REGIONAL INNOVATION STRATEGY OF SLOVENIA AS AN EU REGION

ACTION PLAN "NATIONAL SYSTEM OF INNOVATION"

Project SLORITTS No IPS-2000-01064
Co-financed within the 5th Framework Programme
of the European Community-DG Enterprise
"Promotion of Innovation and Encouragement of SME Participation"

Ljubljana, April 2004

INTRODUCTION

With its accession to the EU, Slovenia now stands at a turning point in its development at which the traditional approaches to increasing competitiveness such as encouraging direct foreign investment and cost depreciation are becoming less prominent, whereas approaches that promote a country's innovation capacity and competitiveness through innovative products are coming to the fore. At the same time, one of the problems facing Slovenia as an EU region is that it does not have a **National System of Innovation (NSI)**. The support provided to cover the needs of the economy and the regions lacks orientation and is fragmented, the actions of the agents of the support environment for development are poorly coordinated, the education system is oriented towards creating "job takers" rather than job providers, i.e. "job makers" and, according to the findings of various international studies, the rankings received by Slovenia's innovation capacity place it amongst the EU countries on the tail-end of this particular list, while when ranked according to the degree of cooperation between the economy and the sphere of research, it even takes last place.

Analyses of global economic trends and the development policies of the most dynamic developed countries clearly indicate that it is the **regional innovation capacity** which makes it possible to adapt rapidly to changes in the international arena and that it alone offers the possibility of improvement of the competitive position. Only a highly innovative state (enterprise, region) will be able to maintain a long-term advantage over the competition and ensure the competitiveness of its economy, economic growth and prosperity. The new building blocks of competitiveness are innovativeness, quality, know-how, adaptability, tolerance and connecting education, research and entrepreneurship into an indivisible unit.

Our understanding of innovations depends on the perception and the value attributed to them within the social and economic environment – in other words, on the prevalent attitude of society towards creativity, inventiveness, innovation, risk taking and the culture of innovation. The oft present narrow classification of innovations as exclusively technological improvements that take place as part of the production process is one of the main obstacles in the path of promoting innovation activities. Such comprehension of innovation consequently also brings about the shaping of narrow innovational policies and constricts the measures implemented by these policies.

> The OECD defines innovation as the transformation of an idea into a marketable product or service, a new, improved production or distribution process, or a new method in providing social services. Defined in these terms, innovation is a synonym for successful production, adapting and the utilisation of novelty in the economic and social sense. By content, innovations are divided into the categories of programme, technical/technological, organisational, management and method.

This report represents almost three years of work on the "Development of Innovation Strategies" (RIS) for Slovenia within the framework of the EU project "**Regional Innovation and Technology Transfer Strategies for Slovenia**" **– SLORITTS**, of the 5th Framework Programme of the European Union *Promotion of Innovation and Encouragement of SME Participation*.

The fundamental aim of the Action Plan is to increase the innovation capacity of Slovenia as an EU region with all of its statistical regions equally developed. The action plan elaborated on this basis is the foundation for the more rapid promotion of innovative culture in Slovenia, as it was reached by consensus amongst the main actors.

The plan was prepared for the period from 2004 to 2006 and lays the foundations for 2007 to 2013. It is based on the results of preliminary work on the project, based on the analyses of the trends, needs and the support environment, the recommendations of the working groups, the SWOT analysis and suggestions made by the main actors on the national and regional level. Experts from the economy (small, medium-sized and large enterprises), financial sector, the spheres of education and research, support organisations on the local and regional level, the Chamber of Commerce and Industry of Slovenia, representatives of the ministries (the Ministry of Education, Science and Sport, the Ministry of the Economy, the Ministry of Information Society), as well as experts from the EU regions of Umbria and Shannon have contributed towards the analysis.

The SLORITTS project was implemented within the scope of the activities of the network of Innovating Regions in Europe (IRE), the activities of which are primarily the transfer of experience, methodology and know-how in the area of regional innovation strategies development. In addition to this, it also provides assistance in the development of regional innovation systems in keeping with the standard and good practices of the EU and the transfer of technologies from the more developed to the less developed European regions, thus accelerating their development. Over 100 European regions are currently members of the IRE network.

Vanja Rangus, coordinator of the SLORITTS project, was appointed a member of the IRE network's Partner Thematic Network body in 2003 and has contributed significantly through her active participation towards the more successful formation of regional innovation strategies in the EU associate member states.

Anton Rop,
Prime Minister of the Republic of Slovenia

In this age of increasingly rapid progress and the ever greater utilisation of knowledge, the issue of innovation and innovative action in the economic area and in society in general, is becoming one of the central subjects in discussions of economic development strategy. For it is innovations that are a major determining factor of economic progress and of key importance in ensuring competitive success, not only of enterprises, but also of regions and entire national economies. It is not only highly innovative *enterprises* that are able to maintain a long-term advantage over the competition in order to ensure their share in the market, growth, productivity and income – the same also applies to those *national economies* which are capable of transforming inventions into innovations, enabling them to place new products and offer new services on the international market well ahead of others.

To this aim, the Government of the Republic of Slovenia has set itself two goals upon accession to the European union:

- Slovenia must become a knowledge-based society, whose goal is to rank amongst the topmost half of the EU members.
- Quality research shall lead to a higher quality of life for the citizens of this country.

For the same purpose, a consortium of experts from Slovenia and the European regions of Umbria in Italy and Shannon in Ireland, have, over the past two years, prepared a detailed analysis of the innovation capacities of Slovenia and its 12 statistical regions within the framework of the EU "Regional Innovation and Technology Transfer Strategies for Slovenia"-SLORITTS project. Their findings and recommendations now lie before you, condensed in the document titled "National System of Innovation Action Plan", which, based on the transfer of good practices from the EU regions and the coordinated approach taken by all the players in the project, sets the path along which Slovenia will progress in the near future, and by which it will achieve the development objectives it has set for itself. We are well aware of the fact that one of the greatest challenges we face at the moment is raising the level of awareness with regard to innovation and the development of the Slovene economy and of the whole of Slovene society in general. For this reason, the Government of the Republic of Slovenia enthusiastically supports the "National System of Innovation Action Plan", as in it, it sees one of the first comprehensive approaches to shaping a more creative innovation policy for the whole nation.

Innovation is a key element of economic and social development. This truth was already realised in the United States by the 1970's, yet the nations of the European Union only began following this maxim twenty years later. There are several reasons for this time delay, ranging from the market orientation of America's universities and research institutions, to their organised approach in promoting innovation and corporate culture.

However, over the past decade Europe has begun devoting a great deal of attention to innovation. One of the documents that laid the foundations in this area was the **Green Paper on Innovation**, adopted in 1995. At a meeting in Lisbon in 2000, the Council of Europe passed a resolution stating that it was the goal of the European Union to become the most competitive and dynamic knowledge-based economy in the world by the year 2010 – capable of sustainable development, with more and better jobs and greater social cohesion. This was followed two years later by one of the most significant measures for the achievement of the objectives set in Lisbon: to increase the share of funds intended for research and development by the end of the decade.

In developed countries, priority is given to promoting and developing capacities for innovation within the nations' economies. For this reason, countries in transition, amongst which Slovenia is also ranked, will have to devote more attention in the future to the issues of innovation, innovation activities and innovation as a social value.

In order to follow these guidelines, in September 2000 the Municipality of the City of Ljubljana – Department of Economic Affairs and Tourism, together with domestic partners (the Jozef Stefan Institute–Innovation Relay Center (IRC) Slovenia, the Institute for Economic Research, the Ljubljana Technology Park, RR & CO. Business Consulting, d.o.o.) and European partner regions (Umbria, Italy and Shannon, Ireland) with the support of 14 centres for regional development from throughout Slovenia, successfully applied for European Union funds earmarked for achieving a national consensus of all regions interested in forming an appropriate national policy to this end, with the **Regional Innovation & Technology Transfer Strategy of Slovenia (SLORITTS)** project and its Action Plan for boosting the innovation capacities of Slovenia as an EU region.

Within the framework of the European Union SLORITTS project, the foundations for a more rapid promotion of innovation culture in Slovenia and Ljubljana were laid down, and a consensus between the main actors was reached.

The SLORITTS National System of Innovation Action Plan was prepared for the period from 2004 to 2006. It is founded on the results of more than two years of preliminary work on the project, based on

Danica Simšič,
Mayor of the city of Ljubljana and Chair of the Steering Committee of the SLORITTS EU Project

an analysis of trends and needs, the support environment, and the recommendations of six working groups. Experts from the area of business (small, medium-sized and large enterprises), the financial sector, research and education, support organisations on the local and regional level, the Chamber of Commerce and Industry of Slovenia, representatives of three ministries (the Ministry of Education, Science and Sport, the Ministry of the Economy, the Ministry of Information Society), as well as experts from the EU regions of Umbria and Shannon contributed towards this analysis.

In the course of their work, the participants in the SLORITTS project never lost sight of the starting point that innovation activities are one of the key factors of accelerated economic growth, and sought the answer to the question of how to firmly embed innovation and an innovative approach in Slovenia. We are aware of the fact that only highly innovative enterprises (regions, countries) can hope to maintain leading positions on the international market in the long run.

Our understanding of innovations also depends on the perception and the value attributed to them within the social and economic environment – in other words, on the prevalent attitude of our society towards creativity, inventiveness, innovation, risk-taking, and the culture of innovation. One of the hurdles that must be surmounted on the path of encouraging innovation is a (too) narrow understanding of innovation and innovations, which delegates them exclusively to the realm of technical improvements and the domain of production activities. One of the consequences of this classification is the shaping of narrow innovation policies and measures. For this reason, our aim within the framework of the SLORITTS project has been to introduce as comprehensive as possible an understanding and definition of innovation and innovation activities. Our efforts have been directed towards introducing this innovation approach into the broader social and economic system and policies.

We anticipate that in the process of Slovenia's accession to the European Union and of forming the programme scheme for drawing on the structural funds, three comprehensive national projects will ensure the increase of our innovation capacities, these being the so-called "umbrella" projects, which bring together the nation's potential in the areas of technology, tourism and health care within all the regions of Slovenia.

These "umbrellas" represent a level of concentration of human and material resources with a view to achieving common goals, identified according to SWOT analysis. The umbrella projects ensure the establishment of an innovation support environment for a new type of entrepreneurship, with a product-based competitiveness in those areas where Slovenia has a strong tradition and competitive advantages in the world market.

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1. BUILDING A REGIONAL CONSENSUS

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The first step in the creation of regional consensus was made already during the time when the SLORITTS project was submitted to the European Commission in the year 2000, when the Letter of Intent to Participate in the project was signed by 13 regional agencies, thus authorising the project coordinator – the Municipality of the City of Ljubljana - and the other four partners in the project: the Ljubljana Technology Park, the Innovation Relay Centre at the Jozef Stefan Institute, the Institute for Economic Research and the RR & CO d.o.o. enterprise, as well as the European partner regions of Shannon – Shannon Development and Umbria – META Group, to submit the SLORITTS project within the 5th Framework Programme of the European Commission.

The next step in the creation of regional consensus was the founding of a steering committee comprised of 19 representatives of 17 organisations from various regions of Slovenia. This Steering Committee is chaired by the Mayor of the City of Ljubljana.

Organisations participating in the Steering Committee (listed in alphabetical order):

Akrapovič d.o.o.
BIA SEPARATIONS d.o.o. - Ljubljana
CIMOS d.d. - Koper
Chamber of Commerce and Industry of Slovenia - Ljubljana
ING.KLAN d.o.o.
ISKRATEL d.o.o. - Kranj
Kolekor Idrija d.o.o. - Idrija
Municipality of the City of Ljubljana
Ministry of Education, Science and Sport
Ministry of the Economy - Ljubljana
National Agency for Regional Development of the Republic of Slovenia - Ljubljana
National Institute of Biology - Ljubljana
NIKA d.d.
Small Business Development Centre – Ljubljana, Celje
Slovenian Academy of Sciences and Arts - Ljubljana
Trimo d.d. - Trebnje
University of Ljubljana

In May 2002, through cooperation of the Municipality of the City of Ljubljana with the Chamber of Commerce and Industry of Slovenia, the Ministry of the Economy, the Ministry of Education, Science and Sport, the National Agency for Regional Development, the Small Business Development Centre, the Ljubljana Technology Park, the Institute for Economic Research (IER), RR & CO. Business Consulting, d.o.o., the Jozef Stefan Institute–IRC Slovenia, and the Centre for

Interdisciplinary and Multidisciplinary Research and Studies of the University of Maribor, the *"First National Conference on Ways of Boosting the Innovativeness of Slovenia as an EU Region"* was organised. At this conference, at which there were 86 participants from the regions, public institutions, the area of research and the academic sphere and the economy, a consensus was reached regarding the objectives, work programme and methodologies of implementation of the project.

In order to achieve a consensus regarding the objectives, working programme and method of implementation of the SLORITTS project, meetings also took place successfully at the Regional Development Agency of the Ljubljana Urban Region (RRA – LUR), the Municipality of the City of Ljubljana, the Ministry of the Economy, the National Agency for Regional Development, the Chamber of Commerce and Industry, the Innovation Development Council of Ljubljana (IRSL), the Small Business Development Centre, the University of Maribor, the NKBM Bank of Maribor, the Ministry of Education, Science and Sport, the Slovenian Academy of Sciences and Arts, and the University of Ljubljana.
In the same way, 12 regional presentations were carried out in the year 2002, which took place in Velenje, Maribor, Ljubljana, Ravne na Koroškem, Murska Sobota, Nova Gorica, Koper, Novo mesto, Litija, Krško, Celje and Postojna.
Based on the consensus on the programme and work methodologies, six working groups were formed, which included representatives of the economy, public institutions and the area of research from all four corners of Slovenia.

The next important phase of building concordance regarding regional innovation development was achieved through the *"Second National Conference on Ways of Boosting the Innovativeness of Slovenia as an EU Region"* in June 2003. The conference was organized in cooperation with the Municipality of the City of Ljubljana by the Chamber of Commerce and Industry of Slovenia, the Ministry of the Economy, the Ministry of Education, Science and Sport, the National Agency for Regional Development, the Small Business Development Centre, the Ljubljana Technology Park, the Institute for Economic Research (IER), RR & CO. Business Consulting, d.o.o., the Jozef Stefan Institute–IRC Slovenia, the University of Ljubljana, and the Centre for Interdisciplinary and Multidisciplinary Research and Studies of the University of Maribor. The results of analyses of the trends, needs and features of an innovation support environment were presented at the conference and the recommendations of the working groups presented and approved. At this conference there were 112 participants from the regions, public institutions and the area of the economy.

In order to achieve political consensus and gain support for the action plan "National System of Innovation", presentations of this plan were also carried out for the:

- Ministry of the Economy (at the Ljubljana Technology Park – December 2003),
- Innovation Development Council of Ljubljana (IRSL) and the SLORITTS Steering Committee (January 2004),
- Region of Štajerska (at the Municipality of the City of Maribor – March 2004),
- Region of Dolenjska (at the Municipality of the City of Novo Mesto – March 2004),
- Government Office for Structural Policies and Regional Development of the Republic of Slovenia (March 2004), and
- The Institute of Macroeconomic Analyses and Development of the Republic of Slovenia (March 2004).

The programme of the SLORITTS project was implemented throughout this period with a high level of national consensus. Of particular import is the consensus that was achieved on the proposed action plan "Regional Innovation Strategy of Slovenia as an EU Region" – "National System of Innovation". This comprehensive plan arises from the vision of the active European region, and therefore offers a number of solutions that primarily involve the forming of strategies, rationalisation, changing the system of innovation and values, achieving concordance, and making optimum use of the potentials brought together by the three national umbrella projects: the Technology, Tourism and Health Care "umbrellas".

2. METHODOLOGY

2.1 Working Groups, Their Tasks and Expected Results

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The method of work was based on six working groups, which were created according to the principle of the areas important for the development of innovation capacities and the entrepreneurship connected with this. These groups were coordinated and comprised of experts and important players of the Slovenian economic system.

1. Legislative System for the Support of Innovation – Coordinator: Igor Antauer

2. Cooperation Between the Research Community and the Industry in the Field of Innovation – Coordinator: Tatjana Fink

3. Infrastructure and Innovation Support System – Coordinator: Ivo Piry

4. Financial Support System for Innovation – Coordinator: Prof.dr. Jože Glogovšek

5. Human Resources Management for the Development of Innovation at the National Level – Coordinator: Prof.dr. Peter Stanovnik

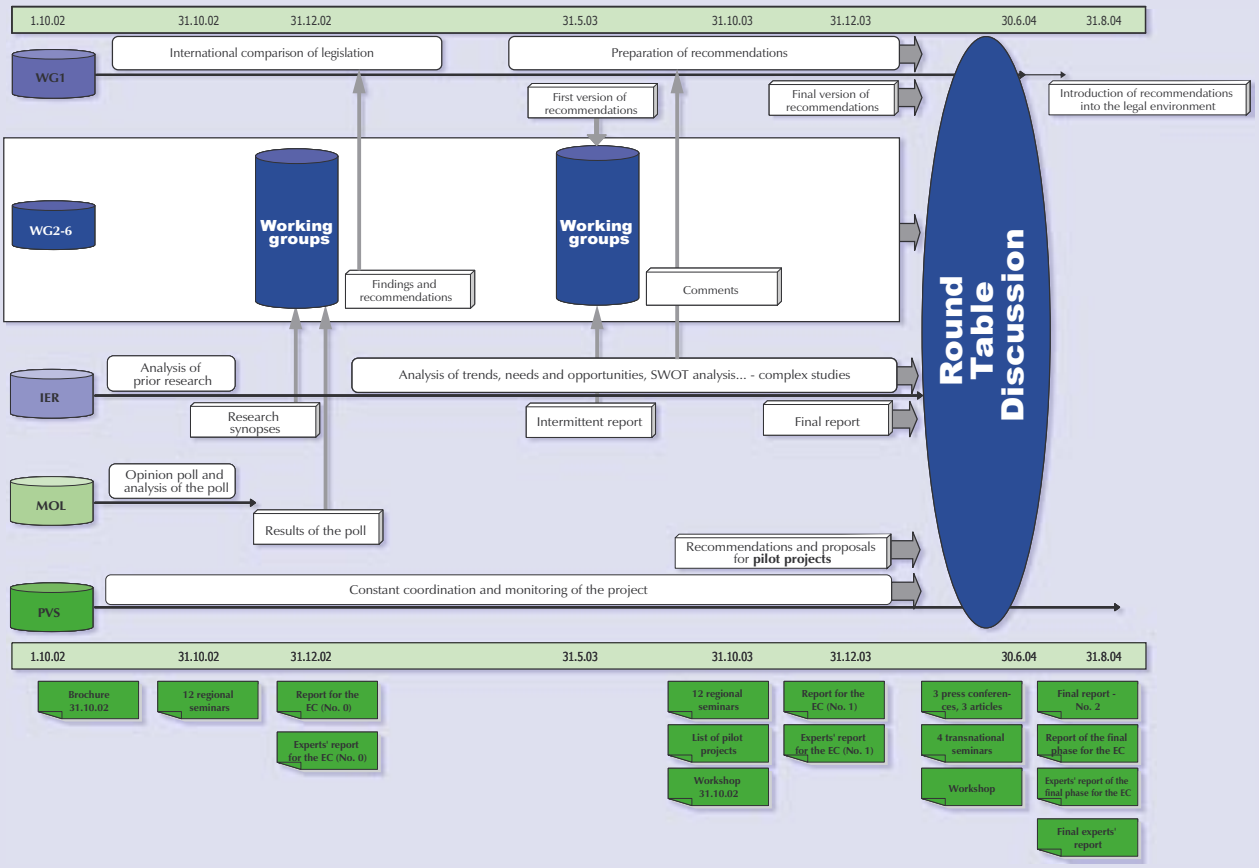
6. Awareness of Innovation – Coordinator: Prof.dr. Maja Bučar

The working groups analysed the existing situation in their areas with special emphasis on the weaknesses and advantages, and submitted proposals of changes for improving innovation capacities in their areas. The group dealing with the legal system for the support of innovation also prepared recommendations for improving the system's environment and legislation in order to provide more effective support for innovations in Slovenia.

Based on the analyses of the trends, needs and the support environment, the existing analyses, and on the basis of the recommendations of the national and regional actors, a SWOT analysis was drafted as the foundation of the action plan and starting point for preparing the actions for increasing the innovation capacity of Slovenia as an EU region.

The project management group then called upon all the regions to compile a record of the concrete innovation projects, complying with the recommendations of the working groups and the Single Programme Document of the Republic of Slovenia, which are orientated towards the implementation of the recommended measures for increasing the innovation capacity of Slovenia as an EU region. A compilation of

over 70 projects was made, a selection of which was made according to the criteria of size, comprehensiveness and compliance with the guidelines of the EU structural funds for 2004-2006. The selection was consolidated into three national umbrella projects, with joint national and inter-regional objectives, which realize the national system of innovation in Slovenia.



Time Schedule of the SLORITTS Project

KEY:
IER = Institute for Economic Research
MOL = Municipality of the City of Ljubljana
PVS = Project Steering Committee

3. PRESENTATION OF SLOVENIA

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3.1 Presentation of Slovenia

Slovenia is a Central European country, in which four major European geographic landscapes meet: the Alps, the Dinaric area, the Pannonian plain and the Mediterranean. To the north, it borders on Austria, in the east, on Hungary and Croatia and its western neighbour is Italy.

It has eight more or less (geographically) separate and different regions: Primorska, Notranjska, Gorenjska, Dolenjska, Bela Krajina, Koroška, Štajerska and Prekmurje. It is a land that abounds in water, as the total length of all its watercourses and rivers with their perennial and storm water tributaries measures 26,600 km. In fact, according to the total extent of its watercourses, it ranks amongst the most water-rich European countries, with almost four times the European average amount of water. Over a half of its surface area is covered by forests – a total of 10,124 km^2, with the only two countries in Europe with more extensive forest lands being Finland and Sweden.

Slovenia has a highly developed culture of environmental protection, with 8% of its territory under protection. The largest area under such a regime is the Triglav National Park. The Škocjan caves which boast the largest underground canyon in the world were entered on the UNESCO World Heritage List in 1986, and the Sečovlje saltpans is the only Slovenian area which was in 1993 included on the list of wetlands of international importance (Ramsar Convention on Wetlands).

According to the most recent population census from 2002, Slovenia's population counts a little under 2 million over an area of 20,273 km^2 (12 statistical regions, 193 municipal communities). The great majority of the population is Slovenian (83.06%), although there are also two national minority communities: the Italian national minority in the coastal areas and the Hungarian national minority in the northeast.
Both are considered autochthonous minorities and their rights are protected under the Constitution. Other ethnic groups include Croats, Serbs, Bosnian Muslims, Yugoslavs, Macedonians, Montenegrins and Albanians. The status and special rights of the Gypsy communities living in Slovenia are determined by statute.

Slovenia's largest cities are: Ljubljana, Maribor, Celje, Kranj, Koper, Novo mesto, Nova Gorica and Murska Sobota. Ljubljana, the capital of Slovenia, is also where the head offices of one third of all the Slovenian enterprises are located, making it the area of strongest economic and financial potential in the country.

Size	20,273 Km^2
Population (June 30, 2002)	1,964,036
Capital city (No. of inhabitants on June 30, 2002)	Ljubljana (258,873)
Unemployment level – ILO statistics, 2003	6.7 %
GDP, real growth (prices, 2000)	2.3%
GDP, in mio. EUR (current prices)	24,264
GDP per capita according to the purchasing power, in PPS	16,600 (69% of EU-15 average)
Inflation – average annual rate/for 2003	5.6%
Value added by agriculture, forestry and fishing (share in GDP in %)	3.0
Value added by industry (share in GDP in %)	30.0
Value added by the construction industry (share in GDP in %)	5.5
Value added by the services (share in GDP in %)	61.5

Data on the last page supplied by the Statistical Office of the Republic of Slovenia:
- GDP real growth in prices for 2000 taken from the first annual evaluation of the GDP for 2003;
- GDP per capita according to the purchasing power in PPS applies for 2002;
- Data on value added to the GDP in the various industrial sectors applies for 2002.

In the 90's of the previous century, Slovenia underwent huge system changes: privatisation, opening of the capital market, liberalisation of the market, macroeconomic stabilisation, associate membership in the EU, and in May 2004 full EU membership.

The Slovenian economy gradually adopted the

structure of a developed economic market, only the percentage of innovative companies in Slovenia is far below the EU average.

Analyses of entrepreneurship in Slovenia have shown that an entire 93.4% of the companies in Slovenia rank among the micro companies (from zero to nine employees). Small enterprises (from 20 to 49 employees) make up 4.9%, medium-sized enterprises (from 50 to 249 employees) 1.3%, and large enterprises (250 and more employees), only 0.3% of the total number of enterprises. The largest number of enterprises is situated in the central Slovenian region (28,014), while the smallest number is located in the Zasavska region (1,344).

The economic percentage of the GDP contributed by the services sector in Slovenia from the beginning of the 1990's is increasing, and amounted to 61.5% in 2003. While growth in the industry is currently smaller, it was 1.4% greater in 2003 as compared to that of 2002. The most important industrial sector is the processing sector, which is also Slovenia's largest exporter. Subsequently, companies in the processing sector, which makes up 9/10 of the entire industry, last year exceeded the 2002 production figures by 1.6%. Within the frame of these activities, the greatest increases in production in 2003 were recorded in the production of chemicals and chemical products (11.8%), the production of optical equipment (11.3%) and the production of automobiles and vessels (4.9%). A decrease in the production volume was recorded by the statistics in 2003 in five (of 14) areas of the processing sector. The largest decrease (an entire 13%) was recorded in the leather and leather goods industry, and in the textiles industry (11.4%). Less products were also produced in the machine and equipment manufacturing industry, the industry of non-metallic and mineral products and the wood processing and furniture manufacturing industry. The trend of decreasing employment levels in the industrial sector continued throughout 2003, although at a somewhat slower pace. An increase in the employment levels in the farming and rubber manufacturing industry was however recorded during the same period. The productivity of labour in the industry, measured in relation to the productivity per capita of employed, increased by 3.2 percent last year.

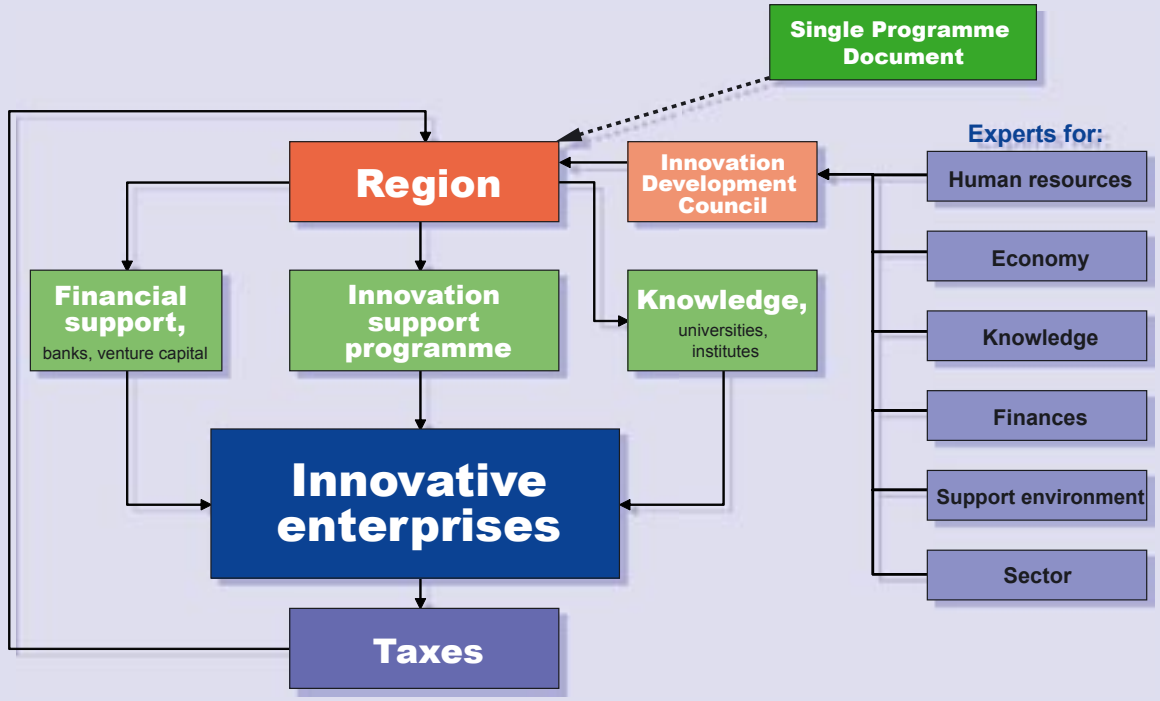
In Slovenia, the percentage of overnight-stays of EU citizens from amongst the total number of overnight-stays by foreigners, is almost the same as the average of the fifteen countries of the EU, coming close to 72 percent. Amongst the new EU member states (with the exception of Malta and Cyprus) , Slovenia has the largest percentage of foreign tourists from the EU and of foreign tourists on the whole. Foreign tourism made up 56 percent of all tourist visits in 2003. The inflow of foreign currency from tourism was 3.5% greater than in the previous year in the hotels and tourist agencies, the inflow of foreign currency has increased 7%, with a 9% in the casinos.

The average annual rate of inflation measured by the increase in the cost of essential commodities amounted to 5.6 percent in 2003. In comparison with the year 2002, the average annual rate of price increases went down 2.6 percentage points. The decrease in the inflation rate in 2003 is, to a great extent, due to the more restrictive measures and better coordinated macro-economic policies, accompanied by relatively favourable conditions in the international environment.

In 2003, Slovenia exported goods to the value of 11,427 million EUR, and services to the value of 2,465 million EUR. The real growth of exports of goods and services was 3.4%. The bulk of exports went to the 15 EU member states and amounted to 58.4% of all exports. Slovenia's leading export partners were Germany, Italy, Croatia, Austria, France, Bosnia and Herzegovina, the USA, the Russian Federation, Serbia and Montenegro and Poland. At the same time, Slovenia imported goods and services to the value of 13,895 million EUR, mostly from Germany, Italy, France, Austria, Croatia, Hungary, the Russian Federation, the Czech Republic, the USA and China.

Sources: Gospodarska Zbornica Slovenije (GZS-SKEP) - Chamber of Commerce and Industry of Slovenia (SCCI – Economic Outlook and Policy Services) data published on their website www.gzs.si and in the professional publication Konjunktura gibanja – February, 2004; Statistical Office of the Republic of Slovenia (Statistični urad RS) and the research project "Slovenian Entrepreneurship Observatory 2003" conducted by the Institute for Entrepreneurship and Small Business Management, the University of Maribor.

3.2 Scheme of Integration of the SLORITTS – Innovation Support Programme into the Slovenian Regional Environment



3.3 Needs Analysis

The needs analysis represents the key results of the field research conducted on the innovation needs of enterprises in Slovenia. The research was carried out by the Department of Economic Affairs and Tourism of the Municipality of Ljubljana and the Institute for Economic Research in Ljubljana, from June to September 2003.

The most important goals of this research were:

- To evaluate the conditions and potentials for innovation in enterprises;
- To identify the factors which impede or disable the process of innovation;
- To identify the innovation needs of enterprises;
- To prepare the basis for the action plan to improve the innovation activities in Slovenian enterprises.

The research methodology encompassed interviews as well as questionnaires, which were sent out by mail. Eventually 99 completed questionnaires were returned. The research included enterprises covering almost all the fields and commercial activities from agriculture to public services. A good half of the sample is made up of production companies, one respondent was a construction enterprise and one was from the field of agriculture, while the rest are service enterprises.

Over 40% of the enterprises that took part in the research recorded at least one innovation during the period of 2001-2002. The main goals and results of their major innovations were entering new markets, i.e. increasing the market share, improving the quality of products and services, reducing the labour costs and increasing the product range. The most frequent hindrances for innovation were lack of financial and human resources (technical experts, persons with marketing and business skills, experts in the fields of information science and computer science). Almost half the enterprises had their own R&D departments and allocated on average 2.3% of their turnover for R&D. Only 16% of the enterprises encompassed by the research had realised at least one transfer of technology during the past 5 years and as few as

8% of the sample had made at least one registration involving intellectual property during the same period. The enterprises earmarked only 1% of their turnover for the training of employees and these funds were most often used for technical training, learning of foreign languages, management, information science and marketing. Only 40% of the enterprises cooperated regularly with universities and research institutes. The biggest impediment for such cooperation was the high costs of cooperation with universities and research institutes and the ineffectiveness of such cooperation at times.

Approximately one fifth of the enterprises used at least one state support measure. In the framework of the research, enterprises also gave some of their proposals for support measures: State support for cooperation with foreign enterprises, subsidy schemes based on business performance, more practical measures, competition for "the best innovation", faster state financial assistance, more flexible invitations to tender etc.

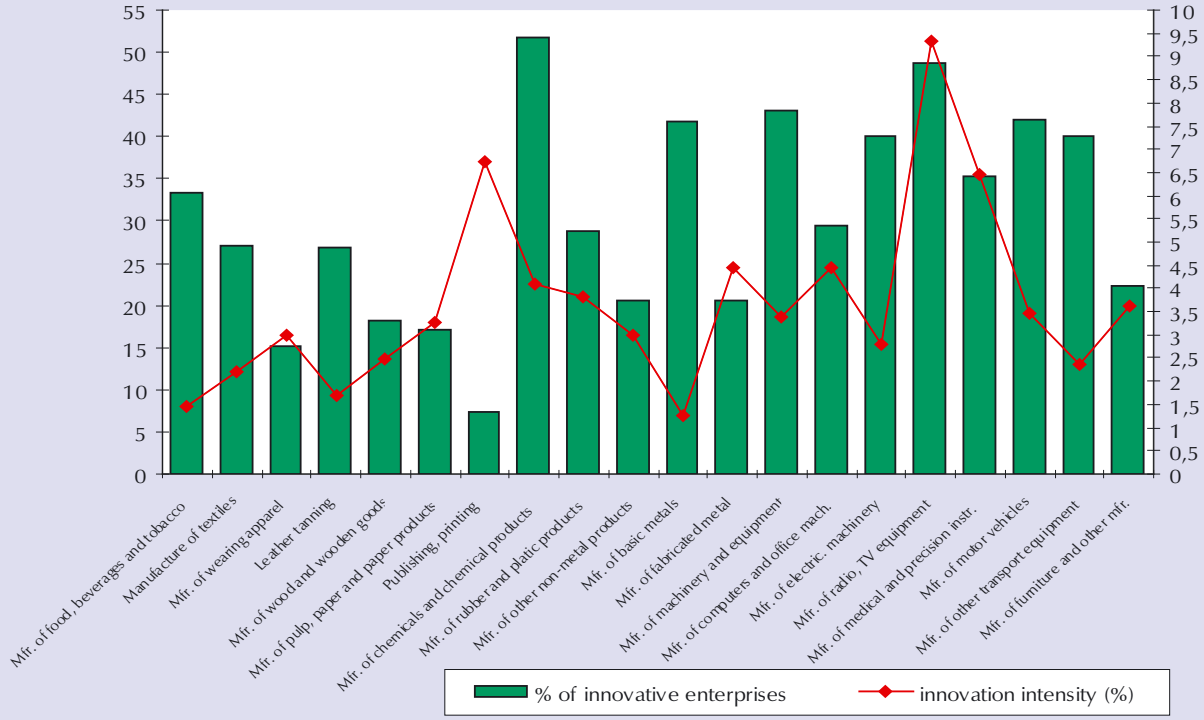
3.4 Analysis of Trends

The structure of the Slovenian market is slowly starting to resemble the structure of the developed market economies. During the last decade, the importance of the service sector has increased (to 60% of the GDP in 2001), while a decrease was recorded in the shares of industry (to 31% of the GDP in 2001) and agriculture (to 3.1% of the GDP in 2001). In the coming three years, the greatest growth of GDP will be in the service sector followed by the processing sector, while the agricultural sector will have the lowest growth.

Despite deindustrialisation, the importance of industry is much greater in Slovenia than the EU average. The most important industrial sector is processing, which is also the major exporter. The restructuring of this sector is therefore of great importance for Slovenia's international competitiveness. Over the past 8 years a positive restructuring process has taken place in the processing sector, is characterised by an increase in the importance of above-average, capital-intensive and export-oriented activities such as the production of chemicals, the processing of metals and the manufacture of electronic and optical equipment. At the same time, the traditional labour intensive activities such as the textiles and leather sectors are losing their importance.

In 2001, the major sectors in the processing industry (as measured by the share of gross added value - GAV) were the production of chemicals and chemical products (12.44%), the production of food and beverages (10.25%), the manufacture of machines and equipment (9.99%), the manufacture of metals and metal products (9.55%), the manufacture electrical machines and appliances (5.98%) and the production of rubber and plastic products (5.49%). The gross added value per employee in the processing industry amounted to EUR 20,733 in 2001. In the production of chemicals and chemical products and in the production of office machinery and computers, the GAV per employee exceeded the average by more than 50%. In the same year, the lowest level of GAV was recorded in the production of textiles, clothing and leather, the processing of wood and wood products and the manufacture of furniture, vehicles and vessels. Despite the high annual growth of gross added value in the processing industry in Slovenia, the values of GAV per employee still lag behind the values recorded in the EU: The GAV in Slovenia is 1.4 to 4.5 times (depending on the sector) less than that of the EU. The sectors of office machinery and computer manufacturing and recycling lag least behind the EU average, while the greatest discrepancies are present in the manufacture of radio, television and communication appliances and equipment, the manufacture of vehicles and vessels and the production of clothing.

The total level of innovative processing companies in Slovenia (28%) is lower than that of the EU. The most recent research conducted by the Statistical Office of the Republic of Slovenia showed that innovation is more present in large enterprises (58%) than in medium-sized (33%) and small enterprises (12%). The greatest obstacles for innovation in Slovenian enterprises are insufficient funds, lack of highly qualified professional staff, high risks related to innovation and lack of information. The decreasing trend of innovations is cause for concern, since the share of innovative enterprises in the processing sector



Percentage of Innovative Enterprises According to the Industrial Sectors 1999-2000

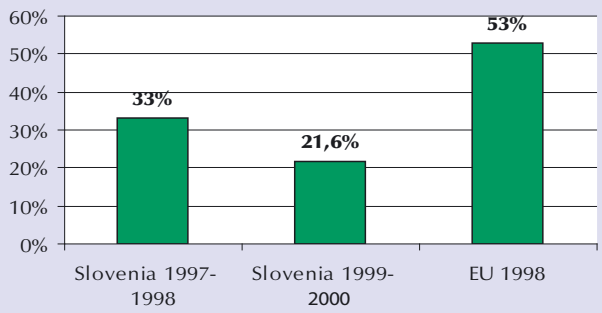
has dropped from almost 36% in 1997 to less than 28% in 2000.

The lagging behind of Slovenian enterprises as regards the conditions for innovation can be further illustrated by the evaluation of the technological development in the Slovenian processing industry. The analysis which was carried out a few years ago showed that 88% of the total work force is employed in companies at the low or medium technological level which generate 78% of the gross added value in the processing industry. This is indicative of a low share of high technology (»high-tech«) activities. On the contrary, Ireland's »high-tech« industry, for example, takes up a 32% share of the gross added value in the total manufacturing industry, followed by Finland with a 27% share.

Guided by the aim of increasing the capacities of Slovenian companies, the state supported three pilot projects of clusters in the automobile, transport-logistic and tool sectors in 2001. In 2002 the state supported four new initiatives of clusters in the fields of wood processing, air-conditioning and heating appliances, plastics and geodesy. The latest attempt of the Slovenian Government to utilise the potential in the technological development of Slovenian companies is its support of technology networks comprised of the representatives of industry, science and service providers. Such networks should be able to develop and establish an exchange of resources and achievements between the academic sphere and the industry, as well as between individual activities.

These technology networks need to represent those technological fields where the critical mass has been achieved and a strong interest is present to cooperate in the field of technological development and learning or training among the developers and users of technologies, providers of know-how and service providers. On the basis of a detailed analysis of technological fields in which Slovenia has comparative advantages in know-how and competences, four technology networks were identified which offer possibilities for the future development of products and processes:

- Biotechnology and pharmaceutics,
- Information – communication technology,
- Environmental technologies and new materials,
- Control, running and management of processes and systems (process technologies).



Percentage of Innovative Enterprises

In terms of the past trends, major indicators (GVA share, GVA/employee, GVA growth/employee, GVA/employee in comparison with the EU, innovation activities, etc.) and various studies and researches, the sectors with growth potential in Slovenia are: The chemical industry (notably the pharmaceutical industry), the information and communication sector (NACE 31 and 32), publishing and printing, the food industry, energy generation, tourism, financial services, transport and logistics, wholesale and retail trade, the automobile industry, the manufacture of tools, the metal processing industry, the plastics industry and all other industries and sectors active within Slovenian technology networks. In the same way, it is possible to identify the sectors which are and will be exposed to serious problems and threats. These sectors are: all labour intensive processing sectors such as the textiles industry, the footwear industry, agriculture, basic industry, and to a certain extent also construction, the wood industry and machine and equipment manufacturing. Nevertheless, these sectors have the potential for development in well-defined market niches (bio-farming, technical textiles, etc.).

The analysis of trends was carried out by the Institute for Economic Research in Ljubljana.

3.5 Analysis of the Support Environment

The analysis of the support environment comprises the review and assessment of the support environment for small and medium-sized enterprises in Slovenia. It covers the range of services which are available to individual organisations and a comparison of these with the actual needs of small and medium-sized enterprises (SMEs). The realisation of the analysis was carried out by the Municipality of the City of Ljubljana in cooperation with the META Group and the Institute for Economic Research (IER).

Review of the results:

1. A part of the industry is still in the early phase of restructuring. Instead of the development of new products, managers mainly deal with the reduction of production costs.
2. A lot of small enterprises were established during the first years of Slovenian independence owing to the need for self-employment and/or due to redundancies following the privatisation of state-owned companies (entrepreneurship born of necessity). Lack of preparedness of the entrepreneurs (in such cases they are usually without any business plans) and the lack of marketing-oriented culture have led many small enterprises to unavoidable ruin. The financial difficulties resultant from the former have caused irremediable consequences.
3. Privatisation with foreign investors is still regarded as a key factor of restructuring. Too little attention has therefore been paid to the endogenous process based on the development of the new base of SMEs which would rejuvenate the economic structure of the regions.
4. Funds allocated for the differentiated economic structure intended for opening and attracting companies operating in the new promising markets are scarce if any.
5. The private services sector is not well placed (the development of specialised consulting companies is not recognised as the strategic goal of the state although the position of the Slovenian economy urgently requires diverse technical support).
6. Public support institutions which manage services devote most of their attention to the already existing enterprises and enterprises which operate in the traditional sectors (which are in most cases facing a structural crisis).
7. The services of public support institutions are not adapted to user's needs and are far from applying the customer-tailored approach. These institutions are more in favour of the reactive approach based on coordination and offer services on the basis of the so-called "purchasing" model (where the

customer has to come to them) although the situation requires a more pro-active approach in which direct contact is established with enterprises, where the institution attempts to envisage the future events together with the enterprises in order to prepare for them and prevent critical situations before they reach the point of no return (the crisis).

8. The whole system with all the regional development agencies (RDA), regional development centres (RDC), business centres and centres for the development of small businesses may become too complicated and incomprehensible for entrepreneurs. Namely, support service organisations sometimes compete in offering similar services and resultantly increase their geographic/market coverage and the content of their services.
9. The banks are very traditional. Financial services are mainly provided in the form of loans (guarantee schemes). Venture capital is available to already established companies but not for investment in start-up companies (lack of initiative for "high-tech" start-up companies and "spin-offs").
10. Regional development within the EU institutional framework is in its beginnings in Slovenia. The RDAs are still in the process of better defining their operational activities. Their main concern is to increase the geographic/market area and the content of their services instead of being oriented towards improving and strengthening the offered services and increasing their recognition.
11. National incentives for innovations are based on projects. However, there are no long-term activities to address the key strategic problems.
12. As far as the increasing of the importance of innovations is concerned, significant stress is placed on informing (bulletins, seminars etc.), but very little has been done as regards the raising of awareness.
13. Universities and research institutions are not oriented, motivated and used to commercial cooperation with the commercial sector.

The analysis of the support system for small and medium-sized enterprises has shown that a consensus should be reached regarding the following questions:

- How to guide the existing support institutions and programmes towards improving the innovation capacities and competitiveness of existing companies?
- How can these institutions help in the establishment and development of new technological companies?
- How can these institutions make Slovenia more attractive for knowledge-based foreign investments (especially "greenfield" investments)?
- How can these institutions utilize the economic potentials of the "knowledge pools"?

4. RECOMMENDATIONS OF THE WORKING GROU

4. RECOMMENDATIONS OF THE WORKING GROUPS

4.1 Legal System for the Support of Innovation

- In order to prepare the appropriate general regulation, a national strategy for the development and support of innovation should be adopted.
- The legal frameworks of innovation providers and the relations between innovators and innovation users (manufacturers) must be defined in a general law which will regulate the innovation activities.
- Regulations should be used to concentrate funds and allocate them on the basis of certain planning documents for priority tasks, and at the same time, such procedures for gaining these funds should be prepared that both transparency and access are ensured without high costs and unnecessary administration.
- By means of a regulation which will be an element of a systemic regulation, the manner of collecting, keeping and circulating of such information at the national level and integrating it with the similar data bases in the EU and other economies should be regulated.
- A systemic act should provide for the organisation of the network for innovation support in which as many human, accounting and financial resources should be used as possible, and at the same time specialist consultants should be trained for innovation activity and the assessment of knowledge and licences introduced in order to ensure an appropriate level of quality of the consulting support.

4.2 Cooperation between the Research Community and the Industry in the Field of Innovation

- Managerial and executive staff should receive training which would contribute to the understanding of the importance of innovation for long-term development. Such training should be carried out at all levels.
- The economy should get rid of the stereotyped prejudices along the lines of "scientists do not understand the needs of the economy" and at the same time, the scientists should realise that there is a lot of innovative know-how in the economy.
- Incentives for learning and innovative companies would quickly increase investments in the most propulsive part of the economy.
- Information provided by the scientific-research community on existing knowledge and innovations would give rise to new entrepreneurial ideas in the economy.
- It would be appropriate to continue with the activities initiated by the Ministry of the Economy intended to integrate the two communities (economic and scientific-research).
- With Slovenia's accession to the EU, the scientific-research institutions will be forced to acquire more funds derived from market-oriented projects.
- The state should lay down the criteria for strategic projects and guidelines for research and development at the level of the state, as well as for market scientific-research projects.
- Scientists and researchers will have to gain an awareness of the speed of innovation in the world.
- Scientific-research institutions should choose the leading innovative companies in order to develop new projects together with them.
- Definition of the mission and goals of scientific-research institutions will represent a good basis for further work.
- The managements of scientific-research institutions need to become better acquainted with modern management methods. It is these managements who should present the strategic development goals to the owners and the interested public.
- The criteria of excellence in the scientific-research area should be modified.
- The goals and priorities of the state in the field of innovation should be set.
- More funds should be ensured for R&D (taking into account the country's development trend) and the criteria for dividing the funds - such as added value in the case of market projects – should be set. Priority should be given to market&problem driven projects.
- Priorities should be set on the basis of SLOTEH (technological forecasts) etc.
- Innovative enterprises should be encouraged.
- A coordinator for innovation activities should be appointed at the level of the state - the newly

established Technology Agency.
- Innovation policy should be implemented consistently.
- The establishment of new innovative enterprises should be actively supported and assistance offered in the operation of new centres.
- Public officials should be trained in the field of innovation.
- A festival of science and innovation should be organised.
- Projects should be assessed and their efficiency verified.
- The state should appoint enterprises as the project developers.

4.3 Infrastructure and Innovation Support System

- To set the key innovation areas, to ensure the appropriate vertical and horizontal integration of institutions within the innovation system;
- To define and enable the key provider at the state level;
- To increase incentives to the level comparable to that of the developed EU member states;
- To ensure constant support within the framework of venture capital funds, guarantee schemes etc;
- To consider the possibility of allocating more funds for innovative projects in the process of the preparation and realisation of the 2004-2006 Single Programme Document;
- To consider the possibility of introducing tax relief as regards corporate income tax and personal income tax;
- To improve the links between universities/institutes and the economy, to increase the participation of young experts in R&D activities of enterprises;
- To ensure tax relief (exemption from tax on salary in case of such employment);
- To speed up the organisation of branch clusters of enterprises and technology hubs at the regional level;
- To prepare appropriate training programmes and enable training abroad;
- To ensure access to appropriate bases of consulting services;
- To raise public awareness and inform the public of the urgency of continuous training as the basis for innovative and development-oriented entrepreneurship;
- To prepare the proposals for stimulating innovation and the programmes for its promotion;
- To protect intellectual property;
- To form pools in order to provide for the exchange of knowledge, ideas and research capacities;
- To form the conditions for group work by innovators and entrepreneurs and for the successful management of the innovation process;
- To ensure the appropriate mobility of innovation providers by creating the conditions for attracting foreign researchers and entrepreneurs and to support the exchange of experiences;
- To ensure an appropriate volume of incentives for the developers of technology parks, entrepreneurial centres and incubators.

4.4 Financial Support System for Innovation

- To ensure the appropriate allocation of funds via the support environment for projects;
- To adjust the support environment so that it shall not spread the funds over such a large number of small projects;
- To adopt an orientation towards a smaller number of highly ambitious and innovative projects which promise, in spite of the risks, a high growth rate in the international environment by offering products or services with high added value, and to provide substantial financial support for such projects;
- To prepare a support environment which would offer support within the provision of assistance to enterprises in such projects in areas where they are weak (lacking in knowledge, organisation and administration, project preparation and management, etc.);
- To reduce the volume of assistance in terms of general consultancy for newly-emerging companies which is in spite of its importance less appropriate for ambitious innovative enterprises.

4.5 Human Resource Management for the Development of Innovation at the National Level

- To adjust the research and education system to the needs of the economy;
- To introduce new education programmes at the secondary and tertiary level whereby emphasis is placed on entrepreneurship and innovation;
- To improve the functional literacy of adults;
- To ensure closer cooperation of the Ministry of the Economy, the Ministry of Education, Science and Sport and the Ministry of Labour, Family and Social Affairs in individual programmes (e.g. The connection between the invitations to tender for young researchers and the invitation to tender for state support and post-graduate studies abroad is of vital importance);
- To promote interest in the study of mechanics and natural science;
- To harmonise national development priorities with existing industrial clusters and technology networks.

4.6 Awareness of Innovation

- To set a clear definition in all documents related to innovation;
- To ensure regular reporting on expert analyses in the area of innovation as the macroeconomic factor (EU, OECD);
- To determine the umbrella institution which will have the task of coordinating the programmes of raising awareness;
- To encourage the discussion of innovation themes also within the framework of wider macroeconomic and development themes;
- One of the tasks of the Technology Agency should be to raise the public's awareness of innovation activities and innovation;
- To carry out the promotion of innovation consistently in all the environments: State administration, economy, education etc.;
- To systematically organise the exchange of good and bad experiences related to the promotion of innovation and inventiveness;
- The educational system is of key importance for changing the attitude of society and its system of values; To that end, topics related to innovation should be introduced into the education system and education itself should become innovative;
- To organise a festival of science and innovation.

5. SWOT ANALYSIS

5. SWOT ANALYSIS

Slovenian Innovation Capacity

Strengths:

- Quality R&D institutions and individuals (SCI, 5. FP…)
- Relatively successful transition and high capacity to adapt to market conditions
- Favourable strategic geographic location, high quality environment and new transportation links
- Stable banking system, low risk
- Relatively suitable state investments in the field of organisation and the preparation of development strategies
- Good institutional platforms (establishment of agencies) in the R&D field

Weaknesses:

- Complex and time-consuming administrative procedures
- Non-market oriented research; selection is not oriented towards achieving excellence at the international level; no priorities in the current mid-term plan
- Lack of critical mass and insufficient cooperation between researchers and the economy
- Difficulties in the placement of R&D strategies at the local level
- Lack of incentives for innovations and research in the public sector (universities and institutes)
- Nonexistent or poorly adapted economic infrastructure of the support environment and lack of vision in approaches taken
- Non-optimal use of the existing support environment
- Lack of entrepreneurial and innovative culture
- Education system not oriented towards the needs of companies
- Low degree of implementation of the adopted mid-term as well as long-term plans (National Research and Development Programme, Development Strategy, etc.)

Opportunities:

- Placement of good practices in the legislation governing the field of innovations
- Importance of innovation in EU policy
- Significance of innovation in the EU area (also in the field of research)
- EU accession (foreign investments, free flow of capital as well as free movement of persons and goods)
- Transfer of technology and know-how to the EU and to Slovenia

Threats:

- More rapidly increasing market competitiveness of other countries when compared to Slovenia
- Other accession countries are faster in adopting legislation in the field of innovations as well as in establishing an adequate environment for innovations
- Other countries attract more talent
- Other countries are more efficient in using EU funds
- Outflow of non-productive private capital abroad (investments of Slovenian companies in production plants in countries with lower labour costs are sensible)

6. PROPOSED AMENDMENTS TO THE LEGISLATION GOVERNING THE ROMOTION OF INNOVATION

6. PROPOSED AMENDMENTS TO THE LEGISLATION GOVERNING THE ROMOTION OF INNOVATION

Based on the findings of working groups, the review of these, and on regional presentations carried out and solutions adopted by the European Union and its members, the group for the legal system for innovation support established the following findings:

A working draft of a general law on innovations should be prepared and once its coordination is completed it should be proposed for examination by the competent ministry or the Government of the Republic of Slovenia. On the basis of the adopted general law, preparations could be entered into for the elaboration of implementing regulations and the harmonisation of all other regulations with the general law on innovations.

The purpose of the proposed law is to define a strategy for the development and growth of a regional economy which would be based on know-how and innovations and oriented towards enhancing its own competitiveness through the utilisation of know-how obtained in the field of technology and innovation.

The proposed law aims to facilitate the participation of new entities, which would become leading players in the process of regional development. These entities would include in particular universities and research centres. In this new phase of regional development, the activities of the operating entities monitoring the development of companies shall be geared towards providing increasing support to technological innovations and the transfer of know-how resultant from research activities.

Taking into consideration the fact that the tendency of companies to connect product innovation with precise project cooperation, laboratory testing, the search for new materials, elements and know-how, as well as with seeking cooperation with technologically developed companies is becoming increasingly more powerful and dominant, it becomes evident that new types of relations should be structured, allowing for the inclusion of small companies as a source of advanced know-how, and facilitating the introduction of such know-how into the structures of companies and their production systems. It is obvious that the type of specialist know-how, which has developed as a result of employee and entrepreneur actions, within the scope of their problem solving capabilities and the supply on the market, is no longer sufficient nowadays. With regard to the economic regional system, attention should be drawn to the importance of cooperation among universities, research centres and companies.

Legal provisions, which in most of the cases only indirectly pertain to innovation promotion in Slovenia, are to be found particularly in the following laws:

a. The Act on the Support of Companies in Developing New Technologies and Establishing and Operating their Development Units in the Period from 2000 until 2003 (ZPGDNT)
b. The Employment Related Industrial Property Rights Act
c. The Employment Act
d. The Companies Act
e. The Draft Act on Entrepreneurship

As opinions regarding the introduction of amendments to the legislation differ, the path leading to the introduction of changes in the current legislation is not effective enough. For this reason, the working group in charge of the legal area has proposed the following solutions:

- Encouragement or promotion of the application of the employee financial participation scheme by means of employee participation in the sharing of company profits, ownership of shares/stocks, options and gainsharing;
- Encouragement of financial participation, i.e. the implementation of relevant adaptations to fiscal incentives included in contributions on employee salaries;
- Encouragement of financial participation both in small and medium-sized enterprises as well as in the public and non-profit making sector (the introduction of financial participation in the public sector);
- Offering to co-finance research costs or technology purchases;
- Supporting the transfer of know-how and practices, with special emphasis on the use of human potential; Establishment of a system/network for initiatives, activities and research;
- Taking into account the various structural aspects of the regional system in the planning process in order to take into consideration the different levels of specialised know-how, company dynamics and increasing activities of universities, with special emphasis on spin-off enterprises.

7. NATIONAL INNOVATION SYSTEM ACTION PLAN

7.1 Aims and Tasks of the National Innovation System Action Plan

7. NATIONAL INNOVATION SYSTEM ACTION PLAN

The SLORITTS project action plan is based on the findings of working groups and on their concrete proposals for improvement. From amongst all the possible ways, a selection was made of the areas and tasks where implementation can be commenced immediately and the application of which is to continue until 2006. These selected tasks optimally satisfy the SWOT analyses – take advantage of the strengths, compensate for the weaknesses, seize the detected opportunities and avert the identified threats. At the same time, an opportunity to use structural funds was offered, whose resources could be drawn upon by Slovenia for the first time in the period between 2004 and 2006. The selected tasks also enable Slovenia to obtain as much fresh know-how, experience and support products for innovation as possible in the shortest possible time.

Legal System to Support Innovation

Area	Tasks	Indicators	Provider
Legal regulation of the area of innovation and support for innovation	• Preparing the starting points for the legal regulation of innovation activities in Slovenia • Preparing the proposal for adoption of a new law on innovations	• Filing the proposal of a new law on innovations	• Project management group • Ministry of the Economy in conjunction with other ministries

Infrastructure and Innovation Support System

Area	Tasks	Indicators	Provider
Economic and technological innovation infrastructure	• Network of business zones • Incubator network • Technology parks	• Economic efficiency of the established economic infra-structure • Number of enterprises using this infrastructure	• Current zones, incubators and technology parks • Local communities • Ministry of the Economy • Technology agency

Cooperation between the Public Research Field and the Industry in the Area of Innovation

Area	Tasks	Indicators	Provider
Evaluation of know-how and transfer of technologies	• Establishment of international groups for evaluation of spin-off initiatives • Awarding scholarships to future managers of new enterprises for the period from idea evaluation to the development of the business plan for these new enterprises • Awarding scholarships to experts for the implementation of technology transfers to enterprises • Spin-off incubator at the University of Ljubljana	• Number of evaluated initiatives • Number of awarded scholarships • Number of newly established enterprises • Number of technologies successfully transferred to enterprises	• Universities, institutes, technology parks, international experts • Technology agency • Hospitals • Leisure and sports centres

Financial Support System for Innovation

Area	Tasks	Indicators	Provider
Venture capital Intellectual property Tax relief	• Seed capital fund • Financing activities of intellectual property protection • Tax relief for innovation activities	• Volume of capital • Number of granted capital stakes • Volume of funds • Number of patents applied for through this mechanism	• Newly established venture capital fund • Ministry of Finance • Banks

Human Resources Management and Raising Innovation Awareness

Area	Tasks	Indicators	Provider
Education in the innovation and entrepreneurial fields Raising public awareness regarding the importance of an innovative culture Increasing the significance of innovations and innovators	• Introduction of new education programmes on the secondary and tertiary level • Lifelong learning • Enhancing functional literacy • Promotion of technical and natural science studies • Encouraging students to obtain entrepreneurial know-how • Continued communi-cation with the public through all the media • Festival of science and achievements	• Number of students • Increased significance of innovations in society	• Ministry of Education, Science and Sports • Ministry of Health • Employment Service of the Republic of Slovenia • Commercial education institutions • Technology agency

Services

Area	Tasks	Indicators	Provider
Tourism Health/sports/wellness Logistics Human resources management Introduction of new technologies	• Intensification of the links between suppliers on the national level • Development of new integrated products for the market • Education • Development of logistic approaches – marketing via the internet, information systems • Development of new profiles, development of cooperation – improving the strengths of personnel through training, decentralisation and enhancement/(attractiveness of work posts) • Self-service machines, management and monitoring system on the basis of state-of-the-art computer technologies, cleaning and maintenance appliances	• Increased number of guests and over-night stays • Increased daily expenditure of guests • Number of new tourism products • Number of new health products • Increased export of services • Increased added value in services and the number of sold tickets in cultural institutions and cultural heritage institutions • Number of newly created jobs	• Ministry of the Economy • Ministry of Health • Slovenian Tourist Board • Local tourist board • Regional Development Agency • Private capital • Entities related to tourism and cultural heritage • Clusters of medium-sized and small enterprises, living on additional services • Secondary school of tourism and university college of tourism

7.1 Aims and Tasks of the National Innovation System Action Plan

The envisaged aim of the National Innovation Strategy is for Slovenia to develop into a prime world region for living, working, learning and wellness.

The fundamental aim of the action plan is to increase the innovation capacity of Slovenia as an EU region with all of its statistical regions equally developed. In order to achieve the fundamental aim it is necessary to achieve the following operational goals:

1. To integrate and connect regional initiatives at the level of national and inter-regional objectives as well as prepare umbrella projects with a common strategy in line with the principle of optimisation and better use of potentials;
2. To achieve a "nuclear reaction" by means of reaching a level above the critical mass within the umbrella projects through the better use of existing human an financial resources and additional synergy effects;
3. To increase the innovation capacity of the economy in all statistical areas of Slovenia and achieve continuity in the transfer of know-how, technology and good practices among the players within Slovenia as well as between Slovenia, the EU and other countries;
4. To start up the "engine" which would propel and draw together all key players in Slovenia by means of the umbrella projects; To attract other similar initiatives in Slovenia and ensure support for them where they need it and in those activities for which they do not reach the critical mass on their own;
5. To enhance the current legislation in order to achieve better support for innovations in Slovenia; To prepare proposals to the competent ministries for changing the legislation in order to achieve a more effective support for innovations;
6. To encourage the joining of small and medium-sized enterprises into clusters in the area of conventional products and services as well as high technologies; To prepare a new methodology of project management in the clustering of small and medium-sized enterprises in the area of conventional products and services as well as high technologies;
7. To initiate a business/technological cooperation between the regions in Slovenia, Italy and Ireland (the case of Umbria and Shannon);
8. To establish a key range of services for providing innovation support for small and medium-sized enterprises, the industry and regional communities, which must be accessible to the same extent in all the statistical regions of Slovenia.

8. UMBRELLA PROJECTS FOR INCREASING THE IN

8. UMBRELLA PROJECTS FOR INCREASING THE INNOVATION CAPACITY OF SLOVENIA

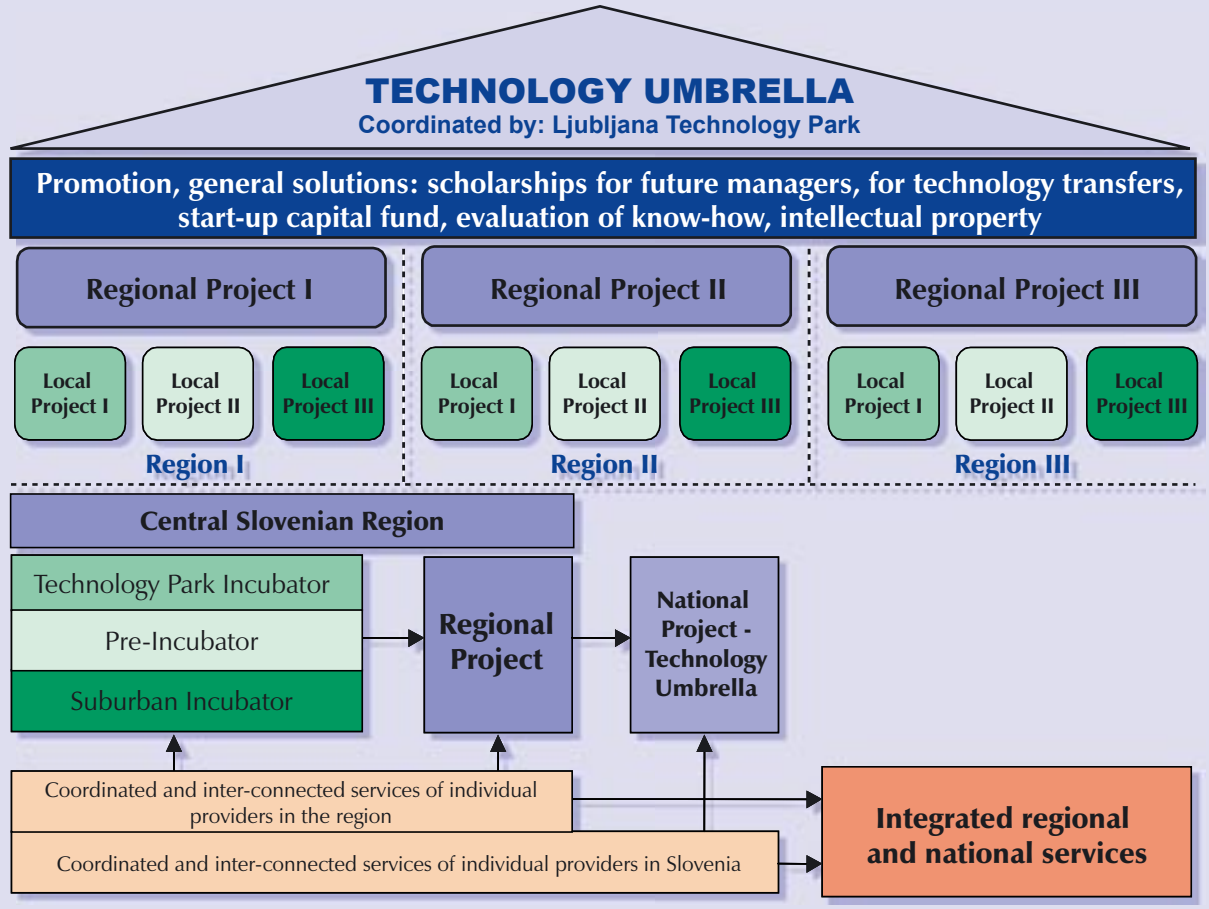
On the basis of Slovenia's preparations for accession to the EU and the elaboration of a programme scheme for drawing on the structural funds during the period from 2004 to 2006 a synthesis of a means of increasing Slovenia's innovation capacity was established, which took shape in the form of three national umbrella projects – the "umbrellas" that bring together the nation's potential in the areas of technology, tourism and health care from all the regions of Slovenia. These "umbrellas" represent a level of concentration of human and material resources above the critical mass, with a view to achieving common goals, identified on the basis of the SWOT analysis. The umbrella projects introduce an innovation support environment for a new type of entrepreneurship with a product-based competitiveness in those areas, where Slovenia has a strong tradition and competitive advantages in the world market.

8.1 The Technology Umbrella

In order to achieve a sustainable higher standard for Slovenia's inhabitants, to prepare for the transition into a society, based on furthering education, to strengthen the competitiveness of the economy and to transform the nation's entrepreneurial potential, it is necessary that we orientate ourselves towards the establishment of a relevant support environment and adequate services, connected to a spatial/land initiative. Thus business zones, technology parks, incubators, promotion centres, clusters and networks of enterprises with their infrastructures and services are all tried and tested building stones on which to base a development strategy for a given individual sector, region or country. The initiatives and projects included in the segment for the development of the economic infrastructure and of a relevant innovation environment, are brought together in one single unified programme – that of the "Technology Umbrella".

8.1.1 Envisaged Aim

We wish to attain the status of an active European region by means of achieving competitiveness by means of evaluation, selection and the support of excellence, followed by the establishment of a coordinated technological and business infrastructure and an innovation support environment as well as by establishing cooperation and links between the public and private sectors and domestic and international potentials. We have enough capacities to realise the envisaged aim. We need only pool our resources and know-how and to make optimal use of all our potentials by means of well thought out forms of support environments under a joint technology umbrella.



The Technology Umbrella

8.1.2 Programme and Projects

The Technology Umbrella is a programme for the development of business zones and the modernisation of the innovation environment, intended for the development of entrepreneurship and competitiveness. It consists of a number of projects for the modernisation of the economic infrastructure and several projects for the modernisation of the innovation environment. The infrastructure projects are regionally and locally based, and the umbrella connects the existing initiatives from individual municipalities. However, the situation is exactly the reverse in other projects in the innovation environment. This initiative has been established in reaction to the strategy of development taking place simultaneously in several regions at the same time, and for this reason, these projects are classified under the heading of joint aims at the national and inter-regional level. The partners in a given infrastructure project are diverse and forge appropriate links amongst themselves according to the regional principle, while partners in projects for the development of an innovation environment come from all over Slovenia. By means of including individual projects/investments, the partners realise the envisaged aims or their own strategy concepts of the development of a region. Typical projects for infrastructural and innovation environments are as follows:

ECONOMIC INFRASTRUCTURE

- Zone of strategic importance (technology park zone, cluster zone);
- Zone of regional importance (business zone or geographically distributed business zone);
- Incubation and innovation centre (pre-incubator, incubator, info points in the know-how sources, info points located in the municipalities, networking);
- Connecting infrastructure (telecommunications, roads, railroads …).

INNOVATION ENVIRONMENT

- Modernisation of the organisation structures for the linking, management, supervision, generation, introduction and implementation of services, evaluation of results, public relations, marketing and promotion of the umbrella;
- Services for the existing and new enterprises (scholarships, counselling, subsidies);
- Transfer and evaluation of know-how and technologies:
- Venture capital fund to start up enterprises, which are umbrella members;
- Establishment of new and enlargement of the existing forms of association (clusters, technology centres, technology networks).

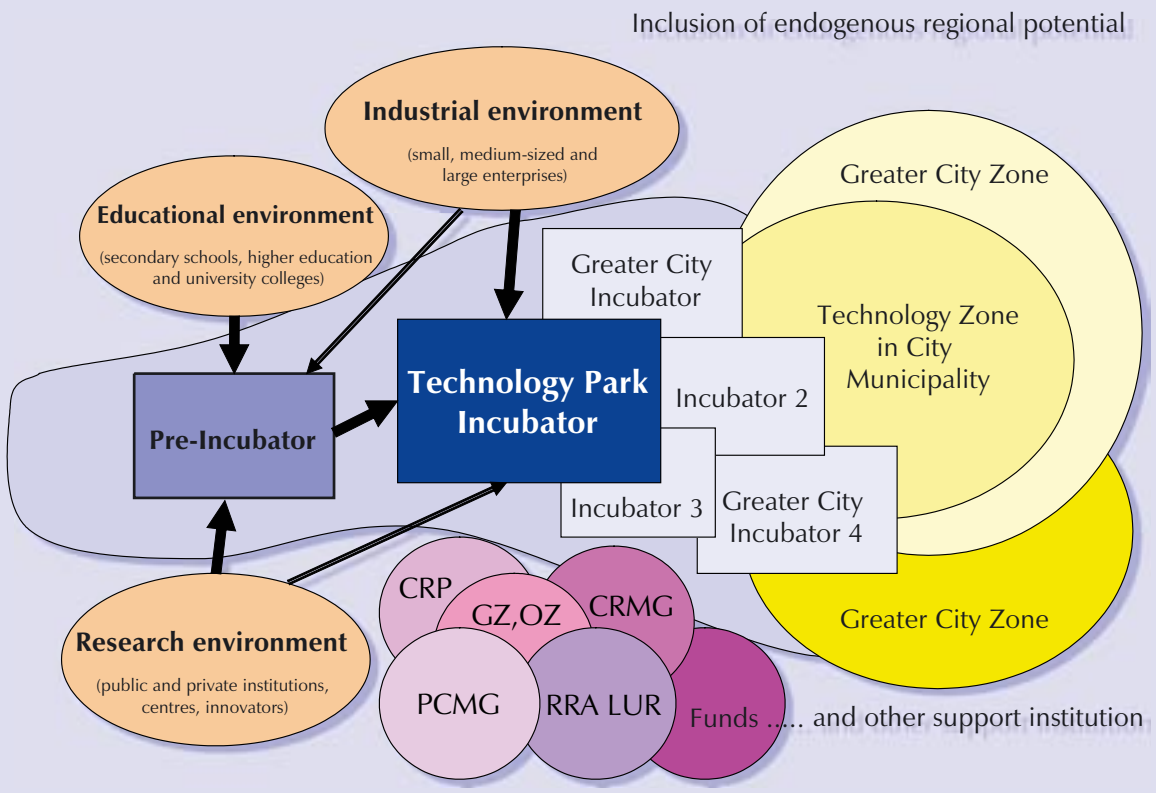
8.1.3 Purpose of the Programme

The purpose of the programme is to develop an innovation environment and its related economic infrastructure. The development of the economic infrastructure should provide for competitive locations, while the development of an innovation environment should accelerate and increase the efficiency of the transfer of know-how from the domestic and international environment to marketable products, ensure cooperation between the research and economic fields, speed up the establishment of enterprises with high potential (Hi and Low Tech) and promote creativity, innovation, competitiveness and the generation of new employment opportunities.

8.1.4 Aims of the Programme

The fundamental aim of the programme is to establish the requisite material and intellectual infrastructure for a network of zones, parks and incubators. By taking into consideration the specific characteristics of an individual environment and observing the principle of partnership and concentration, the network shall provide for the optimal use of financial and human resources, suitable geographic and infrastructure locations, the background area of the labour market and the existence of educational, research, industry and financial potentials.

In addition to the establishment of the network and geographic concentration of endogenous potentials, the aim of the programme is also to bring the working conditions and environment into line with those of the neighbouring areas in the EU, to reach a balanced regional development by preventing micro and macro migrations, the emigration of entrepreneurs and brain drain, to develop human resources, to set up development and service focal points with centres of excellence and leaning, and to lower the costs in order to facilitate the appropriate combining of the functions.



Typical economic infrastructure in Slovenia

CRP *= Entrepreneurship Development Centre*
GZ, OZ *= Chamber of Commerce and Industry, Chambers of Craft*
CRMG *= Small Business Development Centre of Ljubljana*
PCMG *= Small Business Development Centre (SBDC)*
RRA LUR *= Regional Development Agency of the Ljubljana Urban Region*

8.1.5 Details - Methods

The network of technology parks and incubators will be available for the existing and new, domestic and international, small, medium-sized and large enterprises with a high market potential. Enterprises shall be included in the network on the basis of competitive supply and assistance which shall be directed towards encouraging advances in state-of-the-art technology, desire for growth, the creation of quality jobs, the achievement of added value, orientation to global markets and the development of areas of strategic importance (tradition, resources, market). In the segment of micro and small enterprises, the network shall be a suitable haven particularly for new enterprises, and in the segment of the existing companies it shall be appropriate for small and medium-sized enterprises which represent either a technological or marketing backbone in the target area of the region (agriculture, road transport, logistics, automation, information technology, telecommunications and biotechnology). New enterprises are generated in the industry, education and research fields (see picture).

Enterprises shall use the network with the intention of entering the market as fast as possible in a relevant environment with the adequate infrastructure, and by means of an optimal range of services.The appropriate network infrastructure provides for the conditions necessary for generating the new type of entrepreneurship with a high market potential. However, the physical infrastructure alone is not enough. It is necessary to also develop the intellectual infrastructure and innovation environment. Institutions of the existing support environment shall assist enterprises on their way to maturity. The existing innovation environment is being modernised through

the introduction of the network and has to relate to the support environment in the EU as well as attempt to optimally adjust to the altered conditions.

8.1.6 "Evaluation of Know-How" Scheme for Modernisation of the Innovation Environment

The initiatives for advances in the technological and business infrastructure are of a local character. They emerge in the municipalities and normally establish links with one another within the region or in a wider area. These initiatives are business, entrepreneurial and technology zones, incubators and parks as well as technology, incubation or innovation centres, which are relevantly connected in a network. They are primarily intended for the development of endogenous potential. These initiatives are geared to provide the infrastructure in which to place the local potential. The development of entrepreneurship with market potential, identification, evaluation, motivation and a range of services to support development and internationalisation are all schemes, which are of a national character - and after the accession to the EU these shall also gain a European character. Some of these schemes already exist. However, on the basis of analyses we have found that they lack in:

- Training – short training programmes for entrepreneurs,
- Scholarships for managers,
- Scholarships for technology transfer,
- A start-up capital fund,
- Evaluation of know-how.

The entire "Evaluation of Know-How" support scheme is intended for the creation of new products, services and/or enterprises. Since the scheme is intended for natural persons it does not interfere with the de minimis area or the area of the support which the state is able to offer to enterprises only to a certain extent. This support is allocated only for specific projects. The gradual development in phases enables step-by-step financing. Since the support scheme is intended for natural persons it is, however, less likely that these funds be used for other purposes.

The entire Evaluation of the Know-How support scheme is composed of four activities for the modernisation of the innovation environment. Each activity can be introduced independently. These activities logically complement each other so that they achieve a more powerful impact factor in terms of speed, culture and the added value of the whole scheme.

Scholarships for managers are being introduced for the motivation and encouragement of those natural persons – the creators and implementors of ideas - who have made entrepreneurship their mission. This shall ensure that the created business plans will be optimal and of high quality. A part of the evaluation procedure has thus been completed and assessment at the initial stages should save us future headaches. The scheme also provides assistance regarding the method and scope of work, education and active guidance. This way, future managers shall be able to dedicate their entire working time to working on the business plan. Consequently, the products of these managers - the establishment of business opportunities by means of the business plan – will be of a higher quality, since they will have been tested at several levels: By a team of work colleagues, the market, investors…

Technology transfer scholarships address a major area of deficiencies in our business operations: The transfer of technology and the links between the research and the industrial environment. Scholarships are primarily intended for particular individuals, who are experts in their fields and capable of transferring their know-how to an enterprise, a trade and craft activity or a farm. This is principally intended for small and medium-sized enterprises. It is also intended for all employees in the research sphere or in the industry, unless this is prohibited by the law. This is a way of motivating individuals with expertise to transfer their know-how to the SMEs. Technology is also made available in this way to individual SMEs at a subsidised price. An enterprise can additionally remunerate an individual for having transferred technology. The enterprise is thus able to widen its range of highly qualified experts and is geared to European standards. The proposed scheme does not interfere with the existing schemes but rather relevantly upgrades and complements them. The scheme does not touch the de minimis

threshold for an individual enterprise either, since it is implemented in the form of a scholarship for an individual provider. A better targeted use of funds is thus also guaranteed. The action plan envisages that the demand for technology and transfer applications be carried out through public tender. The scheme tackles above all the motivating of enterprises for the procurement of state-of-the-art technology and the motivating of individuals to carry out transfers; it improves the currently somewhat remote cooperation between the R&D field and the economy, and also enables a European openness.

The start-up capital fund is as yet an unknown concept in our market. The establishment of a scheme intended for enterprises that base the contents of their operations on know-how is essential in terms of providing support for the development of new concepts and in terms of creating a uniform platform for business operations in the EU. A part of these funds shall be formed in the public fund. In addition to these funds we wish to attract funding by private domestic and international investors as well as non-refundable means from the EU. The scheme provides for investment into the assets of those enterprises which are now being set up and are entering the incubation or innovation centres. An agreement with an enterprise shall envisage a programme of exit after the incubation period. The next rounds of capital investments with venture capital from other funds and joint sales on the market are also envisaged. The scheme is essential since it strengthens the motivation of people with business opportunities and builds up an environment which is comparable to that of Europe and geared towards the realisation of initiatives in incubators and parks.

A scheme for the evaluation of know-how is necessary in the creation of an opinion for manager scholarships, scholarships for the transfer of technology and the evaluation of initiatives for venture capital in the early stages of an enterprise. Evaluation has to be carried out at the beginning, since this is the only way to avert possible mistakes and development in non-prosperous areas. To this end evaluations must be performed thoroughly and at the international level. The assessment schemes, routine procedures, practices in this field and international participation comprise a vital concept, which needs to be planned with care and introduced into our society. The evaluation of initiatives for scholarships and capital investment has to take place at the beginning and from the global point of view, since this is the only way to ensure a sound selection and the support of excellence. Selection and excellence are the foundation stones for greater competitiveness, wider scope, higher added value and growth.

8.1.7 Indicators

- The number of new and innovative enterprises based on know-how in the area of propulsive technologies (ICT, biotechnology and nanotechnology, automation of industries …);
- The number of links among the regions in order to create a new innovation support environment with a coordinated strategy;
- The number of existing SMEs (low-tech) links integrating into new organisational structures – networks or chains;
- The number of direct foreign investments – expansion of new programmes (products);
- The number of transfers of know-how, technology or good practices in Slovenia, and between Slovenia, the EU and other countries;
- The number of projects for the enhancement of innovation support environments in other regions of Slovenia (for the transfer of the acquired knowledge and know-how);
- The number of patent applications and patents registered (in Slovenia and internationally, particularly in the EU and the USA);
- The number of registered designs and registered trade marks.

8.2 The Tourism Umbrella

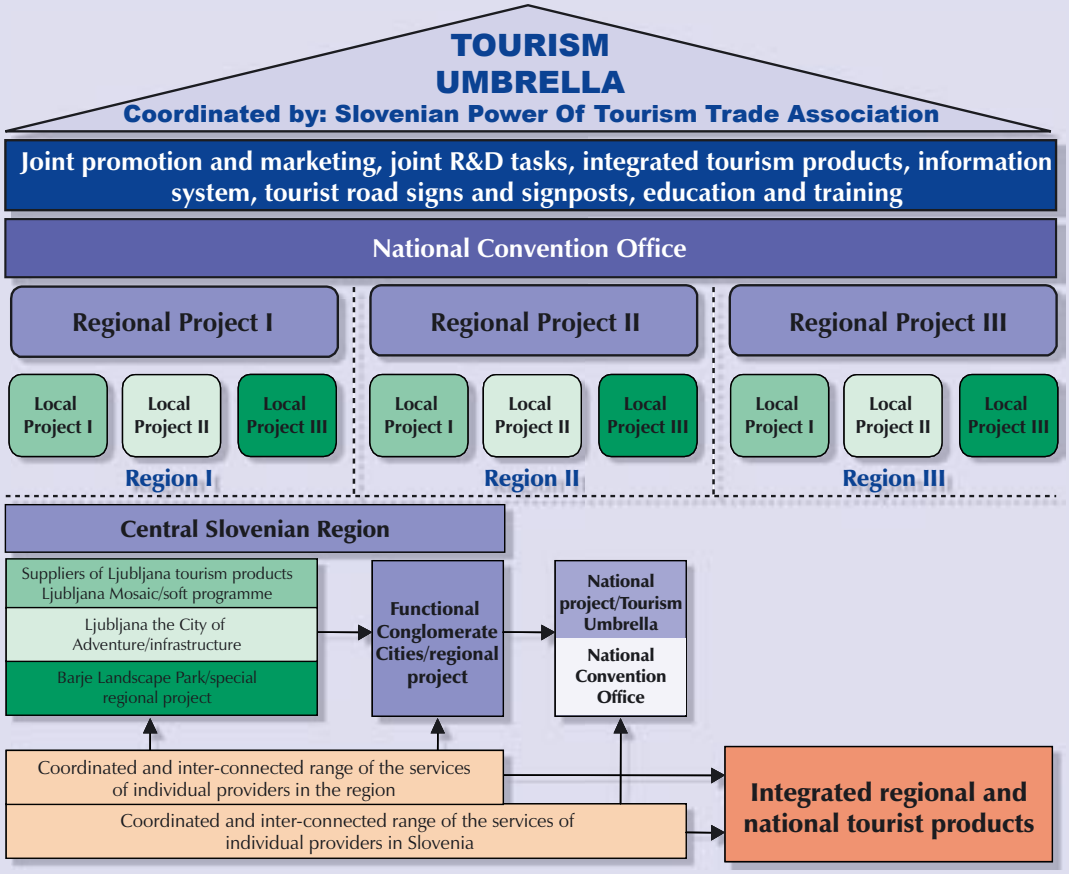
With the unique diversity of its natural environment and the many possibilities this offers for the development of tourism, Slovenia is definitely an attractive tourist destination. The tourism umbrella project aims at activating the highest possible number of Slovenian players in the tourist market with a view that their human, financial and natural resources should contribute to an even regional development and the wealth of Slovenia as an EU region. By implementing the tourism umbrella project we wish above all to increase the number of tourists visiting Slovenia, extend their stay in the country and increase the possibility of the optimum amount of overnight-stays in Slovenia's accommodation facilities. The multiple effects of tourism shall have a positive impact on the Slovenian economy, its added value, employment, the use and effective allocation of funds, and at the same time, they shall pave the way to new entrepreneurial opportunities and possible foreign investments.

8.2.1 Envisaged Aim

Slovenia shall become better known throughout the world – especially as one of the world's most attractive tourist destinations. This shall contribute to the development of other tourist areas and Slovenia as a whole in the same way as Ljubljana: as a nodal point where the business, cultural and administration spheres meet. We wish to take advantage of our land's natural features, diversity and its favourable geographic position, as well as of its sound and developed infrastructure. In view of the current political and geographic integration processes, we also wish to open up possibilities for the economic development of the entire Slovenian economy, based on sustainable progress – and thus contribute to the wealth of our country.

8.2.2 Purpose

We wish to draw together the activities which are currently underway for the purpose of furthering the common aim of achieving better synergy effects and better results in all business operations and work conducted. By integrating the individual segments of the entire range of tourist services which are being developed through investments in the tourism infrastructure in various environments into a comprehensive tourism undertaking of the whole of Slovenia, as well as of the individual regions and places, the local authorities, working in conjunction with local tourist organisations, shall make sure that their strategic and short-term tourism development policies shall be implemented. We anticipate that a coordinated and all-encompassing tourism effort of individual investors shall result in comprehensive tourism programmes, created for various tourist places, their wider areas, and Slovenia as a whole, and at the same time open up possibilities for the development of integrated and supplementary tourism products throughout Slovenia.



The Tourism Umbrella

8.2.3 How?

Slovenia shall be regarded as a modern European country and as such as a popular destination, to which tourists will wish to return. This can be reached by means of the current initiatives to enhance Slovenia's accessibility, observing the principle of the integrated tourism product, which would be achieved by means of the transfer of know-how, good practices and professional services as well as by building the tourism infrastructure and information system and by establishing links between suppliers and cooperation between the public and private sectors. Comprehensively developed services and events shall provide an adrenaline-boosting experience for active tourists, or relaxing holidays for families; shall meet the expectations of demanding culture lovers and cater to the needs of business people. A large number of tourist service suppliers should be integrated and invited to take part in creating joint actions, training and the marketing of tourist products:

- Joint development tasks – the development of new integrated tourism products;
- Development of an integrated information system: Bookings, ticketing;
- Introduction of a sales promotion system utilising the principle of tourist cards;
- Joint promotion and marketing;
- Organisation of tourism road signs and signposts;
- Easy access to and high quality standards of tourism in tourist destinations;
- Joint training and information activities.

8.2.4 Indicators:

- Increased number of domestic and foreign tourists,
- Increased number of overnight stays/extended visits,
- Increased tourist satisfaction,
- Increased tourist consumption,
- Number of new trade marks,
- Number of investment projects,
- Number of newly created jobs.

8.3 The Health Care Umbrella

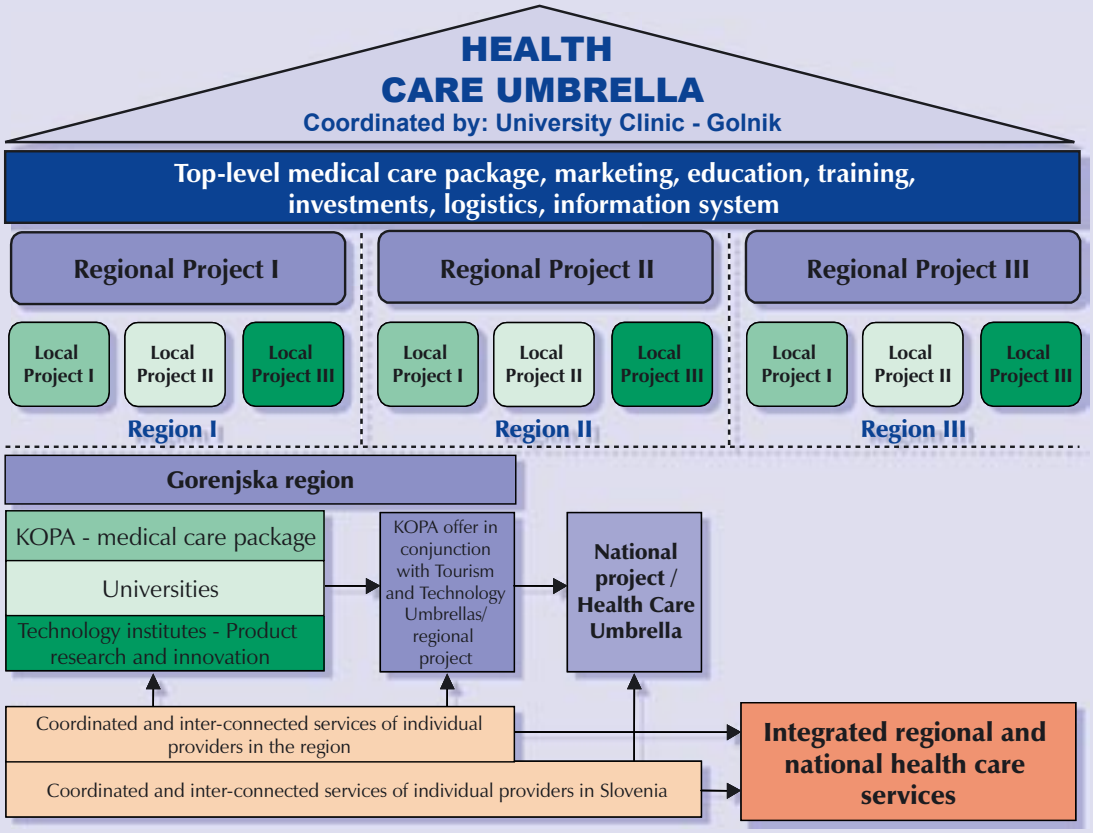
The aim of this programme is to activate the Slovenian health sector and other support institutions and enterprises in the market with a view that their human, financial and natural resources should contribute to an even regional development and to the wealth of Slovenia as an EU region. Slovenia should become the ultimate goal for health care services, combined with the services of the technology and tourism umbrella projects. It is evident from the already expressed interest of foreign health insurance companies and improved logistics (airport and new air companies), as well as in the integrated marketing and information support of the Slovenian business and leisure portal, that important opportunities are arising in this area. This umbrella covers the whole of Slovenia offering equal opportunities for the participation of all the interested health care institutions, while the services shall be carried out locally.

8.3.1 Main Goals of the Health Care Umbrella

- Reduction of the constant pressures on the national budget aimed at increasing budgetary funds earmarked for health care (introduction of a motivation scheme of incentives, based on the achieved marketing results; better use of equipment, spatial and natural potentials);
- Commercialisation of services on the international market with a better use of the existing resources and with a view to contributing to the economic development of Slovenia and increasing employment;
- Integration of hospitals, universities, institutes and enterprises into consortiums with the intention to offer a portfolio of health care services with a high added value of the sector;
- Development of education systems in the regions for the purpose of disease prevention and health protection;
- Creation of a network of home care and nursing health services.

8.3.2 Health Care Services

- Top-level multidisciplinary medical care packages (e.g. organ transplantation);
- Packages of specialist medical services (e.g. pulmonary, allergy-related, cardiologic, preventive, managerial, sports and rehabilitation);
- Marketing and linking the health care services with logistics and the services of the tourism and technology umbrellas.



The Health Care Umbrella

8.3.3 Joint Support Elements of the Health Care Umbrella

- Marketing,
- Education and Training,
- Investments,
- Establishing links with the technology and tourism umbrellas,
- Logistics,
- Information System.

8.3.4 Indicators

- Number of sick days,
- Growth in market revenues,
- Scope of revitalised facilities, including listed buildings of cultural heritage,
- Increased share in the GDP from health care services,
- Employee satisfaction and reduction in absenteeism.

Just as all our great sportsmen had to start training early in their youth, we must also develop inventiveness and encourage it amongst our children from an early age.

Ivan Klanček
Innovator

Various analyses conducted amongst the students of the University of Ljubljana and the University of Maribor show that only approximately 8% of the students have considered a professional path in the field of entrepreneurship. This means that the percentage of students with the wish to become job providers – i.e. "job makers" is significantly lower in Slovenia than in the other EU countries.

Dr. Aleš Mihelič
Ministry of the Economy

Innovation's cornerstones are new and young enterprises.

Dr. Marko Kos

If we look at the examples set by the most successful European countries over the past period, such as Ireland, Finland and a number of others, we can see that these nations had already achieved a consensus on their key development priorities as early as fifteen to twenty years ago. These priorities were not sector-oriented, but rather interactively linked with technological potentials, human resources, and – of course – the economic objectives of each respective country.

Dr. Peter Stanovnik
Institute for Economic Research

Companies such as ours that operate on the global market must ensure constant, recurrent excellence. It is not enough to simply adapt to the changes. We must also ourselves create change, if we wish to achieve long-term success in global competition.

Tatjana Fink
Director of TRIMO, d.o.o.

9. APPENDIX

9. APPENDIX

9.1. PARTICIPANTS OF THE SLORITTS PROJECT

9.1.1. BODIES OF THE SLORITTS PROJECT

STEERING COMMITTEE

Public organisations

Simšič Danica	Municipality of the Ljubljana **Chair of the Steering Committee of the SLORITTS EU Project**
Čuk Jožko	Chamber of Commerce and Industry of Slovenia
Kovač Zdenka	Government Office for Structural Policies and Regional Development of the Republic of Slovenia
Petrin Tea	Ministry of the Economy
Suvorov Bojan	National Agency for Regional Development
Čok Lucija	Ministry of Education, Science and Sports

Academic and research sphere

Glogovšek Jože	University of Maribor
Grabec Igor	University of Ljubljana
Omladič Matjaž	University of Ljubljana
Potočnik Franc	National Institute of Biology
Žekš Franc	Slovenian Academy of Sciences and Arts

Economic sphere

Štrancar Aleš	BIA Separations, d.o.o.
Akrapovič Igor	Akrapovič d.o.o.
Fink Tatjana	Trimo, d.d.
Klaneček Ivan	ING.KLAN d.o.o.
Mihelič Primož	CIMOS d.d.
Petrič Stojan	Kolektor Idrija
Polenec Andrej	ISKRATEL d.o.o.
Šušterič Branko	NIKA d.d.

EXECUTIVE BOARD

Anton Colarč/ Igor Omerza	Municipality of the City of Ljubljana
Igor Gabrenja	National Agency for Regional Development
Mateja Stanič-Rudolf	RR & Co. d.o.o.
Luigi Amati	META GROUP, Italy
Jimmy O'Loughlin	Shannon Free Airport Development Company, Ireland

PROJECT MANAGEMENT GROUP

1. Vanja Rangus	Chair Person	Municipality of the City of Ljubljana Department of Economic Affairs and Tourism
2. Alenka Rebec	Vice-Chair Person	Municipality of the City of Ljubljana Department of Economic Affairs and Tourism
3. Uroš Stanič	Member	Jozef Stefan Institute–IRC Slovenia / University Clinic of Respiratory and Allergic Diseases Golnik
4. Iztok Lesjak	Member	Tehnološki park Ljubljana d.o.o. Ljubljana Technology Park
5. Robert Rudolf	Member	RR & Co. d.o.o.
6. Sašo Kulašič	Member	Municipality of the City of Ljubljana Department of Economic Affairs and Tourism

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1. Jimmy O'Loughlin, Shannon Development, Ireland
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3. Gerry Lowe, Shannon Development, Ireland
4. John Leonard, Shannon Development, Ireland
5. Brendan Lynch, Shannon Development, Ireland
6. Kevin O'Coonor, Shannon Development, Ireland
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Mirjana Kovač	Centre RS for Professional Education
Matjaž Mulej	Faculty of Economics and Business
Katja Lautar	Development Centre Pokolpje, Kočevje
Drago Čepar	Government Office for Religion Communities
Edvard Kobal	The Slovenian Science Foundation
Marija Krušič	Centre for Entrepreneurship Krško
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Saša Gradišek	Litija Development Centre
Violeta Bulc	Vibacom d.o.o.
Živa Gorup Reichmann	3R.TIM d.o.o.
Vanja Rangus	Municipality of the city of Ljubljana
Brian Callanan	Shannon Development, Ireland

9.2. USEFUL WEB SITES

SLORITTS home page:	http://www.sloritts.si
IRE network home page:	http://www.innovating-regions.org
RIS project presentation:	http://www.innovating-regions.org/network/presentation/regional.cfm
RIS-NAC project presentation:	http://www.innovating-regions.org/network/presentation/risnac_project.cfm
PARTNER network home page:	http://www.partner-thematic-network.org
INNOBA project home page:	http://www.innoba.org

SLORITTS Project Partners and Web Sites:

Municipality of the City of Ljubljana – Department of Economic Affairs and Tourism	http://www.ljubljana.si/mol/uprava/oddelek/oddelek_za_gospodarske_dejavnosti_in_turizem/index.html
Ljubljana Technology Park – establishment of spin-off enterprises	http://www.tp-lj.si
Jozef Stefan Institute–IRC Slovenia – support for technology transfer via 68 IRC centres	http://www.irc-slovenija.ijs.si
IER – analyses of trends, needs, supply	http://www.ier.si
RR & Co, support for management and accounting under the EU methodology	http://www.rr-co.si
Shannon RITTS/RIS, Ireland, transfer of good practices	http://www.shannondev.ie
META Group, Italy, a consulting company	http://www.meta-group.com

APPENDIX

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Data on the last page supplied by the Statistical Office of the Republic of Slovenia:

- GDP real growth in prices for 2000 taken from the first annual evaluation of the GDP for 2003;
- GDP per capita according to the purchasing power in PPS applies for 2002;
- Data on value added to the GDP in the various industrial sectors applies for 2002.