

Innovation Vouchers as a Suitable Instrument for Effective Public Support of Innovations by Local Public Administration

J. Stejskal, K. Matatkova

Abstract—This time supporting of innovation making process is very important way how to increase the competitiveness of the region and move the region on the higher economical level. But there is no general tool how to effectively support the cooperation which is key condition for innovation making process. Because without cooperation among entrepreneurs and public R&D institutions there will be no spill-over effects which are the keys for the diffusion of knowledge and birth of innovation. In this context the innovation vouchers was introduced in South Moravian Region. It is very suitable tool for supporting the cooperation among entrepreneurs and public R&D institutions.

The aim of this paper is introduce the background and situation which lead to implementing innovation voucher program in South Moravian Region (Czech Republic) and evaluate the efficiency of this tool for the region.

Keywords— innovation, innovation vouchers, spill-over effect, knowledge

I. INTRODUCTION

CURRENTLY knowledge and innovations play important role in regional economy. We can say that innovations are the fundamental driving force of economic growth and key factor in competitiveness. Therefore, there is a huge literature about knowledge and innovations. All authors agree on the idea that innovation can be understood as an interactive learning process performed by a company in given area. [1].

Each region is trying to support innovation process by certain tools. However, there is no universal approach, how effectively create a suitable environment for creation and spread of innovation, at the end of 20. Century M. E. Porter began investigating the influence of innovation. He examined the links between companies and research institutions that underpin the innovation process. His main contribution was the idea, that the best form of above mentioned links might be industrial clusters [10,13].

The idea of industrial clusters has become a starting point for the creation of innovation systems. The first step was the establishment of National innovation systems (NIS), which have been used since 1980. So far there is no clear definition of National innovation systems, but the most suitable definition is following one: NIS is a network of institutions from public and private sector which joint activities and interactions

initiate, import, edit and disseminate new technologies [8, 14]. Lundvall adds that these interactions are within one state [8].

This approach, however, faces the problem of a “size” of the nation state because this national region can be divided into several smaller regions and each of them needs different tool to support innovation process, because each region has a different starting level of innovation production and has different geographic, demographic and economic conditions. Why it cannot use the same tools to support innovation in the national regional policy in all regions of the state.

In response to this problem regional innovation system (RIS) have been developed and regions have become centres of innovation, because innovations arise on the regional level through regional network of innovative companies, or local industrial clusters with significant contributions from academic institutions in the region [2]. Cooke [4] adds to this approach that it is the interaction between companies and other organizations working with innovation play an important role in regional innovation potential.

In practice of Czech Republic was developed tool for support just regional innovation potential – regional innovation strategy implemented on regional level. These strategies are implemented and supported from public funds. As part of this strategy is also mentioned using of innovation vouchers as a useful tools for the promotion of innovation in the region.

In the first part of presented paper there is theoretical background. In second part there is the Case study about South Bohemian Region. In this part is performed the descriptive analysis of voucher program, which has not been made in Czech Republic yet.

The aim of this paper is effectiveness evaluation of innovation vouchers like the public support form in case of South Moravian Region (Czech Republic).

II. REGIONAL INNOVATION SYSTEMS

Before the definition of the RIS will be made, it is necessary to define the term region. There are two appropriate definitions. According to the first definition region is defined like geographically and

administratively supported arrangement of innovative networks and institutions that largely influence the innovative output of regional companies. The second definition emphasizes on cultural aspects of the region. This means that the region may not be exactly specified geographic area, but can be distinguished from neighbouring areas thanks to a unique kind of internal consistency [5].

In accordance with the above definitions of the region, we can say that region is a key dimension of innovation systems. Therefore, there are some reasons which are summarized in Tödting Tripl work: Firstly, regions differ in terms of their specialization in the industry and their innovative performance (Breschi 2000, Howells 1999, Paci and Usai 2000). Secondly, it shows that knowledge spillovers play a key role in the innovation process and are mostly spatially bounded (Anselin et al., 1997, Audretsch and Feldman 1996; Bottazzi and Peri 2003). Thirdly, we should mention the growing importance of "tacit" knowledge (Polanyi 1966) for a successful innovation process. (Gertker 2003, Howells 2002). Finally, it should be mention that even the political powers and institutions often occur at sub-national level (Cooke et al., 2000).

If we accept the fact that the region is the most important area for innovation is necessary to define the framework and tools to support the innovation process in the region. For this reason, in 1990 was introduced the concept of Regional Innovation System (RIS). From this point, many experts dealing with this issue and try to make an exact definition of RIS. Most of them agree on the definition according to Cooke[4], who says that regional innovation systems are useful in the study of economic opportunities and innovation, are also functional tool for enhancing innovation processes of enterprises. These processes are supported by the interdependence of knowledge flows and systems on which they depend. Further, the definition highlighted the importance of building mutual trust. Regional innovation systems therefore include a set of institutions, public and private, that produce essential systemic effects, supporting enterprises in the region to adopt common standards, expectations, values, attitudes and practices, in condition that innovation culture is supported and processes of knowledge spillovers are strengthened by it.

RIS, then, can be thought of as a framework comprising two subsystems according to Cooke[3]

- the knowledge application and exploitation sub-system,
- the knowledge generation and diffusion subsystem.

The first sub-system is principally made up of private enterprises, while the second subsystem is mostly made up of public organizations such as universities, research institutions, technology transfer agencies and regional and local governments which are responsible for promoting innovation and pro-innovation policy. In fact,

there may be some overlap, as well as business support of knowledge creation, especially if they have their own research and development laboratories and universities. Also private institutions may support the application of scientific knowledge.

Tödting, Tripl [11] have added to the above subsystems another one. The third subsystem is the dimension of regional policy, because policy-makers at this level can play a strong role in shaping the regional innovation process, if there is sufficient regional autonomy in the formulation and implementation of innovation policy. Tödting, Tripl further argue that, ideally, there is an intense interactive relationship within and between these subsystems to facilitate the continuous flow and exchange of knowledge resources and human capital. On the other hand, there are several problems and the failure of the RIS as a lack of respect of organizations and institutions and a lack of relationships within and between subsystems.

II. INNOVATION VOUCHERS

II.1 TARGET AND PURPOSE

Innovation vouchers [9] are small lines of credit provided by governments to small and medium-sized enterprises (SMEs) to purchase services from public knowledge providers with a view to introducing innovations in their business operations.

The main purpose of an innovation voucher is to build new relationships between SMEs and public research institutions.

Innovation vouchers are intended as pump-priming funding through which initial industry-university relationships can be established.

The issuing of the voucher has two main impacts, both of which overcome major incentive barriers to usual engagement between SMEs and knowledge providers.

1. The voucher empowers the SME to approach knowledge providers with their innovation-related problems, something that they might not have done in absence of such an incentive,
2. The voucher provides an incentive for the public knowledge provider to work with SMEs when their tendency might either have been to work with larger firms or to have no industry engagement at all.

For the successful implementation of the OECD innovation vouchers were defined some general steps, which are:

1. The availability of vouchers is advertised widely in the press and through the internet,

2. SMEs are requested to submit an application, which should possibly be electronic to keep the application process and the overall management of the program as simple as possible,
3. Vouchers are awarded by the government agency delivering the program. Specific selection criteria should be set out beforehand and in the case that number of applications is higher a simple lottery has been used to determine the winners of voucher,
4. Once the SME has been allocated an innovation voucher, it formulates a completed research question and commissions through the voucher a public knowledge institution to solve the question,
5. There is generally a time limit 6-12 months by which a voucher must be used,
6. Feedback of the implementation of the voucher to providing agency.

These steps can be of course modified according to the local and concrete needs.

II.2 EVALUATION OF VOUCHER PROGRAM

The impact of innovation vouchers can be evaluated through ex-post surveys aimed at assessing the short- and long-term behaviour of the voucher's recipients [9]. In particular, two types of additionally are important to measure: *output additionally* and *behavioural additionally*. The first refers to whether or not the assignment for which the voucher was given would have been carried out also without public support. The second refers to whether or not the voucher's recipients have been further contracted public research organizations for follow-up assignments paid through other means (e.g. retained savings or other public funds).

A control-group methodology is best suited for assessing the effectiveness of the tool with regard to its ability to trigger both short- and long-run industry-university collaborations, to have an impact on concrete innovation outputs, and to improve the perception of firms toward university research.

The wide recourse to innovation vouchers demonstrates that, thanks to its simplicity, the measure can be easily adopted by countries and regions worldwide, provided that small firms have a minimum "absorptive capacity" towards university research and that universities and public research institutions are willing to cooperate with industry.

Innovation vouchers are traditionally used to solve minor technological problems or scope out larger technological issues. As such, they are useful instruments but need to be integrated into wider innovation strategy in which voucher recipients can refer to other policies for further stages of business

innovation. Examples include collaborative research programmes, incentives for internal R&D, clusters and networks for innovation, etc.

III. INNOVATION VOUCHERS IN SOUTH MORAVIAN REGION

III.1 CREATION AND IMPLEMENTATION OF REGIONAL INNOVATION STRATEGY – THE PATH TO THE INNOVATION VOUCHES

First steps towards establishing a functioning regional innovation system in the South Moravian region, were carried out in 2002 when one of the strategic employers leave the region and it leads to a deficit of 200 jobs. It was therefore necessary to select the appropriate instruments of regional policy to support employment in the region and maintain its competitiveness in the country.

South Moravian Region became the first region in the Czech Republic, which was processed regional innovation strategy. This document was prepared by the South Moravia Regional Development Agency between years 2001-2002. The above-mentioned document identifies the initial set of measures that have already been fully implemented or modified, or are in various stages of implementation.

The first important milestone resulting from the first Regional Innovation Strategy was the establishment of the South Moravian Innovation Centre (JIC). The centre was established in 2003 as an association of legal persons. The founders of the South Moravian Innovation Centre were South Moravian Region, City of Brno, Masaryk University Brno, Brno University of Technology (BUT), Veterinary and Pharmaceutical University Brno and Mendel University in Brno. JIC's mission is to promote the development of a comprehensive infrastructure for innovative enterprise in the South Moravia region.

Furthermore, in 2003 was opened the first technology incubator by BUT in South Moravian Region. This object represents a place where can an entrepreneur or a student come to start with an idea or intention and in the incubator he can get not only discounted rents and services, as well as advice on financing options, business plan preparation, development of companies, etc. BUT Technology Incubator is designed especially for start-ups, an innovative company founded by students, teachers, university graduates or established companies linked to research or to university in the region of South Moravia.

Because in 2003 unemployment in the South Moravian region was around 12%, it was necessary to get strategic investors and work on reducing unemployment. During 2003 it was managed to provide in the region about 1277 new jobs and during 2004 it was 3493 other jobs. Strategic and mainly foreign

investors are attracting to the region due to the fact that there is a high proportion of university educated people in the population in the region.

Another important step towards establishing a functioning regional innovation system was the establishment of the Central Scientific-Research Centre of Excellence CEITEC in 2004. This is a laboratory with first-class instrumentation and facilities that make up the optimal conditions for basic and applied research in life sciences and advanced materials and technologies. The establishment of this institute initiated again Masaryk University Brno, Brno University of Technology, Veterinary and Pharmaceutical Sciences Brno, Mendel University Brno, Research Institute of Veterinary Medicine and the Academy of Sciences of the Czech Republic.

CEITEC project was established primarily to assist the appropriate mechanisms of current basic and applied research localized in South Moravian region to achieve excellence. Its purpose is not only to engage the activities implemented in the region into the European Research Area, but open it to the world by creating favorable conditions for cooperation with the private sector.

For proper functioning of the regional innovation system is needed to update strategic documents. Therefore is the Regional Innovation Strategy of South Moravia Region updated on in 2005.

During the implementation of the updated Regional Innovation Strategy for years 2005-2009 South Moravian Region were made again several significant steps that contribute to the development of innovation system in the region. In 2005 was the South Moravian Center for International Mobility established in cooperation of the South Moravian Region, the city of Brno, Masaryk University, Brno University of Technology, Veterinary and Pharmaceutical Sciences, Mendel University, main goal of it is to attract and education of talent in the region. Furthermore in 2006 was approved the project of the International Clinical Research (ICRC), it is a joint project of the Czech Republic and the USA. In 2006, was during implementation of regional innovation strategies and due successful application of policies about attracting investors created 1832 new jobs. Although there is a noticeable downward trend with comparison to previous years, but they are jobs in companies with higher added value. In 2007 was in this region created additional 438 new jobs.

2008 is the year of establishment of a new technology incubator in Brno. The foundation was involved by South Moravian Region and the South Moravian Innovation Centre.

In 2009 was made another update of the Regional Innovation Strategy now for years 2009-2013. Its

implementation is nowadays in progress. A new instrument, which results from the updated Regional Innovation Strategy is the use of innovation vouchers. This tool is used to support technology transfer from universities to companies and is based on situation when companies are buying knowledge from universities. As mentioned above, attracting foreign investors to the South Moravian Region is based on high-quality graduates, so talented students from high schools and universities are encouraged through the scholarship system. Between years 2009-2010 was supported in this way e.g. 40 Ph.D. talents. In 2010 thanks to the Southern Moravian Centre for International Mobility came to Brno 25 top scientists and they are subsequently engaged in research activities.

III.2 DEFINITION OF INNOVATION VOUCHERS IN SOUTH MORAVIAN REGION

In South Moravian region was the innovation voucher program introduced in 2009 as a part of the third update of regional innovation strategy. According to the above mentioned fact we can say that this is a very effective way of introducing this instrument, because there is obvious connection to support the development of region's competitiveness. The South Moravian Innovation Centre is responsible for innovation voucher program in South Moravian Region, and also provides the actual implementation of regional innovation strategy and to update it.

Innovation vouchers [6] are defined by South Moravian Innovation Centre as financial instruments to support interaction and cooperation among entrepreneurs, institutions and scientific research capacities (knowledge providers) on smaller joint projects. This tool should motivate entrepreneurs to realize contact with the knowledge provider, which otherwise would not be realised. The aim is to help breaking down mutual barriers and prejudices between companies and research institutions and developing new larger cooperation in the future. On one hand, competitiveness of companies might be strengthened; on the other the commercialization of research result of the knowledge providers might become more effective.

Innovation voucher is a subsidy provided to a company in order to purchase a research service from a knowledge provider. This service is based on knowledge transfer, i.e. transfer of knowledge of scientific of technological nature that is new for the company and is not commonly available. Purchased knowledge must, at the same time, lead to strengthening of companies' competitiveness, mainly through innovating its product, process or service.

The motivation for companies participating in innovation voucher project is particularly opportunity to establish long term cooperation with scientific research department and last but not least, a good experience with

an earlier collaboration with scientific research department.

If there are more companies than the size of the volume of funds, are companies, which will be awarded a voucher selected by a lot, which is currently accepted by the companies very well, because it is very simple, fast and most fair and transparent way of decision.

Innovation voucher project is funded from the Brno city budget by financial transfers, which are provided for this purpose to South Moravian Innovation Centre, which has responsibility for this project.

There was a significant increase in number of providers of knowledge during the lasting of project - from the original four institutions to current twelve

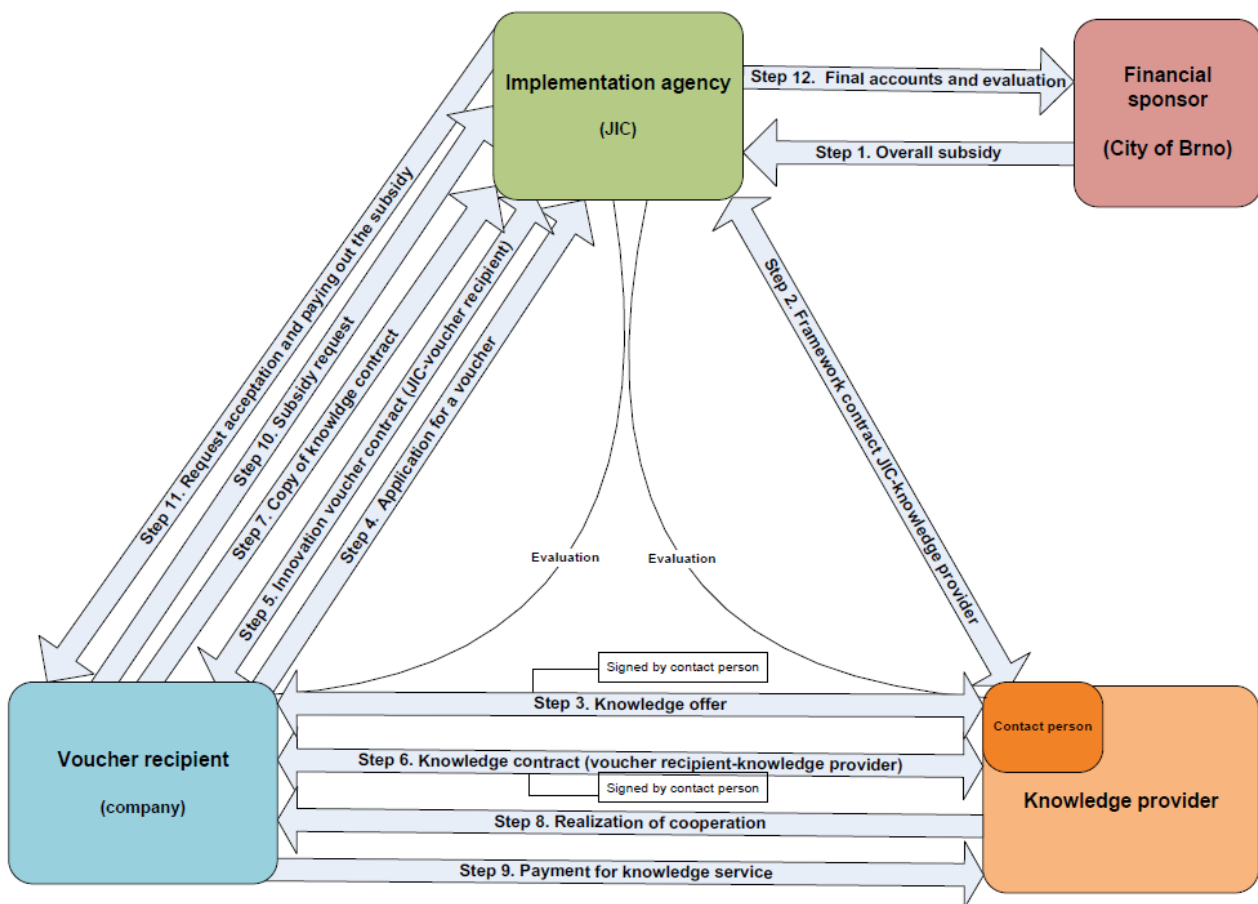
institutions, which entrepreneurs can establish the cooperation.

There are four universities, mostly technical focus, as well as five institutes of Academy of Sciences focused on physics, analytical chemistry, instrumentation and global change, and then three public research institutions in the fields of transport research, clinical research and veterinary research institute. All these institutions have their headquarters on branch in Brno or in its vicinity.

III.3 INNOVATION VOUCHER PROCESS IN PRACTICE

Process of innovation voucher project is almost equal to the OECD methodology (sec. II.1), although there are some extra steps, for better understanding see the Fig.1

Fig. 1 Innovation voucher process



Source: [6]

- The subsidy is granted by financial guarantor (Brno city) to implementation agency (South Moravian Innovation Centre – JIC),
- Framework agreement between JIC and the provider of knowledge,
- Agreement on mutual cooperation between the provider of knowledge and the entrepreneur,
- Submission of an application for an innovative voucher to JIC,
- Contract for providing innovation voucher between entrepreneur and JIC,

- Contract for work between the entrepreneur and knowledge provider,
- Sending a copy of the contract for work to JIC,
- Implementation of contract,
- Payment to knowledge provider,
- Submit a request for payment including documentation of the project to JIC,
- Payment for voucher to entrepreneur,
- Sending accounting to financial guarantor,
- Evaluation of program is lasting during the program by JIC, the evaluation is focused on entrepreneur (voucher recipient) and on knowledge provider.

Basic information about the challenges which was still held and current challenge for 2012 are listed in table 1.

Table 1 Calls to the innovation vouchers

Year	No. Apps.	No. Win.	No. Lose	Total amount of funds (thousand EUR)
2009	199	38	37	228
2010	136	57	27	288
2011	210	52	29	288
2012				160

Source: own processing

There were some modifications of voucher program during the implementation of the each call. The first change took place in 2010, when it was established compulsory participation of entrepreneurs in 25 %, i.e. the subsidy covers 75 % of the amount of contract, but its maximum is 6 000 EUR. In 2011, companies in the whole European Economic Area can participate in the project for the first time. This possibility was used by five companies from Germany, Austria and Slovakia. The last change was in 2012 due to the reduction of the total amount of funds. Maximum amount was reduced from 6 000 to 4 000 EUR per voucher and since 2012 can apply for a voucher entrepreneurs around the world.

The above table shows that interest in innovation vouchers in South Moravian region during the lasting of the project increases. This is obviously due to the fact that companies from around the world not just from the

Czech Republic can log into the new project. Another important change, which supports both the increasing number of applications for vouchers and the number of paid vouchers, is to establish at least 25 % participation of enterprises in the implementation of projects.

An important benefit for the South Moravian Region resulting from the implementation of innovation vouchers is moving branches of individual firms in the vicinity of three universities in South Moravia Region, because technological incubators usually take place near the universities. The implementation phase of the project, are usually located in above mention technological centres.

The above table also shows that there are a relatively large number of companies that were not granted a voucher. These companies have the opportunity to re-subscribe to these challenges. The survey [12] conducted by South Moravian Innovation Centre, however, shows that the number of repeated applications is approximately 24 % of all discarded. Another important conclusion of the above survey is that companies with prior experience with research institutions are more often reported in the challenges.

South Moravian Innovation Centre also monitors the behavior of unsuccessful applicants. In this context, there are an increasing number of failed companies who have successfully cooperated without granting the voucher. From the all unsuccessful applicants it is about 28 %. The total value of this realized cooperation is 455 354 EUR, i.e. the average value of individual investments of the company is 6 900 EUR.

The following Table, which is in appendix shows the overview of the collaboration undertaken among 2009 - 2011.

The data in this table are derived from case studies, which are processed by the South Moravian Innovation Centre, and data about value paid vouchers are provided from a representative of the South Moravian Region.

III.4 RESULTS FROM THE ANALYSIS

The table in appendix shows that most cooperation is implemented with a VUT Brno. This is mainly because most of the completed projects are a technical nature. In addition, this table also shows that since 2010 the mandatory participation of enterprises on the realized project in the extent of at least 25 % of its value. The maximum paid voucher is 6 000 EUR. The highest value of the implemented project is 10 326 EUR, which means that there is business involved more than the prescribed 25 %. From the case studies can be further observed that companies participate in the cooperation only a maximum amount that is 25 % of the cost. When the entrepreneur was not obliged to participate in the costs, any of the companies give finance beyond the voucher.

It is important to note that nearly half of these companies would not cooperate without payment voucher; some would have made implementation in lesser extent and others only probably. We can suggest that innovation vouchers greatly encourage cooperation and transfer of knowledge between scientific research institutions and enterprises.

For enterprises that without innovation voucher did not realize cooperation, the majority are small and micro, rarely medium-sized enterprises. You can then draw another conclusion, namely that the small firms without public support could not engage in research and development. For this reason it is also for these companies very difficult to maintain its competitiveness and therefore vouchers should be directed primarily to group of small and little businesses.

IV. CONCLUSIONS

Innovation vouchers are definitely modern incentive instruments, which can help increase interest particular local businesses to start research activities, like investment incentives. The aim of this work is to obtain a patent or innovation that will help gain market position, or just reduce production costs, which affect the final selling price and the company, can increase its competitiveness in the markets.

Due the economic situation is not common that companies in the CR have their R & D department. They rely more on innovation in the form of improvements or production proposals for implementation of small product innovation. The South Moravian region was in this situation, before the introduction of innovative R & D incentives.

After three years of vouchers duration we can see a slight improvement, respectively achieve some goals of vouchers. The controlled-group after the exhaustion of the innovation voucher continues in cooperation with scientific-research center. Measurable output is increase of added value of the enterprise. As the negative seems finding that voucher holders did not turn public financial support for major innovation, which would cause an increase in production capacity, creating new jobs and an enormous increase in revenue, which would affect the payment of taxes. The effectiveness of this innovative stimulus element is not quantified.

As the problem also appears lack of monitoring by the implementer of innovation support. This may be the goal of the project, which is not to ensure maximum efficiency, but the initiation of innovative capabilities of enterprises and research institutes in the region. Experience from the case study is transferable to other regions in the form of benchmarking. In implementing this form of support for innovative activities is recommended to proceed as follows:

- There should be an agency that will be responsible for the implementation of the voucher program and where will be trained workers who at every stage of implementation will assist both the entrepreneurs and the research institutions,
- The emphasis on minimizing administrative costs for companies during submitting applications - everything should preferably be electronically,
- During the various phases of the program to perform a monitoring of partial results,
- At the end of the project to check the innovation result based of submitted documentation,
- Ensure the establishment of subsequent long-term cooperation - select a suitable way of additional funding (to re-log into the program, but with higher participation of companies),
- Links to regional innovation strategy,
- The ex-post evaluation for example using questionnaires or interviews with representatives of the controlled companies and research institutions.

This case study can be further developed and used as a methodological basis for evaluation of public support.

ACKNOWLEDGEMENT:

This paper is result of project Student Grant Agency of University Pardubice in year 2012.

REFERENCES:

- [1] ASHEIM, B. T.; COENEN, L. Knowledge bases and regional innovation systems: Comparing Nordic clusters. *Research policy*. 2005, 34, s. 1173-1190.
- [2] ASHEIM, B. T.; ISAKSEN, A. Regional Innovation Systems: The Integration of Local "Sticky" and Global "Ubiquitous" Knowledge. *Journal of Technology Transfer*. 2002, 27, s. 77-86.
- [3] COOKE, P. Regional Innovation Systems: General Findings and Some New Evidence from Biotechnology Clusters. *Journal of Technology Transfer*. 2002, 27, pp. 133-145.
- [4] COOKE, P. Regional innovation Systems as Public Goods. Vienna: United Nations Industrial Development Organization, 2006. 33 s.
- [5] DOLOREUX, D.; PARTO, S. Regional innovation systems: Current discourse and unresolved issues. *Technology in Society*. 2005, 27, pp. 133-153
- [6] JIC SOUTH MORAVIAN INNOVATION CENTRE. Innovation vouchers: Project manual - call 2012 [online]. 1. vol. 2011 [2012-03-05]. Available from: <<http://www.inovacnivouchery.cz/promedia>>.
- [7] EU. COMMISSION REGULATION (EC) no. 800/2008. (in Czech) In: Official Journal of the European Union. Brussels, 2008. Available from: http://www.vyzkum.cz/storage/att/051DAEE1AEC922DB2EA111E7F737A677/Na%C5%99%C3%ADzen%C3%AD%20ES%20800_2008%20blok%C3%A9%20v%C3%BDjimky.pdf
- [8] National Innovation System. In National Innovation System [online]. Paris: OECD, 1997 [cit. 2011-03-07]. Available from: <<http://www.oecd.org/dataoecd/35/56/2101733.pdf>>.
- [9] OECD. Innovation Vouchers. [online]. 2010 [cit. 2012-03-28]. Available from: <<http://www.oecd.org/dataoecd/53/42/48135973.pdf>>.

- [10] STEJSKAL, J. *Competitiveness advantage analysis as one method for cluster identification in regions*. In Proceedings of 3rd CERS. Kosice : TUKE, 2009.
- [11] TÖDTLING, F.; TRIPPL, M. One size fits all? Towards a differentiated regional innovation policy approach. *Research policy*. 2005, 34, pp. 1203-1219.
- [12] UHLIR, D; TESAROVA, M.; WEISS, J. *Innovation vouchers: Analysis of calls 2009, 2010 and 2011* [online]. Jihomoravsky kraj: JIC, 2011 [2011-08-15]. Available from: <http://data.jic.quonia.cz/vouchery/Inovacni_vouchery_Analyza_2009_2011-final.pdf>.
- [13] HAMPLOVÁ, E.; KACETL, J.; KOVÁRNÍK, J. *The Development of Czech Foreign Direct Investment Abroad*. Proceedings of International Conference AEBD - Applied economics, business and development, 2011.
- [14] STEJSKAL, J. *Comparison of Often Applied Methods for Industrial Cluster Identification*. Proceedings from International Conference on Development, Energy, Environment, Economics, 2010, 282-286 pp.

Jan Stejskal is Ph.D. in public and regional economics. Studied in University of Pardubice, Faculty of Economics and Administration in Pardubice, Czech Republic. His domain is connection of the public economy in the regional scope and view. In the papers he describes and analyzes specially the regional policy, tool of the local and regional economical development, public policies after care of the investors, systems of support in national economy in EU countries.

Dr. Stejskal is senior lecturer in University of Pardubice, Faculty of Economics and Administration. He teaches subjects: Economy of Public Sector, Management of Public Sector, Public Economics for bachelor and master studies. He is author/co-author of many papers and also monographs, for example *Regional policy and its tools* (Prague, Czech Republic: Portal, 2010 – in Czech), *Economic Development of Regions in the Context of Sustainability* (Saarbrücken, Germany: Lambert Academic Publishing, 2010), *The Industrial Clusters and Their Birth in Regions* (Prague, Czech Republic: Linde, 2011 – in Czech). Now Dr. Stejskal is investigator of the grant financed from Ministry of Culture of Czech Republic under the name “Methodology for measuring the value of library services”.

Katerina Matatkova, ABD is a Ph.D. student of regional and public economics at the Faculty of Economics and Administration, University of Pardubice, Czech Republic. Her dissertation addresses the issue of regional innovation systems and their impact on regional development. During the study carries out educational activities and teaches public economics the subject at the Bachelor level. She is the author of several papers such as: *Components of Regional Innovation System* (ACC Journal, 3/2011, Liberec), *The Analysis of The Regional Innovation Systems - Czech Case* (proceedings from ERSA Congress, Barcelona 2011). Currently she is co-investigator of the project financed from Ministry of Culture of Czech Republic which is called “Methodology for measuring the value of library services”.

Appendix: Implemented cooperation through innovation voucher program in years 2009-2011

Company	University knowledge provider	Value of project (EUR)	Value of voucher (EUR)	Year of implementation	Implementation without voucher	Size of company ***
Tenza, JSC.	VUT Brno	4 160	3 120	2010-11	YES	Medium
A.W., Ltd.	Mend.U. Brno	5 800	4 350	2010-11	YES	Medium
Kaláb	VUT Brno	8 000	6 000	2010-11	NO	Medium
Gina Software, Ltd.	VUT Brno	7 200	n/a	2011	YES*	Micro
Mesing, Ltd.	ASCR v. v. i.**	7 560	5 670	2010-11	YES	Medium
OMICRON, Ltd.	VUT Brno	8 000	6 000	2010-11	NO	Medium
ELLA – CS, Ltd.	VFU Brno	10 326	6 000	2010-11	YES	Large
BENDER, Ltd.	VUT Brno	8 000	6 000	2011	NO	Small
ROMEX, Ltd.	VUT Brno	5 960	4 470	2010-11	NO	Small
MARAT, Ltd.	VUT Brno	7 960	5 970	2010	NO	Small
HOXTER, JSC.	VUT Brno	8 000	6 000	2010-11	YES	Micro
Filmochod, Ltd.	VUT Brno	5 042	n/a	2010	YES*	Micro
I. K. V., Ltd.	VUT Brno	6 000	4 500	2010-11	NO	Micro
ACEMCEE, Ltd.	MU Brno	8 000	6 000	2010-11	NO	Micro
REKUPER, Ltd.	VUT Brno	6 000	4 500	2010	YES*	Small
STROM PRAHA JSC.	Mend.U. Brno	10 000	6 000	2010	NO	Medium
Natural Energy E., Ltd.	VUT Brno	8 000	6 000	2010	NO	Small
It2b, Ltd.	Mend.U. Brno	6 000	5 042	2010	YES*	Small
Baktoma, Ltd.	Mend.U. Brno	6 000	4 500	2010-11	YES	Small
HYDROSYSTEM JSC.	VUT Brno	6 000	6000	2009-10	YES	Small
R. D. S. – CZ, Ltd.	VUT Brno	5 840	5 840	2009-10	YES*	Micro
Taurid Ostrava, Ltd.	VUT Brno	6 000	6 000	2010	NO	Small
Fortemix, Ltd.	VUT Brno	6 000	6 000	2009-10	YES	Micro
DAPE, Ltd.	VUT Brno	6 000	6 000	2010	YES*	Micro
BERNARD, JSC.	VUT Brno	6 000	6 000	2009-10	NO	Small
ENJOY Ltd.	MU Brno	5 678	5 678	2010	YES	Micro
ENERG-SERVIS JSC.	VUT Brno	4 269	4 269	2009-10	NO	Medium
INVEA-TECH	VUT Brno	6 000	6 000	n/a	n/a	Spin off

Source: own processing; * probably; ** public research institution; *** according to typology in [7]