has a low number of elementary schools (201, i.e. 9.9 %) and registered a decrease in the number of students by more than 12 000 against the year 2004. The structure of secondary schools went through an optimisation and consists of grammar schools (20), which represent 8% in SR, frequented by 8 903 students (8.8 %) and graduates (9.1%) from the total number of students and graduates in SR. TNR ranks among regions with a decreasing number of secondary vocational schools, students and graduates. It has a 8.7 per cent share of secondary schools, which is the least in SR. TNR also has 3 universities. Since 2004 it opened only 1 new university and 2 new faculties that are frequented by more than 5.4% of all university students in SR (11.4 thousand) with a share of women 63 %, which is the lowest number of students in SR, despite the highest increase in the number of students since 2004.

**Health care** in the region is provided by a network of all types of health facilities. TNR has 11 hospitals, 3 natural spas (Bojnice, Nimnica, and Trenčianske Teplice) and 1 health resort (Trenčianske Teplice). Outpatient clinics (1052) have the highest share on the total number of number of health facilities (1 419) and the bed fund capacity gradually decreased and represented 5 214 beds in 2008, which is a value comparable with BR and TTR.

TNR has an important position in culture of SR, especially thanks to the city of Trenčín. TNR is the only region of SR without theatre. The network of facilities consists of a network of museums (10) and galleries (2) with a growing number of visitors. TNR has a low number of libraries (251) with Internet connection, but a relatively high number of registered users (68 thousand). The region also has 3 astronomical facilities.
Housing construction in TNR registered a small increase in the recent years. In 2008, 1,470 new flats were completed in TNR, which ranks TNR to regions with average number of new flats in SR. The average dwelling area of flats decreased to 64.94 m², which is the second lowest value in SR.

TNR participated in the creation of gross added value in SR by 10.4% in 2006. GDP in PPP amounted to EUR 14,023, which represented 59.4% of the average of EU 27 and which classifies the region to the category of so-called converging regions.

Business activity is at average level. The region has 15,486 business entities (legal persons) which represented 9.1%, and 46,461 business entities (physical persons) with a share of 11.1%. TNR has 1,163 business entities with foreign participation.

Inflow FDI to TNR is growing. An important FDI inflow was registered in 2003, when FDI at regional level achieved the amount of SKK 23.5 billion, i.e. 4.8% within SR. In 2007 it was SKK 36.23 mil., which represented a 4.6 per cent share within SR.

Based on its economic structure, TNR is regarded as an industrial region. It has a long tradition, particularly in the area of chemical (rubber), textile and engineering industries (still in process of restructuring). Progressive industries, such as electrical production, develop in the region and receive important foreign investments and supplies for the automotive industry. The region has 4 industrial parks with predominance of the engineering industry. From the economic perspective the region has two very different areas that are separated from each other by Považský Inovec - Považie and Ponitrie. In the area of Horná Nitra is situated the most important mining area of Slovakia, while Považie is dominated by engineering and textile industries. At present it belongs to the economically strongest regions of Slovakia. It is also very active in business of SME.

The Trenčín region ranks among less productive agricultural regions of SR with a total area of agricultural land of 185,353 ha, which is the second lowest share of agricultural land in SR (7.6%), behind BR. Agriculture is most developed in the district of Prievidza. Thanks to the geographical characteristics of the region, forestry plays an important role in it. It participates in agricultural production of SR by revenues from sale of primary industry products in amount of EUR 134.2 mil., which is 9.2%, and it registered an increase since 2004. It has the most important position in animal production.

TNR achieved industrial revenues in amount of EUR 6,221 mil., which accounted for 8.9% of industrial revenues of SR in 2008, and its labour productivity from sales of own products goods achieved the value of TEUR 65,591. In 2008 TNR had a relative high number of employees in industry and high average wages (EUR 629.38). A total number of 1,163 with foreign participation is active in the region, which represents an increase of nearly 500 companies against the year 2004.

Production in construction achieved an average share of 9.8% (production by own employees) and 10.6% based on supply contracts and labour productivity per employee (EUR 29,544).

TNR does not belong to the most visited regions of SR, despite its balneology tradition. It has a low accommodation capacity and achieved one of the lowest numbers of visitors (8.1%) behind TTR and the Nitra region.
Generally it can be expected that TNR has a chance to maintain, also thanks to new FDI, its position of economically and socially stable region and that it will slowly approach the average of EU 27. Industrial production will be more dominated by engineering and maybe by electrical industries. A sustainable position of chemical industry could be achieved through innovation, but the position of textile industry and mining is menaced.

Science and research costs increased in the recent years, but they still remain at a low level – 14.9% of total S& R costs in SR (the second highest behind BR). By costs per employee accounting for 14.8% TNR advanced to the group of innovative developing regions.

The innovative potential of the region should be used in the future for innovation in electrical and chemical industries, and in particular in forestry, agriculture, etc.

TNR has a well-developed system of road and railway transport. The region is crossed by a railway line Hungary/Austria - Bratislava - Trenčín - Košice – Poland with international importance. The region is also connected to the railway network of the Czech Republic (Trenčín - Brno). The region is also crossed by an important road corridor Bratislava - Trenčín - Žilina.

The most important route in the region is the motorway D1 built up to Považská Bystrica. The region is crossed by more than a fifth (80.3 km) of motorway routes of Slovakia.

TNR has a total length of roads of 1 877 km. With the number of vehicles (10.7%) it is ranked last among regions of SR; the same holds for its ranking with passenger cars (10.8 %). From the perspective of transport services the region achieves better outputs in freight transport than the Žilina region and is ranked third. In this transport it achieved nearly a double increase against the year 2003. Outputs in passenger transport are third highest and they did not decrease against the year 2003.

TNR has a low consumption of electricity as well as a low consumption of natural gas (5.9%). Diesel oil consumption is at the level of 8.3%, heating oil consumption is slightly higher, but heat consumption is low (1.8%).

TNR is a region with nearly the lowest municipal waste production (188.2 thousand t) and achieves a relatively low percentage of its utilization (8.5%). A total number of 73.3% inhabitants are connected to the water mains, which is the least in SR, and 47% of inhabitants are connected to the sewerage network, which is also below the average of SR and the second lowest value at all, behind the Nitra region. TNR reports low values in solid emission production. In dioxide sulphur production it is ranked first among regions of SR. TNR also achieves high values in nitrogen oxide production and its carbon monoxide production is at a level comparable with the other regions.

Natural sources of TNR are rich and varied. In particular mineral water sources that are used in balneology have a large importance.

Main disparities of TNR:

In agriculture
- Long-term economic instability of a large number of agricultural enterprises;
- Insufficient cooperation and coordination in agriculture and forestry;

**In industry**
- Lagging in innovation and technologies caused a growing energy and raw-material intensity of production, particularly in engineering industry;
- Insufficient cooperation of existing universities with the business sector in the area of science, research and innovation;
- Decline in coal mining, problems related to the programme of reduction of production, unfinished restructuring of important industries;
- Under-utilisation of existing production capacity, including research and development;
- Persisting high concentration in sectors of engineering industry with special production;
- Low level of innovation of products and lagging behind in export performance;

**In services**
- Decrease of competitiveness of small and medium enterprises due to large expansion of multinational companies, but also due to the absence of quality of provided services and products;
- Low quality of public services provided to citizens and the business sector, with concentration of supporting services in larger cities (Trenčín, Prievidza);

**In technical infrastructure**
- Insufficient capacity and telecommunications infrastructure;
- Poor quality of second and third-class roads is often cause of road accidents;
- High environmental stress of landscape (chemical industry, coal mining);

**In social infrastructure**
- Unsuitable demographic structure, high share of population at post-productive age;
- Insufficient connection of the educational system to the business sector;
- Significant outflow of labour force to other countries due to a proximity of state border, without replacement for high-qualified labour force;
- Uneven network of social service facilities in the individual districts of the region;
- Absence of an integrated system of lifelong education.

**Main factors of the development of TNR:**

**In agriculture**
- Good soil economic production potential in the area of forestry, corn and potato growing;

**In industry**
- Developed diversified structure of industry;
- High share of foreign capital in enterprises;
- Possibility of strengthening of export;
- Construction of science and technology parks;

**In services**
- Use of geothermal springs subject to the fulfilment of valid legal conditions (Act No. 538/2005 Coll.) for further development of traditional balneology;
- Available potential for regional economy based on information technologies;

**In technical infrastructure**
- Plans for navigability of the river Váh, ecologisation of transport;
- Possibilities of use of combined transport;
- Position potential of the region, logistic links, at least between the west and the east;

**In social infrastructure**
- Low unemployment rate in the recent years;
- Availability of qualified labour force;
- Good coverage of the territory by local civil infrastructure in the areas of education, health care, social services and culture;
- High share of population with university education creates conditions for the use of new technologies and renewable sources of energy in accordance with environmental principles based on the use of the human and economical potential;
- Strengthening of the system of lifelong education and targeted retraining.

**Specific characteristics of the region**

Based on comparison with regions of developed EU countries and regions of SR we can state that the development potential of TNR is not fully used. The most important reserves can be found in the insufficient use of innovative potential, particularly in chemical, engineering and electrical industries and ICT. In comparison with the global trends of improvement of the quality of public services through informatisation and with the development of neighbouring countries the level of informatisation of TNR is low.

The highest development potential of TNR is represented by:
- Advantage geographic position among fast-growing regions of SR
- Industrial tradition and good export performance, diversified industrial infrastructure with built-up energy distribution network
- Availability of qualified labour force,
- High representation of small and medium enterprises in the economic structure, high level of flexibility of small and medium enterprises;
- High expertise of workers in all areas of agriculture, forestry and food industry;
- Existence of competitive products (agriculture).

**Competitive advantage**

The competitive advantage of TNR consists in the industrial tradition, advantageous geographic position, supraregional links, availability of qualified labour force and competitive agriculture and conditions for the development of high-sophisticated services that support main sectors of industry.

**Strategic objectives:**

1. To increase the productivity and competitiveness of industry and services;
2. To develop human resources and increase their adaptability and to create a sufficient number of new jobs in sectors with higher added value;
3. To increase the effectiveness of agricultural production and quality of life of rural population;
4. To develop new environment-oriented services and SME;
5. To implement the express way R2;
6. To use geothermal springs for further development of traditional balneology.

**Expected impacts:**

- Increased use of regional sources and internal potential of the region;
- Growth of employment in the service sector;
- Establishment of new links among sectors and industries at regional and international level;
- Rural development;
- Full use of the potential in agriculture and forestry;
- Improvement of the quality of the environment;
- Improvement of transport infrastructure with interconnection of the whole region from west to the east (central Považie - upper Nitra),
- Improvement of the tourism capacity and traditional balneology.

**Priorities in the framework of priority areas (PA):**

**PA 1: Science, research and innovation**

TNR should focus its strategic activities, with stress on areas specified in the approved Innovation Policy of SR, particularly to the area of management, among others in the chemical industry (chemical specialties), research and development aimed to progressive and ecological materials, mechatronics and industrial ecology.

In the first phase TRN should concentrate on a consistent implementation of the regional innovation strategy in the region and to intensify cooperation among the individual regional actors in the area of science, research and innovation and to start more intensive establishing the supraregional and international relations and cooperation.

To promote science, research and innovation, preferably in the most innovative sectors (aviation, ICT and optical devices).

**PA 2: Human resources**

TNR should develop human resources, putting stress on the development of main sectors and on the growth of services for main sectors – engineering, chemical and electrical industries, forestry and ecological services.

In view of potential continuation of strategic restructuring and changes in the structure of economic activities in the individual subregions it is necessary to develop an open regional system of lifelong education and targeted retraining of available labour force towards new industries and the service sector, putting stress on recognition of results of informal education and on the promotion of professional mobility, particularly of young people, and on the interconnection of educational institutions with production enterprises.

In the area of public health the region should incorporate, at the regional level, into its conceptual documents the strategies of population health promotion in all policies in cooperation with RPHA.
PA 3: Employment

TNR should create conditions for the growth of employment, putting stress on maintenance and creation of new jobs in main industrial sectors and in the sector of services that support the adaptability of the region and the preparation of certain areas to important changes in the structure of their economic activities.

From the perspective of demographic development in the region it is necessary to concentrate on the creation of new jobs in promising sectors with the aim to attract qualified labour force back to the region (about 22 000 economically active inhabitants) and to maintain the high level of economic activity of women.

To substantially increase the quality of provided services on the labour market by promotion of partnership between the public and the private sectors, by promotion of lifelong consultancy (career guidance) and by systematic monitoring and evaluation of needs of the regional labour market.

PA 4: Competitiveness, growth and business environment

TNR should create conditions, putting stress on the promotion of SME and creation of business environment in the sector of services that support the adaptability of the region, use of new technologies in main sectors and the preparation of certain areas to important changes in the economic (sectoral) structure.

A main driving force for the economic growth and competitiveness of the region based on internal sources and internal potential is promotion of all forms of coordination, communication and cooperation among business entities in the region (clusters, common projects, thematic networks), accelerated transfer of know-how for key sectors in the region, provision of financial and non-financial support for new pilot and experimental development projects.

The promotion of business can also be oriented to the development of services in rural areas (agro-food industry and crafts).

PA 5: Environment, climate change and renewable sources of energy

TNR should Implement strategic activities putting stress on the increased use of renewable sources of energy and raw materials in main sectors – engineering, chemical, electrical industries and forestry. It also should draw up strategic documents in the area of management of protected sites in the region.

One of priority objectives should be the use of alternative energy sources (biomass, geothermal and solar energy, small hydraulic power plants) in areas where the construction of gas connections and promotion of ecological transport modes are not economic, and remediation of old environmental burdens.
5.4 Priorities and objectives of the Strategy of development of the Nitra region

Basic characteristics of the region as at 31. 12. 2008

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area of the region (v km²)</td>
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<tr>
<td>Number of inhabitants of the region (v thousand persons)</td>
<td>706.4</td>
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<tr>
<td>Population density in the region per km²</td>
<td>111.3</td>
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<tr>
<td>Number of communities</td>
<td>354</td>
</tr>
<tr>
<td>- in it cities</td>
<td>15</td>
</tr>
<tr>
<td>Registered unemployment rate in %</td>
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</tr>
<tr>
<td>GDP per capita in 2006</td>
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</tr>
<tr>
<td>- (in PPP, in current prices)</td>
<td>12 844.0</td>
</tr>
<tr>
<td>- Comparison with EU 27</td>
<td>54.4</td>
</tr>
</tbody>
</table>

Map No. 5 The Nitra region

Source: own output

The Nitra region is a predominantly rural, slow-growing region of SR, with adequate attractiveness and position, average degree of preparedness for innovation, average competitiveness, situated out of the centre of EU development activities and with the possibility of cross-border cooperation with Hungary.

Analysis economic and social situation and evaluation of internal potential of the region

The Nitra region (NR) with population (13.1% of total population SR) and population density of 111.3 inhabitants per km² belongs to densely populated regions. It is the third most
populated region of SR, behind the Košice and Prešov regions. NR is a predominantly rural region of SR (46.8% of urban population) that is significantly marked by ageing of population and decrease of the child component of population. The natural decline in population (-2.2%) is so high that, despite the third highest rise in migration in SR, the overall decline in population in the region (-0.54%) persists and represents the highest decline among regions of SR. In 2008 children aged of 0 – 14 years only accounted to 13.8% of total population of the region. The region had the highest share of population at productive age (72.8%).

NR reported a growth in economically active population. NR has an average employment (employment rate of 64.1%), which represents 361 thousand persons, average nominal monthly wage (EUR 683.57) and registered unemployment rate (7.4%), with the highest share of applicants for job with complete secondary education. Based on LFSS, the rate of economic activity was 59.5% in 2008. NR will have to create job opportunities, particularly for economically active population that commutes for work to other regions (about 27 000 economically active inhabitants). Most population of the region is employed in industry (about 36%), but public services (23%) and services in general (56%) also significantly contribute to employment.

Monthly income per person has increased since 2004 at both national and regional level and represented an amount of EUR 349.1 in 2008. The growth of income was accompanied by a growth of household costs that amounted to EUR 336.0 in NR, of which 21.3% were costs of food a non-alcoholic beverages and 19.6% costs of housing. These values represent an average at the level of SR.

Education in NR is characterised by a developed network of all types of schools. The regional distribution of schools is related to the age structure of population. NR has an average number of nursery schools (403, i.e. 14%) and a number of children representing 12% of total population of the region. The region also has an average number of elementary schools (315, i.e. 14%) and registered a decrease in the number of students of more than 9 000. The structure of secondary schools consists of grammar schools (28, i.e. 11.1%), that are frequented by 10 550 students (10.4%) and graduates (10.5%) from the total number of students and graduates in SR. As regards secondary vocational schools, NR belongs to regions with a decreasing number of students and graduates representing a share of 13%. The Nitra region has 3 universities. Their number did not increase since 2004, but one new faculty was opened. Students of these universities account for 12.4% of all university students in SR (26 thousand) with a high share of women (62%).

Healthcare in the region is provided by a network of all types of health facilities. NR has 13 hospitals and 3 centres for medical treatment. Outpatient clinics (1 272) have the highest share on the total number of health facilities (1 683). The bed fund capacity gradually decreased and represented 4 356 beds in 2008.

NR has not as important position in culture of SR as BR, but it is a region with high concentration of fairs, expositions and festivals and with a high cultural and historical potential. The Andrej Bagar Theatre in Nitra with its theatre festival (and 10 other theatre scenes) gained an international reputation. NR also has a ramified network of museums (10) and galleries (3), but the number of their visitors significantly decreased since 2006. On the contrary, NR has a large number of libraries (351) with Internet connection and an average number of registered users (62 thousand). The region also has 4 astronomical facilities.
Housing construction in NR registered a huge increase in the recent years and 1 428 new flats were constructed in 2008 in NR, which ranks NR to average regions of SR. The average dwelling area of flats decreased to 72.4 m².

In 2006 NR participated in the generation of gross added value by 11.2%. GDP in PPP amounted to EUR 12 844, which represented 54.4% of the average of EU 27 and which ranks the region among so-called "converging" regions.

Business activity is at average level. The region has 16 811 business entities (legal persons), which represents 9.9%, and 52 830 business entities (physical persons), which represents 12.6%. NR also has 1 992 business entities with foreign participation.

The FDI inflow to NR is growing. An important inflow was registered in 2006, when FDI in the region achieved the level of SKK 17.9 billion, i.e. 3.7% of FDI in SR. In 2007, NR achieved FDI totalling SKK 24.20 mil., which represented 3.1% within SR. The sustainability of investments is significantly affected by the level of participation of companies active in the region at quality customer/supplier relations. The key factor should be strengthening of relations among companies from the region within the value chain, but also their relations with competitors and related companies, and the development of intensive relations with other actors such as educational institutions, research centres etc. (e.g. through promotion of cluster initiatives).

NR is one of the most productive agricultural regions of SR with a total area of agricultural land of 468 669 ha, which is the highest share of agricultural land in SR (19.3%). NR also participates in agricultural production of SR by the highest share on revenues from sale of primary industry products (EUR 464.8 mil.) and has the most important position in plant and animal production.

The development of sectoral structure in the region is favourable. It went through a fast sectoral restructuring and strengthened the position of the most important sectors (engineering and chemical industries), followed by selected segments of the consumer-goods and electrical industries. The region has 4 industrial parks.

NR achieved industrial revenues in amount of EUR 4 866 mil. and labour productivity from sales of own products goods amounted to TEUR 64 712. In 2008 NR had a relatively high number of employees in industry (36%) with average wages of EUR 600.82. A total number of 1 992 companies with foreign participation is active in the region, which represents nearly a triple against the year 2004.

Production in construction achieved an average share of 8.86% (production by own employees) and a share of 8.37% based on supply contracts and labour productivity per employee (EUR 26 993).

The Nitra region does not belong to the most visited regions of SR. It has a low accommodation capacity and achieved one of the lowest numbers of visitors (6.3%) within SR.

The general expectation is that NR will hardly maintain its position of an economically and socially stable region and that it will slowly approach the average of EU 27. The industrial production will be more dominated by power engineering. Thanks to new foreign
investments the share of engineering, electrical and automotive industries, and through innovation also of chemical industry could increase. The position of shipbuilding industry is menaced.

**Science and research costs** are very low and only account for 6.67% of total S&R costs in SR. They did not register an important and sufficient increase since 2004. By costs per employee with a share of 10.0% NR advanced to the group of regions lagging behind in innovation.

**Innovative potential of the region** should focus on innovation in electrical industry and energy sector, on the increase of consumption of energy from renewable sources, on technologies mitigating the negative environmental impacts, especially in the area of agriculture, etc..

The area of Nitra has structural problems in the area of research, development and innovation comparable with the rest of Slovakia - insufficient instrumentation equipment and insufficient S&R infrastructure, but an important and unique science and research basis for agriculture is concentrated in the region.

NR has relatively **good transport links** to the other regions of SR, despite the absence of motorways with a Nitra traffic junction. All types of transport, with the exception of fair transport (local aerodrome Nitra - Janíkovce), are represented there. The water transport has a specific position and its importance grows (Danube and a port of national importance in Komárno). NR has a total length of roads of 2 559 km and nearly the largest share of first and second-class roads. In the number of vehicles (14.1%) is belongs to average regions, but with the number of passenger cars (13.5%) it is ranked second behind BR. From the perspective of transport services NR achieves freight transport output comparable with the Žilina region. The volume of freight transport significantly increased against the year 2003 and passenger transport outputs are the second highest behind the Žilina region, in spite of their decrease.

NR has a **low consumption of electricity**, but the second highest gas consumption (16.71%) behind BR. The diesel oil consumption is at the level of 11.75% and heating oil consumption is very low, like heat consumption (1.9%).

NR is an average municipal waste producer (234.4 thousand t) and achieves a relatively low percentage of its utilization (6.9%). Ninety per cent of inhabitants are connected to the water mains, but only 45.5% of inhabitants are connected to the sewerage network, which is the least in SR. NR has low production of solid emissions, sulphur dioxide and other emissions.

The regional city Nitra is the oldest settlement of Slovakia (the first written mention dates back to the beginning of the 9th century). At present it is the fourth largest city of SR, a centre of agricultural education and research.

**Main disparities of NR:**

**In agriculture**
- Reduction of cultivated area and number of reared livestock (poultry, pigs and beef cattle) and import of cheaper subsidised foods from the initial EU countries;
- Insufficient level of cooperation and coordination in agriculture;
In industry
- Absence of accreditation and certification with international validity causes limitations in international trade;
- Lagging in innovation and technologies causes a growing energy and raw-material intensity of production;
- Low economic performance and competitiveness of SME;

In services
- Significant disparities in the relation between the city and environs caused by uneven distribution of services and educational institutions;
- Decrease in competitiveness of small and medium enterprises due to large expansion of multinational companies, but often also due the absence of quality of provided services;
- Low quality of public services provided to citizens and the business sector;
- Insufficient promotion of knowledge-based economy;

In technical infrastructure
- Insufficient capacity and telecommunications infrastructure;
- Poor quality of second and third-class roads is often the cause of road accidents;
- High environmental stress of agricultural landscape;

In social infrastructure
- Unsuitable demographic structure, high share of population at post-productive age;
- Significant outflow of labour force to other countries due to a proximity of state border, without replacement for high-qualified labour force;
- Insufficient investments in flats for rent, regeneration of housing stock and slow reconstruction of cultural and historical monuments, which is caused by a lack of own financial sources for cofinancing of development and investment projects;
- Weak cooperation of entities inside the region;
- High unemployment rate with unbalanced supply of jobs, particularly in rural districts;
- The highest share of population with complete elementary education in SR.

Main factors of the development of NR:

In agriculture
- Good soil economic potential in vegetable, fruit and wine growing creates possibilities for the development of housing based on rural settlement. The region has the best conditions for agricultural production;
- High agricultural potential allows growing of virtually all types of ecological foods and animal production – the key sector;
- Development of biotechnologies;

In industry
- Developed industrial production and varied economic basis, but with a different position of the individual sectors (main sectors are engineering, chemical and food industries) with a long tradition allows the transfer of technologies to promising sectors, particularly to the electrical industry;
- Possibility of strengthening of exports, establishment of supraregional relations;

In services
- The geopolitical position potential allows direct contacts with developed regions and intensification of foreign investments and international cooperation;
- Use of geothermal springs subject to the fulfilment of valid legal conditions (Act No. 538/2005 Coll.) for further development of traditional balneology and ecological rural tourism;

In technical infrastructure
- Position potential of the region, logistic links;
- Potential use of water sources;
- Improvement of energy balance of the region by utilisation of the nuclear energy complex Mochovce, hydraulic power potential, geothermal springs, biomass and biogas;

In social infrastructure
- The high share of population with university education creates conditions for use of new technologies and renewable sources of energy in accordance with environmental principles based on the use of the human and economic potential;
- Accessibility of educational, social and health facilities;
- Strong potential of cross-border cooperation, possibility of building cross-border settlement conglomerations.

Specific characteristics of the region

Based on comparison with regions of developed EU countries and regions of SR we can state that the development potential of NR is not fully used. The largest reserves are in the under-utilization of the innovation potential, particularly in agriculture a chemical industry. It causes its weak penetration into industry, especially agriculture and services, in sectors concentrated in the region. In comparison with the global trends of increasing the quality of public services through informatisation and with the development of neighbouring countries, the level of informatization of NR is low.

In the recent years performance of NR started to decline in comparison with the other regions of SR, in spite of its potential.

We see the highest development potential of NR in:
- Existing network of scientific and research institutions and the potential of high-qualified labour force suitable for the development of research and development
- Supraregional links to fast-growing regions
- Shipping route on the Danube with riverports of international importance in Komárno and Štúrovo.

Competitive advantage
The competitive advantage of NR consists in the high innovative potential and high-qualified labour force in the area of agriculture and chemical industry with favourable conditions for the development of biotechnologies, new type of social services and health care.

Strategic objectives:
1. Science, research and innovation aimed to agriculture and chemical industry
2. Comprehensive rural development and agriculture
3. Local and interregional cooperation
4. Sustainable development of landscape.

Expected impacts:
- The enhancement of innovative capacity and potential, particularly in agriculture, chemical industry and alternative sources of energy;
- Comprehensive rural development, sustainable development of landscape as a part of the quality of life in the region;
- Strengthening of intraregional, but also supraregional and international relations in strategic development areas;
- Improvement of demographic situation in the region;
- Increased orientation of regional economy to new types of services in the social area and health care.

Priorities in the framework of priority areas (PA):

**PA 1: Science, research and innovation**

NR should implement its innovation strategy, putting stress on areas specified in the approved Innovation Policy of SR and on the research and development infrastructure.

In view of the long-term formation of the economic structure in NR and the significant influence of agriculture and food industry on the economic and social development of the region it will be necessary to link the location of the University of Agriculture with formation of research infrastructure, as well as the orientation of research workplaces, to promote its further diversification and to establish a functional partnership among universities, specialised workplaces of the Slovak Academy of Sciences, specialised state and private research institutes, business research and development.

**PA 2: Human resources**

NR should develop human resources, putting stress on the growth of the service sector in connection to main sectors – chemical and engineering industries and agriculture, ecological services, social services and health care. Increased attention should also be paid to ageing population.

In the area of public health NR should incorporate, at regional level, into its conceptual documents the strategies of population health promotion in all policies in cooperation with RPHA.

**PA 3: Employment**

NR should concentrate on maintenance and creation of new jobs in the service sector in connection to main sectors (production of electrical and optical devices, metals and metal products, food industry), but in particular on the growth of employment in rural areas. Increased attention should also be paid to creation of new jobs in the area of provision of social services and health care, in view of the ageing of population.

**PA 4: Competitiveness, growth and business environment**
NR should concentrate on the promotion of SME and creation of business environment, particularly in the country and in social services and health care, biotechnologies and ecological services.

NR (together with TTR) has the best conditions for agricultural production in the whole Slovakia. This territory is characterised by the highest natural, social and economic potential for agriculture, which creates a strategically suitable orientation to all types of agricultural activities.

The rural development should be connected to so-called “silver“ economy\(^5\) and services in the area of social and health care.

**PA 5: Environment, climate change and renewable sources of energy**

NR should concentrate on strategic activities putting stress on increased use of renewable sources of energy and raw materials in all main sectors – chemical and engineering industry and agriculture. It is necessary to draw up strategic documents in the area of management of protected sites in the region.

NR has the best conditions for environmental protection and planning in relation to the development of agriculture, landscaping and use of alternative sources of energy.

**5.5 Priorities and objectives of the strategy of development of the Žilina region**

**Basic characteristics of the region k 31. 12. 2008**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Area of the region (in km²)</td>
<td>6 808.8</td>
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<tr>
<td>Number of inhabitants of the region (in thousand persons)</td>
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<td>Population density in the region per km²</td>
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<td>Number of communities</td>
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<td>- in it cities</td>
<td>18</td>
</tr>
<tr>
<td>Registered unemployment rate in %</td>
<td>6.2</td>
</tr>
<tr>
<td>GDP per capita in 2006</td>
<td>12 145.0</td>
</tr>
<tr>
<td>- (in PPP, in current prices)</td>
<td>51.4</td>
</tr>
</tbody>
</table>

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\(^5\) “Silver“ economy is defined as economy that reacts to key problems related to demographic ageing in the context of regional policy and cohesion policy. Its objective is to ensure that regional authorities and organisations at regional level can fully take into account problems and needs of ageing population in the preparation of regional strategies.
The Žilina region is other rural, competitive, fast-growing, converging industrial region of SR with prospects to become a competitive region at level of SR, with high attractiveness for investors, high innovative potential and long-term below-average unemployment rate, but situated out of the centre of EU development activities, with possibility of cross-border cooperation with the Czech Republic and Poland.

Analysis economic and social situation and evaluation of internal potential of the region

With its population (12.9% of total population of SR) and population density (102.3 inhabitants per km²) the Žilina region (ZR) ranks among densely populated regions of SR and is categorised as other rural region (50.3% of urban population). The settlement is concentrated in valleys. Also this region is marked by the ageing of population. The share of the child component slightly decreases and the share of population at post-productive age grows. The overall rise in population in the region represents 0.93‰ per 1000 inhabitants. In 2008 children aged of 0 - 14 years only accounted for 16.4% of total population of the region, while population at productive age represented 72.1%. Only certain districts, not the region as a whole, benefit from migration.

Most inhabitants of the region are employed in industry (about 35%), in public administration and education (together nearly 25%). Registered unemployment is low and achieved 6.2% (below the average of SR) in 2008. ZR will have to create job opportunities, particularly for economically active population that commutes for work to other regions (about 23 000 economically active inhabitants).

ZR reported a growth of economically active population, which represented 48.4% of total population of the region. In 2008 the average nominal monthly wage was EUR 717.67 and
represented a better average among Slovak regions, but remained below the average of SR. Based on LFSS, the rate of economic activity accounted for 58.4% of the value of SR in 2008.

Industry, services and construction were evenly represented in the structure of workers in economy, although the share of services is low against the other regions and it is not dominant. Workers in industry and construction accounted for 41.7%, persons employed in services 54.6 % and workers in agriculture 3.7 %, which is below the average of SR.

**Monthly income per person** increased at national and regional level since 2004. In ZR it represented the amount of EUR 336.50 in 2008 and remained below the average of SR. The growth of income was accompanied by the growth of household costs. In ZR they represented EUR 335.4, of which 21.9% were costs of food and non-alcoholic beverages and 18.6% costs of housing. These values are below the average of SR.

**Education** in ZR is characterised by a developed network of all types of schools. The regional distribution is related to age structure of population. ZR has an average number of nursery schools and their number decreased since 2004 (338, i.e. 11.7%). The number of children represents a share of 13.3% in SR. The region has a low number of elementary schools (270, i.e. 12.1%) and registered a decrease of students of more than 13 000 against the year 2004. The structure of secondary schools went through optimisation. It consists of grammar schools (28), which is 5.4% in SR. They are frequented by 13 631 students (13.4%) and graduates (14%) of all students and graduates in SR. As regards secondary vocational schools, ZR belongs to regions with a declining number of schools, students and graduates, with a 14.7 per cent share of secondary schools. ZR also has 2 universities. Since 2004 their number did not increase and they are frequented by more than 9.9% of all university students in SR (20.8 thousand) with a share of women 57.2 %, which is nearly the lowest number of women in SR, despite the highest increase in the number of students since 2004.

**Health care** in the region is provided by a network of all types of health facilities. ZR has 9 hospitals and 3 natural spas (Rajecké Teplice, Lúčky, Turčianske Teplice). Outpatient clinics (1 181) have the highest share on the number of health facilities (1 571) and the bed fund capacity gradually decreased (in 2008 a total number of 5 847 beds, which is a value comparable with BR and TTR).

ZR has a network of cultural facilities consisting of theatre scenes (6), which increased by 2 since 2007. It also has a ramified network of museums (11), the number of which decreased by 1, and galleries (6), which is the highest number in SR. The number of their visitors increased every year by nearly 200 thousand visitors until 2007. On the other hand, ZR has an average number of libraries (305) with Internet connection, but a relatively high number of registered users (88 thousand). The region also has 3 astronomical facilities.

**Housing construction in ZR** slightly increased in the recent years. In 2008, 2 138 new flats were completed in ZR, which ranks ZR to the average of SR. The average dwelling area of flats decreased to 67.49 m².

The region participated on generation of gross added value of SR by 10.4 per cent in 2006. **GDP in PPP/capita** amounted to 12 145, which is 51.4% of the average value of EU 27.
**Business activity** is at above-average level. The region has 17 217 business entities (PA), which represented 10.1%, and 59 830 business entities (PP), which represented 14.3%. ZR has 678 business entities with foreign participation (below the average of SR).

**FDI inflow to ZR is growing.** An important inflow was registered in 2006, when FDI in the region achieved the value of SKK 35.6 billion, i.e. 7.8% of FDI in SR. In 2007 FDI achieved the level of SKK 47.83 mil. (6.1%).

The intensification of system relations among companies participating in the value chain in automotive industry caused that the existing customer/supplier relations show signs of a functioning “cluster“. Supported investments in this case have very positive impacts on the dynamics of regional economy, where initial investments were able to induce more investments and secondary creation of new jobs in the region.

ZR can be classified as an **industrial region with a high development potential.** It is due to two factors: location in the proximity of industrial zones in the neighbouring Czech Republic and Poland, but also to the lack of fertile agricultural land. Industry accounts for more than 70% of annual production of the region. It includes all sectors and is evenly distributed.

The most efficient companies in the region are active in the metallurgical and engineering industries, as well as in timber, cellulose and paper production and production of related products. In comparison with other regions, ZR is characterised by a strong position of construction with annual share higher than 13%. The electrical industry, telecommunications and IT sector also have an important position. The highest boom is registered in the automotive industry and related industries.

ZR achieved **industrial revenues** in amount of EUR 7 490 mil., i.e. 10.7% of industrial revenues achieved in SR in 2008. The labour productivity from sales of own products goods achieved the amount of EUR 106 707 thousand. In 2008 ZR registered a decline in the growth of employees in industry and average wages (EUR 653.97). The region has 676 companies with foreign participation, which represents an increase of nearly 250 against the year 2004.

**Production in construction** achieved the share of 16.8% (production by own employees), which was the second highest value in SR, behind BR, and a share of 17% based on supply contracts, which was also the second highest value. The labour productivity per employee was EUR 30 637.

ZR belongs to **less productive agricultural regions of SR** with a total area of agricultural land of 245 063 ha (10.1%) and with the lowest share of arable land in SR. The region participates in agricultural production of SR by revenues from sale of primary industry products in amount of EUR 79.4 mil., which only represents 5.4% (the least in SR) and which decreased since 2004. It has a more important position in animal production.

**ZR has an important position in tourism** and ranks among the most visited regions of SR, with the highest accommodation capacity, which achieved one of the highest numbers of visitors (18.8%) behind BR and in front of the Prešov region.

It can be expected that ZR has a chance to maintain its position of economically and socially stable region, also thanks to new FDI and that it will gradually approach the average of EU
27. Industrial production will be further dominated by the automotive and engineering industries. The electrical industry might also improve its position.

**Science and research costs** were growing very slowly in the recent years and still remain at a low level – 6.5% of total S&R costs in SR (less than the Košice region). In costs per employee of 10.3% ZR advanced to the group of innovative developing regions, comparable with NR.

The region has a permanent science and research basis, particularly in the area of logistics, ICT, chemical and food industries. Seven industrial parks were built up in the region, particularly near Žilina and Martin with high concentration of engineering and automotive industries.

**ZR has a strong innovative potential in settlements.** Performance of tourism grows. Rural areas are on the way to transformation, supported by instruments for diminution of regional disparities – especially by diversification of economic activities. Identity/specific character of settlements and subregions is conserved and well used in favour of local high-quality products. ZR with its clean environment is a region with a well-developed transport, business and public infrastructure, high-developed information technologies and attractive tourism.

**ZR is an important international intersection** that connects transport networks of three countries – SR, Czech Republic and Poland. For achievement of a sustainable economic and social growth of ZR it is necessary to complete the superior transport infrastructure in the route of multimodal corridors Va and VI and TEN-T. After completion of the motorway network ZR will be connected to further international transport corridors. Renovation of railways and corridors of combined transport together with modernisation of the airport will create very favourable conditions for development of a transport system of European standard.

ZR has a total length of roads of 2 020 km, with the third longest network of motorways (69.1 km) and a high share of first-class roads. With the number of vehicles (11.2%) it is ranked last among the regions of SR, like with the number of passenger vehicles (11.1%). In provision of transport services it achieves average performance in freight transport, where it registered a significant increase against the year 2003. Passenger transport outputs are average, having regard to the transport potential of the region, and decreased against the year 2003.

**ZR has an above-average consumption of coke and coal,** an overall above-average consumption of electricity, but a low consumption of gas (6.7%). Diesel oil consumption, that represented 9.1%, was the lowest in SR in 2003. Heating oil consumption is very low and significantly decreased since 2003.

In 2003 ZR reported **the highest municipal waste production in SR,** but its production decreased in 2007 (210 thousand t) and the region achieves a very low percentage of waste utilization (4.4%). A total number of 86.5% inhabitants are connected to the water mains, which is just below the average of SR. Only 52.2% of inhabitants are connected to the public sewerage network, which is also below the average of SR. ZR reports relatively low values of solid emission, sulphur dioxide and nitrogen oxide production, but above-average values of carbon monoxide production in comparison with other regions.
Natural sources of ZR are rich and varied. Forests (57% of area of the region) and mineral and thermal water sources used particularly in balneology and food industry have a large importance. The region has not raw material stocks.

Main disparities of ZR:

In agriculture
- Insufficient cooperation a coordination in agriculture;
- Underutilization of sources in forestry;

In industry
- Lagging behind in innovation and technologies causes the growth in energy and raw-material intensity of production, particularly in the engineering industry;
- Underutilisation of existing production capacity, including research and development in electrical, metallurgical and engineering industries;
- Insufficient level of restructuring of industry and other main sectors in certain districts of the region;

In services
- Decrease in competitiveness of small and medium enterprises caused by large expansion of multinational companies, but also by poor quality of provided services (electrical industry);
- Low quality of public services provided to citizens and the business sector;

In technical infrastructure
- Insufficient capacity and telecommunications infrastructure;
- Poor quality of second and third-class roads is often the cause of road accidents;
- Unfinished transport infrastructure at supraregional level;
- High environmental stress of landscape (chemical industry, metallurgy);

In social infrastructure
- Low number of employees with university education in enterprises and institutions, unsuitable structure of education, high share of population with elementary education, important intraregional disparities;
- Low standard of living in northern districts;
- Insufficient connection of the educational system to the business sector;
- Significant outflow of labour force to other countries due to a proximity of state border, without replacement for high-qualified labour force;
- Uneven network of social service facilities in the individual districts of the region;
- High percentage of graduates from secondary schools who do not work in their study specialization (80%), low level of knowledge and preparedness of the graduates from elementary and secondary schools for needs of the labour market;
- Widening disparities in position of men and women on the labour market.

Main factors of the development of ZR:

In agriculture
- Good soil economic potential in the area of forestry, corn and potato growing;

In industry
- Developed diversified structure of industry;
- High share of foreign capital in enterprises;
- Potential for strengthening of exports;
- Development of science and technology parks and regional innovation centres;

In services
- Available potential for regional economy based on information technologies, innovative services in education and supporting services for main industrial sectors;
- Attractive potential for the development of tourism;

**In technical infrastructure**
- Plans for navigability of the river Váh, ecological and integrated transport;
- Possibility of use of combined transport;
- Transport connection of Krakow and Budapest;
- Position potential of the region, logistic links;
- Sufficient potential of water sources and high percentage of forest land;
- Self-sufficiency in electricity production, possibility of development of new energy sources;

**In social infrastructure**
- Favourable demographic situation, long-term progressive natural mobility and natality;
- Low unemployment rate in the recent years;
- Strengthening of the system of lifelong education and targeted retraining.

**Specific characteristics of region**
Based on comparison with regions of developed EU countries and regions of SR we can state that the development potential of ZR is not fully used. We see the largest reserves particularly in the underutilization of innovative potential in chemical, automotive and engineering industries and in services, which causes its weak penetration into industry and threatens the competitiveness of the region. In comparison with the global trends of increasing the quality and accessibility of public services through informatization and with the development in neighbouring countries, the level of informatization and the quality of provided electronic services in the Žilina region are low.

We see the highest unused development potential of ZR in:
- Strategic position (west-east connection, border region and international intersection)
- Natural wealth – protected areas, geothermal energy, cultural traditions
- Above-average innovative potential and high number of SME.

**Competitive advantage**
The competitive advantage of ZR consists in the strong innovative potential combined with advantageous geographic position, accessibility and attractiveness of the region, potential for development of tourism, transport and new services to support the main industrial sectors.

**Strategic objectives:**
1. Strengthening and development of innovative potential;
2. Utilization and strengthening of the internal potential of tourism with connection to environmental protection and planning;
3. Supraregional and regional transport accessibility and quality of services with stress on cross-border cooperation and supraregional relations.

**Expected impacts:**
- Utilization of the strong innovative potential for the growth of regional GDP and productivity;
- Growing share of services and innovative enterprises on the economic structure of the region;
- Strengthening of relations among science, research and innovation – business sector and educational institutions;
- Growth in employment, export performance and competitiveness of regional economy,
- Increase of the quality of life achieved by creation of favourable conditions for access to good education, suitable and adequately rewarded jobs with family support, quality social and health care, equality of opportunities, sufficient supply of cultural, sport and leisure activities;
- Improvement of the quality of the environment.

**Priorities in the framework of priority areas (PA):**

**PA 1: Science, research and innovation**

ZR should implement its innovation strategy, putting stress on areas according to the approved Innovation Policy of SR and on logistics and natural sciences, in particular on information and telecommunication technologies, engineering industry (bearing production), transport and logistics.

In this area it will be necessary particularly to implement the required infrastructure, at least one common technological incubator (the business sector and university) and a functional RIC. But the first step should be the increase of absorption capacity for external sources to support science, research and innovation and to increase the capacity in the business sector – training of employees in the area of new technologies and innovative management.

**PA 2: Human resources**

ZR should support the implementation of strategic activities putting stress on the development of main industrial sectors and on the growth of the service sector, also for tourism, logistics and IKT.

ZR as one of few regions of SR has been trying for a long period to provide systematic access to the development of human resources by creation of open environment and by promotion of pilot projects in the area of lifelong education and lifelong consultancy in accordance with the National Programme for Learning Regions. In the following period it will be important to better interconnect these activities and to develop a suitable “region-specific“ content of further education and systematic monitoring and evaluation of needs of the labour market, also with connection to the cross-border labour market and mobility.

In the area of public health ZR should incorporate in its conceptual materials at regional level strategies of population health promotion in all policies in cooperation with RPHA.

**PA 3: Employment**

ZR should implement its strategic activities, putting stress on maintenance and creation of new jobs in main industrial sectors and in the service sector, especially for areas such as tourism, logistics and ICT, as well as for the promotion of employment in rural areas.
If we suppose that the automotive industry, logistics and ICT, and in rural areas forestry and tourism will be become the most important sectors of regional economy in the following periods, it will be required to create conditions for creation of new and better jobs in these sectors in connection with green economy⁶.

It will be necessary to solve the question of creation and maintenance of suitable job opportunities, particularly for graduates from schools and disadvantaged groups of population (rural population with low qualification) strategically and in the long term and to support not only new forms of work (teleworking), but also foundation of family businesses.

PA 4: Competitiveness, growth and business environment

ZR should promote strategic activities putting stress on the promotion of SME and creation of business environment in the service sectors, particularly in the area of tourism, logistics and ICT, and to concentrate on the promotion of business in rural areas.

For the competitiveness, growth and business environment in the region it will be necessary not only to increase the innovation performance, but also to accelerate the process of introduction of ICT and eGovernment, to implement a network of supporting services for enterprise, to improve possibilities of financing of new founded SME and to systematically support business activities in the area of ICT, tourism and logistics and in rural areas and to maintain the present dynamics of growth of business entities.

PA 5: Environment, climate change and renewable sources of energy

The promotion and development in the area of environment in ZR should be oriented to conservation of important natural sources and the possibility of their use (groundwater and mineral waters), raw materials for biofuel production), to gradual change in the structure of industry, services and agriculture towards ecological/clean technologies and to the change of access to landscaping and management of protected areas.

5.6 Priorities and objectives of the strategy of development of the Banská Bystrica region

Basic characteristics of the region as at 31. 12. 2008

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area of the region (in km²)</td>
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<tr>
<td>Population of the region (in thousand persons)</td>
<td>653.7</td>
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<td>Population density in the region per km²</td>
<td>69.1</td>
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<td>Number of communities</td>
<td>516</td>
</tr>
<tr>
<td>- in it cities</td>
<td>24</td>
</tr>
<tr>
<td>Biggest cities:</td>
<td></td>
</tr>
<tr>
<td>• Banská Bystrica</td>
<td></td>
</tr>
<tr>
<td>• Zvolen</td>
<td></td>
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<tr>
<td>• Lučenec</td>
<td></td>
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<tr>
<td>• Rimavská Sobota</td>
<td></td>
</tr>
</tbody>
</table>

⁶ Green economy is defined as economy based on development and use of products and services contributing to the improvement and protection of the environment and to a reduction of consumption of all types of energy. It comprises areas such as clean energy, ecological construction works, ecological transport, waste recycling and utilization, etc.
Registered unemployment rate in % 14.3 • Brezno
GDP per capita in 2006
- (in PPP, in current prices) 11 083.0
- Comparison with EU 27 46.9

Map No. 7 Banská Bystrica region

The Banská Bystrica region is other rural, slow-growing, rather stagnating region with a long-term above-average unemployment rate and low degree of preparedness for innovation. It is an average attractive and low-competitive region of SR situated out of the centre of EU development activities with a possibility of cross-border cooperation with Hungary.

Analysis of economic and social situation and evaluation of internal potential of the region

With population (12.1% of total population of SR) and population density (69.1 inhabitants per km²) the Banská Bystrica region (BBR) belongs to the most sparsely populated regions. By degree of urbanisation it is categorised as other rural region (53.5% of urban population). Also this region is significantly marked by ageing of population; the share of child component slightly decreases, while the share of population at post-productive age grows. In the recent years the region reported negative values of all rises. In 2008 the natural decline was -0.98‰ and overall decline was -1.48‰. In 2008 children aged of 0 - 14 years accounted for 14.9% and population at post-productive age 72.4% of total population of the region. Only certain districts benefit from migration.
Most population of the region is employed in industry (about 31%) and in public administration and education (together almost 27%). Unemployment in this region is high above the average of SR and EU 27. In case of BBR it will be necessary to create job opportunities, particularly for economically active population that commutes for work to other regions (about 10 000 inhabitants). The priority is solution of long-term unemployment and employment of Roman population.

BBR did not report any growth in economically active population, which stagnated at a level of 326.9 thousand inhabitants (50%). Registered unemployment was one of the highest in SR. In 2008 it achieved a level of 14.3 %, despite its decrease of 8% since 2004, but it still represents a double of the average of SR. The region has relatively high unemployment graduates and 26 336 long-term unemployed, which is one of the largest numbers in SR.

Average nominal monthly wage in 2008 was above the average of SR only in agriculture (EUR 671.12). Average monthly wage in industry was EUR 703.97 and the lowest average monthly wage was reported in trade (EUR 624.46). Based on LFSS, in 2008 the rate of economic activity was 59% and stagnated.

Industry, services and construction were differently represented in the structure of workers in economy. Also the share of services is just below the average of SR. A total number of 31.7% workers were employed in industry and construction, but services also have a high share on employment (61.4%). The number of inhabitants employed in agriculture was 6.9%, which is above the average of SR. BBR has the second highest share of employees with university education on the total number of workers in the region (17%), behind BR.

Monthly income per person increased since 2004 at both national and regional level. In BBR, it amounted to EUR 331.5 in 2008 and remained below the average of SR. The growth of income was accompanied by growth of household costs. In BBR they represented an amount of EUR 318.7, of which 21.0% were costs of food and non-alcoholic beverages and 20.2% costs of housing.

Education in BBR is characterised by a developed network of all types of schools. The regional distribution is related to the age structure of population. BBR has an average number of nursery schools that decreased since 2004 (374, i.e. 13%). The number of children accounts for 11.2% of total number of children in SR. The region has an average number of elementary schools (446, i.e. 19.9%) and registered a decrease in the number of students of more than 11 000 against the year 2004. The structure of secondary schools went through optimisation and consists of grammar schools (32, i.e. 12.7%), that are frequented by 10 868 students (10.7%) and graduates (10.9%) from the total number of students and graduates in SR. As regards secondary vocational schools, BBR belongs to regions with a decreasing number of schools, students and graduates, with a 12 per cent share of secondary schools. BBR also has 3 universities, but no new universities or faculties were opened in the region since 2004 (decrease of 2 to 13). They are frequented by more than 9.3% of all university students in SR (19 thousand) with a share of women of 62.6%.

Health care in the region is provided by a network of all types of health facilities. BBR has 18 hospitals, 6 natural spas (Brusno, Číž, Dudince, Kováčová, Sliac, Sklené Teplíce - the largest number together with the Prešov region) and 2 health resorts (Dudince, Kováčová). Outpatient clinics (1 183) have the largest share on the number of health facilities (1 328) and
the bed fund capacity gradually decreased. In 2008 it represented 6 780 beds, which is a value comparable with the Prešov and Košice regions.

The number of new flats (1 002) completed in BBR as a part of housing construction was the lowest in SR and the average dwelling area of flats decreased to 67.2 m².

BBR has an important position in culture of SR. The network of facilities consists of theatre scenes (8) and their number increased by 3 since the year 2006. It also has a ramified network of museums (16), which is the largest number behind BR, and galleries (2) that have an increasing number of visitors. BBR has 424 libraries with Internet connection and a relatively low number of registered users (66 thousand). The region also has 3 astronomical facilities.

In 2006 the region participated in generation of gross added value of SR by 12.1%. GDP in PPP per capita represented EUR 12 647 and achieved 53.5% of the average of EU 27.

Business activity is at above-average level. The number of legal persons active in the region was 18 120, which represented 10.6%, and increased by 5 000 entities since the year 2004. The region also has 45 045 physical persons, which represents 10.7%, and 745 business entities with foreign participation.

FDI inflow to BBR is growing. Important FDI inflow was registered in 2001 and again in 2006, when FDI in the region achieved a level of SKK 12.5 billion (2.6% in SR). In 2007 it was SKK 15.20 million, which represented one of the lowest rankings and a share of 1.9% in SR.

A main factor for achievement of sustainable investments and maximisation of investment benefits for regional economy is the existence of suitable economic structures able to fulfil the investors’ requirements for supplies to the production sector. In the investment (preparation) and operating (production) phase of implementation of investments the participation of domestic suppliers is dominant. They are mostly represented by enterprises located out of the respective region.

As for the volume of supplies, in the investment phase enterprises obtain most of their supplies from Slovak suppliers, but in the phase of production a majority of supplies comes from other countries. Despite the important share of investments in sectors less demanding for knowledge and partially limited influence of multiplication effects, regional economy can actually benefit from the transfer of technologies, increased employment rate and development of qualification of labour force.

Industry is distributed unevenly in the region. It achieves a high level of concentration in the north of the region, where the most productive industries – metallurgical, engineering, automotive, timber, pharmaceutical and printing industries - are located. Food industry and other industries complementary to agriculture are located in the south of the region.

A dominant sector of industry is metallurgy represented by the largest enterprises in the region. Metal production participates in exports of the region by more than 40%. Other important sectors are timber, engineering, chemical, pharmaceutical and food industries. The regional city Banská Bystrica has also oriented to the development of services and trade in the recent years.
The economic structure of the region is conditional upon its geographical conditions. The mountainous area in the north was a centre of mineral working and industrial production, while the south is dominated by agriculture. Agricultural land of medium quality accounts for 44% of total area of the region. The existing mining industry is gradually transferred to environs of Lučenec (silicates) and Revúca (magnesite ore). The region has 13 industrial parks specialised in engineering, automotive and timber industries.

BBR achieved industrial revenues of EUR 3 861 mil., which only accounted for 5.5% of total industrial revenues of SR in 2008. Labour productivity from sales of own services and goods achieved the amount of EUR 67 407 thousand. In 2008 BBR registered decline in growth of employees in industry and its share of workers in economy remained at the same level (50.6%). With average wages (EUR 619.40) the region achieved the second higher growth rate against the average of SR.

Production in construction achieved 7.2% (production by own employees) and was the lowest in SR, with a 6.2 per cent share based on supply contracts. The region also had the lowest labour productivity per employee (EUR 27 325).

BBR belongs to less productive agricultural regions of SR with a total area of agricultural land of 245 063 ha (10.1%) and the smallest area of arable land in SR. The region participates in agricultural production of SR by revenues from sale of primary industry products in amount of EUR 79.4 million, which only represents 5.4% (the least in SR) and decreased since 2004. The region has a more important position in animal production.

BBR has an important position in tourism. It belongs to the most visited regions of SR. With accommodation capacity in 483 accommodation facilities it achieved an 11.2 per cent share on the number of visitors, which is higher than in the Košice region.

In general, BBR has a chance to maintain, only thanks to new FDI, the position of economically a socially stable region. But it will approach the average of EU 27 very slowly. Industrial production will be further dominated by existing industry and tourism could gain a more important position.

Science and research costs increased very slowly in the recent years, but they are still low. BBR was ranked last but one before the Prešov region, with a share of 4.7% on total S&R costs in SR. With costs per employee (8.8%) it advanced to the group of lagging regions, where it was ranked last together with the Prešov region.

The region has a permanent science and research basis, particularly in forestry, ecology and chemical and food industries.

BBR has a strong innovative potential only in two cities – Banská Bystrica and Zvolen. The performance in tourism slowly grows. Rural areas are on the way to the transformation, supported by instruments for elimination of regional disparities – in particular a diversification of economic activities. Identity/specific character of settlements and subregions is preserved and well used in favour of quality local products (e.g. mountain fields).

Telecommunications services are provided within a scope of available modern technologies and for much differentiated prices.
Transport system of the region does not meet the needs of its economic development. It lags behind, particularly in availability of modern road infrastructure. The region has an airport - Sliač that is also used for irregular civil transport. Two main railway lines connect the south of Slovakia to the north and the west to the east. They are integrated into an extensive network of regional lines. 

BBR has the longest road network in SR (3 185 km), with a zero share of motorways and a low share of first-class roads. With the number of vehicles (11.5%) and passenger cars (11.2%) it is ranked last among the regions of SR. In the area of transport services it achieves low outputs in freight transport that decreased against the year 2003. Outputs in passenger transport are low too and decreased against the year 2003.

BBR has a low consumption of coke and coal, the second highest consumption of electricity, but low consumption of gas (6.9%). Diesel oil consumption is at a level of 12.5% and increased only slightly since 2003. Heating oil consumption is the second highest in SR and increased since 2003.

BBR decreased its municipal waste production since 2003. In 2007 it represented 162.3 thousand t (the lowest in SR) and achieves a very low percentage of waste utilization (3.4%). The percentage of population connected to the water mains (90.4%) is above the average of SR. The percentage of population connected to the public sewerage network is 60.1%, which is also just above the average of SR. Both networks showed a growth since 2003. BBR reports relatively low values of solid emission production and sulphur dioxide production. Its nitrogen oxide production is not high, but in carbon monoxide production it achieved the second highest values in comparison with the other regions.

Natural sources of BBR are rich and varied. Forests and mineral and thermal water sources that are used in balneology and food industry have a large importance. The region also has a large number of protected areas.

Main disparities of BBR:

In agriculture
- Insufficient cooperation a coordination v agriculture;
- Low competitiveness of agriculture due to low productivity and underdeveloped market infrastructure;
- Underutilized potential of growing different crops for the energy sector and ecological agriculture;

In industry
- The lagging behind in innovation and technologies causes a growth of energy and raw-material intensity of production, particularly in main sectors;
- Insufficient restructuring of industry and other main sectors in some districts of the region, low orientation to FDI in sectors with higher added value;
- Low growth of labour productivity in industry;

In services
- Low competitiveness of small and medium enterprises;
- Below-average share of services on regional GDP;
- Unused potential of tourism – balneology, protected areas and mountain fields;
In technical infrastructure
- Insufficient capacity and telecommunications infrastructure, ruggedness of landscape as a barrier to development of Internet connection;
- High environmental stress of landscape (chemical industry, coal mining);
- Unfinished construction of superior water supply system in southern districts of the region and low percentage of population connected to WWTP;
- Non-compliance with specified limits and regulations;
- Relatively low level of agriculture from the perspective of protection of nature and landscape and future renewable sources of energy;
- Low transport accessibility of territory and “regional logistics”;

In social infrastructure
- Unsuitable structure of education in selected districts, high share of population with elementary education, important intraregional disparities;
- Gradual disappearance of strategically important study programmes and specialisations;
- High share of long-term unemployed on a total number of unemployed;
- Low standard of living in south districts;
- Insufficient connection of educational system to the business sector;
- Significant outflow of labour force to other countries due to a proximity of state border, without replacement for high-qualified labour force;
- Uneven network of social service facilities in the individual districts of the region;
- Insufficient publicity of region and its comparative advantages;
- Problematic establishment of cooperation among sectors in the search for a comprehensive solution of the situation and needs of citizens.

Main factors of the development of BBR:

In agriculture
- Good agricultural production potential in the area of crop growing, fruit farming, specific regional crops;
- Forestry – high stocks and timber harvesting;
- Consistent application of common agricultural policy, also in protected areas;

In industry
- Possibility of strengthening of exports, strong export position in metallurgical, woodworking, ceramics and glass industries;
- Development of science and technology parks specialised in main industries;
- Provision of support to domestic investors, particularly in promising sectors, and enhancement of attractiveness for FDI inflow;
- Promotion of production of new products with higher added value, based on renewable and non-metalliferous raw materials;
- Potential for the development of e-business oriented to the development of optimisation of cooperation in industrial production;
- Use of cross-border cooperation for the development of business activities;

In services
- Attractive potential for growing interest in tourism, specialisation in balneology and rural tourism;
- Interest of regional self-government in the promotion of business and innovative environment in the region;
- Existing consulting centres for the development of business environment;
- Integration of the region into international cooperation and transfer of know-how, strengthening of cooperation between universities and the business sector;
- Extension of provision of e-services and support, particularly in mountainous areas, improvement of access to services for population;

**In technical infrastructure**
- Possibilities of use of combined transport;
- Advantageous geographic position for flow of goods and services to new EU member countries, position potential of the region, logistic links, connection Budapest – Krakow;
- Sufficient potential of water sources and high percentage of forest land – high concentration of secondary wood raw materials suitable for energy purposes;

**In social infrastructure**
- Favourable demographic position, availability of free labour force;
- High level of education in regional centres;
- Possibility of establishment of a quality regional system of lifelong education.

**Specific characteristics of region**

Based on comparison with regions of developed EU countries and regions of SR we can state that the development potential of BBR is not fully used. We see the largest reserves in the underutilization of the innovative potential, particularly in agriculture, the low FDI inflow and support provided to domestic investors, the use of high-qualified labour force and creation of jobs in the service sector. It results in a weak competitiveness of agriculture and overall risk of impairment of the competitiveness of the region, based on energy intensive production. In comparison with global trends and development in neighbouring countries, the degree of informatization of BBR is low and insufficient for its future development.

**Competitive advantage**
The competitive advantage of BBR consists particularly in its natural, cultural and historical wealth, attractive rural landscape, including the potential for development of agriculture and forestry, renewable sources of energy and agrotourism.

**Strategic objectives:**

1. Transport and enhancement of accessibility and attractiveness of the territory (integrated transport);
2. Development of human resources and improvement of the quality of life of population by introduction of eGovernment and promotion of projects in the area of e-services;
3. Agriculture, forestry and rural development;
4. Innovation and growth of competitiveness of industry in main sectors and with use of renewable sources of energy.

**Expected impacts:**

- Increased use of domestic regional sources;
- Increase in employment, particularly in rural areas and in the area of new technologies;
- Higher accessibility and attractiveness of the region, not only for domestic and foreign investors, SME, but also for local population, and increased share of ecological (integrated) transport;
- Increase in performance, especially in tourism, agriculture, forestry and woodworking industry.
Priorities in the framework of priority areas (PA):

**PA 1: Science, research and innovation**

BBR should implement strategic activities putting stress on areas according to the approved Innovation Policy SR and in the area of progressive therapeutic procedures and selected areas of medicine.

BBR has the second most-qualified labour force with good language skills, which represents an important potential for accelerated creation of different types of regional and international technological/competence centres in relation to RIC and in cooperation with universities and secondary schools, particularly in the area of woodworking industry, ecology and renewable sources of energy.

**PA 2: Human resources**

BBR should focus its strategic activities putting stress on the development of main industries – engineering, metallurgical, timber and food industries and forestry, and on the growth of the sector of services for balneology, tourism and rural enterprise.

BBR should pay increased and immediate attention to issues of social services and education of Roman population, especially in the south districts of the region.

It will be necessary to further develop the high-qualified labour force by increasing the access to further education, particularly through the promotion of growth of ICT in the area of education and production of content for new promising sectors and introduction of eGovernment.

It will also be necessary to finish the social infrastructure in selected districts according to specific needs, e.g. field social services and health care for marginalised groups of population.

In the area of public health BBR should integrate into its conceptual documents at regional level the strategies of population health promotion in all policies in cooperation with RPHA.

**PA 3: Employment**

BBR should implement strategically targeted activities putting stress on maintenance and creation of new jobs in main industries – engineering, metallurgical, timber and food industries, as well as in forestry and in the sector of services for balneology, tourism and rural enterprise.

BBR should pay increased and immediate attention to issues of employment of Romany population, particularly in south districts of the region.
PA 4: Competitiveness, growth and business environment

BBR should focus its strategic activities to the promotion of SME, development of business environment in the sector of services for balneology, tourism and rural enterprise.

At present, the only competitive sector in BBR is industry and hence industrial production represented by a small number of large enterprises in metallurgical, engineering and woodworking industries, which creates conditions for creation of new supporting services. Important sources of competitive advantage of the region are the potential for diversification of agricultural and non-agricultural activities and the advantageous geographic position (transport services and logistics, particularly the use of railway transport), so it is necessary to strengthen the relations between agriculture, food industry and tourism.

PA 5: Environment, climate change and renewable sources of energy

BBR should strategically support activities putting stress on the increased use of renewable sources of energy and raw materials in main industries – engineering, metallurgical, timber and food industries, forestry and sector of services for balneology, tourism and rural enterprises.

The priority is to elaborate strategic documents in the area of management of protected areas in the region and to propose the elimination of impacts on economic performance of the region. It is also necessary to pay more attention to UNESCO monuments, e.g. Banská Štiavnica.

5.7 Priorities and objectives of the strategy of development of the Prešov region

Basic characteristics of the region as at 31. 12. 2008

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area of the region (in km²)</td>
<td>8 973.7</td>
</tr>
<tr>
<td>Population of the region (in thousand persons)</td>
<td>804.0</td>
</tr>
<tr>
<td>Population density in the region per km²</td>
<td>896</td>
</tr>
<tr>
<td>Number of communities</td>
<td>666</td>
</tr>
<tr>
<td>- in it cities</td>
<td>23</td>
</tr>
<tr>
<td>Registered unemployment rate in %</td>
<td>12.9</td>
</tr>
<tr>
<td>GDP per capita in 2006</td>
<td>8 199.0</td>
</tr>
<tr>
<td>- (in PPP, in current prices)</td>
<td></td>
</tr>
<tr>
<td>- Comparison with EU 27</td>
<td>34.7</td>
</tr>
</tbody>
</table>

Biggest cities:
- Prešov
- Poprad
- Humenné
- Bardejov
- Vranov nad Topľou
The Prešov region is a predominantly rural, slow-growing region of SR with long-term above-average unemployment, low level of preparedness to innovation and average attractiveness. It is a competitive region developing out of the centre of EU development activities, with a possibility of cross-border cooperation with Poland and Ukraine.

Analysis of economic and social situation and evaluation of internal potential of the region

By its area the Prešov region (PR) is the second largest region of SR (18.3% of territory) with predominance of small communities, rugged topography and rich mineral deposits. By the population (14.9% of total population of SR) the region ranks among the leading regions, but with population density of 89.6 inhabitants per km² it belongs to the most sparsely populated regions, to the category of predominantly rural regions (49.2% of urban population). Also this region starts to feel the process of ageing of population. The share of child component decreased and the share of population at post-productive age slowly grows. In the recent years the region reported positive values of all rises, with the exception of the rise in migration. In 2008 the natural increase of population achieved the value of 4.06‰ and was the highest in SR. In 2008 children aged of 0 – 14 years accounted for 18.8% of total population of the region and 70.6% of total population at productive age. The region has been losing inhabitants for a long period due to migration of population, especially persons with higher qualification (the highest value in SR, nearly 6 000 inhabitants per year). Persons with university education account for 14% of total number of workers, which is more than e.g. in TTR or NR.

Most inhabitants of the region are employed in the service sector (56.8%), industry and construction (about 37%). Employees in education (nearly 17.26%), but also in public
health sector and social services (10%) have a high share on employment. In 2008, 6.1 per cent of population of the region were employed in agriculture, which is above the average of SR.

Unemployment had a downward trend after the year 2004, but this trend gradually changed since the end of year 2008. In 2006 it achieved the level of 13.68% and in June 2007 it decreased to 12.31%, which represented 45 392 available applicants for job and significantly exceeded the average of SR. In 2008 the unemployment rate was 12.9%.

PR did not report any growth of economically active population, but stagnated with 374.8 thousand inhabitants of the region, which represented 46.8%. In the structure of unemployed, the region has the highest share of unemployment graduates (27 504), the third highest long-term unemployment rate and one of the highest unemployment rates in the age category of 35 – 49 in SR.

Apart from the unemployed, the region can use as a potential source of labour force the economically active population that commutes for work to other regions or other countries. In case of PR it represents approximately 42 000 economically active inhabitants.

Average nominal monthly wage in 2008 was EUR 632.17. In all sectors it was lower than the average of SR. Based on LFSS, in 2008 the rate of economic activity was 58.1% in SR and stagnated.

Monthly income per person increased since 2004 at national and regional level. In 2008 it amounted to EUR 309.2 and remained below the average of SR. The growth of income was accompanied by a growth of household costs that represented EUR 268.3 in PR, of which 22.5% costs of food and non-alcoholic beverages and 20.4% costs of housing.

Education in PR is characterised by a developed network of all types of schools. The regional distribution is related to the age structure of population. PR has the highest number of nursery schools (538, which represents 18.7%); the number of children represents a 16.1 per cent share in SR. The region has the highest number of elementary schools (446, i.e. 19.9%) and registered a decrease in the number of students of more than 15 000 against the year 2004. The structure of secondary schools went through an optimisation and consists of grammar schools (40), which is 15.9% in SR, that are frequented by 16 006 students (15.8%) and graduates (14.7%) from a total number of students and graduates in SR. As regards secondary vocational schools, PR ranks among regions with the fastest decreasing number of schools, students and graduates, with a 15.2 per cent share of secondary schools. PR has also 2 universities. Since 2004 one new university was opened and the number of faculties decreased by two (13). More than 7.6% of all university students in SR (16 thousand) study at these universities, with a share of women of more than 71%, which is the largest number of women studying in SR, despite the second highest increase in the number of students since 2004 behind TNR.

Health care in the region is provided by a network of all types of health facilities. PR has 21 hospitals, 5 natural spas (Bardejov spa, Výšné Ružbachy, Lučivná, Nový Smokovec, Horný Smokovec) and 4 health resorts (Nový Smokovec, Tatranská Kotlina, Tatranská Polianka and Tatranské Zruby). Outpatient clinics (1 404) have the highest share on the number of health facilities (1 903) and the bed fund capacity gradually decreased and represented 8 436 beds in 2008, which is the largest number in SR.
In the framework of housing construction, 1 575 new flats were completed in PR, which ranks this region among average regions of SR. The average dwelling area of flats decreased to 68.9 m².

PR is one of regions richest in cultural and historical monuments in Slovakia. The number of visitors of cultural facilities stagnated against the year 2004. The representation of cultural facilities is comparable with BBR. PR together with ZR reports the highest number of registered users of public libraries (97 thousand) and the highest number of public libraries with Internet connection (557). The network of cultural facilities in the region consists of 5 theatre scenes, 13 museums, 4 galleries and 3 astronomical facilities.

In 2006 the region participated in generation of gross added value of SR by 8.1%. GDP in PPP per capita amounted to EUR 8 199 (34.7% of the average of EU 27).

Business activity in the region is average. PR registers 18 968 business entities (legal persons), which represented 11.2%, and 61 160 business entities (physical persons), which represented 14.6%. Based on calculation per 1,000 inhabitants, PR together with NR has the smallest number of registered business entities. PR also has 639 business entities with foreign participation, which is below the average of SR.

FDI inflow to PR gradually grows. An important inflow was recorded in 2004 and then in 2006, when FDI inflow in the region achieved the level of SKK 7.8 billion (1.6% in SR). In 2007 it was SKK 68.6 million, which represented 8.8% and the second ranking in SR.

PR has been facing important structural problems for a long period. Their solution will require, apart from the potential state support, further targeted interventions, especially in improvement of accessibility of infrastructure and upgrading of skills of labour force.

PR has been economically the weakest region of SR for a long period, also thanks to its predominantly rural character. PR has a low internal investment potential, so industry is not sufficiently developed. The most important industries in the region are chemical, woodworking, engineering, clothing, textile, electrical, and in particular food industries. Electrical industry (Stropkov) played an important role in the region in the past and its share was above the national average. This situation changed after the arrival of important foreign investments in other regions of SR (TTR) and only two major enterprises producing telephones and electrical appliances remained in the region. Food, chemical, engineering and textile industries have the highest share on experts and production of PR.

PR achieved industrial revenues of EUR 2 738 million in 2008, which represented 3.9% in SR (the lowest value achieved in SR). Labour productivity from sales of own services and goods achieved the level of EUR 53 034 thousand, which is two times less than e.g. in ZR and below the average of SR. In 2008 the growth of employees in industry decreased and average wages (EUR 742.34) were growing at below-average rate.

Production in construction represented 10.4% (production by own employees) and was average, and 8.6% (supply contracts), which was also average. The labour productivity per employee (EUR 23 689) was the lowest in SR.

PR belongs to the most important potato producers in SR, but with the lowest yield per hectare. The region has a total area of agricultural land of 383 936 ha (15.8%) with the second
lowest share of arable land in SR. PR participates in agricultural production of SR by revenues from sale of primary industry products in amount of EUR 94.3 million, which is only 6.5%. Plant production currently has more important position. Although PR is characterised as predominantly agricultural region, it has not favourable geographic and climatic conditions for growing of cereals. It specialises in production of less demanding crops. Forestry also plays an important role in the region.

The most precious wealth of the region is nature. Particularly the National park High Tatra is an important tourist centre. Mineral water reservoirs in several spas are also very important for regional tourism. From other natural sources, stone salt deposits near Prešov have a national importance. PR has a very important position in tourism in SR and ranks among the most visited regions of SR. It has the second largest accommodation capacity (626 accommodation facilities) and achieved one of the largest numbers of visitors (18%) behind BR and ZR.

In general, PR has a chance to maintain, thanks to new FDI, its position of economically and socially stable region. Although it will slowly approach the average of EU 27, it has a sufficient development potential of a border region. Industrial production will be further dominated by chemical and engineering industries. The electrical industry might achieve a more important position in the future.

Science and research costs increased very slowly in the recent years, but they are still low and PR was ranked last behind BBR with 2.4% of total S&R costs in SR. With costs per employee representing 8.8% it advanced to the group of regions lagging behind in innovation, to the level of BBR. The region has the least workers in the area of science and research.

PR has a strong innovative potential, particularly in tourism, chemical industry and ecological services. The identity-specific character of settlements and subregions is preserved and well used in favour of local quality products. Telecommunication services are provided within a scope of available modern Technologies for much differentiated prices. The coverage is complicated by the ruggedness of landscape.

The road and railway system in PR is well developed. An international airport, that is used predominantly for charter service, is situated in Poprad. In 2007 regular flights from Poprad to London and Prague started to be operated. The regional city Prešov is only 40 km away from the international airport in Košice. The territory of the region is covered by a relatively dense road network, whose quality varies and that comprises all types of roads, from motorways and international routes to local roads. The skeleton of the railway network of the region consists of two main lines in the west-east direction (Žilina – Košice - Ukraine) and in the north-south direction (Poland – Prešov – Košice – Hungary). PR has the second largest total length of roads (3 107 km) behind BBR, with a network of motorways (40.4 km) and a highest share of first-class roads (826 km). Based on the number of vehicles (11.2 %) and number of passenger cars (11.46%) the region achieves one of the worst ranking in SR. In the area of transport services PR achieves average outputs in freight transport that registered a minimum increase since 2003. Outputs in passenger transport are also average and decreased against the year 2003.

PR has an average consumption of coke and coal, the lowest consumption of electricity (5.1%), the lowest consumption of gas (4%), the lowest consumption of diesel oil (8.2% in SR) and the third highest consumption of heating oils (1.97%) which increased since 2003.
In 2003 PR had the **lowest municipal waste production in SR.** In 2007 its production further decreased (187.9 thousand t) and PR achieves the second highest percentage of its utilization (13.4%) behind BR. The percentage of population connected to water supply network is 73.7%, which is below the average of SR. Only 51.8% of inhabitants are connected to the public sewerage network, which is also below the average of SR. PR reports a high quantity of drained waste water, but also a high degree of its treatment – 96.8%. PR achieves relatively low values of solid emission production. The most important improvement was registered in sulphur dioxide production and the region does not report high values of nitrogen oxide and carbon monoxide production.

The territory of PR is poor in raw material sources and ore deposits. But is represents an important basis of nonmetalliferous raw materials and construction materials, reserves that allow the development, in particular of construction industry. It has rich bentonite and zeolite deposits, raw materials for the cement and construction industries. Important stone salt deposits are in locations of Solivar – Prešov.

**Main disparities of PR:**

**In agriculture**
- Insufficient cooperation and coordination in agriculture;
- Low competitiveness of agriculture due to a low productivity and underdeveloped market infrastructure;

**In industry**
- Lagging behind in innovation and technologies causes the growth of energy and raw-material intensity of production;
- Insufficient restructuring of industry and other main sectors in some districts of the region;
- Unsuitable structure/concentration of industry;
- Local economy lagging behind;
- Low labour productivity in industry;

**In services**
- Low competitiveness small and medium enterprises in the area of services;
- Unfinished network of institutions providing services to enterprises;
- Underutilization of e-services, absence of coordination of use of existing transmission services and underdeveloped e-services (not only the public ones);
- Insufficient conceptual approach to the use of existing potential for tourism;
- Low labour productivity in the sector of services;

**In technical infrastructure**
- Insufficient capacity and telecommunications infrastructure, ruggedness of landscape as a barrier to development of Internet connection, insufficient and uneven level of development of the international and regional information networks;
- Underdeveloped infrastructure of express ways;
- Relatively low level of agriculture from the perspective of protection of nature and landscape;
- Slow development of transport infrastructure;
- High energy intensity of the key sectors of regional economy;
- Insufficient investments in landscaping and flood protection;
- Insufficient attention paid to environmental burdens;
In social infrastructure
- Unsuitable structure of education, high share of population with elementary education, important intraregional disparities;
- Low quality (accessibility, effectiveness) of all types of education within the context of lifelong education;
- Low rate of use of new, innovative programmes for the promotion of employment, including financing of these activities;
- Low rate of use of labour force;
- High share of long-term unemployed on a total number of unemployed;
- Significant outflow of labour force to other countries due to a proximity of state border, without replacement for high-qualified labour force;
- Long-term trend of high share of long-term unemployed in selected social groups;
- Long-term low adaptability of labour force;
- Problematic establishment of interregional cooperation in the search for a comprehensive solution of the situation and needs of Roman population.

Main factors of development of PR:

In agriculture
- Favourable conditions for the development of ecological agriculture and forestry within SR;

In industry
- Development of eco-industry and network technologies, particularly in SME;
- Provision of support to domestic investors, particularly in promising sectors;
- Potential for the development of e-business directed to an optimisation of cooperation in industrial production;
- Use of cross-border cooperation for the development of business activities;
- Development of RIC with a focus on the transfer of innovation, green economy and ecological technologies;

In services
- Attractive potential and growing interest in tourism;
- Integration of the region into international cooperation and transfer of know-how;
- Extension of e-services and provision of support, particularly in mountainous areas;
- Foundation of family enterprises in the area of services and development of teleworking to increase the employment;
- Existing network of consulting and supporting institutions for small and medium enterprises;
- Developing system of support to SME (incubators, information and consulting services);

In technical infrastructure
- Sufficient potential for the use of renewable sources of energy;
- High transport potential, advantageous geographic position for the flow of goods and services to the new EU member countries, position potential of the region, logistic links, connection to new markets;
- High share of protected areas on a total area of the region – attractive natural environment;

In social infrastructure
- Favourable demographic situation, availability of free labour force;
- High share of population with secondary education/possibility of professional mobility;
- High level of education in the regional centres;
- Development of the metropolitan centre Košice – Prešov;
- Ability of bilateral communication of population in border areas, cross-border cooperation.

**Specific characteristics of the region**

Based on comparison with regions of developed EU countries and regions of SR we can state that the development potential of PR is not fully used. We see the largest reserves in the underutilization of innovative potential, particularly in tourism and selected sectors of industry. This development might cause a risk of impairment of the competitiveness of the region and slowdown of its economic growth. In comparison with global trends of increasing the quality of public services by informatization and with the development in the neighbouring countries, the level of informatization of PR is low.

We see the highest unused development potential of PR in:
- Rich natural, cultural and historical heritage with a high share of protected areas and with quality environment, particularly for the development of tourism;
- Strategic position (border region, external border of EU);
- Young labour force (growth in the level of education, especially secondary vocational education);
- Favourable climatic and soil conditions (growing of crops for use in biomass);

**Competitive advantage**

The competitive advantage of PR consists in the favourable demographic structure, quality environment, strategic position on the border of three countries and the EU frontier zone, natural, cultural and historical wealth and conditions for the development of a new green economy in relation to rural development and key traditional sectors.

**Strategic objectives:**

1. Strengthening of productivity and competitiveness in key and promising industries and services;
2. Utilization and strengthening of internal potential of tourism with connection to environmental protection and planning;
3. Comprehensive development and strengthening of the country in regional economy;
4. Improvement of human potential – solution of Roman issue and provision of support to young people, development of all forms of lifelong education (LLE) and lifelong consultancy (LLG).

**Expected impacts:**

- Increased use of domestic, regional sources;
- Increase in regional employment, export performance on new markets and competitiveness;
- Creation of new jobs in rural areas and rural development, increase of the share of ecological agriculture;
- Strengthening of intraregional cooperation and business relations;
- Establishment of new links between science & research and innovation - business sector and educational institutions;
- Higher quality of human resources and improvement of social cohesion.
Priorities in the framework of priority areas (PA):

PA 1: Science, research and innovation

As a part of this strategic priority PR should implement activities putting stress on areas according to the approved Innovation Policy of SR and on tourism, education and green technologies (recyclable materials), services of green economy and food industry.

In the first phase the main objective will be to build and modernise the infrastructure for science, research and innovation, as well as human resources in proposed thematic areas, and thus create conditions for development of knowledge-based economy. It is also important to build up, in addition to the regional innovative centre, at least one international technological incubator/centre specialised in green technologies and services.

In the second phase it will be necessary to create conditions for further development of innovative environment, promotion of innovative enterprises and international cooperation.

PA 2: Human resources

PR should concentrate its strategic activities on the development of main sectors – engineering, food, chemical industries, forestry and growth of the service sector in relation to decisive sectors, not only industries, but also balneology, tourism and rural enterprise. PR should pay increased and immediate attention to solution of issues of social services and education of Roman population.

The strategic aim is the creation of an open educational environment for lifelong education of all groups of population and for the development of professional mobility, including the development of a regional strategy of lifelong education and lifelong consultancy with an effective coordination, monitoring and evaluation system as a part of the regional strategy of development of human resources.

PA 3: Employment

PR should implement strategically targeted activities putting stress on maintenance and creation of new jobs in main sectors – engineering, food and chemical industries, forestry and the sector of services with links to main sectors, not only industries, but also for balneology, tourism and rural enterprise, and supporting services for export and business on new markets. It is necessary to pay increased and immediate attention to solution of issues of employment of Roman population.

The main objective will be the application of philosophy and principles of flexicurity and promotion of mobility on the labour market, particularly inside the region.
PA 4: Competitiveness, growth and business environment

As a part of this strategic priority PR should implement activities putting stress on the promotion of SME and creation of business environment in the sector of services with links to decisive sectors, not only industries, but also for balneology, tourism and rural enterprise, hand-made manufacture and food industry, as well as supporting services for export and business on new markets.

The main objective should be the completion of business supporting infrastructure, including provision of comprehensive information, consulting and educational services, particularly for starting enterprises in new sectors, and accelerated “informatization“ and implementation of e-services, which will also increase the effectiveness and accessibility of services.

PA 5: Environment, climate change and renewable sources of energy

PR should implement strategic activities putting stress on the increased use of renewable sources of energy and raw materials in main sectors – engineering, food and chemical industries, forestry and in the sector of services with links to decisive sectors, not only industries, such as balneology and tourism, and in rural enterprise.

The primary aim is the preparation of strategic documents in the area of management of protected areas in the region with links to the rural development, tourism and increased use of energy from renewable sources.

5.8 Priorities and objectives of the strategy of development of the Košice region

Basic characteristics of the region as at 31. 12. 2008

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area of the region (in km²)</td>
<td>6 754.6</td>
</tr>
<tr>
<td>Number of inhabitants of the region (in thousand persons)</td>
<td>775.5</td>
</tr>
<tr>
<td>Population density in the region per km²</td>
<td>114.8</td>
</tr>
<tr>
<td>Number of communities</td>
<td>440</td>
</tr>
<tr>
<td>- in it cities</td>
<td>17</td>
</tr>
<tr>
<td>Registered unemployment rate in %</td>
<td>13.5</td>
</tr>
<tr>
<td>GDP per capita in 2006</td>
<td>12 647.0</td>
</tr>
<tr>
<td>- (in PPP, in current prices)</td>
<td></td>
</tr>
<tr>
<td>- Comparison with EU 27</td>
<td>53.5</td>
</tr>
</tbody>
</table>

Biggest cities:
- Košice
- Michalovce
- Spišská Nová Ves
- Trebišov
- Rožňava
The Košice region is other rural, slow-growing region of SR with a long-term high unemployment rate and high degree of preparedness to innovation. It is an averagely attractive and competitive, but developing and converging region out of the centre of EU development activities, with a potential for cross-border cooperation with Hungary and Ukraine.

Analysis economic and social situation and evaluation of internal potential of the region

By its area the Košice region (KR) is the fourth largest region of SR by the area (13.8% of territory) and the second largest region of SR by population (14.3% of total population of SR). With population density of 114.8 inhabitants per km² KR belongs to averagely populated regions and by degree of urbanisation it ranks among other rural regions (55.7% of urban population). Also this region starts to feel the ageing of population. The share of child component decreased and the share of population at post-productive age grows. In the recent years the region reported positive values of all rises, with the exception of the rise in migration, and it has a high natural increase in population (2.63‰). Children aged of 0 – 14 years accounted for 17.5% and population at productive age accounted for 71.3% of total population of the region in 2008. The region has been losing population, in particular that with higher level of education, for a long time. Persons with university education account for 14% of all workers, which is more than e.g. in TTR or NR.

Most inhabitants of the region are employed in industry (about 31%), public administration and education (together nearly 25%), but also in the area of transport, storage and telecommunication services (11.3%). Unemployment had a downward trend until 2008 and decreased to 13.5%, which represented 546 607 available applicants for job and was much above the average of SR and EU 27. KR will have to create job opportunities,
particularly for economically active population that commutes for work to other regions (approximately 13 700 economically active inhabitants). The region shows important intraregional disparities. The priority is the creation of new job opportunities for qualified labour force (due to the need of limitation of migration of qualified labour force), solution of long-term unemployment and employment of Roman population.

Based on LFSS, economically active population accounted for 45.3% of total population in 2008 and its share decreased against the year 2004, achieving the lowest value in SR. The rate of economic activity was 55.3%, which is the lowest value in SR.

The economy was dominated by services (65.5% of total number of workers in the region), followed by industry and construction (30.1% of workers). The number of inhabitants employed in agriculture in 2008 increased against the year 2004 (increase of 4.3%).

The average nominal monthly wage in 2008 was EUR 749.29, which is below the average of SR. Wages in agriculture and trade were below the average of SR, while wages in industry and construction were above this average.

Monthly income per person increased since 2004. In 2008 it was EUR 341 and remained below the average of SR. The growth of income was accompanied by the growth of household costs. In KR household costs amounted to EUR 305.3, of which 22.3% were costs of food and non-alcoholic beverages and 20.8% costs of housing (the highest value in SR).

Education in KR is characterised by a developed network of all types of schools. The regional distribution is related to the age structure of population. KR has the largest number of nursery schools (442, i.e. 15.3%). The number of children achieves 13.9% of their total number in SR. The region also reports the second largest number of elementary schools (320, i.e. 15.3%). KR recorded a decrease in the number of students of more than 11 000 against the year 2004. The structure of secondary schools went through an optimisation and consists of grammar schools (37), which represents 14.7% in SR, that are frequented by 14 762 students (14.5%) and graduates (14.3%) of the total number of students and graduates in SR. As regards secondary vocational schools, KR belongs to regions with a declining number of schools, students and graduates with a 14.4 per cent share of secondary schools. KR also has 4 universities. One new university was opened since 2004 and the number of faculties increased by three (17). More than 13.9% of all university students in SR (29 thousand) study there, which is the largest number in SR, behind Bratislava, with the lowest share of women (41.4%) in SR and with an increase in the number of students of 9 000 since 2004.

Health care in the region is provided by a network of all types of health facilities. KR has 20 hospitals and 4 centres for medical treatment. Outpatient clinics (1 526) have the highest share on the number of health facilities (2 014, the most in SR). The bed fund capacity gradually decreased and in 2008 represented a total number of 6 070 beds. The region also has a therapeutic spa.

As a part of housing construction, 1 270 new flats were built in KR, which ranks the region among average regions of SR. The average dwelling area of flats decreased to 75.3 m², which was lowest value in SR in 2008.

KR is also rich in cultural and historical monuments. The number of visitors of cultural facilities slightly decreased against the year 2004 and the representation of cultural facilities is
comparable with BBR. The network of cultural facilities in the region consists of 11 theatre scenes (decrease of 1 against the year 2007), 9 museums, 3 galleries and 6 astronomical facilities. Against the year 2006, the number of libraries in the region increased by 108 to 398 libraries with Internet connection, but the number of registered users in the region is the third lowest in SR (57 thousand). The cultural centre of KR is the city of Košice, whose historical core is the most extensive urban conservation area in Slovakia.

In 2006, the region participated in generation of gross added value of SR by 12.1%. **GDP in PPP per capita** achieved the value of EUR 12 647, which represents 53.5% of the average of EU.

**Business activity** is at average level. The region has 19 575 registered business entities (legal persons), which represents 11.5%, and 43 744 business entities (physical persons), which represents 10.4%. Based on calculation per 1000 inhabitants, the business activity of the region is comparable with ZR and TNR in case of enterprises and with BBR in case of traders. KR has 1 116 business entities with foreign participation and their number nearly doubled since 2004.

**FDI inflow to KR is growing.** An important inflow was registered in 2001 and then again in 2006, when FDI in the region achieved the level of SKK 37.8 billion, i.e. 7.8% within SR. In 2008 it achieved the level of SKK 68.6 billion, which was the second highest share (8.8%) on FDI inflow in SR. It can be expected that further induced effects related to investment support, such as creation of new jobs, transfer of knowledge and technologies, development of human resources, will fully show in the performance of regional economy in the next 2 – 3 years, when the production capacity and stabilised economic structure in the supported sectors are fully used.

KR is the **second most important region** of Slovakia in terms of export performance and GDP per capita. The most developed areas are the districts Košice I - IV. KR is important by its production basis with key sectors in economy of SR.

From the perspective of industrial structure, the metallurgical, chemical and electronics industries are regarded as most important. Industry is clearly dominated by metallurgy that participates by 60% in industrial production of the region and accounts for 50% of its exports.

**Agriculture** plays a key role in the south of the region. The fertile land of the East Slovak Lowland is the basis for growing of cereals and oil plants. Less demanding agricultural crops are cultivated in the mountainous north.

KR achieved industrial revenues of EUR 7 691 million, which represented 11.2% of industrial revenues of SR in 2008 and the third ranking in SR. The labour productivity from sales of own services and goods achieved the value of EUR 115 455 thousand, which is two times more than e.g. in BBR and above the average of SR. The share in 2008 was characterised by an average rate of growth of employees in industry and the share on the number of workers in economy remained unchanged (less than 30%). With average wages (EUR 742.36) the region ranked among above-average regions of SR. Production in construction achieved a share of 12.9% (production by own employees) and was average, and a share of 12.6% (based on supply contracts), which was the third highest value in SR. Labour productivity per employee (EUR 42 299) was the second highest in SR.
KR belongs to more important agricultural regions of SR, with a total area of agricultural land of 337,466 ha (13.9%) and relatively high share of arable land and a high percentage of ploughed land in SR. KR participates in agricultural production of SR by revenues from sale of primary industry products in amount of EUR 132.1 million, i.e. 9.1%, that increased since 2004. Plant production has current an important position in agriculture of the region.

KR has an important natural, cultural and historical potential (National Parks Slovenský raj, Slovenský kras, caves included in the UNESCO list, cultural and historical monuments and others). In the area of tourism KR belongs to the most visited regions of SR with average accommodation capacity (379 accommodation facilities). The number of visitors achieved 8.7%, which is comparable with TNR.

In general, KR has a change to maintain, also thanks to new FDI, its position of economically and socially stable region. It will approach the average of EU 27 slowly, but it has a sufficient development potential of a border region. Industrial production will be further dominated by metallurgical, chemical and engineering industries, while the electrical industry might achieve a more important position.

Science and research costs were growing slowly in the recent years, but are still low. But KR was ranked third behind BR and TNR with a share of 9.3% of total S&R costs in SR. With costs per employee of 9.2% it advanced to the group of regions lagging behind in innovation, to the level of BBR and PR. It has the second largest number of workers employed in the area of science and research, behind BR.

Telecommunication services are provided within a scope of available modern Technologies for much differentiated prices. The coverage of territory is average.

The region has a well developed transport network, with the city of Košice as main junction. The second most important international airport in SR is also situated here. Railway lines with national importance that cross the region, include the west-east transit corridor (Prague – Košice – Čierna nad Tisou) and the north-south transit corridor (Poland – Košice – Hungary). The region has first, second and third-class roads, including motorways. Important routes have the same orientation as railway corridors.

KR region has a total length of roads of 2,379 km comparable with NR, a network of motorways (5.3 km) and a low share of first-class roads (367 km). No important development of the road network occurred since 2003. In the number of vehicles (12.1%) and passenger cars (12.60) KR ranks among average regions of SR. In the area of transport services it achieves the second highest performance in freight transport that significantly increased against the year 2003. Outputs in passenger transport are average and decreased against the year 2003.

KR has the highest consumption of coke and coal in SR (56%), the third highest consumption of electricity (14.9%), low consumption of gas (4%), the second highest diesel oil consumption (19.2%) and nearly zero heating oil consumption.

KR belongs to smaller municipal waste producers in SR. In 2007 waste production in the region increased (189.5 thousand t) and the region achieves a low percentage of waste utilization (4.8%). The percentage of inhabitants connected to the water supply system (76.3%), which is below the average of SR, increased since 2004. On the other hand, only
57% of population is connected to the public sewerage network, which is also below the average of SR. KR reports a decrease in the quantity of discharged waste waters. The level of their treatment is 75%, which is 20% less than in PR.

KR reports the highest values of solid emission production despite a considerable improvement. Sulphur dioxide production improved too (the region is ranged second) and KR also achieves high values of nitrogen oxide production and carbon monoxide production, where no improvement was registered since 2003.

The region has deposits of different minerals with national importance. Gas resources in the district of Michalovce and quarries and sources of different construction materials are worthy of mention. Geothermal energy and low-potential geothermal energy in the Košice basin with potential use for heating, development of tourism and agriculture is also important. The region also has 5 industrial parks specialised in the engineering industry.

Main disparities of KR:

In agriculture
- Decrease of area of cultivated land and number of reared livestock, insufficient technical equipment of farmers, insufficient use of the natural potential of the region for development of fruit and vegetable growing;
- Insufficient cooperation and coordination in agriculture;
- Low competitiveness of agriculture due to a low productivity and underdeveloped market infrastructure;

In industry
- Lagging behind in innovation and technologies causes a growth of energy and raw-material intensity of production;
- Insufficient restructuring of industry and other main sectors in some districts of the region;
- Unsuitable structure/concentration of industry;

In services
- Low competitiveness of SME;
- Uneven distribution of institutions providing services to enterprises in the region;
- Underutilization of e-services;
- Insufficient connection of science and research institutions to SME, low level of innovation, underdeveloped services in the area of venture capital;

In technical infrastructure
- Insufficient capacity and telecommunications infrastructure, ruggedness of landscape as a barrier to the development of Internet connection, insufficient and uneven development of international and regional information networks;
- High environmental stress of landscape (chemical industry);
- Unfinished superior water distribution network in south districts of the region and low percentage of connection of population to WWTP;
- Lagging behind in connection to the sewerage network and WWTP;
- Relatively low level of agriculture in terms of protection of nature and landscape;
- Slow development of transport infrastructure;

In social infrastructure
- Unsuitable structure of education in relation to demand existing on the labour market, high share of population with elementary education, important intraregional disparities;
- High share of long-term unemployed on a total number of unemployed;
- Decrease in the number of permanent inhabitants of communities at productive age;
- Lack of job opportunities in south districts and resulting worse income situation;
- Insufficient connection of the educational system to the business sector;
- Significant outflow of labour force to other countries, without replacement for high-qualified labour force;
- Insufficient capacity of social service facilities in the individual districts of the region;
- Problematic establishment of cooperation between sectors in the search for a comprehensive solution of situation and needs of Roman population;
- Low overall interest in enhancement of the level of education in the form of lifelong education due to the lack of job opportunities;
- Stagnating LLE and a low share of population participating in LLE.

**Main factors of development of KR:**

**In agriculture**
- Suitable conditions for the development of agriculture, including fruit, vegetable and wine growing, and forestry within SR and common EU agricultural policy;

**In industry**
- Potential for strengthening of export, strong export position in metallurgical and electrical industries;
- Provision of support to domestic investors, particularly in promising sectors;
- Potential for the development of production of new products with higher added value based on renewable and non-metalliferous raw materials;
- Potential for the development of e-business directed to an optimisation of cooperation in industrial production;
- Use of cross-border cooperation for the development of business activities;
- Development of a regional innovative centre and a regional multifunctional centre aimed to the transfer of innovation, green low-carbon economy and creative economy;
- Existence of industrial parks supporting the entry of investors and centres of excellence for the development of innovation;

**In services**
- Attractive potential for growing interest in tourism;
- Conditions for rural tourism, agrotourism;
- Integration of the region into international cooperation and transfer of know-how;
- Extension of e-services, provision of support, particularly in mountainous areas;
- Foundation of family enterprises in the area of services and development of teleworking with the aim to increase employment;
- Existing network of consulting and supporting institutions for small and medium enterprises;
- Available potential for regional knowledge-oriented economy based on IT, biomedicine, renewable sources of energy and creative industry;

**In technical infrastructure**
- High transport potential, advantageous geographic position for the flow of goods and services to new EU member countries, position potential of the region, logistic links, connection to new markets;
- High share of protected areas on a total area - attractive natural environment;

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7 Economic growth and development are achieved by use of human creativity and talent
- Presence of geothermal and mineral waters with prospects for use;
- Implementation of international transport routes – development of the European region Košice – Miskolc is conditional upon the construction of the express way Košice – state border with Hungary;
- Material and energy use of waste – separated waste collection, recycling;
- Favourable natural conditions for the use of renewable sources of energy - energy from biomass, wind energy (Slovenské Rudohorie - Spišská Nová Ves), important potential of geothermal energy;
- Biofuel produced by no-waste refining of vegetable oils – colza, flax, glycerine by-product are good merchantable commodities;
- Cultivation of fast-growing species on contaminated land - energy use of timber by modern technologies.

In social infrastructure
- Favourable demographic situation, availability of free qualified labour force;
- Existing cooperation of schools with the business sector;
- High level of education in the regional centres;
- Development of metropolitan centre Košice – Prešov;
- Cultural potential, also in connection with the city of Košice as the European Capital of Culture 2013;
- Possibility of bilateral communication of population in border areas, cross-border cooperation.

Specific characteristics of the region

Based on comparison with region of developed EU countries and regions of SR we can state that the development potential of KR is not fully used. We see the largest reserves in the underutilization of innovative potential, particularly in industry. It can result in a loss of export performance, impairment of competitiveness of the region and slowdown of its economic growth, as well as in the decline in main industries, followed by a decline in services in sectors concentrated in the region. In comparison with global trends of increasing the quality of public services by informatization and with development in neighbouring countries, the level of informatization in KR is low.

The underused potential of the region as the basis of competitive advantage of KR consists in:
- Strategic position (border region, external border of EU, good transport connections to Hungary and new member countries – Romania), transport routes crossing the region in the east-west and north-south directions;
- Generation of tourism and destination management products that will require the promotion of the development of tourism infrastructure;
- Good demographic structure of population;
- Existing functional network of BIC (Business and Innovation Centres) and RCIC (Regional Consultancy and Information Centres),
- Area of research and development in KR that traditionally ranks among leaders in Slovakia;
- Development of agriculture based on the growing interest in renewable sources of energy and on the high potential and accessibility of raw materials for renewable sources of energy in KR;
- Geothermal energy of the Košická Basin and bioenergy.
Competitive advantage

The competitive advantage of KR consists in a favourable demographic structure, strategic border position, high export performance, above-average innovation climate and involvement in international projects, natural, cultural and historical wealth and conditions for the development of ecological agriculture and the increase of the share in green economy.

Strategic objectives:

1. Strengthening of productivity and competitiveness of key and promising sectors of industry and services, putting stress on their export performance and innovation of products, processes and services,
2. Building up a strong metropolitan centre Košice – Prešov,
3. Comprehensive rural development and strengthening of the share of the country on regional economy;
4. Supraregional accessibility and quality of services, cross-border cooperation and development of supraregional relations and use of economic and cultural potential of the region;
5. Creation of conditions for the development of green economy and so-called green job opportunities.

Expected impacts:

- Increased use of domestic regional sources and internal potential of the region;
- Growth in productivity and competitiveness of key sectors of industry and services;
- Growing share of new and high-innovative sectors on regional GDP;
- Building up the metropolitan centre Košice – Prešov,
- Growing share of green economy on the economic development of the region and increase in employment rate;
- Higher quality of human resources and improvement of social cohesion.

Priorities in the framework of priority areas (PA):

PA 1: Science, research and innovation

KR should implement strategic activities putting stress on areas according to the approved Innovation Policy SR and areas of new (supporting) services and veterinary medicine, new construction materials, selected areas of medicine, IT, creative economy, green – low-carbon economy, metalworking industry.

In the first phase the main objective will be the completion of infrastructure for science, research and innovation, in particular the preparation of human resources in proposed thematic areas and hence the creation of conditions for the development and transition to a knowledge-oriented economy.

Besides the functional innovative centre, KR in cooperation with PR will have to build up an international technological incubator/centre for green Technologies and services. In the second phase it will be necessary to create conditions for further development of
proinnovative environment, promotion of innovative enterprises and international cooperation.

PA 2: Human resources

KR should concentrate on activities putting stress on the development of main sectors – engineering, metallurgical, chemical and electrical industries and on the growth of the sector of services for agriculture, rural enterprise and promising sectors such as energy (renewable sources) and production of ecological construction materials, as well as on the growth of the service sector, logistics, tourism and IT.

The main objective is the connection of existing educational infrastructure at regional level to the functional open educational environment for lifelong education and consultancy, taking into account needs of the labour market and promoting the professional mobility from prevailing qualifications to new promising qualifications and competences as a part of the existing Strategy of HR development.

In the area of public health KR should incorporate into its conceptual documents at regional level the strategies of population health promotion in all policies in cooperation with RPHA.

PA 3: Employment

KR should implement strategic activities putting stress on maintenance and creation of new jobs in main sectors – engineering, metallurgical, chemical and electrical industries and in the sector of services for agriculture, rural enterprise and promising sectors, such as energy (renewable sources) and production of ecological construction materials, but also supporting services for export and enterprise on new markets. It also should deal with the problem of employment of Roman population.

The main objective will be the application of philosophy and principles of flexicurity and further promotion of cross-border mobility on the labour market. Increased attention should be paid to long-term unemployment and creation of jobs in new promising areas, particularly for young people with complete secondary and university education.

PA 4: Competitiveness, growth and business environment

KR should implement strategic activities for the promotion of SME and creation of business environment in the sector of services for agriculture, rural enterprise and promising sectors such as energy and production of ecological construction materials, but also supporting services for export and enterprise on new markets and services for innovative sectors, food industry and tourism.

The main objective is maintenance and strengthening of export performance of the regional economy and the penetration into new markets, followed by the increase of the share of innovative activities in main industries and reduction of their energy intensity. It will also be necessary to maintain the positive trend of development of use of new technologies,
particularly in services, and to support investments in SME in promising - new sectors of green economy.

**PA 5: Environment, climate change and renewable sources of energy**

KR should focus its strategic activities, putting stress on the increased use of renewable sources of energy and raw materials in main sectors – engineering, metallurgical, chemical and electrical industries and in the sector of services and rural enterprise, and in promising sectors such as energy (renewable sources) and production of ecological construction materials, foot industry and tourism.

The main objective will be the preparation of strategic documents in the area of management of protected areas in the region with connection to rural development, tourism and increasing of the share of energy from renewable sources in all industries and sectors.
6. Institutional and organisational support for the implementation of the National Strategy

The Government of SR approves the National Strategy and its update on a proposal of the Ministry of Construction and Regional Development of SR (“MoCRD SR“).

MoCRD SR is according to the Act No. 539/2008 Coll. on the promotion of regional development responsible for the preparation of the national strategy, its updating, provision of institutional and organisational support for the implementation of the national strategy and coordination of activities of socio-economic partners in its implementation. MoCRD SR regularly monitors and annually evaluates the implementation of the national strategy and submits annual reports on its implementation to the government. MoCRD SR is also obliged to ensure the effective, efficient and proper management and implementation of the support for promotion of the regional development according to the national strategy. The updated national strategy is drawn up as needed and with the application of partnership.

Other ministries and central bodies of state administration work within the scope of their powers with MoCRD SR in the implementation of the National Strategy.

At regional level the higher territorial unit (“HTU“) ensures and coordinates the preparation and implementation of the Programme of Economic and Social Development (PESD) of HTU, regularly monitors and evaluates this programme, and ensures its compliance with objectives and priorities defined in the National Strategy and with planning documentation. HTU sends to MoCRD SR the annual report on implementation of objectives and priorities of the National Strategy, always by 31 March. Other ministries and central bodies of state administration cooperate on the preparation of PESD of HTU, within the scope of their powers.

The community cooperates with HTU, in whose territory it is situated, on the preparation and implementation of PESD of HTU. It ensures and coordinates the preparation and implementation of PESD of the community as a medium-term development document, which is drawn up in accordance with objectives and priorities defined in the national strategy and takes into account objectives and priorities defined in PESD of HTU, within whose territory the community is situated.

A detailed description of competences of the individual actors in the area of promotion of regional development is contained in the Act No. 539/2008 Coll. on the promotion of regional development.

The regional development is a horizontal issue and at national, regional and local level it should take into account, like at level of EU, the socio-economic and territorial principle. For an effective and efficient implementation of the promotion of regional development it is necessary to establish a specialised “Methodical Institute for Regional Development“ (hereinafter “Methodical Institute“) dealing with issues of the social, economic and territorial development of regions, also in the context of membership of SR in international institutions. The Methodical Institute could be an efficient supporting instrument for the implementation of effective planning at national, regional and local level. Good experiences from work of
similar institutions in other countries such as France, Poland and Czech Republic confirm that the establishment of this institution is justified.

The Methodical Institute will among others:

- Draw up analyses, prognoses, conceptions, strategies, impact studies and case studies in the area of regional development and landscaping planning, cooperate in the preparation of legislative documents in the area of regional policy at national and international level;
- Provide in cooperation with SO SR and HTU relevant analytical and statistical data at the level NUTS 3 or lower level for an effective implementation of the regional policy;
- To fulfil tasks related to the implementation of the National Strategy;
- To carry out methodical and information activities in the area of regional development.

The Methodical Institute should be established as an independent organisational unit of MoCRD SR. We propose that funds for the establishment of the Methodical Institute and for its activities should be provided from the budget chapter of MoCRD SR⁸.

The concrete material, organisational, financial and technical support for the Methodical Institute will be the content of a separate document.

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⁸ According to the Resolution of the Government of SR No. 54/2010 competences of MoCRD SR will be transferred to the successor organisation on 1 July 2010.
7. Monitoring and evaluation system with specification of measurable indicators and method of their verification

According to the Act No. 539/2008 Coll. on the promotion of regional MoCRD SR is obliged to regularly monitor and annually evaluate the implementation of the National Strategy. For the needs of monitoring and evaluation of the National Strategy MoCRD SR will cooperate with SO SR and HTU.

The process of monitoring comprises systematic collection, sorting and storage of relevant information for needs of evaluation and verification of the fulfilment of priorities and objectives defined in the National Strategy. Monitoring will be implemented through two groups of specified measurable indicators. The first group consists of indicators that will be monitored in all regions of SR (Annex 4). The second group consists of specific indicators that will be monitored on the basis of main objectives and priorities specified for the respective region in the National Strategy at the level LAU 1\(^9\). The data source for specified indicators will be SO SR. MoCRD SR in cooperation with SO SR will draft a system of generation and collection of statistical data up to the level LAU 1. MoCRD SR will use services of other entities at regional level for collection of data that are not the subject of monitoring by SO SR.

The attainment of the strategic aim of the National Strategy “Through an integrated and result-oriented approach to the regional development and on the basis of use of the internal potential of regions to increase the adaptability, competitiveness and performance of regions by the year 2030 at a simultaneous increase of the quality of life of their population and respecting the principles of sustainable development” will be closely monitored on the basis of the following indicators (for details see Annex 3):

- GDP per capita in PPP
- GDP growth rate (in constant prices)
- Generation of gross fixed capital for the private sector as a percentage of GDP,
- Share of net disposable income of households per inhabitant
- Labour productivity
- Greenhouse gas emissions
- Share of renewable sources of energy on total energy consumption.

The implementation of the National Strategy will be annually evaluated and verified on the basis of analysis of the state and development of monitored indicators and annual reports of HTU. MoCRD SR will prepare annual report on the implementation of the national of the strategy and submit it to the meeting of the government of SR.

The evaluation of implementation of the national strategy will be aimed to the fulfilment of the strategic aim and main objectives and priorities at regional level (NUTS 3). Based on results of this evaluation potential proposals for updating of the National Strategy can be submitted.

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\(^9\) List of specific indicators will be contained in the document “Draft elaboration of objectives and priorities of the National Regional Development Strategy of the Slovak Republic at level LAU 1“
8. Financial plan with specification of sources and forms of financing

According to the Act No. 539/2008 Coll. on the promotion of regional development the regional development is financed from the following sources:

- State budget, including funds from budget chapters of the ministries
- Dedicated state funds
- Budgets of higher territorial units
- Budgets of communities
- Funds of physical persons
- Funds of legal persons
- Loans and contributions of international organisations
- Funds resulting from international treaties on grants concluded between the Slovak Republic and other states
- Other funds, if a special regulation provides so.

Funds of the European Union are a supplementary source of financing of the promotion of regional development.

The regional development is a cross-sectional issue that reflects all socio-economic activities performed within a specific territory. The achievement of noticeable progress in the regional development of a specific territory requires an effective coordination of activities, concentration of financial resources to solution of the most resonating problems of a region and use of the economic and development potential of given location, taking into account a sustainable development of the landscape. According to EC regulations these activities should be preferably financed from public resources of the EU Member States. The EU funds are only their complementary instrument.

SR has not a sufficient number of effective financial instruments for the promotion of regional development, apart from the EU funds. The existing financial instruments are characterised by high dispersion and complicated access to them. An efficient measure, especially in a period of overcoming the consequences of the financial and economic crisis would be the harmonisation of existing financial instruments and subsidy policies provided by the individual ministries and the integration of public funds reserved for the promotion of regional development into one financial instrument. This new financial instrument could associate public funds of existing subsidy programmes provided to legal and physical persons from state budget expenditures for the respective budget year, e.g. village renewal programme, programme of promotion of territorial development of communities and cities, subsidy for individual needs of communities, subsidy for generally beneficial activities in agriculture and rural development, ant others. The main objective should be more effective promotion of regional development by enabling the financing of integrated development projects related to the implementation of objectives and priorities specified in the National Strategy. The establishment of such instrument requires the adoption of a special act regulating its position, activity, conditions and scope of provision of the financial support.

The harmonisation of subsidy policies should serve for the prevention of duplication and contradiction of financing of certain purposes with the aim to achieve synergic effects in the
promotion and integrated approach to management of a territory, and ensure a better use of the internal development potential of a territory and settlements and its faster economic progress towards a balanced and effective polycentric settlement system.
9. **Schedule of implementation of the National Regional Development Strategy of SR**

According to the Act No. 539/2008 Coll. on the promotion of regional development, the communities and HTU are obliged to harmonise their PESD with the objectives and priorities defined in the National Strategy after the approbation of the National Strategy by the government of SR.

HTU will send to MoCRD SR the annual report on the implementation of objectives and priorities of the National Strategy, always by 31 March. Afterwards, MoCRD SR will submit to the government of SR the annual Report on the implementation of the National Strategy, always by 31 July. The updated National Strategy is drawn up as needed and with the application of partnership. The National Strategy and the updated National Strategy are approved by the Government of SR on a proposal of MoCRD SR.

The implementation of the National strategy at the national level envisages the establishment of the Methodical Institute by 30 September 2011.

After the approbation of the National Strategy, the objectives and priorities contained in this document will be detailed to the level of LAU 1 exactly defining the Schedule and responsibility for their attainment by 1 January 2012. In connection with this task MoCRD SR in cooperation with SO SR will prepare a draft system of generation and collection of statistical data down to the level LAU 1.
Conclusion

The National Regional Development Strategy of SR should, apart from the analysis of the present state and long-term trends of development of the economic and social situation in SR and its regions, take into account the supranational environment and overall international context, in which the regional development of Slovakia will occur.

From the political-security perspective, the international context is determined by the membership of SR in the North Atlantic Treaty Organisation and in EU and by its affiliation to the Western civilization with its fundamental values.

From the economic perspective the membership of SR in the European Union and resulting obligations and advantages have a key importance for SR and its long-term development, including the regional development. One of the most important and tangible advantages of the EU membership is the option to use the European funds within the EU Cohesion Policy. The main objective of the Cohesion Policy from the perspective of needs and priorities of SR is the reduction of economic and social disparities at the level of development of the European regions.

SR agrees with the opinion that the Cohesion Policy should be aimed to the promotion of competitiveness of all regions (lagging and non-lagging behind the level of EU as a whole), but believes that main attention should be paid and a higher rate of support should be provided to lagging regions.

The National Strategy will also serve as a basic for the preparation of a new programming document on the use of financial resources from the EU funds after the year 2013. Works on the Strategy are performed in a period when the future form of policies, including the budget of the European union after the year 2013, is being discussed. In connection with the use of complementary EU sources it is however important for the future system of EU Cohesion Policy to use good experiences from the programme period 2007 - 2013. The previous experiences of most EU Member States also prove the importance of regional operational programmes developed at the regional level. The development of a similar system should be preceded by the implementation of an impact study.

For an efficient and effective fulfilment of objectives of the National Strategy it will be necessary to strengthen an integrated approach of the EU Cohesion Policy in the following period. The basic criterion for the application of an integrated approach and horizontal coordination in the EU funds should be the following principles:

- The system will support a multi-source financing;
- The system will not exclude the interconnection of different EU policies;
- The system will apply an integrated approach to the promotion of the individual activities;
- As a part of the integrated approach, special attention will be paid to promotion of priorities that reflect the use of internal potential of regions;
- The implementation system will be oriented to outputs, which means a shift from a control-based system to a result-oriented system;
- The system will much more support the development of partnerships, including international partnerships and international cooperation;
- The system will support the strengthening of administrative capacities and their education;
- The system will promote the reduction of administrative burden, simplification of audit and review procedures;
- The system will contain elements correcting the direction of support in the process of elimination of interregional disparities from the national level of the EU Member States;
- The system will support the balance of interventions of investment and non-investment character.

A dominant influence of regional GDP per capita in purchasing power parity is shown in the determination of regions eligible for drawing of funds earmarked for the EU regional policy. The comparison of values of regional GDP per capita in purchasing power parity with defined limit of 75% of the average of this value in the territory of EU cannot provide an objective evaluation of the situation in the EU regions, especially when the permanent residence is used in the calculation of this indicator, instead of the place of employment where GDP was generated. In this context, when establishing the legislative principles of the EU regional policy in the following period, it will be necessary to use for same purpose an adequate number of indicators expressing criteria of the development from the social and environmental aspects.

The Slovak Republic welcomes the inclusion of territorial cohesion in the Lisbon Treaty among the terms of economic and social cohesion, which again underlines the importance of the cohesion policy as one of key EU policies. Territorial cohesion as an integrating instrument, which should help the implementation of economic and social development, respecting the specifics of each territory where the internal potential of a territory is regarded as its main development factor, confirms the cross-sectional character of the EU cohesion policy. Also for this reason, for the formation of further strategic approach to the EU cohesion policy in the following period, it is desirable to set up an independent permanent political and strategic forum at the level of the EU Cohesion Policy Council, or to delegate the agenda of the EU cohesion policy to the General Affairs Council (GAC).

In connection with the preparation of the following programming period the “Draft Preliminary Opinion of the Slovak Republic on the Future of Cohesion Policy after the Year 2013“ was drawn up.
### List of abbreviations

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<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>BBR</td>
<td>Banská Bystrica region</td>
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<td>BR</td>
<td>Bratislava region</td>
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<td>LLE</td>
<td>lifelong education</td>
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<td>WWTP</td>
<td>waste water treatment plant</td>
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<td>ESA</td>
<td>European system of national and regional accounts</td>
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<td>EU</td>
<td>European Union</td>
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<td>GDP</td>
<td>gross domestic product</td>
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<td>ICT</td>
<td>information and communication technologies</td>
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<td>IT</td>
<td>information technologies</td>
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<td>KR</td>
<td>Košice region</td>
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<td>LAU</td>
<td>Local Area Units</td>
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<td>SME</td>
<td>small and medium enterprises</td>
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<td>MoCRD SR</td>
<td>Ministry of Construction and Regional Development of the Slovak Republic</td>
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<td>NATURA</td>
<td>network of protected areas with European importance</td>
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<td>NR</td>
<td>Nitra region</td>
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<td>NUTS</td>
<td>nomenclature of local area units</td>
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<td>PESD</td>
<td>Program of Economic and Social Development</td>
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<td>PR</td>
<td>Prešov region</td>
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<td>PPP</td>
<td>purchasing power parity</td>
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<td>FDI</td>
<td>foreign direct investments</td>
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<td>RIC</td>
<td>Regional innovation centre</td>
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<td>RPHA</td>
<td>Regional Public Health Authority</td>
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<td>SR</td>
<td>Slovak Republic</td>
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<td>SO SR</td>
<td>Statistical Office of the Slovak Republic</td>
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<td>TNR</td>
<td>Trenčín region</td>
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<td>TTR</td>
<td>Trnava region</td>
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<tr>
<td>UNESCO</td>
<td>UN Educational, Scientific and Cultural Organisation (angl.</td>
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<td>S&amp;R</td>
<td>science and research</td>
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<td>HTU</td>
<td>higher territorial unit</td>
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<td>LFSS</td>
<td>labour force sampling survey</td>
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<td>ZR</td>
<td>Žilina region</td>
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