REGIONAL INNOVATION STRATEGY FOR THE SOUTHERN MORAVIA REGION

EXECUTIVE SUMMARY

In spite of the fact that South Moravia belongs to more developed regions within the Czech Republic it still fights against various economic problems. South Moravia has got a traditional strong and expanding basis in the research and development area formed by college students and scientists. The structure of these students and scientists is also favourable because it is focused on disciplines of biology and engineering. The key approach how to improve the situation is to support innovative small and medium enterprises with a high added value that direct their attention to the introduction of novel and better products and services and also to the introduction of new approaches.

A political consensus and a good will of all parties involved represents a cardinal advantage in a process of introducing the system supporting the innovative business. Universities, the regional political representation and representatives of the City of Brno have managed to find a common ground and came to an agreement regarding goals that are mentioned in the second version of the Regional Innovation Strategy.

The Regional Innovation Strategy represents a set of measures, submeasures and tools that should be implemented to ensure the development of innovations. The first version of the Regional Innovation Strategy was created in winter 2002 and it came into being in the context of that time and the environment. Since that time substantial changes happened in the environment, in priorities of the Czech Republic and in the economic area of South Moravia as well as in possibilities to obtain external financial means for innovations (in particular owing to the admission of the Czech Republic to the European Union). The sector of business enterprises, universities and colleges as well as supporting organizations in South Moravia are undergoing a dynamic development and because of this an obvious need to update the innovation support strategy appeared.

The need to update the strategy has emerged mainly from substantial changes in the environment. The first part of changes includes changes on the top level, especially the admission of the Czech Republic to the European Union, the attention of the government paid to support small and medium business enterprises and emphasizing of innovations as a tool for increasing the competitiveness of Czech enterprises. After the admission of the Czech republic to the European Union the possibility of exploiting a financial support in the form of structural funds has proved to be a great stimulus. These funds (especially the Operational Programme Industry and Entrepreneurship) are aimed at a support of innovations and increase of the competitiveness of Czech enterprises generally.

The second part of changes includes local changes in South Moravia. It concerns mainly the change of the infrastructure of industrial companies, the development of new industries, altering requirements of companies and preferences of the society as a whole. In this connection we should mention the expanding activities of universities and colleges, the development of the biotechnology sector, a larger exploitation of grant programmes from the part of companies, a relocation of companies to South Moravia and efforts made to put results of the research and development widely into practice.

The third part of changes includes the general development of the society, improving the standards of living, the development of the tertiary sector and companies oriented more to their basic businesses.

Metodology of the creation of the Regional Innovation Strategy II of South Moravia

On the basis of these changes a whole series of analyses has been realized within the scope of a preparation of the Regional Innovation Strategy (RIS) II of South Moravia. Analyses dealt mainly with factors that influence the innovative environment in South Moravia from a higher level (i.e. especially the European Union, the National Innovation Strategy, the National Innovation Politics,
the Conception of Support of SME in the period of 2005 - 2006, the support programmes available in the Czech Republic) and with politics on the level of South Moravia (the Economy Development Strategy, the Regional Development Programme etc.) Besides that and not least the analyses of innovative environment in South Moravia (SM) were made. It concerned mainly the desk research of the industrial branches in SM, an identification of promising sectors, interviews with companies on their demands, the analysis of the companies relocation to SM, the demand research of companies in the field of technology and the analysis of innovation activities in universities. The special attention was paid to the biotechnology sector where the detailed analysis of demands for services and premises has been carried out. The given analyses has become a basis for the creation of the Regional Innovation Strategy II of SM. The process of the creation itself included a meeting of a wider Working Party of RIS that defined the RIS SM II mission in separate steps (Why we are here?), the RIS SM II vision (Where to get to?), identified and approved key problem realms (in what areas?). Particular goals (What we are going to achieve?) were identified in each of these fields. Individual measures of RIS can then answer the question How will we reach this? Every measure has a defined goal to be reached. The measure has been further discussed and divided to partial submeasures that fall within the same sort of problems. Goals have been defined for these submeasures and tools for reaching these goals have been proposed. An organization responsible for the implementation has been designated for each proposed tool and a date of the implementation of the tool has been set, too. The Regional Innovation Strategy is divided into nine measures:

Measure 1 - Financial means for small and medium enterprise

The information obtained from domestic and foreign innovation start-ups revealed that one of preferred demands is to obtain financial means. In most cases small and developing companies have neither time nor the qualification for investigating all possibilities of financing. The main goal of this measure is to ensure financial sources for companies especially for those in the early stage of their development. At first it is necessary to establish requirements of companies in the sphere of financing. Monitoring of companies’ requirements in the sphere of financing represents a fundamental step for developing and securing services that are going to solve topical problems. For obtaining the information regarding companies’ requirements inquiry actions and interviews will be made. In order to secure the financial means for companies it is important to know all available forms of financing and subventions. Grants and loans within the EU Structural Funds, government subsidies, the EU framework programmes, guarantees and even other forms of financing can be here especially taken into account. The continuous monitoring of existing and newly emerging financial supports for entrepreneurs - beginners will provide us with the detailed information on forms of financing. A standard procedure for establishing the most appropriate form of financing for a specific company will be set. The goal is to have a tool for an evaluation of the development level of the company, of a market situation, a strategy, a necessary cash-flow and further connections and together with relevant available sources it is necessary to compare and determine the most suitable possibility of financing. Another objective anchored in this measure is to establish tools for the financial support and subsequently to have a scope of available financial tools that result directly from needs of companies and to gain access to existing commercial financial products for them or to create such products (in the case of their non-existence in the market). Some of financial support tools are already offered on the regular basis by the South Moravian Innovation Centre (Fit4Finances, Grants for services of business incubators, Microloans).

Measure 2 - Premises for SME

The important tool for support of newly established companies is providing them with first-class premises to ensure their development. The term premises means both premises for newly emerging firms (incubator premises) and development premises for companies that passed through the
incubation period or for companies relocated from other regions of the Czech republic or abroad. It concerns especially a creation of incubators and monitoring and providing companies with adequate premises in order to enable their expansion.

Monitoring of companies needs will enable to obtain the information concerning demands of incubator premises and on the basis of this to initiate their possible enlargement. The provision of collecting information on premises demands is one of fundamental steps in filling needs of SME. A periodical monitoring of demands for the incubator premises will provide with the relevant information concerning demands for the above mentioned space. Monitoring of new projects and newly emerging companies that could raise their demands for incubator premises represents a part of this measure. Monitoring of offers regarding premises is aimed at gaining and a regular renewal of this type of information and will give a possibility to obtain the relevant information on offers concerning development premises for companies. One of other tasks is to provide new premises for innovative SME namely the incubation space according to demands in the region.

Within the scope of the market analysis prepared for the Science and Technology Park SM Project a need to extend the incubation space in SM has been identified. Current incubation capacities are already almost filled up and there is an existing potential for using other space which could be solved by building approximately 4500 m$^2$ of a planned new incubation area. Securing the operation of incubators will help to provide quality services for innovation start-ups. The purpose of it is to ensure a good supporting background for innovation start-ups - that is why it is inevitable to arrange the operation of incubators.

**Measure 3 - Intellectual Property Protection**

The intellectual property protection is one of the most important spheres of assistance innovation start-ups should receive. In view of a complexity of the problem and because of the current disappointing situation in this field an assistance in the intellectual property protection has been established as a goal of the RIS third measure namely through the whole period of the protection that means from the idea’s emergence till its launching into the market. In view of complexity of the whole problem regarding the intellectual property protection the measure is divided into several submeasures.

The aim of setting up a methodology for an evaluation of ideas is to ensure an expert appraisal of the idea for the purpose of the intellectual property protection. Through the support of projects aimed at the intellectual property protection the chance will be given to a larger number of innovative ideas to secure a first class and early copyright protection for them. While making decisions what project is to be assisted and in what way it is necessary to have tools prepared that will ensure an independent and quantifiable expert evaluation of technical feasibility and usability of the innovative idea in the market.

The sphere of the intellectual property is very complicated. For a better orientation in this field a standard procedure for securing a process of the intellectual property protection will be created. The developed material will serve as a counselling manual and a handbook for various forms of the intellectual property protection. This material should clearly describe individual steps that should be taken in ensuring the protection and should propose practicable solutions.

The purpose of an assistance at the patent commercialization is to aid in sale or purchase of the patent/licence by companies. To fulfill this goal it is necessary to have knowledge about ongoing projects (at universities and in the field of commerce) and firms or potential investors that work in the given sphere. This goal will be fulfilled in the close cooperation with technology transfer centres at separate universities.

The creation of supporting tools will enable to form an infrastructure that will simplify possibilities of the intellectual property protection in the region and will make them accessible. During analyses carried out within the scope of the RIS SM II creation some drawbacks have been identified in the field of the intellectual property protection. The main shortcoming proved to be a lack of financial means and only a little possibility to commercialize patents. Creation of the mentioned tools has been proposed for solving these problems.
Measure 4 - Interconnection of subjects

The interconnection of companies is an important tool for creating a higher added value and for using other synergic effects in business enterprise. The globalization trend urges companies to cooperate more closely unless they want to become small-time players in their job. Creating an atmosphere of confidence, sharing the information or working on joint projects leads to the increased productivity of firms.

Monitoring of the industries development will bring the relevant information on industries in the region offering good prospects, on their development, on companies and their products and changes of the data that could occur after some time. On the basis of the said information industries offering good prospects will be chosen to support and provide services.

Monitoring of products in industries is aimed at providing reliable knowledge of a sort of products and services offered by companies in perspective industries and of fields in which firms can be interconnected. Information on a competitiveness and a level of know-how that is available by individual firms is of great importance, too.

Monitoring of projects fit for commercialization will bring knowledge on ongoing projects both in the university and business sphere and also on possibilities of interconnecting such projects with firms or other projects. For assuring success of projects it is necessary to monitor auspicious projects in universities but also in business enterprises where spin-offs can be formed. The conception regarding the interconnection of companies will provide a basic framework of this interconnection. During its implementation complementary projects or firms will be searched out to cooperate. The assistance in the course of interconnecting companies will be provided, potential partners will be found, regular informal meetings for companies will be arranged as well as workshops and conferences on specific subjects for the purpose of mutual acquaintance of firms and the university sphere in the region. Creating a portal of innovations represents a further tool that will integrate all the information on the innovation enterprise in the region and on support and possibilities of cooperation for defined segments. The important activity in this field is searching out and supporting a creation of clusters. Monitoring of domestic investors will give the information on the orientation and financial standing of potential domestic investors. A database of potential domestic investors emphasizing their orientation in the industry and their financial standing will be kept. A manual that serve as guidelines for securing the process of the capital entry will be created, too. Similarly monitoring of foreign investors will provide knowledge of foreign investors activities in SM and will enable to secure appropriate conditions for them as well as the connection with SME in the region (directly - investments, indirectly - eg. as customers of products or services in the region). Providing knowledge of the foreign partners business orientation as well as of their financial standing is also of great importance. The concept of cooperation with contractors of services in the region and its implementation is aimed at creating an adequate database of commercial suppliers of services for firms in incubators as well as outside them. In this database one can find contacts and information on companies providing services for SME in the region. From the standpoint of quality the database should comprise only verified subjects. On the basis of analyses the biotechnology sector in SM has been defined as outstandingly promising. Since biotechnology represents a preferred sector of support in the EU the RIS SM II promotes this field as well. By virtue of available sources and the situation in SM the development of the biotechnological sector in SM will be promoted chiefly by gaining specialized grants, promoting a creation of joint-venture companies ( foreign and domestic investors, local firms and academicians) and by creating an information portal on biotechnology that will serve as a basic place gathering all the relevant information. The organization of workshops, conferences, educational stays and competitions will represent other essential tools for interconnecting and promoting subjects in the biotechnology sector. Clusters belong to another tools that cannot be omitted and owing to support coming from CzechInvest and the EU they could start up distinctive synergic effects in biotechnology in the region.
Measure 5 - Transfer of know-how between universities and the sector of commerce

The transfer of technologies between universities and the sector of commerce belongs to domains that do not function properly at present though at the same time they are of great importance both for the sector of commerce and universities. The main goal of the Measure 5 is to contribute to creating the functioning system of the technology transfer in SM. The stimulation of entrepreneurship should bring about a greater number of established companies together with a change of their relationship towards entrepreneurship. It concerns especially the change of the well-established practice in case when the university graduate let himself get employed rather than he would try to start up his own business. Workshops, promotion events and a cycle of lectures on innovative enterprise are suggested to be appropriate tools for this. One of main goals is also to disseminate knowledge of existence of incubators as well as of possibilities that incubators offer for entrepreneurs-beginners.

Monitoring of university projects will bring a view of ongoing projects and possibilities of commercialization of such projects. The fact of existence of the project itself, respectively an intention to realize the idea, represents an important element of the technology transfer from universities. Further step that follows is establishing a contact with a team of organizers and a continuous transfer of information relevant for a successful commercialization of the monitored project. On the basis of such collaboration the project will be assessed from the standpoint of a possibility of its further development.

A methodology for the evaluation of an idea will give us a tool to identify a project quality regarding its possible commercialization, to evaluate the project from the standpoint of its technical feasibility and to assess its market potential and qualities of a management team standing behind the project.

The point of securing the initial intellectual property protection at the universities is to provide the intellectual property protection wherever it is necessary. The most appropriate form of the protection will be chosen and recommended for these projects and the assistance in securing the protection will be provided as well. This submeasure is closely connected to the third measure that secures financial aspects.

The conception dealing with finding of partners for the commercialization will help to find them (natural persons, investors, distributors etc.) The choice of reliable and right partners is a key moment for a fruitfulness of the project.

Setting up a standard procedure for a commercialization of the project aims at changing the situation when scientists, who are mostly holders of projects do not have experience of the company development. They encounter difficulties they have neither time nor desire to solve themselves. On that account many projects are either not opened at all or they are not completed and thus the region loses a number of promising opportunities. Counselling of key business enterprise spheres will help to change the described situation.

The aim of the research and development cooperation in the international level is sharing results and an exchange of information. Personal contacts among researchers coming from various countries and an engagement of universities in networks of excellence represent possible tools of the cooperation. EU framework programmes are oriented to create a connection between the research and the development in the international level. The training of experts for transfer of know-how from universities will result in a sufficient number of experts in this field and will raise the awareness of possibilities regarding this issue at universities in the region. The aim is to raise the awareness of technology transfer both at universities and in the business sector. An assistance at founding technology transfer centres in SM and at training of required experts can represent another output.

Measure 6 - Counselling

The development of start-ups often fails as a consequence of poor knowledge, insufficient skills or inexperience in any of important areas of company activities. On the basis of previous experience
existing both in the Czech Republic and abroad companies are provided with advisory services in fields specified below. The aim of it is to define unequivocal rules of cooperation with external companies providing services for firms in incubators and through their good offices for firms outside them. Regular monitoring of company demands can help to reveal needs of firms regarding adjustment of products to their requirements. Appropriate contractors will be found for the most required services and standard products will be developed as well. Counselling of specific areas of business enterprise will help to secure advisory services in the spheres that are demanded most. According to the SMIC research (South Moravian Innovation Centre) it concerns chiefly the advisory services regarding the foundation of a company, its development, marketing, securing financing, the financial management, the human resources development, innovations of products, counselling at sales, providing premises and the assistance in a termination of company activities.

**Measure 7 - RIS Implementation**

This measure including submeasures is aimed at securing a first-class implementation of the Regional Innovation Strategy. The accent is put especially on the management quality, the development of human resources and on other supporting systems necessary for the implementation. Developing the qualification of employees of RIS implementation organizations means to have a sufficient number of highly trained experts. The sufficient expert knowledge and the development of skills of employees in support of innovations represents a crucial factor for success in the RIS SM II implementation. This submeasure emphasizes the preparation of a sufficient background formed by experts for the innovation sphere in SM. In order to fulfill the Regional Innovation Strategy it is inevitable to secure resources for financing RIS, namely a systematic and continuous financial support from the part of stakeholders is needed. Another crucial factor for success of the RIS SM II implementation is a provision of cash flow for support of innovations.

The interconnection of RIS with other strategic documents of SM and Statutory City of Brno is aimed at laying RIS SM II down in hierarchy of strategies and at its acceptance by the political representation of SM and the City of Brno. On that score the interconnection of RIS with other strategic documents of South Moravia and Statutory City of Brno is very important. The implementation management of RIS puts the accent on best practices, creating systems of measuring indicators and a standard budgeting within the RIS implementation. The efficiency of work can be reached through creating supporting systems, methodologies and tools to support the implementation. In order to provide a quality system of support of innovative business enterprise in the region it is necessary to secure especially a first-class management and an information flow.

**Measure 8 - RIS Monitoring**

The aim of regular continuous monitoring is to secure the RIS implementation and a reaction to a (possible) change of conditions. Monitoring of superior strategies will provide knowledge of innovations in superior strategies (EU, CR, SM, City of Brno, CzechInvest, universities) and will determine their possible impact on the Regional Innovation Strategy of SM. Naturally, the Regional Innovation Strategy is influenced by many factors. Besides the very environment of the region (development of industries, development of companies and academic sphere) it is also contingent on superior strategies in this hierarchy. It concerns especially strategies on the regional level (eg. Strategy of the Regional Development), on the national level (eg. National Innovation Politics) or on the EU level (Lisabon Strategy, structural funds for further programming period). The environment changes constantly and therefore it is necessary to monitor the changes continuously and to react on them - mainly through exploitation of opportunities. Monitoring of the RIS implementation will enable to evaluate real benefits of the Regional Innovation Strategy for the innovation sphere in SM within the scope of this submeasure.
Monitoring indicators will be created and according to them a fruitfulness of the RIS implementation will be assessed. In case of necessity the RIS update will be carried out. RIS will be updated (eg. RIS SM II created) in case of a radical change of the situation on the basis of monitoring of superior strategies and the environment situation in the region.

**Measure 9 - Communication**

The main purpose is to provide the expert and lay public with the first-class regular information on R&D within the scope of SM, on a support of innovations in the region, on RIS SM and a support of transfer of R&D results to business and also on success attained in this field.

Within the scope of analyses carried out it has been found out that the public has got little information of the system of innovation support in SM. For that reason it is necessary to provide the education of the public and to inform all segments of current initiatives and results. Providing the information of the support and results of the RIS implementation to all subjects in defined segments is crucial for an effective functioning of the system and in a long run for receiving a long-term political support.

Communication with organizations promoting business enterprise will establish good relationships and a general awareness of innovations in SM by other organizations (domestic and foreign) that support business enterprise.

Cooperation with other subjects that support innovative business enterprise is essential for an integration of the implementation procedure, an increase of its efficiency, a creation of innovation networks and a long-term success of the RIS implementation.

Brno, November 2005