

REGIONAL INNOVATION POLICY
IN SOUTH MORAVIA

Jiří Loudín, Adolf Filáček, Michal Kostka,
Kateřina Tydláčková*

Abstract

The study was compiled as a part of EU project ProAct (“Practical Regional Research and Innovation Policy in Action – the Efficient Tools for Regional Catching-up in New Member States” (Regions of Knowledge – FP6). The regional practices of innovation policy in eight EU member states are presented in case studies, elaborated for one region in each country with South Moravia representing the Czech Republic. South Moravian innovation policy is analyzed in three fundamental dimensions: strategy formation, policy deployment, and practices at the programme level. These are the constituent elements of the process that was defined by the ProAct consortium as so called “ProAct policy learning cycle”. The benchmark methodology (The ProAct Benchmarking Framework) was applied in the case studies to explore good practices in regional innovation and research policy. In the study, the role of South Moravian Innovation Centre (JIC–Jihomoravské inovační centrum) is highlighted.

Keywords: *innovation; policy; research; evaluation*

* All authors can be reached via: STSS – Filosofický ústav AV ČR, Jilská 1, Praha 1, 110 00, Czech Republic (stsscz@cesnet.cz).

Analyzing the evolution and context of Regional Innovation Policy in the Czech Republic it should be taken into consideration that this concept and practice is very young in the Czech Republic. During 1990's nothing like that existed–innovation was considered not being a target of governmental policy and no regions existed then.

As for the regional aspect, the territorial public administration reform was completed in 2001 after quite a long political process of clarification and decision-making what the regions should be like. The result was the establishing of 14 regions of so-called self-governing higher territorial administrative units–NUTS 3 regions. Besides that, also 8 NUTS 2 regions were established.

As for the innovation aspect, the concept of innovation policy began to appear in the Czech policy in the late 1990's in the form of specific pro-innovation programmes at the governmental level (operated by the respective ministries).

In fact, Regional Innovation Policy came to the Czech Republic via participation of the Czech institutions in EU programmes, especially in the programmes developing and implementing the concept of RIS. This was e.g. the case of Praha and Brno; the respective regions established their own RIS while participating in these EU programmes in the period 2002–2004.

At the national level, the first governmental document focused on supporting innovations was National Innovation Strategy approved in 2004, having set the key lines of pro-innovative governmental activities. In 2005 National Innovation Policy was adopted by the government. In this document, the main goals, tools and measures of national innovation policy for the period 2005–2010 have been formulated.

Hence, the constitution of innovation policy in the Czech Republic may be characterized as bottom-up scheme: National Innovation Policy was preceded by some Regional Innovation Policies.

1. Strategy formation

The context of rise of regional innovation policy in South Moravia may be described as a competent and conceptual response of the key regional authorities and actors to the relevant changes of economic environment. The dramatic economic changes were invoked by a comprehensive societal transformation and accession to European Union and both processes have brought so far unknown pressures and opportunities.

1.1 Finding a vision

As was mentioned above, the regions were established in the Czech Republic in 2001. In this year, the first regional programme for South Moravia was adopted – The Programme of Regional Development of South Moravia (DHV CR, South Moravian Region, Brno, 2001).

The first strategic document focused on innovations—the first version of the Regional Innovation Strategy (Regional Innovation Strategy of South Moravia, DHV CR, Brno, 2002) was formulated in 2002 by Regional Development Agency of South Moravia as a part of InterPRISe (EU programme ECOS-OUVERTURE). Project InterPRISe was joint project of the regions Saxony (D), Limburg (NL), Hajdu-Bihar (H) and South Moravian Region (CZ). Here obviously the involvement into the European projects conveyed an inspiration and support how to design and practice regional innovation policy. The original innovation strategy of South Moravia was primarily a bottom-up activity, developed in the time when nothing like that at national level existed. Or, more precisely, it was a joint product of regional and European actors.

RIS I attempted at laying the foundations of regional innovation policy. It sought to improve the administrative conditions for innovators; one of the main tasks was to establish JIC (South Moravian Innovation Centre, www.jic.cz). It acclaimed setting up the technological incubators and sectoral clusters.

In the process of implementation of RIS I, the changing environment—the admission of the Czech Republic to the European Union (esp. possibility to participate in Structural Funds interventions), the increasing efforts of the government to support innovative SMEs as well as changing nature of South Moravian economy (expanding higher education sector, growth of the bio-tech, increasing pressure on commercialization of R&D results)—has revealed the need to up-date the regional innovation strategy. Therefore, in 2005, Regional Innovation Strategy II of South Moravia was developed—elaborated by JIC (South Moravian Innovation Centre, Regional Innovation Strategy of South Moravia, version II, South Moravian Innovation Centre, Brno 2005). In 2008, the new version of RIS is supposed to be formulated.

Considering the *real economic space*, it is obvious that there exists an unbalance between economic performance of Brno which is slowly becoming high-tech hotspot and other territories of the region, namely large rural areas. This is a specific character of the region South Moravia. Discrepancy between Brno and other areas may explain why the region as such occupies only mediocre position in economic statistics. This applies for the case when we follow the statistics of NUTS 2 regions: NUTS 2 region Jihovýchod consists of NUTS 3 regions South Moravia and Vysočina while the latter region may be characterized as a rural area with no bigger town and little industry. Then the economic power of Brno is totally dissolved and hidden in the regional statistics.

Linkages to the external economic spaces are taken into consideration only partially in the strategy—in the context of changes in the economic structure of global economy and changes resulting from the membership of the country in EU. Co-operation with neighboring regions (including cross-border regions) was taken to be implicit and then, in reality, it has really developed. At present, South Moravian universities co-operate with their counterparts in Austria and Slovakia routinely and cross boarder supplier-customer chains are running among the companies.

The formulation of RIS II was based on a whole series of *analyses*. These were conducted in the form of desk research, field research, SWOT analyses, etc. The main focus was an innovative environment of the region—an identification of promising sectors, needs and demands of SME, intentions of companies on the field of technology, innovation activities at universities. The special attention was paid to the biotechnology sector where the detailed analysis of demands for services and premises has been carried out.

1.2 Stakeholder involvement and the consequences of involvement

The rise and evolution of regional innovation strategy in South Moravia is tied with three groups of the *major stakeholders*: political and public authorities of both the Region and the City of Brno, universities and research organizations, and business. These partners were at the birth of RIS I as well as JIC. Since its establishing, JIC has been the vital institutional platform of engagement and co-operation of the stakeholders.

The partners of JIC (and, the main stakeholders of strategy) are Region South Moravia, City Brno, Masaryk University, Technical University Brno, Mendel University of Agriculture and Forestry Brno, and University of Veterinary and Pharmaceutical Sciences Brno. Besides these public institutions, a number of private companies participate in design and upgrading of the strategy.

General Meeting of JIC as a steering body of RIS implementing institution is held regularly, twice a year or more if desired. This is a basis where stakeholders (South Moravian Region, City of Brno and 4 universities) discuss, evaluate, and monitor strategy implementation and collects information and experience for regular upgrading of RIS.

Working Group of RIS is an expert/advisory body. Its members are the representatives of RIS main stakeholders and individual independent experts (Working Group is structured into the sectoral expert sub-groups).

The task of this group is to follow the practice of RIS in a complex way: to evaluate and monitor its implementation and generate and communicate new ideas for future strategy.

JIC has also founded *Innovation Club* as a place where businessmen, researchers, public officials and other stakeholders meet in order to exchange ideas and experience. Innovation club holds its session each month. Each session is specifically focused (presentations, lectures, discussions), however, an integral part of it is an informal conversation. Here the new contacts are made but also a commonly shared vision of innovation strategy is continually taken shape and facilitated.

All these platforms mentioned above represent a breeding-ground of new ideas and expert opinions where alternatives and *different strategic options are discussed and vision disseminated*.

1.3 Coordination of and facilitating strategy development

JIC is responsible for coordination and facilitating strategy development. It also includes processing the incentives from the discussions and compiling draft of the strategic document. JIC also ensures a necessary accordance between the various regional economic policy documents. The strategy is not linked to any specified indicators. However, JIC has developed their own indicators for their activities.

1.4 The emphasis placed on innovation at the regional level

Innovation and research is the *core of the regional economic strategy*. The region and especially its capital Brno were traditionally highly profiled in engineering and manufacturing industry. This became a problem in the period of transformation when these branches have suffered considerably and the process of de-industrialization has been evolving. Several big enterprises in the region have been closed. It is a merit of the

regional authorities of both South Moravian Region and City Brno that they have conceived a crisis as a chance; that they *conceived the importance of regional innovation*. They captured an opportunity—considering the powerful knowledge resources of the region—to convert disadvantage into advantage while emphasizing innovations and R&D as a core of future regional economics. They also acknowledged the need to constitute a new consistent vision of regional economic development based on innovations as its key element.

South Moravia and Brno have favourable conditions for such an economic policy. Brno has, in the Czech context, a strong knowledge potential (universities, research institutes). Brno is the second most important university centre in the Czech Republic. About 64.000 university students at 9 universities enrolled in South Moravian Region in 2004/2005. The comparison among the Czech cities and regions shows that the highest proportion of university students per 1 000 habitants occurs in Brno (127 students). Brno has for the second time come out on top in the Visegrad category of the European Cities and Regions of the Future 2006/2007 competition organized by the prestigious magazine fDi. As in 2004/2005, Brno beat out Budapest, Warsaw and Bratislava for the honour. (See Attachment) For South Moravia, an ambitious goal was set in RIS II – in time horizon 2013 to become the most innovative Czech region while ranking among 50 most innovative European regions.

The region has *no need* to set up a *specific regional R&D policy*. Large R&D capacities are concentrated in the region (namely in Brno) with an advanced R&D infrastructure. Universities and research organizations participate in many relevant national and international projects. The thematic structure of research in the region is very rich and widely diversified.

The strategy is strongly *specialized on support of SME innovative entrepreneurship* (a main strategic task is to improve entrepreneurial environment) with *incubation and networking* (intermediating/facilitat-

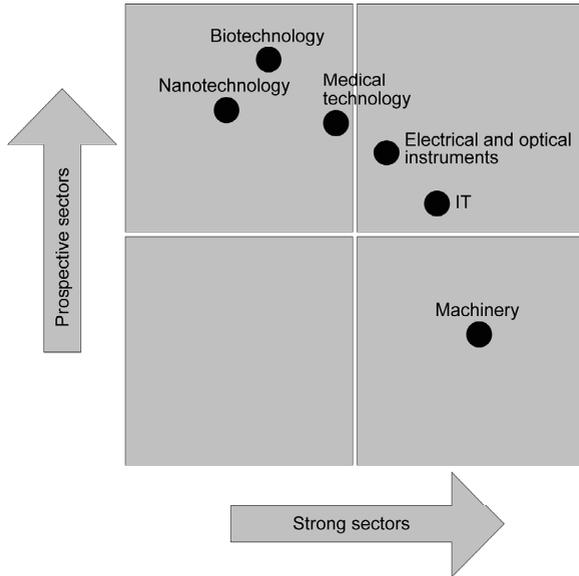
ing/clustering) as most preferred tools. This appears to be a right option when we take into consideration the relatively advanced R&D infrastructure and a bundle of high-tech FDI in the region. To boost innovative activities of SMEs means to fill the existing gap at this point. At a more specific level, a *robust innovation infrastructure* is to be built—both in its “soft” (people, competences, financial institutes, networking tools) and “hard” (incubators, technological parks, etc.) version.

Then the main task of policy is to convert R&D into innovations and boost an innovative entrepreneurship, also among academicians. A part of it is an effort to move researchers to solving practical problems and produce innovations. The specific courses on innovative entrepreneurship for researchers, professors, and students are organized and various forms of activities (lectures, exhibitions, mass media, etc.) are carried out to change a traditional mindset of researchers, away from focusing on pure academic research.

As to the sectoral specialization, this is defined in the strategy as follows from the graph (p. 13).

There is an effort to *emphasize the specific regional context*: to utilize the available knowledge and research base while converting knowledge potential into innovative entrepreneurship. In the sectoral context, specialization may be characterized as a mixture of continuity and novelty. It is linked to tradition of engineering, however, upgraded to advanced engineering in the form of ecology and energy engineering, production of new materials, medical and laboratory instruments, etc. However, the most dynamic—and at present already dominant—is the field of life sciences and biotechnology, e.g. bioinformatics. This sector has been identified as a new opportunity for the region. After all, it is not a quite new event in this region. In 19th century in Brno was living and working J. G. Mendel, a pioneer of modern genetics. But today’s expectations are predominantly based on good research base of biotechnology in the region.

Graph – regional specialization of South Moravia in innovative economics:



Source: <http://documents.jic.cz/ris-jmk-ii.pdf>

However, JIC and other regional actors are now engaged in final phase of preparing two big innovation-oriented R&D projects which are also promoted by the Czech government. *Central European Institute of Technology (CEITEC)*–the project with budget 50 million € to be co-funded by SF EU–should represent a modern centre of excellent research integrating life sciences, ICT and material science.

International Clinical Research Center (ICRC) is a strategic project based on co-operation of the Czech institutions with international academic institutions – especially US Mayo clinic. It should integrate

the functions of research, medical practice, education, and technological park.

The problem of each strategy—*whether to support the winners or less competitive subjects*—is to be found in South Moravian strategy in the following way: in the enterprising sector the support is directed to neither successful nor uncompetitive firms. It is directed toward starting innovative business and support is provided namely via incubation. (In a sense, the starting-up companies may be designated as “less competitive” for many reasons.) If we take into account a structural aspect of economic geography and demography of the region, then we get a picture of centre (Brno the champion) and (far less advanced) periphery.

Even if we take into consideration the sophisticated problem how to compare the economic performance of industrialized zones and rural areas (do they have the same social, economic, and cultural function?), the problem of territorial socio-economic disparity remains.

In this territorial sense, the strategy is focused on actualizing and mobilizing a big innovative potential of R&D and knowledge base located in Brno. It would be a mistake to neglect such a chance. In this context, the current regional strategy may be indicated as winners supporting. At present, to support and make sustainable the innovative infrastructure of high quality in places with high R&D density brings relevant benefits to the whole region.

Later, of course, it should be elaborated a specific strategy how to make non-industrial areas more competitive and their economics more knowledge-intensive. In the rural areas exists a broad space for non-technological (organizational, social, cultural) innovation. It is possible to make agro- and eco- services knowledge-intensive. Tourism may be based on ICT logistics, more tightly linked with cultural activities and eco-values. This is a challenge for future regional innovation policy in South Moravia.

1.5 Balancing EU/national/regional/local policy agenda

No frictions are felt in the region among *EU, national, and regional policy*. The region may participate in EU interventions and in the recent years also government has activated its efforts in innovation area.

1.6 Dealing with risks in the strategy

The grounding fathers of innovation strategy in South Moravia were well aware of the fact that the social and economic environment in the Czech Republic is still not stabilized and has tendency to change continually. Therefore they have set 3 years period as a time for regular renewal of the strategy. This is a way how to cope with *risks in the strategy* and how assure its flexibility. In each upgrading cycle the SWOT analysis is updated also.

Attachment

Brno is again the Visegrad city of the future 2006/2007

Brno, the Czech Republic's second largest city and economic centre of the Moravian region, has for the second time come out on top in the Visegrad category of the European Cities and Regions of the Future 2006/2007 competition organised by the prestigious magazine fDi. As in 2004/2005, Brno beat out Budapest, Warsaw and Bratislava for the honour.

Locations were ranked according to 28 individual criteria in seven main categories (economic potential, cost effectiveness, human resources, IT and telecommunications, transport, quality of life and investment promotion). Brno owes its remarkable success to a wide range of factors. In addition to the economic results – especially the city's rapid economic growth and high per capita GDP – a significant role was played by Brno's economic development strategy,

investment promotion, clear incentives and public investment projects. The city also ranked at the top for IT and telecommunications. The dynamic development of the technical university places Brno among the cities with the highest number of university students per capita. An abundance of qualified workers, together with well-prepared industrial real estate and high-quality infrastructure, provides an excellent foundation for investment, especially in the area of research and development.



The favourable investment conditions found in Brno and its surroundings are positively demonstrated by the range of quality projects implemented here by such world-renowned firms as Honeywell, IBM, LogicaCMG, Lufthansa, Tyco International, Daikin Industries, GigaByte Technology, Progeon, IMI International, Danaher Motion, ModusLink Corporation and others. In 2006, the computer firm Levi International located its activities in Brno, similarly as in the case of Inventec Scotland Servers.

The South Moravia region ranked highly in the FDI competition as well. It took a clear lead for its economic strategy, impressing the judges with its clearly explained incentives, ambitious develop-

ment projects and overall attractiveness for foreign investment. The growing interest of investors is illustrated by the number of projects implemented in region last year. With 32 new investment projects worth over EUR 261 million, South Moravia was the Czech Republic's most attractive region for investment in 2005. However, this rising interest of investors applies to Moravia as a whole.

Source: fDiMagazine (www.fdimagazine.com), CzechInvest (www.czechinvest.com)

2. Policy deployment and implementation

2.1 Innovation and research policy tools

The applied *tools of regional innovation policy are in accordance with the strategic objectives*. A portfolio of the tools is open and flexible – each year something new is arising: a new incubator, web portal, or courses.

In South Moravia, JIC is a central institution liable for an implementation of regional innovation strategy. The *portfolio of the tools* applied in the implementation process of innovation strategy is, in a substance, identical with that employed by JIC.

JIC provides services in financing, consultancy, networking (incl. clustering and technology transfer), and training. *Technological incubator VUT* may be indicated as a main organizational tool. The companies—the members of an incubator—may use the premises of the incubator at favourable conditions and are provided with financial services and consultancy. While in 2003 (a starting year) 7 companies were situated in the incubator, 27 companies enjoy the favours of being in the incubator in 2007 (March 2007).

In 2008, Technological incubator II and Biotechnological incubator INBIT are supposed to be opened.

Transfer of technology is also in the centre of attention in regional innovation policy. Offices of technology transfer operate at Masaryk University and Technical University in Brno, the special departments dealing with this issue function also at Veterinary and Pharmaceutical University Brno and Mendel University of Agriculture and Forestry. All these organizations co-operate with JIC.

In this field, JIC assists the university research units predominantly at the following areas: stimulation of entrepreneurship, monitoring of the research projects running at universities, methodology for evaluation of ideas, protection of property rights, finding the partners for commercialization, drafting the standard procedure for commercialization, international co-operation, and the training for know-how transfer.

JIC is active in the field of *networking and clustering*. Several regional clusters have recently emerged facilitated and assisted by JIC:

- WTA (Water Treatment Alliance) 15 companies and Faculty of Civil Engineering at Technical University in Brno involved
- CAIC (Czech Aircraft Industry Cluster) 18 companies and Faculty of Mechanical Engineering at Technical University in Brno involved
- CETI Cluster (life-science cluster) 16 companies and Faculty of Science at Masaryk University involved

JIC also organizes the innovation training—the courses in management skills, IPR, financing, technology transfer, etc.

The programmes and projects may be *partially adapted* to the changes; during the period of their implementation, only some programmes/projects may be changed.

2.2 The governance of implementation

What refers the governance of implementation, the key actor responsible for the implementation of strategy as a whole is JIC. However, for imple-

mentation of the specific measures/programmes of strategy are accountable the specific subjects. A distribution of the responsibilities linked to the specific measures/programmes appears as follows:

1. Finance for small and medium-sized enterprises (SME) – JIC
2. Premises for SMEs – JIC, SMR
3. Protection of Intellectual Property – JIC
4. Linking Subjects – JIC, CTT, RRAJM
5. Transfer of know-how between universities and the commercial sector (technology transfer) – JIC, CTT
6. Advisory services – JIC
7. Implementation of RIS – JIC, RRAJM, CTT, SMR, City Brno
8. Monitoring RIS – SMR, RRAJM
9. Communication – JIC, RRAJM, SMR

JIC – South Moravian Innovation Centre

SMR – South Moravian Region

CTT – Centres of Technology Transfer at universities

RRAJM – Regional Development Agency of South Moravia

The role of JIC is then above all being a *networking* centre and *facilitator*. JIC is a key player in both policy making (strategy formation) and policy implementation and it appears that it is rather an advantage. Something as “regional innovation community” has emerged around JIC and that is a platform where all sorts of problems are discussed and clarified and contacts re systematically kept. The issues of policy formation and its implementation overlap here and feedbacks really function. The scope of *independence in governance* may be characterized as medium.

2.3 Networking practices of the programme implementing organization

JIC *mediates the contacts* to investors, business angels, venture capital funds, innovation companies, universities, research organizations, intermediar-

ies. The suitable form of making the new contacts is Innovation Club. As an efficient tools of communicating and networking have proved to be web portals <http://www.gate2biotech.cz> and www.inovace.cz.

Of course, there are platforms where rather the representatives of politics and public bodies (General Meeting as a steering body RIS) meet and other ones where more businessmen are coming (Innovation Club). JIC is then a common intermediary and networking mid-point. There is *some collaboration with the partner regions*, however, not predominantly the cooperation in the joint projects.

2.4 The way money goes

To find a stable *financing mechanism* is a crucial task for any regional innovation policy. It can be said that in South Moravia the main actors have during a short foundation period been learning to find and tune such a system. For the present, financing is *fluid and stable*.

Financing is based on mixture of regional and supra-regional money. By supra-regional money we mean national and European resources (but it should be taken into consideration that acquiring such money is a result of own effort) the prerequisite is to be successful in competition for national and European projects. Instructive may be following data tracing evolution of JIC funding:

JIC funding in million CZK

	2003	2004	2005	2006
Budget incl.:	3,5	8,2	15,4	36,5
- Subsidies by Region South Moravia	2,5	5,0	6,9	12,0
- Subsidies by City Brno	1,0	1,0	1,5	1,5
- Own effort	-	2,2	7,0	23,0

<http://www.jic.cz/o-nas/oficialni-cisla.html>

European and national resources (that are often the joint projects via co-funding) are of crucial relevance here as volume of available SF interventions in the next years will increase.

JIC has developed its own programs for supporting especially starting innovative business. *Fit4Finance* is a form of consultancy how to find money for funding innovative activity—it may convey the ways to the advantageous loans, bank guarantees, Venture Funds, and Business Angels. Besides that, JIC has designed and launched its own financial tools for innovations. These are the projects *Microloan* (see chapter 3) and *Patent and License Fund*. The latter provides a financial assistance (the advantageous loans) for covering the costs of patent application and overall patent processing. Both concepts are original and unique in the Czech conditions.

2.5 Ex-ante, interim and ex-post evaluations

An integral part of both innovation policy and its implementation in the region is *evaluation*. In South Moravia, the process of evaluation has evolved to the scope and depth which is appropriate to the economic possibilities and stage of development of innovation policy itself.

The evaluation of strategy implementation is carried out *regularly* once a year. It is done in expert groups which serve as advisory bodies of RIS. It is the only link the experts have to RIS—they may be designated as *independent experts*. The results of evaluation are also discussed at General Meetings of JIC. Regional Assembly then discusses and approves the regular upgrading of RIS.

As for the evaluation tools, namely *peer-review of experts and cost-benefit analyses* have been applied. In the period when the next version of RIS is being prepared also innovation surveys as well as marketing surveys are conducted.

It should be noted that all kinds of surveys and analyses cost something: the more in-depth analysis the more it costs. Considering the fact

that all innovation-related activities are covered from one budget the task is to find such an evaluation design which is in accordance with the available resources.

2.6 Learning and feedbacks

Learning and feedbacks occur on practical everyday basis – it is a prerequisite for survival in a rapidly changing environment – and on the other side these processes are incorporated into a design of the next strategy. However, some implementing *organizations learn* fast and some other slowly.

The results of evaluation are reflected in two principal ways: in a correction of possibly indicated deviations and as an incentive for design of the next version of innovation strategy.

There are some examples of training programmes for the employees of the agency, the same applies for mobility.

3. Practices at the programme level

In South Moravia, the regional innovation projects—largely operated by JIC—are of two basic kinds (typology described more precisely in Benchmarking Frame): those designed on contract basis with well defined tasks, indicators, and deadlines (incubation, financial services) and those more directed on strengthening and cultivating innovation culture with rather indirect impacts—these are based on networking, facilitating, communicating (training, consultancy, clustering, facilitating contacts, organizing meetings and workshops, maintaining web portals, organizing project consortia for project applications, etc.).

3.1 Initiation and decision on programme

A wide range of both physical and legal persons may initiate the project—the consultants of JIC, its administration, representatives of stakeholders, individual researchers and businessmen, almost anybody. The idea is analyzed by JIC and then eventually approved by JIC administration or JIC General Meeting. Institutionally, JIC usually initiates the programmes. Of course, a great part of discussing and assessing the project proposal is carried out on the basis of informal communicating and networking.

Each programme is *not necessarily traceable* back to the agreed regional strategy but it contributes to achievement of the strategic goals. *Sometimes* it happens that the programme is *launched without a substantive discussion* in which participate all stakeholder groups.

3.2 Transparency in the proposal calls and submissions

JIC does *not organize any calls*—applications are being received permanently. Still, the process of admission into an incubator may be considered competitive and transparent. The firms-applicants have to pass a procedure which follows the publicly known standards and is examinable.

3.3 Responsibilities and management

In South Moravia, JIC is largely responsible for management of the projects—supervised usually by JIC General Meeting (comprising the main stakeholders). Practice of project management is project-specific but prevailing practice is continuous communication of JIC consultant with people involved in project implementation. It can be said that *administrative costs are kept at reasonable level*. However, its amount is not possible to determine precisely.

Time management is a relevant aspect of programme management, the programmes are *implemented as scheduled*. Some employees are *more*

competent than others, there is a space for improvement in the field of human resources management.

According to JIC experience, to keep a *project documentation* at desired level is by far not a trivial task. It requires highly qualified people and it is often a heavy burden in terms of time- and human energy costs. Again, it depends on the nature of project—whether it is a rather commercial project built on contract-basis or more loosely designed networking project. In the former case, electronic documentation is not possible according to the Czech legal norms. In this area, there are very good examples but also *some cases* that do *not* fall into the category of *best practices*.

3.4 Monitoring

Monitoring is conceived predominantly as a continuous interactive process—project managers and JIC consultants are able to gather relevant information and follow the processes. There is also space available for possible corrections. However, *not for all the important processes* was monitoring done.

3.5 Audit

Audit of the projects is performed as a part of *regular auditing* of JIC (including the possible consequences).

3.6 Sharing project/programme experience internally and externally

Project experience is discussed regularly and continually at work meeting in JIC and in wider circle of stakeholders and interested persons at both formal and informal encounters. All the results did not reach the interested public. The full-fledged interactions between project officers and contractors were not realized at all the projects.

To make the programme practice more instructive, here is the example of the project Microloan.

A purpose of the project Microloan is public support of the small and middle-sized enterprises—starting innovative technological firms in the region South Moravia. The form of support is co-financing their innovative projects, i.e. the activities based on the product and process innovations, promoting the admission to the new markets, introducing changes in production, distribution, management and quality of human resources. Institute of Microloan should partly correct the market failure in financing technological firms at an early stage of their development (phase seed/start up). It should be applied in those cases when the firms are for whatever reasons not able (high risk rate of the project, short history of the firm, absence of security funds) to acquire financial funds on the market.

The prerequisite for the firms' participation in the project Microloan is their membership in Technological incubator VUT. Technological incubator is a non-residential property owned by VUT (Technical University in Brno) and operated by JIC. Incubator provides services for the entrepreneurial entities approved for membership in incubator, namely the innovative firms founded by the university's students, professors, graduates (spin-off) or functioning companies with links to R&D or to university in the South Moravia region. Membership in the incubator may be either real, i.e. including timely limited sublease of non-residential premises or virtual, i.e. without any sublease.

Project Microloan was *initiated* by the JIC administration in Autumn 2003, inspired by the similar activities of the analogous institutions abroad. The project *may be traced back to the key strategic goal* – to improve environment for innovative entrepreneurship. *Not all key stakeholders were contacted* before drafting the project.

A key motive for launching Microloan was the inaccessibility of finances for commencing entrepreneurs, especially in the beginning of their innovative activities. The banks are not ready to render the credits

to entrepreneurs with no history; risk capital funds support only highly profitable projects, etc.

An initial deposit into Microloan Fund in amount of 5 mill. CZK was granted in the form of subsidy by the South Moravia Region at the end of 2003. In 2006, the means in the fund were increased by the same amount of 5 mill. CZK provided by City of Brno. The financial means are being increased gradually from the interest revenues of advanced microloans and from the various fees.

Microloan is a mid-term specific loan in amount of 250,000–750,000 CZK with 3 % interest rate. Microloans are, in principle, rendered for 3 years (with conceivable 12 months suspension of payment) and with the possibility of premature payment without any fees.

Microloans are specifically and exclusively fixed on covering the costs connected with preparation and realization of an innovative project, namely on:

- patent recherches
- finalizing R&D
- protection of property rights
- refund of direct production costs
- expert reports, laboratory tests
- subcontracts with external partners
- investment into technological equipment
- advertising and marketing activities linked to the introduction of an innovative product into market
- funding of other activities linked to an innovative project.

Only entrepreneurial subjects may apply for microloans—physical or legal persons.

JIC is responsible for the management of the Microloan project. The Manager of the Microloans Fund is an employee of JIC. He communicates with the involved firms continually on everyday basis.

Since the possibility of being granted a microloan is conditioned by a membership of the firm in Technological incubator, the firm first has to apply for admission into incubator. The applications are evaluated reflecting the economic and managerial aspects as well as the technical qualities of the project (technical side assessed by the Industrial Council of the Technical University).

The approval of application for the microloan is a three-level process.

In the first round, JIC is carrying out so-called internal scoring – it is examined how an applicant meets the following criteria (with an increasing number of fulfilled criteria the possibility of applicant's success also increases):

- the applicant is a newly founded firm
- the applicant is finishing development of a product and plans to introduce it into market
- the applicant has less than 8 employees and new workplaces are supposed to arise
- a year turnover of the applicant is below 5 mill. CZK
- the applicant has no unfulfilled obligations towards state.

In the case of „favourable“ score, in the second round the application is reviewed by the Investment Council of the project Microloan, the members of which are financial experts (none expert is affiliated to JIC). The economic aspects (business plan, cash flow etc.) of the application are evaluated here.

The final decision is made by the Supervisory Council of the project Microloan comprising the representatives of the depositors into the JIC Microloans Fund – South Moravia Region and the City of Brno. The successful applicant is contracted by JIC. The minimal co-financing by the applying entrepreneurial subject is 20 per cent. Six Microloans have been granted since the launching of the Microloans project in 2004.

In the case of this programme, administration may be indicated as effective with reasonable low costs, schedule is being kept and it is managed by competent individuals. What regards the documentation of the project, it is kept properly according to the rules and it traces all relevant steps of the project implementation.

All applications for Microloans are evaluated thoroughly – in the process described above. So evaluation *ex ante* proceeds on multi-level expert basis. The project Microloan started in 2004 and due dates of loans are 3 years in principle – hence, in the next years the first project results will be evaluated *ex-post*.

Monitoring is performed continually by the Manager of Microloans Fund and the consultants of JIC. The Manager monitors and analyzes the repayment process and maintains the permanent contacts with the involved firms. Regularly each half a year the Manager compiles a monitoring report that is submitted to the depositors of the Fund – South Moravia Region and City of Brno. Also the consultants of JIC participate in the process of monitoring – they take care of the firms in the incubator and provide them with consultancy for successful start-up. Audit is performed regularly as an integral part of auditing JIC. There are regular interactions between project officers and contractors.

Conclusions

The relevant conditions for generating innovations in South Moravia are favourable: the regional political authorities put innovation on the prominent place of regional economic strategy, the capital Brno has a very strong knowledge potential (universities, research institutes) and a good geographic location. These assets are being valorized.

A number of leading research and education institutions are active in the region (especially in its capital Brno). They successfully participate in many national and international projects and have relatively well ad-

vanced research and knowledge infrastructure. Also a lot of high-tech FDI were located in the region. Therefore, regional innovation strategy emphasizes an innovative entrepreneurship of SMEs. The key strategic task is to improve business environment for innovating small and medium-sized enterprises. The main tools applied in strategy implementation is incubation and networking/facilitating, but also other tools are being utilized.

South Moravian Region has established JIC (South Moravian Innovation Agency) that is largely responsible for design and implementation of regional innovation strategy. Such system solution that really works well is still unique in the Czech Republic.

For the next period, the challenges are similar to other such institutes with a short history. First, to gain more experience in “reflexive” activities such as evaluation, monitoring, auditing. And, for future, to design innovation concept for rural and non-industrialized areas where is a large space for non-technological innovations and various knowledge-intensive economic activities.

***Jiří Loudín** is researcher at the Centre for Science, Technology, and Society Studies (Institute of Philosophy at the Academy of Sciences of the Czech Republic). He is interested in philosophy and sociology of technology. His research also focuses on innovations studies.*

***Adolf Filáček** is director of the Centre for Science, Technology, and Society Studies at the Institute of Philosophy (Academy of Sciences of the Czech Republic). His interests encompass research policy (in Czech Rep., EU, etc.), social functions of science and research, and evaluation and benchmarking R&D in research and development.*

Michal Kostka is deputy director and chief consultant, JIC – Jihomoravské inovační centrum (South Moravian Innovation Centre).

Kateřina Tydláčková is project manager at JIC – Jihomoravské inovační centrum (South Moravian Innovation Centre).