

Policy guidelines for regions falling under the new regional competitiveness and employment objective for the 2007 - 2013 period in the fields of the knowledge economy and the environment, in line with the Lisbon and Gothenburg objectives

Call for tenders by open procedure N° 2004 CE 16 0 AT 039

**Policy guidelines for regions falling under the  
new regional competitiveness and  
employment objective  
for the 2007 - 2013 period**

*Vol. II Country Report. SLOVAKIA*

Prepared for:  
European Commission  
DG REGIONAL POLICY

December 2005

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*The Team takes full responsibility for the data, information and judgments expressed in the present report.*

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## LIST OF ACRONYMS

CIS	Community Innovation Survey
DG Regio	Directorate General of Regional Policy of the European Commission
ERDF	European Regional Development Fund
EKC	Environmental Kuznets Curve
EPO	European Patent Office
ESPON	European Spatial Planning Observation Network
FA	Factor Analysis
GDP	Gross Domestic Product
ICT	Information and Communication Technology
INRA	International Research Associates (Europe)
NUTS	Nomenclature of Territorial Units for Statistics
PC	Personal Computer
PCA	Principal Components Analysis
PPS	Purchasing Power Standards
R&D	Research & Development
SF	Structural Funds
TLC	Telecommunication

## EXECUTIVE SUMMARY

This Report offers an assessment of economic conditions and policy priorities for the regions falling under the new Competitiveness and Employment Objective 2007-2013.

It is structured as follows:

- 1) the report presents some statistical data on the general economic conditions of the country.
- 2) a statistical analysis on the three ERDF themes: a) Innovation and the Knowledge economy; b) Accessibility; c) Environment and Risk Prevention.
- 3) a discussion of the current experience with Structural Funds and some implementation issues.
- 4) a set of policy priorities as perceived by the team of independent experts. The methodology, sources of data and description of indicators are explained in detail in Vol. I of the Report, that should be duly considered.

Contributors to the Report include: the statistical team, the core team, thematic experts and the country experts. The final version has been prepared under the responsibility of the core team (Milan).

### Eligible Region: Bratislava

- *General Economic Conditions*

Bratislava region is limited to the city area and the nearby, and consequently shows high population density, low share of employment in the primary and manufacturing sectors. In terms of economic performance the overall ranking is intermediate, because of the GDP per capita very close to the benchmark of the average of the EU eligible regions to the Competitiveness objective. Bratislava shows a relatively high growth of GDP per capita, and per employee, but unemployment is higher than the benchmark. Recent country trends and forecasts confirm the positive dynamics, of the Slovakian economy (5-6% GDP growth in 2006-2008).

- *Innovation and knowledge economy*

Despite strong traditions, the innovation potential is not yet fully developed. R&D expenditure is less of the half of the benchmark, as also the number of patents applications and the share of new products to turnover. However the employment in hi-tech services is very high, also because of FDI, and the tertiary education indicator is higher than in the EU eligible regions

average. Thus, while the overall ranking for innovation is only intermediate, there is a strong potential, hindered by poor finance and obsolete research facilities.

- *Accessibility*

There is a low endowment of secondary roads for the connection to transport terminals, and access to Bratislava, particularly from the South-east is unsatisfactory, while multimodal accessibility is good. Transport networks for commuters are inadequate for a metropolitan region and sub-urbanization trends. Some attractive suburban districts do not have a flexible access to main nodes.

ICT/TLC indicators are overall intermediate for the Bratislava metropolitan region, with good levels particularly for firms with a website and internet access, while households with PCs, internet and broadband access are below the benchmark. The situation is quickly improving and the Government has a clear strategy in this area.

- *Environment and risk prevention*

Electricity efficiency is low, but self-sufficiency and renewable resources are over the benchmark. The environmental impact of transport seems to be high, basically because traffic intensity is well in excess of the benchmark, while non-fuel transport is in a better situation. For the indicators of natural/rural assets the situation is of low natural endowment, but there are adequate protected areas. There is no indication of widespread technological risk, but a high risk of floods, and high air pollution mainly caused by transport. There are concerns with the water management, particularly treatment of waste water and underground reservoirs.

- *Implementation of Structural Funds in the current programming period*

In 2004-2006 an Objective 2 programme has been approved, with several priorities, including measures for the business environment, support to SMEs, tourism and leisure, cultural heritage. Implementation was good for Infrastructure operative programmes and OP Industry and Services, while SPD Bratislava faced big delays, probably because of slow administrative capacity, low quality of many projects, low participation by the private sector.

- *Policy priorities for discussion*

The very key priority is to fully exploit the innovation potential of the region. Bratislava well educated workforce and the active presence of multinationals should be combined with

investment to enhance regional R&TD, targeted to research infrastructure, universities, research institutes. This is by far more important than stimulating innovation in SMEs and promoting entrepreneurship, for which selectivity is needed. We do not find there is any particular need of new financial engineering packages and firm incubators. Environment is the second priority, focussing on contaminated lands, and specific measures in other areas, except perhaps technological risk for which there is no evidence. Assuming that some other transport infrastructure can be financed by the Cohesion Fund, the role of the ERDF in this area should be limited to secondary networks.



# 1 Scope and methodology

## 1.1 Aim of the report

The aim of this Country Report is to offer the European Commission an overview of the strengths, weaknesses, opportunities and threats faced by the regions eligible for the new Competitiveness objective 2007-2013. It focuses on the three ERDF themes listed in the draft regulation, and it has been prepared as a background document, with a view to supporting the Commission in its own policy priorities analysis and negotiation with the Member States.

As a part of a comprehensive study on 19 countries including 167 regions, the present Country Report is designed as a summary assessment of some key issues. It is a preliminary assessment that should be completed by a much more detailed structural and policy analysis needed at a later stage for the preparation of the Operative Programmes. Moreover, as explained in detail in Vol. I (Statistical Analysis), and as requested by the Terms of Reference, the present report is based mainly on standardised regional statistics and a common cross-country approach. This has obvious advantages in terms of comparisons and benchmarking, but is not designed to fully capture specific features based on local data, and this fact should be duly considered when using it as a reference.

## 1.2 Methodology for context analysis

The analysis at regional level presents the following sections: general economic structure, innovation and the knowledge economy, accessibility, environmental and risk prevention. For each section a brief description is given according to a short list of indicators with the following characteristics:

- they are consistent and available at NUT2 level;
- they are relevant for the ERDF thematic approach;
- they are, as far as possible, policy-oriented.

The choice of this set of indicators comes from the need to provide guiding principles for policy priorities, rather than to develop comprehensive regional statistical data. For this reason it should be clear that they give some highlights of the major trends in the regions and do not offer a complete picture of all the needs and weaknesses experienced by the regions.

The rationale of the data processing is the following:

- for each aspect (economic structure plus three themes) a linear composite indicator is created and the region is ranked in comparison with all the other eligible regions;
- for each theme (except Environmental risks) the degree of correlation with the economic performance is investigated, by means of a correlation analysis.

The basic idea is to discuss the main thematic trends in the regions, with respect to the ERDF eligible interventions, in the light of the economic structure and trends and the relative position of the regions as compared to a given benchmark (the EU eligible regions average). This reading of the data helps to discover combinations of, for example, High Innovation and Low Economic Performance, that may suggest the existence of unexploited potential, hence an opportunity to invest more on transfer and adaptation than on R&D or tertiary education per se. This analysis is included in Sections 2 to 5.

This set of information is then discussed from a more qualitative point of view on the basis of inputs coming from an assessment of the current SF programming period and lessons learnt in the field analysis carried out by the national expert.

### **1.3 Structure of the report**

Section 2 briefly summarises the general economic conditions for the eligible regions, using the following average annual data (2000-2002): regional population and its national share, population density, employment share of manufacturing, a 'rural/urban' and a 'presence of manufacturing' classification; and 1995-2002 averages for GDP per capita, rate of unemployment, growth of GDP, labour productivity growth per employee, and economic performance ranking. The latter ranking is crucial in the analysis. It is based on a linear combination of two factors ('levels' and 'growth') arising from a factor analysis (see Vol. I for details). Each data set is presented in comparison with a benchmark given by the average of the EU 168 regions eligible for the objective. Often some additional macroeconomic information is also included.

The following section is on Innovation and Knowledge Economy. It presents regional average annual data (mostly 1995-2002) on R&D expenditure as a share of GDP, EPO applications per million inhabitants, percentage of employment in high-tech services, share of population with tertiary education, share of firms' turnover due to new products (CIS data), and an overall

classification based on a factor analysis. Regions are classified High, Intermediate or Low performing in innovation with a combination of these data.

Section 4 is about Accessibility. It presents data on TLC and ICT (share of firms with Internet access and websites and share of households with a PC and access to the Internet) and data on transport indicators (the ESPON multimodal accessibility potential and connectivity to terminals by car). The analysis is supplemented by recent and forecasted trends in travel demand by mode (DG TREN data and scenario at 2020 (Tremove)). A multi-index analysis is given in the Annex.

Section 5 looks at Environment and Risk prevention. This includes standardised data on energy sustainability (electricity efficiency, self-sufficiency, renewable sources and ranking); the environmental impact of transport (vehicle density, non-fuel transport, anthropic degree, urban/rural typology); natural and technological risk (flood hazard potential, burnt areas and polluting sites). The reader should note that these data cannot cover specific sub-regional environmental risks, but consider regional averages.

Section 6 gives a quick overview of the current 2000-2006 programming period, based on a financial breakdown by re-classified priority and some qualitative comments based on the evaluation results.

The last section is about the policy priorities assessment. The first part of it presents the results of a correlation analysis between Economic Performance and Innovation, Access, and Environment summary indicators. A similar cross-reading is given for Economic Performance, Accessibility and Environment, while the presence of high Natural or Technological Risks is considered as a critical issue per se.

After this combined reading of performance and structural data, the following section is more qualitative, and based on other sources of evidence, including interviews with stakeholders, official documents, evaluation reports, academic research, and the personal assessment by the country expert. This leads to the suggestion of some indicative regional policy priorities, based on the available evidence, to be checked at a later stage when the national frameworks and regional programmes are available.

The report ends with a brief discussion of some implementation issues.



## 2. General economic conditions

The Slovak Republic transition to well functioning market economy with stable and dynamic economic growth has faced several constraints. The national economy suffered serious unbalances, restructuring accompanied with painful consequences, only gradual formation of new vital business environment etc. Despite the positive economic development achieved during the last few years (GDP growth in 2003 was 4.5%, and 5.5% in 2004 according to Slovak Statistical Office), basic comparisons show that the country is still lagging considerably behind the older member states of the EU. The most typical indicator of the serious limits Slovak economy is facing, is high unemployment, as the most pressing and long-term problem (the unemployment rate was 17.1 percent at the end of 2004 according to Slovak Statistical Office).

The capital region of Slovakia, Bratislava (the region of Bratislava) is classified as intermediate in terms of the rural/urban typology of the area. It presents a population density far above the average of the EU eligible regions and a lower share of workers employed in the primary sectors (table 1). The presence of manufacturing activities is low, even though superior for example to the value registered by Prague.

**Tab. 1 Structural indicators**

	Population (thousands)	Population density	Share of primary sectors on total employment	Share of manufacturing on total employment	Rural/urban classification	Presence of manufacturing
Bratislava	605	295	2.19	14.39	Intermediate	Low
EU eligible regions	313,711	129	3.34	20.18		

Source: Eurostat - see vol.I

Bratislava has significantly converged to the GDP per capita of the most advanced regions of Europe, reaching 95% of the reference average (tables 2 and 3). This level of GDP in 2000-02 is still far from that of Prague which is located in the most developed part of the former Czech-Slovakia. However, the annual growth rate of real GDP is higher (4.3%) and almost doubles the average of the 168 European eligible regions.

The main peculiarity of Bratislava can be identified in the high value of the unemployment rate, which is as large as the one showed by the major metropolitan areas of Europe (Madrid, Berlin and Inner London). This unsatisfactory performance in the labour market leads to consider Bratislava an intermediate region although just below the threshold used to identify the high performing regions.

**Tab. 2 Economic performance indicators**

	GDP per capita	Rate of unemployment	Growth of GDP	Growth of GDP per employed person	Economic performance ranking
Bratislava	23,046	8.12	4.33	3.43	Intermediate
EU eligible regions	24,162	6.42	2.34	0.99	

Source: Eurostat and DG Regio - see vol.I

**Tab. 3 Economic performance indicators (European eligible regions =100)**

GDP per capita	Rate of unemployment	Growth of GDP	Growth of GDP per employed person
95	126	185	348

Source: Eurostat and DG Regio see vol.I

Recent trends confirm stable economic performance of the Slovak economy, where Bratislava region has crucial role. Due to the lack of the latest regional data, recent and future trends are available only for the whole country. GDP growth belongs permanently to the highest among new member states, for example in 1Q 2005 it was 5.1%. Positive dynamics of the Slovak economy development is forecasted by Ministry of Finance of the Slovak Republic for next period as following GDP growth: 2005: 5.1%, 2006: 5.4%, 2007: 6.1%, 2008: 5.6%. Advisory Council for Macroeconomic Forecasting (consisting of experts from financial sector in general) estimate future GDP growth rate at the comparable level: 2006: 5.5%, 2007: 6.3%, 2008: 5,3%.

Recent trend of unemployment rate in Bratislava region confirms significant tensions on the labour market: 2002: 8.6%, 2003: 6.9%, 2004: 8.2% (however, these rates are still the lowest among Slovak regions).

### 3. Innovation and knowledge economy

The innovation and knowledge potential of Bratislava is very similar to that of Prague (table 4), so that the region can be located in the intermediate ranking. It exhibits a low value in the indicators of hard innovation activities (R&D expenditure and EPO applications) which, however, is mitigated by the extremely large share of occupation in high-tech services (the highest figure in the EU25) coupled with a remarkable share of population with tertiary education.

**Tab. 4 Indicators of innovation and knowledge economy**

	R&D expenditures on GDP	EPO application per million inhabitants	Percent. of employment in high-tech manufact	Percent. of employment in high-tech services	Share of population with tertiary education	Share of turnover due to products new to the firms	Overall ranking
Bratislava	0.78	59	1.13	7.55	26.54	10.70	Intermediate
EU eligible Regions	1.70	136	1.49	3.23	24.81	35.21	

Source: Eurostat and Community Innovation Survey see vol.I

Bratislava region concentrates almost half of total Slovak research and development personnel (Slovak Republic: 20,928 in 2003, Bratislava region: 10,135 in 2003). Even larger is concentration of Slovak basic research capacities into Bratislava region. Lower performance of this R&D potential is especially related to its long term poor financing resulting in obsolete facilities and equipment, as well as lack of other research and development related resources (with minor improvement within last 2 years).

Knowledge economy penetration into Bratislava region is the best observable in a case of high-tech services. Combination of well-educated, cheap labour force and suitable business environment positively influenced development within the last years. Globalisation and outsourcing of services caused that Bratislava moved into attractive location of various highly productive services. It is well documented by the fact that many large multinational companies selected Bratislava as centre for their specific activities serving own needs or their customers from many regions, not only in Europe.



## 4. Accessibility

### 4.1. Access to transport infrastructure

Location and capital-city function, both are considered as the crucial strengths of the Bratislava region. The location on western border of Slovakia, close to Vienna, already strongly influences the vitality of Bratislava’s economy. This borderland territory among Slovakia, Austria and Hungary, sometimes referred as Golden Triangle (or in reduced Vienna/Bratislava view as “Twin City”) is sometimes considered as one of the future “engines” of the EU. Bratislava region is very important transport node for various types of transport (in north-south as well as west-east directions). Gradual completion of transport infrastructure started to influence expansion of Bratislava region role as centre of logistic/distribution activities serving wider Central European environment.

Bratislava is characterized by a low endowment of secondary roads facilitating the connection to transport terminals (see table 5), similarly to that of Kozep-Magyarország in Hungary but far behind that of Prague.

The proximity of Wien and the eastern regions of Austria as well as the location in the middle of a wide flat valley have not yet stimulated the development of a satisfactory level of secondary road connections. As a consequence, this aspect could limit, in the future, the growth opportunities of the region.

Instead, concerning multimodal accessibility, the situation is very good.

**Tab. 5 Indicators of access to transport**

Connectivity to transport terminals by car	Multimodal potential accessibility
Low	High

Source: ESPON.

Two main problems have to be stressed within the context of accessibility:

1. access to Bratislava and its transport terminals from all direction is still not balanced,
2. access to main transport network/terminals is insufficient in many areas where large-scale sub-urban development is proceeding.

The first issue concerns Bratislava as a large centre of business activity and employment that attract large volume of transport each day from many directions. The access transport networks to the city from all directions are not well balanced. There are still directions with complicated, time consuming access accompanied by insufficient capacity (especially of roads). It is especially the case of access to Bratislava from south-east direction (e.g. current directions Samorin, Dunajska Streda).

Bratislava has started to develop as real metropolitan region, with much larger use of all its spaces as well as spaces in its hinterland. Suburbanization trends are intensively changing Bratislava region landscape already now. Many companies and citizens have found there new location for their living and business activities (among them are also transport intensive logistics and warehouse activities). These flows are not supported with adequate transport networks. Already now there appeared difficulties in having flexible access to main transport routes and nodes. This is the case of many attractive localities in all suburban districts (Senec, Pezinok and Malacky).

## 4.2. Access to telecommunications and information technologies

The degree of deployment of ICT equipment and connectivity of the capital region of Slovakia can be considered satisfactory, given its level of economic development (table 6). Nevertheless, its performance in this field is lower than that of Prague, especially when one examines the ICT access of households (which, however, has been calculated to both regions).

**Tab. 6 Access to TLC/ICT**

	Share of firms with Internet access	Share of firms with a Web site	Share of households with PCs	Share of households with Internet access	Share of households with broadband Internet access	Overall ranking
Bratislava	95.4	78.8	45.3	32.4	4.6	Intermediate
EU eligible Regions	86.01	56.33	49.29	35.19	5.05	

Source: ESPON and INRA see vol.I

Slovakia is heavily investing in ICT technology and its ICT expenditure is among the highest in Europe (8.90% of GDP), but the infrastructure is still limited: at the 6<sup>th</sup> and 4<sup>th</sup> level in fixed and mobile technology (see Annex); at the 5<sup>th</sup> and 4<sup>th</sup> level in PC and Internet availability.

In the region concerned, those efforts are showing clearly in the performance related to access, that is in line with economic performance. The performance is especially good from the supply side, where the region of Bratislava ranks in the top league. It is not equally so for households, that enjoy a much lower access and lag behind.

**Tab. 7 Ranking by variable out of the EU eligible regions**

	Share of firms with Internet access	Share of firms with a Web site	Share of households with PCs	Share of households with Internet access	Share of households with broadband Internet access
Ranking	8	4	14	14	13

Source: ESPON and INRA see vol.I

Slovak Republic is developing large effort in improving situation in ICT focusing on public sector and households segment within the last years. Bratislava region, by far the best developed in this field in Slovakia, will be especially positively influenced by pressure for liberalization and rising competition. High concentration of the population allows very cost efficient and affordable expansion of ICT within short time. The establishment of the Government plenipotentiary for informatization of the society (2005) and its following policy initiatives also multiply potential for future efficient solutions in this field. The informatization of the society is among the core issues addressed within the strategy of competitiveness already adopted in Slovakia. It also is supposed that informatization will be among horizontal priorities during next programming period.



## 5. Environment and risk prevention

The indicators of environment and risk prevention depict a mixed picture for the capital region of Slovakia. Contrary to Prague, Bratislava does not appear to face serious problems of energy sustainability.

**Tab. 8 Indicators of energy sustainability**

	Electricity efficiency	Electricity self-sufficiency	Renewable sources of electric energy	Overall ranking
Bratislava	1.313	0.261	0.347	Intermediate
EU eligible Regions	3.646	0.254	0.202	

Source: EUROSTAT - NEW CRONOS (Regio) - see vol.I

**Tab. 9 Indicators of transportation impact**

	TR1 Vehicles density	TR2 Non-fuel transportation	TR3 Traffic intensity	Overall ranking
Bratislava	0.124	0.039	7.653	High
EU eligible Regions	0.218	0.031	0.400	

Source: EUROSTAT - NEW CRONOS (Regio) see vol.I

1) Every transport indicator - TR1, TR2 and TR3 - should be interpreted according its own dimension (and colour in column chart). Indicators cannot be compared with each other because of the difference in scales used. See Annex.

The value of the traffic intensity indicator (TR3) could be some time negative because of the method of normalization used to calculate it. Such a normalization method allows us to summarize the two heterogeneous variables which make up the indicator ("total number of driven intra-regional trips/Total Area" and "Total number of kilometres made by journeys produced-generated by the region/Total Area). Values produced by normalization are relative and not absolute values.

Instead, the situation is more critical in terms of vehicle density and traffic intensity where, especially concerning the latter indicator, Bratislava is closely behind Prague in the top ranking of the EU eligible regions.

In spite of its intermediate urban profile, Bratislava exhibits a low endowment of natural assets so that some interventions in this field could be recommended.

**Tab. 10 Indicators of natural/rural assets**

	Degree of protection	Wilderness degree	Anthropic degree	Urban/Rural typology	Overall ranking
Bratislava	NA	0.377	0.110	1.000	Low
EU eligible Regions	0.088	0.310	0.103	2.819	

Source: IRENA Database and ESPON-CORINE Landcover Database see vol.I

**Tab. 11 Indicators of natural and technological risk**

	Natural risk			Technological risk	
	Flood hazard potential	Share of burnt areas	Overall ranking	Polluting sites density	Overall ranking
Bratislava	1.000	0.000	Intermediate	NA	NA
EU eligible Regions	0.763	1.622		0.447	

Source ESPON Database and EPER-EEA see vol.I

On the contrary, the prevention of natural risk does not emerge as a priority while for this region, as well as for those of all new Member States, data on technological risk are not available.

### *Electricity efficiency and renewable energy*

*Electricity efficiency* in Bratislavský kraj is 2 points under the Union average (around 1,31 million euros GDP produced per gigawatt hour consumed), while *electricity self-sufficiency* has the same Union average level (0.26). The share of *renewable sources* (34.7%) in the electricity production capacity overcomes the average EU performance.

In terms of energy sustainability, the score reached by Slovakia is intermediate.

### *Transport and environment*

Regarding the transportation impact on environment, *vehicles density* and *non fuel transportation* indicators show a performance in accordance with the EU average.

Like in Hungary, *traffic intensity* is very high (7.653), compared to the Union average (0.941). Generally speaking, Slovakia has a high transportation impact on environment.

### *Natural resources assets and management*

Data on the share of the areas under nature protection are not available for the Bratislava region.

The presence of natural surfaces (*wilderness degree* equal to 37.7%) and the share of areas with higher human intervention (*anthropic degree*, 11%) are in line with the EU average situation.

The Slovakian territory has a great prevalence of rural settings (*Urban/rural typology* indicator equal to 1.00).

### *Risk Prevention*

As for the natural risks, *flood hazard potential* is double in Bratislavský kraj, relatively to the EU average, while the vulnerability to the negative event of *burnt areas* is equal to zero.

As regards the technological risk, data on the *polluting sites density* are not available.

In conclusion, these values about the natural risk imply the attribution of Slovakia to the intermediate class.

Environmental conditions in Bratislava are influenced by rapid urban development, protection of large natural areas and partly improved situation in impact of production activities on the environment. The most problematic are quickly expanding car ownership and transportation volume in the city and unclear burden of contaminated and/or devastated, derelict land mostly of the former production/transport sites.

As a result of concentration on major environmental problems, some other environmental issues remain outside the major focus of initiatives. There is group of large protected areas which include protected landscape area Male Karpaty (crossing the regions as well as Bratislava city), large scale water protected area on South-East the region (crucial underground water resources), Ramsar Convention registered wetlands alongside Danube river (south-east), Morava River (west) as well as on the north west outskirts of Bratislava (large protected areas cover 26% of the whole region). Numerous are small protected natural locations of various nature (total size only 1,8% of total area of the region). Many highly protected areas already in direct contact with the urban built environment and create important barriers in spatial development in some directions. More sophisticated forms of their coexistence should be developed and supported. Worse is situation in water segment of the environment. In the case of surface water it is caused especially by insufficient water cleaning

infrastructure. Very sensitive is situation in underground waters taking into account large reservoir of underground water in eastern part of the region and alongside Danube. Some preventive measures are intended already within current programming period (flood prevention).

## 6. Implementation of Structural Funds

### 6.1. The 2000-2006 Structural Funds Programming period

Bratislava region is the only eligible region for Slovakia for the regional competitiveness and employment objective. It is currently receiving support under the Objective 2. In summary, the following measures are called for:

- Development of SMEs (various services, notably in the financial and technical sectors),
- Support for entrepreneurs through joint services in the public interest (such as industrial zones, innovation centres, technology parks and tree nurseries),
- Activities and services associated with tourism and leisure (such as private infrastructure and facilities, information and promotion),
- Joint services in the public interest for tourism and leisure (such as accessibility, environmental protection,
- local infrastructure for development and employment and tourism offices),
- Renovation of sites in rural municipalities and development of the cultural and national heritage.

The EU contribution for the programme is 37.17 million Euro, and expenditures are distributed as follows: 40.5% for basic infrastructure; 14.5% for competitiveness of firms; 27.2% for human resources; 17.7% for agriculture, rural development and fisheries<sup>1</sup>.

The country receives also a contribution of 44.94 million Euro under an Objective 3 Programme.

### 6.2. Implementation of regional policies: lessons learnt

The experiences with implementation of current SFs support reveals above all large differences according to operational programmes (end 2004). Due to large need for investment as well as

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<sup>1</sup> On processing of DG REGIO data.

due to significant experience in implementing projects in this sphere has been one of the best working operation programmes OP Infrastructure. There are already developed well working mechanisms of preparing and implementing projects in the field of transport infrastructure, and later also in the field of environmental infrastructure. Surprisingly high was response concerning measure Local Infrastructure. It documents large need, as well as improved capacities of the local governments in generating projects. Good response was achieved also in the OP Industry and Services (resources required were four times higher comparing to allocated resources). Most of them addressed support to SMEs. Similarly positive situation concerns OP Agriculture and Rural Development (addressing especially the needs of farmers), as well as OP Human Resources, or community initiative Equal.

Substantially lesser was volume of requested and approved resources form the rest of supports schemes (SPDs, Interreg III). Among the worst is the situation in implementation of SPD Objective 2 Bratislava (no contract until end 2004). Structural Funds implementation faces series of obstacles. Differences reflect different progress in elaboration of relevant documents (manuals, guidelines etc.) and in their approval, slow progress in administrative capacity building. From other problems, there is still significant share of projects of unacceptable quality (for example about 30% of projects submitted in Operational programme Industry and Services had formal errors).

There are also big differences in projects submitted according to particular measures. Certain obstacles in effective exploitation of funds were constraints facing potential projects crossing public and private domain. Conditions allowing more specific public-private partnership based projects should be considered. It could improve situation in submitting suitable projects, although with more sophisticated funding mix.

Evaluations of projects in some measures are too long, sometimes causing troubles to applicant (e.g. blocked own resources). More reliable assessment of SFs implementation will be possible not earlier than in mid 2005 (but especially since the end of 2005 after public procurement processes in contracted projects will progress to their final stages). As far as current sectoral interventions are concerned, they are considered as acceptable, but measures addressing certain sectors probably will face certain difficulties. It seems that response form private sector is behind the response from public sector. It can be partly explained by smaller need to co-finance the projects implemented by subjects from public sphere, compared to much larger co-financing needed for private sector projects. Issue of co-financing also will be sensitive during the next period.

There also are first indications that measures addressing tourism will be less extensively covered by well-elaborated projects. Tourism schemes probably will have less effect since there are not so much attractive touristic locations in Bratislava hinterland. Main tourism destination is Bratislava itself, while under current micro-zoning, support in tourism is oriented on a few tourism centres in Bratislava hinterland, with limited potential in larger scale development. They are not considered as so promising business opportunities with respect to current stage of society and economy (slowly growing pressure for free time activities in close hinterland of the Bratislava). Business support oriented schemes are attracting attention not as massively as it was expected according to first experiences. Nevertheless, it is supposed that next calls for projects will induce much higher interest in the sphere of business support measures.

Business support is widely accepted as long-term priority, as well as for the future programming period. It also seems that the best response has measure addressing renovation and development of municipalities and preservation of cultural heritage (current period). With respect to present experiences, much higher allocation of resources to this scheme would be useful. Absence of similar measures during next programming period is accepted with certain bitterness, especially on territory outside Bratislava (many good projects will not be satisfied, and there will be no chance in the future for similar projects).

### **6.3. Future Perspectives: first outlook**

Resulting from previous development and absence of specialized policies, as well as lack of resources, three proposed priorities are considered. Comparing to current period proposed priorities are considered more suitable, and probably will be even more efficient.

The intention to cancel micro-zoning approach to regions under this objective is also highly welcomed and is considered as reasonable in relation to identified aims. It is supposed that the highest priority should be attached to "innovation and knowledge economy", followed by "environment" and "accessibility". It is also supposed that major attention should address business and R&D support. Sharing of responsibilities among national and regional level is under discussion. Current involvement of sub-state level is rather limited. It should be mentioned that Slovak regional level is functioning only since 2002, and its capacities have been consolidated after a few years. Nevertheless, it seems that national level with it's already build capacities will remain dominant (e.g. selection of the projects), but subordinated bodies with more functions can be expected. It is supposed that regions will take much larger role in

new programming period. Role of central government bodies should also be reduced in favour of non-central actors within the processes of selection and monitoring (changing composition of these bodies with larger share of these actors).

Some forms of technical assistance will be needed, as well as upgrading of their own projects' elaboration capacities. It is generally agreed that priorities proposed for period 2007-2013 are more suitable for the region. Retreat from micro-zoning also is widely accepted, especially taking into account general objectives as competitiveness and innovations.

Future programming period probably will offer much more opportunities and have chances to be really efficient in the region. Proposed priorities will allow concentration of resources to the fields with urgent need and potential effective output. Opening schemes to whole Bratislava region (including Bratislava), with its vital business and public sector institutions (universities, research institutes) should lead to more and better-elaborated projects in outlined priorities. Certain opportunity for support of infrastructure, housing and public sector activities and facilities could be allowed (in specific conditions).

There are expectations that at least support focusing to progress in education sector and public mass transport will be possible with the use of EU funds. Co-ordination between ERDF and ESF is considered as very important. It is expected that already working co-ordination among ERDF and ESF will be elaborated into more details in next programming period. It is also supposed that more links between both funds should be developed, to strengthen efficiency of resources allocated to the projects.

## 7. Policy priorities assessment

### 7.1. Findings from the statistical analysis

From the joint analysis of the economic performance and the thematic indicators it emerges a largely homogenous profile for Bratislava, as demonstrated by the positive correlation between the indexes of economic performance, innovation potential and access to ICT.

By contrast, the degree of development of the secondary transport infrastructure is lower although does not seem to have influenced the pace of growth. However, this aspect may prevent this region from fully exploiting further opportunities of growth, once the catching-up process will come to an end, as well as limit the development of the neighbouring regions.

As opposed to the intermediate economic performances, the high value of transportation impact and the low endowment of natural areas suggest that a certain priority should be ascribed to specific interventions in these fields.

Along with the main ones, secondary priorities could be assigned to the increase of the innovation potential and the access to TLC-ICT (two thematic area in which the region obtains an intermediate score, in line with intermediate economic performances).

**Tab. 12 Economic performance versus innovation & knowledge economy, access to ICT and access to transport**

Economic performance	Innovation and knowledge economy		Access to TLC and ICT		Access to transport	
	Ranking	Joint analysis	Ranking	Joint analysis	Criticality	Joint analysis
Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Low connectivity	Uncorrelated

Source: ESPON and INRA see vol.I

**Tab. 13 Economic performance versus environment and risk prevention**

Economic performance	Energy sustainability	Transport impact	Natural/rural assets	Natural risk	Technological risk
Intermediate	Intermediate	High	Low	Intermediate	NA

Source: ESPON - see vol.I

## 7.2 Findings from the field analysis

From consultation with the stakeholders approaching the future period from various positions, three points should be stressed:

1. As far as priorities are concerned, one group of them within last consultation recommended concentration of support to innovation and knowledge economy, second group of them emphasised need to support accessibility (also taking into account estimated costs in this field)
2. Bratislava also needs elaborated activities in the field of urban sustainability. Experts are aware of unclear knowledge of scope of contaminated land and potential high costs of activities in this field. Clean mass transport is considered as the second priority. During the programming period eventual shift in favour of clean mass transport and energy efficiency should be allowed (depending on spending in priority of rehabilitation of contaminated sites).
3. Regards future priorities, they also should react on existing intraregional disparities. In the case of Bratislava region there still is urgent need to overcome existing underdeveloped rural character of local communities outside core urban Bratislava region. It concerns absenting or insufficient basic technical infrastructure, access and local roads, as well as incomplete or obsolete basic public facilities. Among the new challenges they will face, there is a need to enlarge and modernise social infrastructure addressing the elderly. Future priorities and concrete measures should offer chance to solve at least some problems of these communities (e.g. within priorities of energy efficiency and transport infrastructure and prevent their internal marginalisation or even worse, prevent deepening of spatial polarisation. Local representatives and the public will not positively perceive too extensive concentration of resources only to Bratislava city and its closest hinterland as well.

We show below our suggestions for policy guidelines:

Priority 1 – Initiative to improve innovation and knowledge economy performance is considered as very suitable area of support in Bratislava region, despite not so extensive response in schemes addressing e.g. SMEs development during the 2004-2006 programming period. The possibility to allocate funds for subjects active in whole region including Bratislava city, it can generate quite competitive environment within this priority and strongly improve performance in this field. Value of this priority is multiplied by large concentration of research and development institutions, as well as innovative business companies in Bratislava region.

This priority should be opened both to entities from private, public as well as mixed sector. Main support should address support of building and/or modernisation of research and development infrastructure (equipment, laboratories, development facilities, prototype development, pre-production testing etc.). Part of support should address long term underfinanced research and development infrastructure at universities and research institutes, as core centres of generating basic innovations. It also should include modernisation of technologically based training facilities improving substantially dissemination of new technologies.

Specific support should address formation of new R&D based businesses, including cross-sectoral business units (public/private). Projects focused on building the links among R&D bodies and business sector should be specifically supported. Specific attention should focus on support of transfer of innovations, licences and support of patent registration (which is costly for small businesses, or public entities generating important R&D outcomes). Considered should be support of access to latest scientific knowledge – it means support of core libraries/scientific information centres, with extensive information facilities upgrading, as well as access to main packages of electronic information resources.

Priority 2 – Environment and risk prevention measures also are very suitable in the region. The largest portion of resources should address widely perceived need of rehabilitation of contaminated sites/land, mostly of previous production and transport land/facilities, for preventing expansion of contamination and devastation, clearance of derelict old industrial and transport areas. They can be converted subsequently to new and efficiently used areas of development (the scope of resources depends on scope of possible concrete measures as mentioned above). It also should be used for protective actions and infrastructure in areas with valuable natural environment located within the region but which are threatened by external degradation.

There also is need to support enhancement of energy efficiency and of renewable energy sources. Among the suitable field of support could be improvement of energy efficiency of large stock of public and private facilities, mostly build during previous socialist period of development without strong pressure for energy efficiency. Besides non efficient energy facilities and equipment, for example many of public bodies are spending significant share of their budget on energy (leading to reduction of available resources for pursuing their core activities). Projects in favour of modernisation toward application of more energy efficient technologies should also obtain certain preference. These should focus on reduction of energy consumption in subjects of all sectors. Support of energy saving initiatives could also address

housing, especially in a case of older housing stock (projects, new equipment, construction adaptations in preventing energy losses).

Clean urban mass transport support should address especially support in favour of expansion and modernisation of non-fuel mass transport modes (trams, trolley buses, alternative fuel buses). It should reduce the scale of dependency on fuel bus transport. The support of replacement of existing heavy polluting buses would improve environment efficiently. Improvements in the field of mass transport (urban, suburban) could attract customers/commuters back to use of mass transport network and improve environment by reduction of car use. Resources can be very efficiently used within modernisation initiatives of main public transport operators.

Priority 3 – Improvements in the field of secondary networks is of rising importance. After progress in completion of basic transit networks, the urgency to improve system of secondary transport network is widely recognised. It is especially the case of hinterland of Bratislava, with its expanding housing, production and logistics functions that already started to face difficulties with accessibility to main transport corridors and nodes of transport, as well as Bratislava itself. Current transport network is not adequate to current needs, still having features of inherited rural character. Due to spatial and functional expansion of Bratislava hinterland this transport network (especially road network) must be quickly upgraded. It is especially the case of road transport capacity extension, as well as improvements of transport system organisation (streetlights and crossings, roundabouts, improvements focusing on roads' sections having high incidence of street accidents etc.). New role of suburban railway transport and its closer integration into regional transport system also is worth of support.

Due to already high penetration of ICT use in business sector in general in Bratislava and improving competitive environment in this field, it is recommended to concentrate resources allocated for Priority 3 on secondary networks.

### *Implementation issues*

It is generally supposed that the role of regional level in implementation should be strengthened in the future programming period. Two main alternatives are considered – obtaining more powers as intermediary body or act as managing authority. Regional level representatives are interested to act as managing authority with payment unit remaining at the central level. For this reason, regional level needs to enhance personal professional administrative capacities, technical equipment and information technologies.

Bratislava self-governmental region is currently participating in implementation of SPD2 and SPD3. It already has implemented electronic monitoring system (IMTS) serving to financial control over Structural Funds use. The responsible organisational unit within the Office of the Bratislava self-governing region is *Department of Regional Development and Spatial Planning* that consist of 24 employees at present, with planned increase to 27 employees during year 2005. Nevertheless, taking over of much larger extent of powers in SFs implementation will require further increase of staff. The costs of this personal capacity increases can be alternatively covered by potential involvement of EU funds, transfer of workplaces from now responsible Ministry of Construction and Regional Development (or state budget) and from own budgets of regional self-government. Final scope of needed personal capacities, as well as technical and information technologies enhancing will depend on final decision on position of regional structures – if the current division of tasks remains, or if it will be position of managing authority or if at least the powers of intermediary unit are strengthened.

Under the processes of preparation of the current period, regional self-governments were not sufficiently participating (being only under formation). At present, regional level is progressing in the field of planning and programming activities, so their participation should be more extensive. Bratislava region has valid *Master Plan of the Region* – approved by the central government. Bratislava Regional Council, as the main representative body of the region also approved *Strategy of the development of Bratislava self-governmental region until year 2013*. These two documents already were partly used in preparation of SPD2 programming document for current period. However, not all priorities of Bratislava self-governing region were transferred into priorities and measures in SPD documents. Under the preparation for future programming period Bratislava region intends to prepare new *Plan of Economic and Social Development of Bratislava Self-governing Region for years 2007-2013*. This plan will be prepared within the standardised regional development framework and procedures adopted in Slovakia during the last years. It will also allow reflecting the latest changes in social and economic environment in this very dynamic region. This „Plan“ also should be approved by newly elected Regional Council (election will be held in November 2005). Preparation and approval of this document, accompanied by various participatory activities, will generate new guidelines for future development that should be incorporated into national level documents.

The duration of administrative processes since the project submission to its implementation is often considered as too long. Especially in measures with large-scale participation of private sector bodies, lengthy procedures reduce their interest. Such conditions are hardly acceptable for innovative subjects facing global competition. It also is the case of many sensitive initiatives within public sector. Long term uncertainty, waiting, means delays in preparing

suitable alternatives in a case of urgent need. Measures then can be perceived as inefficient. Shorter time schedules of project cycle (esp. selection and contracting) are expected in the next programming period. Calls for projects should be more regular, their frequency announced, (not suddenly emerging), with clear plans when they can be expected.

Preparation of good projects requires quite a large concentration of human and financial resources. To fit into all requirements seems sometimes too complicated, too detailed, and certain measures over-regulated. Simplification, reduction of very demanding documentation would attract more applicants. In some fields, transparent possibility to negotiate details in a case of larger projects of public interest should be allowed.

Clarity of related documentation, unified interpretation of terms, reduced misunderstanding caused by working in English and Slovak languages, easy access to full information can reduce number of projects with formal imperfections. Full information should be available already at the beginning of project elaboration. Guidelines, manuals, calls documentation used for projects elaboration should not be changed during the period reserved for projects' elaboration prior their submission.

Better access to applicants and recipients at the regional level is among the arguments in favour of decentralisation of more powers in SF's implementation. Clear identification of responsible person, responsible for communication in a case of uncertainty or incomplete documents could be improved by this change. Frequent information on progress of submitted projects would improve satisfaction of applicants' facing now long term waiting in uncertainty.

Priorities, measures, detailed conditions concerning whole future period should be more flexible. It is expected that there should be allowed transfer of certain amount of resources according to developments in the region, as well as according to demand for resources. Programming period is quite long and prediction for the whole period is complicated by many uncertainties.

Important issue is transparency, trust, justice and clear rules within the process of projects' evaluation and selection. Guarantee of reduction of any outside intervention is among the highest priorities among applicants. Chances for political intervention at the level of Minister (or similar future intervention, outside main selection procedure) also should be strictly limited (e.g. only in reduced number of cases and according to narrow list of reasons).

Summary of recommendations:

- Stronger participation of regions in preparatory and programming activities
- More powers to regional self-governments in implementation of SFs
- Strengthening of personnel capacities and of technical and information technologies at the regional level
- Shorter and strictly respected time-framework during the implementation phase
- Simplification, reduction of too detailed regulations, less bureaucracy
- Existence of procedure of redistribution of resources according to development in demand and spending among the priorities well as adjustments in identification and specifications of suitable projects
- Availability of full and clear information in time, without changes during the project elaboration period
- Better, reliable and personally identified communication between responsible authorities and applicants/recipients
- Frequent information on progress of submitted projects
- Transparency, justice, clear rules in evaluation and selection process, elimination of outside intervention, including political



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