S&T INTERMEDIARY ACTIVITIES IN CZ NUTS 2 REGION PRAGUE: SUPER-SME PROJECT

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Abstract

The paper is describing the current state of intermediation services in CZ NUTS 2 Region Prague, based on results of ongoing SUPER-SME Project of FP6. It is possible to identify an important role of intermediaries in research, development, and innovation activities. The intermediation aims at optimizing supply of scientific and technological services, with demand of RTDI companies and organizations or any other actors using or interested in using these services, e.g. national or regional stakeholders. S&T intermediary is defined as a public, private, or public/private (non-profit) institution with a mission of optimizing interface between supply of scientific and technological services and demand of an enterprise, groups of enterprises, or any institution in this respect. Universities, research centers, private companies, or technology transfer centers can play a role of S&T intermediary.

Keywords: *research; development; innovation; intermediaries*

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1. SUPER-SME Project (Supporting Potential and Existing Research intensive SMEs)

The SUPER-SME project that started in March 2006 formed a consortium of partners from seven regions all across Europe: Lorraine (France); Central Macedonia (Greece); Catalonia (Spain); South Estonia (Estonia); Cluj County (Romania); Adana Region (Turkey); and Prague (Czech Republic). The network has been directly funded by the European Commission (FP6) through the Regions of knowledge 2. The SUPER-SME project aims to promote increased regional business investment in research by improving the know-how of regional intermediation system.[1]

The project was implementing a variety of activities which enable regions to understand their particular needs of their regions on how to improve the quality and efficiency of the S&T intermediation services. Through methods such as case study analysis and mentoring events, the project partners intended to develop individual action plans for partner-regions which will support innovation processes of R&D intensive SMEs.

According to the current SME definition of the EU, "the category of micro, small and medium-sized enterprises (SMEs) is made up of enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding EUR 50 million, and/or an annual balance sheet total not exceeding EUR 43 million." [2]

The technological typology of SMEs used in analyses of the regions involved in SUPER-SME project was the following:

[1] See detailed description at http://www.e-innovation.org/supersme/overview.html.

[2] European Commission, *Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises* [online]. Available at: http://europa.eu/eur-lex/pri/en/oj/dat/2003/l_124/l_12420030520en00360041.pdf [quoted 1. 4. 2008].

- *Research performer SME*

A research performer SME is a company who conducts in-house R&D activities, contracts out R&D activities with the purposes of sharing costs and minimising duplicative R&D efforts, and/or undertakes R&D co-operation directly linked to the product or process development. Such SMEs have R&D departments or equivalent, and are able to take a long run view of technological capabilities (they have an R&D and/or innovation strategy, uses tools such as technology forecasting, technology roadmapping, etc.). They may be beneficiaries of national/regional/international R&D/innovation support programmes (R&D grants, etc.). Research performer SMEs may also have one or more patents or pending patent applications.

- *Technological competent SME*

A technological competent SME is a company with more than one engineer, have some budgetary discretion for R&D and is able to participate in technology networks. These companies are the ones with the greatest potential to contribute to raising regional business R&D expenditure. However, this requires them to be effectively supported and guided by S&T intermediaries to sources of expertise, know-how, technology and finance.

- *Bootstrap SME*

A bootstrap SME is a company, which employs on engineer and is able to adopt packaged solutions. These companies may require implementation help.

- *Low technology SME*

A low technology SME is a company who has no significant technology capability and does not perceive a need for it.

Concerning the selected regions, the project offers the possibility of learning from good practice and exchange of knowledge between a group of regions at various stage development of a network of S&T interme-

diation services. Broadly speaking, the participating regions were divided into two groups:

- three "advanced" regions, or "mentors", which have a track-record of developing and implementing support measures and organizations aimed at research intensive SMEs; these three advanced regions offer different models;
- four "less-advanced" regions, or "mentees", at various stages in developing a system of S&T intermediaries; two of these regions are from the new Member States (NMS) and two from Candidate Countries.

It is assumed that both research performers and technology competent SMEs use or have the potential to use services of S&T intermediaries so the project has focused on them both in "mentor" or "mentee" regions. In each region was selected a group of 10–15 SMEs who formed the "business R&D panel" as users of S&T intermediation services. The main functions of the business R&D panels were to identify the needs and issues on S&T intermediation in their regions and proposing solutions for the improvement of the system. The panels also actively participate in the mapping of services provided by intermediaries; the personal detailed interviews based on formalized questionnaire were conducted under the project. In addition, 2–3 members of the panels from mentee regions participated in the study tours to each of the mentor regions to learn from good practice examples.

2. Concept of Intermediation in R&D

In the SUPER-SME project is on a regional level studied a phenomenon of an intermediary in RTDI processes, which plays a most important role in regional innovation system by supporting interactions, cooperation, and networking.

In general, *an intermediary is "a negotiator who acts as a link between parties"* (Word Web Online). The intermediation of RTDI activities aims at optimizing (ideally harmonizing) supply of scientific and technological services, with demand of RTDI companies and organizations or any other actors using or interested in using these services, e.g. national or regional stakeholders. It is clear that efficient and successful communication is involved in all intermediary activities.

The definition of an S&T intermediary (the definition comes from the SUPER-SME Project), is as follows:[3]

- S&T intermediary is defined as a public, private, or public/private institution with a mission of optimizing interface between supply of scientific and technological (S&T) services and demand of an enterprise, groups of enterprises, or any institution in this respect;
- Intermediaries communicate, animate, and support joint projects between SMEs and research institutions acting as brokers. Universities, research centers, private companies, or technology transfer centers can play a role of S&T intermediary. They play a decisive role in national and regional innovation systems while supporting interacting, cooperating, and networking.

3. Types of S&T intermediaries

There are different types of intermediaries according to the mission and activities of these subjects; it was recognized under SUPER-SME project during study visits in partner regions.[4] Some of them are:

[3] *SUPER-SME Methodological Guidebook* [online]. Available at: http://www.e-innovation.org/supersme/guidebook.html [quoted 1. 4. 2008].
[4] See e.g. http://www.e-innovation.org/supersme/seminars.html.

- Specialized S&T intermediaries (organization with specific mission to diffuse and transfer research results and promote research offer among companies)
- University interface and technology transfer (TT) units (specific units at universities and other higher education institutions with a mission to diffuse and promote their research results and offer among companies)
- Research Centers' interface units (specific units at research centers with a task to diffuse and promote their research results and offer their specific S&T service to companies)
- Specialized TT organizations (organizations with a specific mission to transfer technology to companies)
- Non-technological intermediaries (organizations with a mission to support companies, but focusing on non-technological assistance e.g. supporting access to funding or managerial training)
- Chambers of commerce and associations (organizations and institutions supporting e.g. networking, partner search, and awareness raising activities)

4. Science and technology intermediation and information services in Prague

In the field of science and technology (S&T) Prague is a leading city and region of the Czech Republic with the highest concentration of various actors active in research and development (R&D) and of human and financial resources used in R&D. That can be illustrated by the fact that Prague is a seat of three quarters of all Academy of Sciences institutes, 29 public and private universities (of which several with international recognition), 41 R&D firms and institutes with R&D as their main focus of activity and nearly 200 others with R&D as their non-primary activity. There are also a few S&T parks, incubators, transfer technology centers and several ad-

visory and information organizations. The detailed SWOT analysis of the Capital Prague can be found in the Annex 1 at the end of this paper.

This large potential of S&T infrastructure and resources requires a substantial support of S&T intermediation system that connects supply and demand sides of the S&T sphere, i.e. research facilities producing R&D results with entrepreneurs and others who are interested in practical and/or commercial use of these results. At present, in Prague, this system develops mainly on a bottom-up principle as the above-mentioned actors usually individually seek their partners for specific projects or activities. Universities who often seek partners among firms or research facilities to develop co-operation and implement projects of S&T intermediation infrastructure are among the most active organizations. From the point of view of the business sector, S&T sphere in Prague may seem difficult to grasp and orientate in and establishment of certain contact (intermediation and information) points would be beneficial. However, there are several non-profit associations that provide certain level of insight and advice, e.g. Association of Research Organizations, Association of Innovative Entrepreneurship, both active on a national level.

Technology transfer centers and incubators, which serve as an important link between research and commercialization of R&D results, are among the key elements of S&T intermediation system. In Prague, there are two technology transfer centers, one in the Technology and Innovation Centre of the Czech Technical University (which serves also as an incubator) and the other in the Technology Centre of the Academy of Sciences. Another incubator is at a private company – the Aeronautical Research and Test Institute and the third one is under construction expected to start operation in 2007.

Interaction in this filed should be facilitated by a top-down approach that is foreseen in the Regional Innovation Strategy for Prague finalized in 2004 as one of the pilot projects of its Action Plan. It is a project of Regional Innovation Council as an advisory body to Prague authorities consisting

of representatives of R&D institutions, training and consultancy organizations, financial and business sector and state administration. It should be a platform for dialogue among innovation and R&D actors and for co-ordination of exploiting R&D potential of Prague economy and increasing its competitiveness.

At present, the support of Prague authorities of R&D can be described as one-dimensional and it is offered exclusively through European Structural Funds and provided in the framework of the Single Programming Documents for Objectives 2 and 3 since 2004. They allow for submitting projects focused on developing partnership among R&D, educational, non-profit and business sectors, on creating suitable conditions for exploiting of Prague's R&D potential and on developing of services supporting entrepreneurs and competitiveness. Number of submitted projects suggests that there is a significant interest in developing R&D and innovation infrastructure and that there is also a substantial demand for effects and benefits those projects should create.

It can be concluded that S&T intermediation and information system in Prague is still at its early stage of development based on a bottom-up approach driven mainly by the individual actors of the R&D sphere. For the future, the addition of a top-down approach to provide co-ordination of activities is considered necessary.

5. Description of the Prague S&T intermediation system

This text is partly including data and information from the Summary Report on the regional S&T intermediary system in Prague, which can be found on SUPER-SME web site.[5]

[5] *Pilot Action Plan: Draft project* [online]. Available at: http://www.e-innovation.org/supersme/files/WP4/WP4_PA_PRAGUE.pdf [quoted 1. 4. 2008]. The analysis was compiled by Šimon Krbec (Cheval, Ltd.) in collaboration with Adolf Filáček (STSS Centre at the Institute of Philosophy AS CR, v.v.i.). The methodology and

The cited Summary Report tried to identify what works and what does not work within the region. It is worth to say that such approach is not common. Furthermore, the report is neither the regional innovation strategy, nor the evaluation report. The research has been based mainly on interviews, personal contacts and insights into the innovation process. The report has been produced by actors directly involved in the intermediation sub-system with special regard to local needs and personality of the City, so that under the perspective from within.

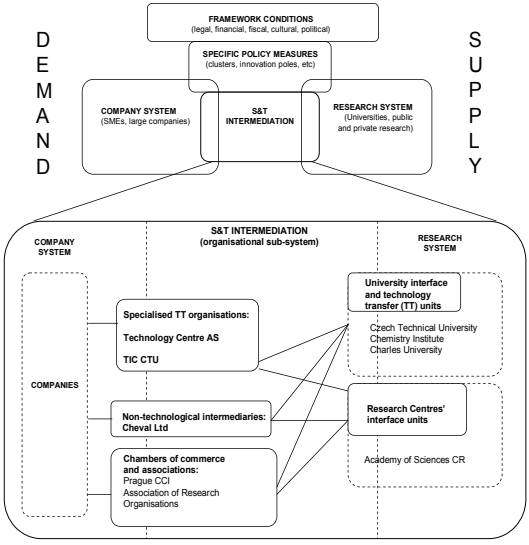
Although the general concept and practice of the information and knowledge society rejects the concept and practice of any physical boundaries, there are still many reasons for taking the regional aspects of innovation into account, especially regarding the SME sector as a stability component of regional economy. However, a number of Prague-based intermediary actors provide their services at the national, European or even transnational level. And, moreover, many regional actors partially operate in other Czech regions. With regard to the regional intermediation sub-system, a typical intermediation body is, at the same time, preparing feasibility studies, searching scientific partners, supporting networks and assisting in accessing Structural Funds. In other words, organizations have no overriding specialization, "everyone is doing everything," can be said. This situation indicates either a high level of creativity or a lack of co-operation, clustering, strategic approach, business planning and so forth. The truth is probably somewhere between. The main well known organizations of the regional innovation system located in Prague are classified in Table 1 and Exhibit 1.

mapping template was developed by Technopolis Ltd. (Brussels), the subcontractor of the SUPER-SME project.

Table 1: Main organizations of the regional innovation system

Type of organization	Name of organization
Universities and other higher education institutions	Czech Technical University
	Charles University
	Institute of Chemical Technology
Public and private research institutes/laboratories	Academy of Sciences
S&T intermediaries between research and business	Czech Technical University (e.g. Technology and Innovation Centre)
	Academy of Sciences (e.g. Technology Centre, Aeronautical Research and Test Institute)
Networks of organizations active in the field of research, technology and innovation	Association of Research Organizations
	Association of Innovative Entrepreneurship
Chambers of commerce, industry and associations	The Prague Chamber of Commerce and Industry

Exhibit 1: S&T intermediation in the wider regional innovation system



5.1 Status of S&T intermediaries

Following the logic of SUPER-SME project, we had chosen five types of intermediation bodies: research association/network, business association/network, research/technology institute, university/technology institute and private company.

The *Association of Research Organizations (AVO)* associates public, private and semi-public organizations operating in the field of applied research. Main activities of the Association are mediating of research and commercial contacts, promoting of interests of applied research, granting of information and counseling services in the field of applied research and development and organizing professional conferences and discussion meetings. The structure of members as well as the geographical coverage is diverse. The territory of AVO's services is the Czech Republic.[6]

The *Prague Chamber of Commerce and Industry (PCCI)* associates Prague-based enterprises, so that the geographical coverage is solely the Prague region. The Chamber facilitates cooperation with the municipality of the capital city Prague, aimed at the development and support of members of the Chamber, seeks the development of state administration and local government initiatives and supports initiatives with the Czech Economic Chamber and Regional Economic Chambers throughout the Czech Republic, including cooperation with foreign business partners.[7]

The university sector represents the *Scientific Incubator of the Technology and Innovation Centre of the Czech Technical University (TIC).* This public university institute focuses its services on the Prague region. TIC ensures the transfer of innovative technologies, provides consulting services related to the science and research programmes, patent services, licenses etc.[8]

[6] For more details see http://www.avo.cz/index_e.htm.
[7] For more details see http://www.hkp.cz/index.php?lang=en.
[8] For more details see http://www.bic.cvut.cz/l=en.

The sector of research institutes is represented by the *Technology Centre of the Academy of Sciences of the Czech Republic (TC AS)* which operates at the national and European level. The Centre provides information and advisory services related to the EU Framework Programmes, ensures the national and transnational technology transfer and technology audits and strategic studies. The TC AS was the coordinator of preparation of Prague's Regional Innovation Strategy.[9]

Finally, the private sector represents the *Cheval Ltd.* consulting company providing its services in the Prague region and specializing in research, evaluation and analysis, with an emphasis on support for both public and private projects involving European Union sources of funding. Cheval also provides intermediary, mentoring and coaching services for SMEs and research institutes, mainly within the IT, telecommunications, medicine and tourism sector and operates in the field of strategic management of innovation.[10]

No organization/institution participated in the intermediary survey from the year 2006 was specialized in terms of general profile of the S&T intermediation. Each participant covers more than two categories of intermediation services (collective actions, support for technological and scientific cooperation and so on). We may characterize the Association of Research Organizations as the technology transfer oriented intermediary, the Chamber of Commerce and Industry as the provider of legal support and the Cheval consulting company as non-technological intermediary.[11] Nevertheless, such typology can be accepted only to the very limited extent. In fact, all interviewed intermediaries are combining technological and non-technological orientation.

[9] For more details see http://www.tc.cz/home_/.
[10] For more details see http://www.cheval.cz/english.
[11] The Association of Research Organizations as well as the Prague Chamber of Commerce and Industry are naturally focussed on networking activities.

The S&T intermediation is one of the key activities of interviewed bodies. The Scientific Incubator of the Technology and Innovation Centre is the only interviewed organization which indicated the S&T intermediation as its sole activity. Out of the selected group of intermediaries, there is one organization (the Cheval consulting company) created recently.

5.2 Sectors and research areas covered by S&T intermediaries

The structure of sectoral coverage of interviewed intermediaries shows that institutions/organizations cover many different fields of work or expertise. Whilst the Association of Research Organizations, the Chamber of Commerce and Industry as well as the Scientific Incubator of the Technology and Innovation Centre cover more than 15 sectors (concretely 18, 19 and 15), the Technology Centre AS provides its services within 8 sectors and the Cheval consulting company covers only 5 research areas.

All sectors/research areas listed in the exhibit above are formally covered by interviewed intermediaries. However, there is only one sector covered by all intermediaries (ICT). Five research areas, among them important sectors "medicine" and "chemistry", are covered by only two intermediaries. It is worth to note that the Prague innovation system with its unique university and research base provides good conditions for further development of intermediary services in sectors that are not sufficiently covered by interviewed intermediaries.

Table 2: Coverage of research areas by surveyed regional intermediaries

Sector	AVO	PCCI	TIC	TC	CHEVAL	Number of inter-mediaries
ICT	●	●	●	●	●	5
Biotechnology	●	●	●	●		4
Advanced materials	●	●	●	●		4
Mechanical engineering	●	●	●	●		4
Informatics	●	●	●		●	4
Energy	●	●	●	●		4
Food processing	●	●		●		3
Optics	●	●	●			3
Mechanics	●	●	●			3
Nanotechnology	●		●	●		3
Electronics	●	●	●			3
Robotics	●	●	●			3
Metrology	●	●	●			3
Construction	●	●			●	3
Transport equipment	●	●	●			3
Chemistry	●	●				2
Medicine		●			●	2
Industrial design		●	●			2
Textiles	●	●				2
Logistics		●	●			2
Wood processing				●		1
Agriculture	●					1
Number of sectors	18	19	15	8	4	

5.3 Profile of assisted SMEs

As per the direct assistance to the companies, there were four organizations provided services during the year 2005. Out of the overall number

of clients (664) 80 % of enterprises were SMEs, 17 % TPEs and 3 % large companies. The biggest share of clients (7 5%) has the Technology Centre AS CR, 15 % Association of Research Organizations, 7 % of companies received the intermediation services of the Prague Chamber of Commerce and Industry and 3 % from the Scientific Incubator of the Technology and Innovation Centre.

Out of the overall number of companies using the intermediation services almost 13 % of them were new clients. As of the share of the Technology Centre AS CR, main part of targeted clients created companies receiving technology audit service. It is also important that 97 % of the overall number of clients were companies with less than 250 employees. Almost 860 companies received the group assistance (mainly training and awareness raising activities).

Table 3: Number of clients by the size of companies

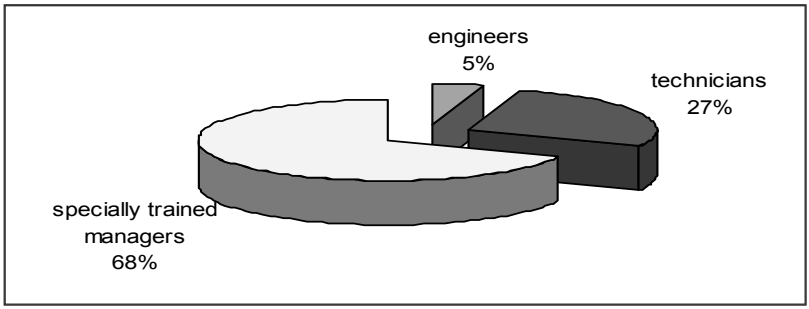
Size of companies	**Number of companies received direct assistance**	**%**	**Number of companies received group assistance**	**%**	**Overall number of companies**	**%**
TPE (less than 10 employees)	117	17,62	149	17,41	266	17,50
SME (10–250)	531	79,97	707	82,59	1.238	81,45
BE (more than 250)	16	2,41	0	0,00	16	1,05
Total	664	100,00	856	100,00	1.520	100,00

5.4 Human resources

The average share of employees dealing with S&T intermediation within interviewed organizations is 52 %. Employees of the Scientific Incubator of

the Technology and Innovation Centre as well as the Technology Centre of the Academy of Sciences are dealing exclusively with S&T intermediation. Main position of employees involved in the innovation process is "specially trained manager" (68 %). As of the time spent on intermediation, there are 9 full-time managers out of the overall number of 22 employees. Interviewed organizations are using services of the external experts; however the collected data are not clear in that respect. It is also important that interviewed organizations mentioned the lack of human resources and managing capacity as their key internal problem.

Exhibit 2: Human resources of interviewed intermediaries



5.5 Categories of S&T intermediaries

S&T intermediaries are diverse organizations with different missions and scope of service. This report introduces a categorization of intermediaries based on distinctions between (1) generic or sectoral orientation and (2) technological or non-technological character of service.

Generic or multi-sectoral intermediaries provide services to companies independently of their sector. The examples can include both collective services such as awareness raising campaigns and one-to-one services such as support for start-ups and spin-offs. Sectoral intermediaries are

specialized and focus on a particular sector or technology field. Technological intermediaries focus on providing support for development, commercialization or transfer of technology whereas non-technological services include activities with a focus on management and organization, S&T staff training and placement schemes, IPR etc. Some intermediaries may provide both technological and non-technological services. These are referred to as 'hybrid'.

Table 4: Categorisation of regional S&T intermediaries

	Generic
Technological	* The Association of Research Organisations
Non-technological	* Cheval Ltd
Hybrid	* Prague Chamber of Commerce and Industry * Scientific Incubator of the Technology and Innovation Centre of the Czech Technical University * Technology Centre of the Academy of Sciences

Note: The Association of Research Organisations and the Cheval Ltd can be classified as technological/non-technological oriented only to limited extent. In fact, they are also hybrid.

6. Service areas covered in regional S&T intermediation system in Prague

6.1 General offer of S&T intermediation services

The following table 5 presents an overview of the service areas covered and services delivered by the interviewed regional S&T intermediaries over last 2 years.[12]

[12] See detailed survey results, done by Šimon Krbec and the author, included in the *Pilot Action Plan* , *op. cit.*

Table 5: Services in the regional S&T intermediation system

S&T intermediation service area and services	Number of inter-mediaries	Number of services delivered (last 2 years)
Collective actions	**5**	**773**
awareness raising activities for enterprises (e.g. study visits, presentations and conferences)	5	69
awareness raising activities for the scientific community on research commercialisation and IPR	4	62
technology watch – analysis of evolution of the technological needs of the region	3	22
collecting and disseminating information on relevant existing technologies	4	56
coordinating and disseminating information on available S&T services for companies	4	564
Support for technological and scientific cooperation	**5**	**390**
Technological audit – analysis and identification of needs of enterprises	3	195
Search for regional and national scientific partners for R&D projects	4	21
Search for international scientific partners for R&D projects	2	14
Search for regional and national industrial partners for R&D projects, and S&T support	4	71
Search for international industrial partners for R&D projects, and S&T support	3	25
Technical and legal support for preparing projects and agreements related to S&T collaboration	4	64
Support for new product and service development	**2**	**52**
Technical assistance for preparing a feasibility study of the product/service	2	12
Assistance for developing a business plan for the new product/service	1	10

Assistance for prototype development (e.g. fast prototyping etc.)	1	10
Assistance for prototype testing	1	10
Support in product launch or service implementation	1	10
IPR and commercialization	**2**	**45**
Initial IPR check for products and services before their development	1	10
Assistance in commercialisation of industrial research projects, identification of results requiring IPR protection	2	25
Assistance in depositing patents and management of patent portfolio	1	10
Licensing	**3**	**32**
Industrial partner search for licensing	2	15
Preparing and negotiating conventions (license agreements)	3	17
Support to innovative start-ups and spin-offs	**2**	**110**
Legal support in creating a start-up	2	70
Legal support in creating a spin-off	1	10
Search for private financial partners for start-up/ spin-off creation	1	10
Preparing cahier des charges and budget for spin-off creation	1	10
Monitoring and promotion of start-up/spin-off	1	10
Human capital mobility	**1**	**20**
Placement schemes between research and industry	1	10
Search for highly specialised R&D personnel	1	10
Search for highly specialised management personnel (e.g. innovation management, knowledge management)		
Networking and clustering	**4**	**40**
Supporting and creating business networks (B2B)	3	14

Supporting and creating networks of SMEs and research base (University, research centres)	3	12
Supporting and creating clusters, and promotion of SMEs and research base participation	2	14
Assistance in accessing public funding for RTDI activities	**5**	**146**
Search for public funding and monitoring of public tenders	4	60
Assistance in accessing funds from EU Framework Programmes	4	50
Assistance in accessing funds from EU Structural Funds	5	36

The exhibit is based on information provided by 5 regional S&T intermediaries.

As we can see from the Table 5, all service areas, excluding "search for highly specialized managers", are in general covered by interviewed intermediaries. It means that each category of services has been influenced by activity of at least one intermediary during last two years. It says very little about the intensity of the overall supply of services because this methodology does not distinguish between core and side (secondary) activities. A detailed picture of the situation gives the Table 6 below. The second column of the table presents a number of interviewed intermediaries with the core activity within the category of service areas.

We may identify three different levels of intermediary service development. The first level includes highly developed areas "collective actions", "support for technological and scientific cooperation" and "assistance in accessing public funds". It is characterized by a high number of provided services and by coverage through all intermediaries. This level includes "soft" intermediation activities such as promotion, awareness raising, communication, mediation between research and business, exchange of contacts and dissemination of information. These activities can be marked as "soft skills" of the intermediation process.

Table 6: Summary of intermediation service areas

	Total number of inter-mediaries	Number of intermediar-ies with core activities	Number of services provided
Collective actions	5	5	773
Support for technological and scientific cooperation	5	4	390
Assistance in accessing public funding for RTDI activities	5	4	146
Networking and clustering	4	3	40
Support to innovative start-ups and spin-offs	2	2	110
Support for new product and service development	2	2	52
Licensing	3	1	32
Human capital mobility	1	1	20
IPR and commercialization	2	0	45

The second, medium level of services includes areas with lower interest of interviewed intermediaries: networking and clustering, support to innovative start-ups and spin-offs and support for new product and service development. Compared to the first group of highly developed services with the common "soft skill" link, areas of the medium level are diversified. As per networking and clustering, there is only the service "networking of SMEs and research base" with significant interest of intermediaries (3 organizations provide this support as a core activity). Creating business networks and clustering are covered by the only intermediary (business

network by Cheval, clustering by the Chamber of Commerce and Industry). Nevertheless, other two intermediaries (Technology and Innovation Centre of the CTU and Technology Centre AS CR) deliver these services as their side activity. Thus, there is a potential of further development. Main reason of less development of these services could be the fact that networking and clustering are relatively new topics in the Czech Republic. SMEs either perceive the role of networks and clusters as vague and redundant or they are afraid of data misuse.

The service area "support to innovative start-ups and spin-offs" is mostly covered by one intermediary (Technology and Innovation Centre of the CTU). The Chamber of Commerce and Industry provided a legal support in creating start-ups. Relatively low developed areas of intermediary services are also licensing, human capital mobility, IPR and commercialization. All these services can be marked as practical consultancy in the field. As of the area of licensing and IPR, there is only one service (preparing and negotiating license agreements) covered by the Technology Centre AS CR as its core activity. Two other intermediaries supply some individual services as their secondary activity. It does not mean, however, that regional intermediaries do not pay attention to these important issues. It means that intermediaries are not specialized in practical in-depth consultancy because their basic activity is awareness raising and disseminating of information, including about IPR protection, licensing and so on. Surprisingly, intermediaries in the survey tend to mediate the know-how in the form of technologies and products rather than in the sense of human capital.

6.2 Services offered by category of S&T intermediary

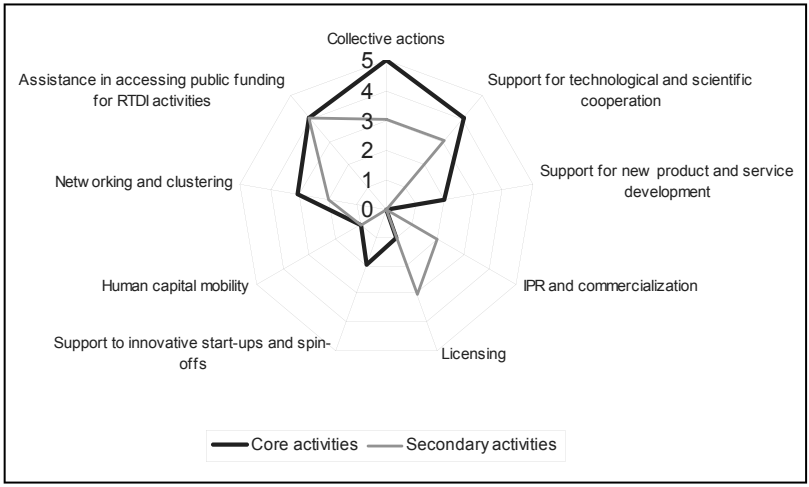
The regional intermediation sub-system of the City of Prague is not diversified. Its orientation is generic (i.e., multi-sector) on the one hand and hybrid (i.e. combining technological and non-technological orientation)

on the other hand. All intermediaries are strictly generic. This is mainly because of the limited demand (or market). As has been concluded by the SUPER-SME Panel Group participants, the network of intermediaries is not covered by the sufficient network of companies. However, we may expect some tendencies of the intermediary sub-system towards a more sectoral specialization. Mainly with regard to Structural Funds assistance, there are new specific running projects and platforms with the aim to support technology transfer or interface between research and business sphere regarding different sectors (chemistry, biotechnology, medicine, food and wood processing, mechanics and construction, etc.).

Furthermore, the lack of market research is influencing a hybrid character of intermediation services (combining technological and non-technological supply, i.e. supply of various services). Intermediaries are "hybrid" not because of complex strategic approach or high demand form the side of knowledge applicators. The offer of intermediaries is significantly shaped by external financial resources (Structural Funds programmes) because intermediaries do what can be financed by Structural Funds. In that respect, however, priorities of SF programmes have been formulated (both for the 2004–2006 and 2007–2013 programming period) on the basis of the Regional Innovation Strategy for Prague Region.

With regard to the fact that regional intermediaries do not work with data describing a current state of art, it is no surprise that the whole intermediation system is multi-sector oriented and combing technological and non-technological services at the same time (so called "generic hybrid"). All this means that the improvement of regional innovation system in the sense of matching needs and supply requires an in-depth market research and needs analysis based on the practical knowledge of customers' situation.

Exhibit 3: Core and secondary activities of S&T intermediaries in Prague



The Exhibit 3 provides a basic picture about the functioning, strengths and weaknesses of the supply of intermediary services in the analyzed sample. The intermediary system ensures a sufficient production and dissemination of data, consulting support concerning the Structural Funds, and initiating of the cooperation between research and business sector mainly through services such as searching regional and national scientific partners. Moreover, the system is also pro-active in the field of technology audit.

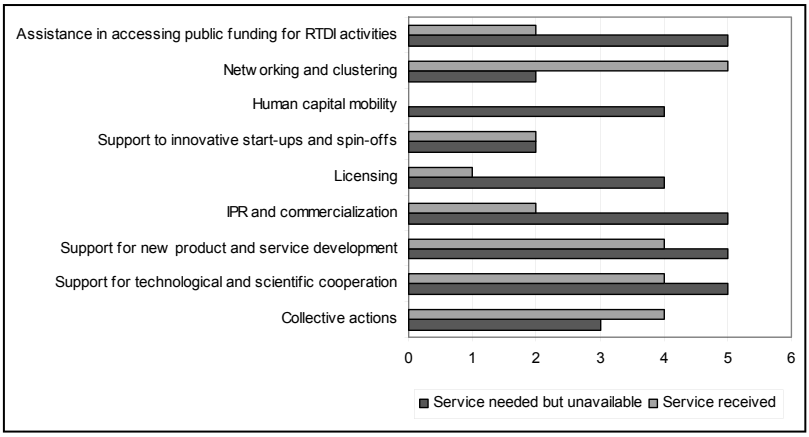
On the contrary, the intermediary system is not prepared for practical consulting services requiring specific know-how (IPR, licensing, legal support in creating spin-offs and start-ups). There is also a lack of services focused on product development (business plans, product launch and so forth). The system is missing qualified consultants (experts) in less developed service areas and qualified in-sight into the demand structure.

The main opportunity of the intermediary system is the Structural Funds support. The system will have very soon a developed infrastructure of incubators, scientific parks, university interface units and so on. The SF financial support could also strengthen skills and knowledge of specialized managers as well as the field of cooperation between intermediaries and networking activities.

6.3 Matching S&T services offer with the needs of SMEs

The structure of intermediary services received by interviewed SMEs corresponds with the stage of service development. Most received services are networking, collective actions and support for technological and scientific cooperation.

Exhibit 4: Services received and unavailable in the regional S&T system according to SMEs (N = 8)



According to all interviewed SMEs, the main reason of not receiving or applying services is the lack of information about the offer of inter-

mediation services and about the intermediary system as such. It seems that regional intermediaries are very capable of informing about general ideas and concepts such as cooperation between research and business sector (awareness raising activities), but they are not capable of informing about themselves. One interviewed company mentioned also high costs of services concerning the IPR as the reason of not applying intermediation services.

Most needed service areas by interviewed SMEs are following:

- Support for technological and scientific cooperation
- Support for new product and service development
- Support to innovative start-ups and spin-offs
- IPR and commercialization
- Assistance in accessing public funds
- Licensing
- Human capital mobility

There are only two areas of services needed by SMEs that have a sufficient offer of regional intermediaries (support for technological and scientific cooperation and assistance in accessing public funds). Whilst the area of technological and scientific cooperation has also the highest level of exploitation, the assistance services in accessing public funds are used by SMEs to the limited extent.

As of the area of product and service development, in the survey was stressed a deficiency in terms of the intermediary service portfolio. In spite of the very high demand and usage of this type of services by SMEs, only two intermediaries provide at least one individual service concerning product development.

The widest gap between SMEs demand and intermediaries' offer is dedicated to S&T service categories "IPR and commercialization" and "human capital mobility". As has been concluded by the SUPER-SME Panel Group participants, intellectual property is the issue of interme-

diation which needs essential improvements. In other words, the system requires a shift from awareness raising activities to highly specialized and customized consulting services.

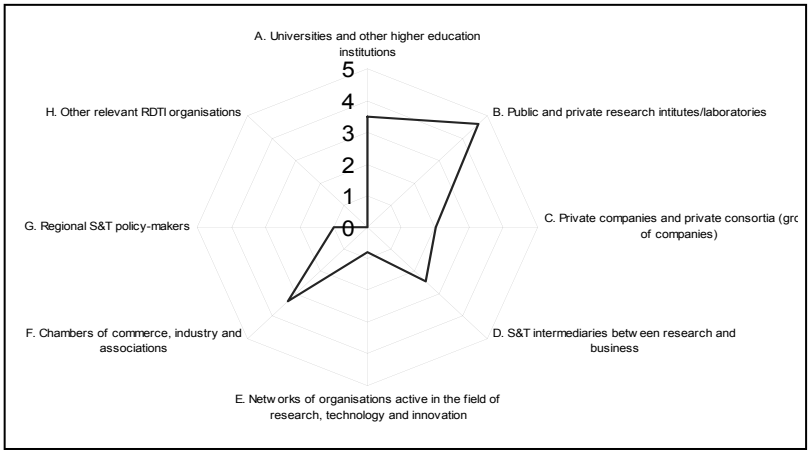
6.4 Cooperation within regional S&T intermediation system

The cooperation within the intermediation system is affected by the position and role of the City of Prague. As the main source of knowledge in the country, Prague's regional innovation system is rather a sub-structure of the national innovation system than independent and separate entity. This is obvious especially regarding links between intermediaries and other actors of the innovation system. Since main regional intermediaries operate at the national level, we may ask whether the cooperation among them is underpinning regional or national S&T environment. It means that the national and even the trans-national innovation systems could influence the cooperation between intermediaries much more than local needs. Undoubtedly, local SMEs have a direct access to information concerning last world innovative trends. However, it seems that needs of local SMEs stand in the shadow of these trends.

The Exhibit 5 shows that regional intermediaries cooperate intensively with public and private research institutes (average mark of intensity is 4.6 out of 5), universities and other higher education institutions (3.5) and chambers of commerce, industry and associations (3.3). Each intermediary cooperates with more than one institute of the Academy of Sciences of the Czech Republic (AS CR). No other research institute has been mentioned by interviewed organizations. Three intermediaries work with the Czech Technical University, two organizations have a link with the Institute of Chemical Technology Prague and the Charles University. Nevertheless, the intensity of cooperation is lower than in the case of research institutes of the Academy of Sciences.

As of the category "chambers of commerce, industry and associations", all intermediaries have a strong link with the Prague Chamber of Commerce and Industry. Since the intensity of collaboration between intermediaries is at the low level, this institution can be considered as the potential integrating actor of regional intermediary system. Intermediaries themselves perceive the current situation and relationships as the mix of "co-operation and competition, with no patterns of co-ordination". As has been concluded by the SUPER-SME Panel Group participants, it is necessary to promote networking activities between intermediaries, whether at regional or national level.

Exhibit 5: Collaboration of S&T intermediaries with other regional actors

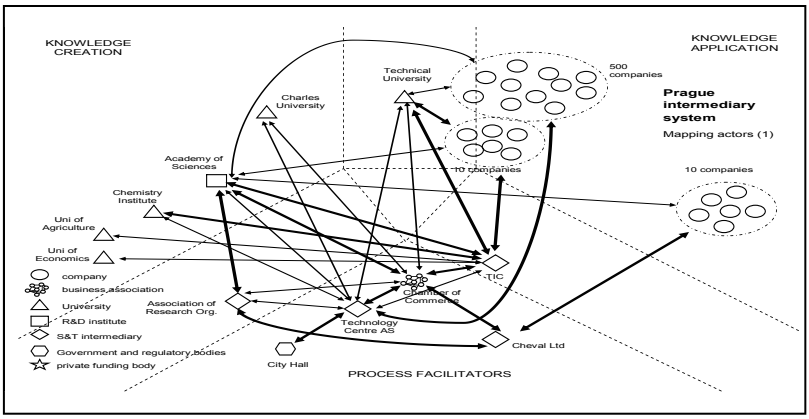


The main and dominant attribute in choices of partners is the EU Structural Funds. Partner search (and choice) is, together with the structure of supply, the typical case of how the Structural Funds determine the intermediary system. For instance, the Prague Chamber of Commerce

and Industry cooperates with other intermediaries mainly on the basis of SF projects. Thus, the creation of partnerships as well as the structure of intermediary services is not driven by local needs but governed by the SF programmes' priorities. In addition, there is significant difference between searching partners for the direct business contract on the one hand and searching partners for the Structural Funds project on the other.

7. Mapping S&T intermediation system

Map 1: Regional S&T actors



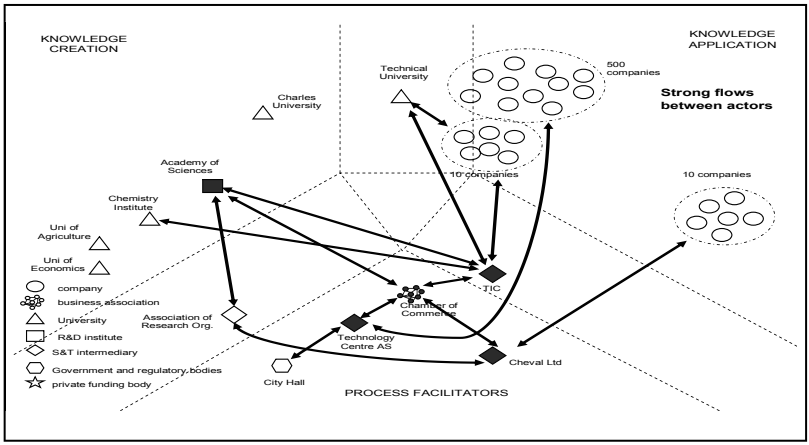
The Map 1 presents main actors and the overall network of relationships of S&T intermediation system.[13] The map is divided into three parts representing main functions of the innovation system (knowledge creation, knowledge application and knowledge intermediation/process facilitating).[14] There are three S&T actors with double function (the As-

[13] The mapping methodology and template was developed by Technopolis Ltd. (Brussels), the subcontractor of the SUPER-SME project.
[14] Cf. also Exhibit 1 of this paper.

sociation of Research Organizations, the Technology Innovation Centre and the Technical University).

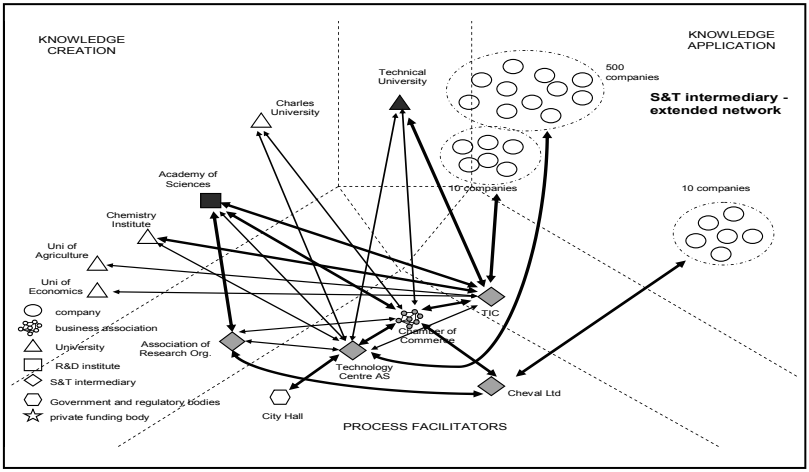
Strong flow (Map 2) means, for instance, that actors are partners in most of S&T projects with shared budget and so on. We can see that each intermediary has such relationship with at least three another organizations/entities. The main target of intermediation is the Academy of Sciences. On the contrary, the Charles University has no strong link with involved intermediaries.

Map 2: Strong flows between S&T actors



Nevertheless, following Map 3 with the extended network of intermediaries confirms that regional S&T actors have a very good potential to cooperation through their relationships with intermediaries. In other words, regional intermediaries are significantly a key element of intensification of the overall innovation system.

Map 3: Main flows between intermediaries – extended network



8. General assessment of the regional S&T intermediation system

The regional S&T intermediation system of the City of Prague is not enough diversified. The main functions, specialization and partners of the key regional S&T intermediaries are summarized in Annex 2, and the SWOT analysis is in Exhibit 6. Its prevailing orientation is generic (multi-sector). Together with its unique university and research base, the system covers full range of research areas. Also the intermediation services are not distributed proportionally. All intermediaries are "hybrid" in the sense of delivering and typology of services (they are combining technological and non-technological orientation). However, the reason is not complex strategic approach but the limited demand and missing in-depth market research. Therefore, the offer of intermediaries is significantly shaped by external financial resources (Structural Funds programmes) since intermediaries do what can be financed by the Structural Funds.

There are only two areas of services needed by SMEs that have a sufficient offer of regional intermediaries (support for technological and scientific cooperation and assistance in accessing public funds). The widest gap between SMEs demand and intermediaries' offer (according the survey results) is dedicated to S&T service categories "IPR and commercialization", "human capital mobility" and "support to innovative start-ups and spin-offs". Especially intellectual property is the issue of intermediation which needs essential improvements. Main deficiency as well as the biggest market opportunity of the intermediary system is regarding the area of product and service development. In spite of the very high demand and usage of this type of services by SMEs, only two intermediaries provide at least one individual service concerning product development. However, more accurate matching of needs requires a shift of the whole intermediation system from awareness raising activities to highly specialized and customized consulting services.

The main reason of not receiving or applying services form the side of SMEs is the lack of information about the offer of intermediaries. It seems that regional intermediaries are very capable of informing about general innovation ideas (as a part of their awareness raising activities), but they are not capable of informing about themselves. It is certainly connected with patterns of cooperation. The only intermediary with strong relationships with other intermediaries is the Prague Chamber of Commerce and Industry. Out of an ideal number of links between five intermediaries, three are totally missing and only four are considered as strong. More networking between intermediaries would significantly strengthen shared marketing of intermediation services and informing SMEs about the offer. However, mapping of relationships has shown that SMEs have a very good potential to cooperate with other regional actors, especially public and private research institutes, through their relationships with intermediaries. More precisely, regional intermediaries play the role of a key element of intensification of the overall innovation system.

The intermediary system ensures a sufficient production and dissemination of data, consulting support concerning the Structural Funds, and initiating of the cooperation between research and business sector mainly through services such as searching regional and national scientific partners. Moreover, the system is also pro-active in the field of technology audit. On the contrary, the intermediary system is not prepared for practical consulting services requiring specific know-how (IPR, licensing, legal support in creating spin-offs and start-ups). There is also a lack of services focused on product development, qualified consultants (experts) in less developed service areas and qualified in-sight into the demand structure.

The main opportunity of the intermediary system is the Structural Funds support in the forthcoming programming period. The system will have very soon a developed infrastructure of incubators, scientific parks, university interface units and so on. The SF financial support could also strengthen skills and knowledge of specialized managers as well as the field of cooperation between intermediaries and networking activities. On the other hand, the threat of the intermediary system would be a low intensity backing from the side of the City Hall, especially after the completion of SF programmes. In the survey was observed single link of the Prague City Hall with the whole innovation environment through the Technology Centre AS. In spite of sufficient relationships of the Technology Centre AS with other regional S&T actors, the regional policy authority can be seen as relatively separated actor of the regional innovation system. Nevertheless, the main threat and constraint of intermediation system is the mismatch problem of Structural Funds programmes priorities. In order to ensure the accurate matching of regional needs and intermediation services, the system requires continuous amendment of the Regional Innovation Strategy which will be used as the reference point for assessing projects, partnerships and products financed by the Structural Funds.

Exhibit 6: Strong and weak points of the regional S&T intermediation system

	Strong points		Weak points	
	S&T intermediaries	**SMEs**	**S&T intermediaries**	**SMEs**
S&T intermediation organisational capabilities (budget, human resources etc.)	• Structural Funds support (external financial resources). • Excellent access to businesses in the Prague region. • Neighbourhood with the Central Bohemian region providing much more possibilities of SF support (former Objective 1 of SF).	• Excellent access to university and research base in the region. • Access to transnational technology transfer. • Access to information through intermediaries' awareness raising activities.	• Lack of HR and managing capacity for intermediation (transfer specialists and so on). • Low level of informing the SME sector about intermediation services. • Low competencies for delivering services to large companies. • Lack of capacity for specialised consulting services.	• Low private spending in R&D compare to public expenditures. • Lack of managing capacity for innovation process and managing innovation. • Lack of strategic planning of SMEs (operational pitfall).
Service areas and ervices delivered	• Good sectoral/research areas coverage. • Sufficient portfolio regarding technological and scientific cooperation and assistance in accessing public funds. • Very strong "soft skills" of the intermediation process.	• Financing individual services from SF (no/low costs from the side of SMEs). • Access to all sectors through intermediation system. • Transparent system of intermediation.	• Insufficient marketing of intermediation services. • Current structure of supply and needs of SMEs are mismatched. • Insufficient demand/lack of interest from the SME sector. • Quality of SF projects is decreased because of huge administration demand.	• The offer is driven by the SF programmes which do not fully reflect needs of SMEs. • No supply of highly needed services (IPR, licensing, legal support in creating spin-offs and start-ups).

Connections between different organisations in the system	• Starting process of networking between intermediaries. • Strong cooperation with the Prague Chamber of Commerce and Industry throughout the system. • Strong links to Academy of Sciences.	• Very good potential to cooperation with both knowledge creators and other applicators via intermediaries. • Access to and recovering of "hidden knowledge" via cooperation with universities and research insitutes/ laboratories (new ideas, patents, young researchers).	• Low intensity of contacts with regional policy makers. • Inadequate business and entrepreneurial knowledge of researchers and some intermediaries and other communication barriers.	• Sporadic relationships with regional policy makers. • Weak relationship of innovative SMEs with the Chamber of Commerce (no disseminating of good practice within the SME sector).

9. SUPER-SME Guidebook[15]

The Guidebook of science and technology intermediary services for SMEs is intended to be a manual introducing regional return on experiences/practices/feedbacks of 7 European regions in the field of S&T intermediation system. It summarizes and concentrates the results of the work done during two years into some sort of a "practical guide" for the sphere of public support interventions into regional S&T system, especially its intermediation sector. It could also serve as a reference point for those interested in regional experiences on S&T services or regional tools to increase in quality of system for R&D intensive SMEs.

In 2002, the Barcelona European Council set the goal of raising overall research investment in the EU from 1,9 % to around 3 % by 2010. However, instead of rising, the overall level of European research is, in a substance, stagnant. What to do in the regional innovation systems to change this situation? What are the specific tasks of regional intermediaries in this effort and how to improve their performance? Upgrading research and innovation policy does not only mean to increase R&D investments but also to increase their efficiency and effectiveness and link R&D and SME more tightly. That is obviously the specific role of regional intermediation system.

The main target group of this manual is regional authorities in charge of innovation policies. The role of public regional authorities in upgrading regional innovation policy is of a major relevance. The manual describes and analyses the whole variety of practices and measures of public support the regional authorities may apply in an effort to improve innovation capacities of the regional SMEs in the field of intermediary activities. The judgment is based on practical experiences of the 7 partners who represent the regions with various socio-economic profile and setting.

[15] See Science and technology intermediary services for SMEs for SMEs: A guide via practices [online]. Available at: http://www.e-innovation.org/supersme/files/WP5/BOOKPRINT_FINAL_COMPRESS.pdf [quoted 1. 4. 2008].

The manual also seeks to address significantly the regional S&T intermediaries. They play a decisive role in regional innovation system while supporting interacting, cooperating, networking. Again based on practical experience of the partners, the manual tells how S&T intermediation systems may function – what types of services are provided, what segments of innovation policy are covered, what issues are being solved, what are the results in increasing innovation capacity of SMEs. In a sense, there is indicated what "best practices" in intermediation field may be.

The manual covers the theoretical and methodological background in the chapter 1; including generic questions at national level, the basic definitions and the methodology used both for qualitative survey and case study analysis. Roadmap of regional public supporting high growth in research intensive SMEs and identification of breakdowns/deficiencies in development and creation of these research-intensive SMEs is described in chapter 2 and is followed by illustration boxes, practical recommendations and proposition of regional actions for regional authorities and S&T intermediaries. The important conclusions and other information are possible to find there, too.

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Annex 1. – Regional profile of the Capital Prague: SWOT analysis

Axis	Strengths	Weaknesses	Opportunities	Threats
	State of the art		**Perspectives**	
NATURAL ENVIRONNEMENTAL CAPITAL				
Geographic position	Capital of the Czech Republic Centre of the Bohemia Self-governing region In the heart of Europe	Week city marketing and external communication	Commercial opportunities Well-functioning public transport system	Low capacity of road network Old and unreliable technical infrastructure
Environment	Well-known genius loci of the historical centre Rich history and culture Rich potential of both the city and suburban landscape with the added advantage of the river Vltava	Lack of care of historical sites Heavy air pollution mainly in the central parts of the city Noise pollution from traffic and other sources Above average public consumption of and demand for energies	Improvement in the care of the historical sites Revitalization of urban and suburban green areas and strengthening of their function in terns of eco-stabilization Reduction in traffic intensity particularly in the city centre and in ecologically sensitive areas	Further growth in the negative effects of car transport on the environment Un-ecological waste disposal policy and contamination of soil and underground water sources
HUMAN CAPITAL				
Demography	Balanced social structure Low but positive net migration, migration increase 5,8 ‰	Worsening demographic structure and ageing Prague population	Re-evaluation of Prague's multicultural traditions	Continuing demographic trends (ageing population, falling birth rates) brings negative side effects both of economic and social areas

Employment	Stable and diverse labour market Above- average quality of the workforce Diversified job offer, demand for highly qualified jobs High competitiveness of the labour forces	Limited choice and variety of requalification and remobilizing programs Insufficient support of medium and small businesses	Creation of conditions for an effective, competitive and motivating labour market Creation of stable political and socio-economic climate Increasing employment in the services industry, favourable to women work	Worsening macro-economic conditions Low knowledge (including tacit knowledge) for entrepreneurship Slow and insufficient integration of specific groups of inhabitants
SOCIAL CAPITAL				
Un-employment	Lowest unemployment (3,58%) in the Czech Rep.	Raising long lasting unemployment	Continuing social dialogue and cohesion	Growth in the crime rate and increasing levels of drug addition
Territorial cohesion	Long- term continuity in the spatial development managing and planning of the city	Unclear and hypertrophied system of public administration Growing economic and social disparities on the territory	Good accessibility for majority of the regional hinterland and sufficient space both within and around for securing the development	Lack of success in the effort to reform public administration as a public service
Experiences in European territorial cooperation	Strong international political cooperation with all Central European capital cities Participation in European Programmes ESF, and other projects	Short experience in European territorial cooperation, lack of initiative Weak territorial participation in FP6	Opening the dialogue with major European cities Advantage of current interest in Prague	Lack of concept and actions to support Prague to be important business and cultural centre in Europe

Axis	Strengths	Weaknesses	Opportunities	Threats
	State of the art		**Perspectives**	
ECONOMIC CAPITAL				
Economic development	High level of wealth creation: GDP per capita in purchasing power parity standards is 29 888 Open business environment Concentration of intellectual and human resources capital Attractivity for foreign investors Diversified economy (development of services industry) 84,700 companies, inc. 6,400 joint-stock companies; 5,400 cooperatives, 200 state-owned enterprises Higher salaries, favourable conditions for high-qualified and educated incomers	Insufficient restructuring of economic base Growing financial problems of some firms Insufficient support for small and medium enterprises Uncoordinated and unclear relationship between city authorities and enterprise sector Low interest from the side of SME sector to co-operate with R&D Intellectual property rights protection Lack of seed capital funds	Sufficiently intensive FDI Successful transformation of business enterprise sector Services represents near 83,2 % High concentration of financial and other services Strategic interest of the region in innovations High level of the R&D potential Good quality of R&D outputs 2 Business Innovation Centres Existing venture capital funds	Small number of innovative firms Low share of high-tech firms Small number of spin-offs Small number of SMEs co-operating with the R&D sector Insufficient capacity of existing business incubators Insufficient extent of services provided by innovation intermediaries Small number of public supported projects No Business Angels

Innovation and research	60% of the public and 30% of the private R&D sector capacities are located in Prague Wide structure of the R&D branches Concentration of the scientists and other R&D staff Good quality of R&D outputs Universities and higher education (more than 100,000 university students and 10,000 PhD students) R&D institutions are aware of economical importance of the co-operation with industry Tradition of some R&D institutes to collaborate with industry Existing examples of the successful commercialisation of R&D outputs Intensive connections to European RTD programs (particularly Framework Programmes)	Low R&D expenditures from regional sources Low private spending in R&D (in relation to public sector expenditures) Lack of national and regional financial sources and programmes to foster the technology transfer on Insufficient promotion of R&D results Low business and entrepreneurial knowledge of researchers Restricted availability of R&D grants and subsidies for SMEs Small number of innovative firms co-operating with R&D sector Some framework and legislative problems with commercialisation of R&D results	Exploitation of the synergy effect of science, academic, industrial and financial potential of the region Growing political support to R&D and innovation The highest share of population with university degree in Czech Rep. Standardisation of the business legislative and investment environment after EU accession Acceptance of the National Innovation Policy and public support of SMEs New legislative acts – the Act on Non-Profit Research Institutions Existing Strategic Plan of the Capital Prague, Single Programming documents – objective 2 and 3 supporting innovation and qualified workforce European support to innovation	Low activity in the fields of academia, research and the consumer sphere Loss of the capital's innovative role Low motivation to commercial use of R&D outputs – the R&D work is evaluated to a number and quality of publications Low interest of SME sector to co-operate with R&D sector Low demand in innovation intermediary and technology transfer services Short extent of advisory services concerning intellectual property rights protection Supporting large foreign investment not connected to R&D and innovation Brain drain after EU accession

Annex 2.

Summary table: main functions, specialisation and partners of regional S&T intermediaries

Intermediary	Sectors/research fields	Principal functions	Research partners	Business partners	Intermediary partners
The Association of Research Organisations	All sectors excluding industrial design, wood processing and logistics	• mediating of research and commercial contacts • promoting of interests of applied research • granting of information and counselling services in the field of applied research and development • organizing professional conferences and discussion meetings	• Academy of Sciences CR	• Confederation of Industry • Association of Innovative Entrepreneurship • Prague Chamber of Commerce and Industry • Chamber of Commerce and Industry, Czech Republic	• Technology Centre AS • Cheval Ltd
The Prague Chamber of Commerce and Industry	All sectors excluding nanotechnology, wood processing	• facilitating cooperation with the municipality of the capital city Prague, aimed at the development and support of	• Academy of Sciences CR • Charles	• Chamber of Commerce and Industry, Czech	• Technology Centre AS • The

	and agriculture	members of the Chamber, • development of state administration and local government initiatives • supporting initiatives with the Czech Economic Chamber and Regional Economic Chambers throughout the Czech Republic • cooperation with foreign business partners	University • Czech Technical University	Republic	Association of Research Organisations • Cheval Ltd • Association of Innovative Entrepreneursh ip
The Scientific Incubator of the Technology and Innovation Centre of the Czech Technical University	All sectors excluding chemistry, medicine, food and wood processing and construction	• transfer of innovative technologies • consulting services related to the science and research programmes • patent services • licences	• Czech Technical University • Academy of Sciences CR • Chemistry Institute • University of Agriculture • University of Economics	• Prague Chamber pf Commerce and Industry	• Technology Centre AS • Technology and Innovation Centre of the Czech Technical University
The Technology	• biotechnology • food processing	• providing information and	• Czech Technical	• Prague Chamber of	• Association of Research

Centre of the Academy of Sciences of the Czech Republic	• advanced materials • nanotechnology • mechanical engineering • wood processing • ICT • energy	advisory services related to the EU Framework Programmes • ensuring the national and transnational technology transfer and technology audits and strategic studies • coordinating of preparation of Prague's Regional Innovation Strategy	University • Academy of Sciences CR • Chemistry Institute	Commerce and Industry • Confederation of Industry of the Czech Republic • Association of Innovative Entrepreneurship	Organisations • Cheval Ltd • Technology and Innovation Centre of CTU
The Cheval Ltd consulting company	• ICT • construction • informatics • medicine	• Specialising in research evaluation and analysis, with an emphasis on support for both public and private projects involving European Union sources of funding. • Providing intermediary, mentoring and coaching services for SMEs and research institutes, • operating in the field of strategic management of innovation	• Academy of Sciences CR	• Prague Chamber of Commerce and Industry	• Association of Research Organisations