



**EXPERT EVALUATION NETWORK  
DELIVERING POLICY ANALYSIS ON THE  
PERFORMANCE OF COHESION POLICY 2007–2013**

**TASK 1: POLICY PAPER ON INNOVATION**

**CZECH REPUBLIC**

**VERSION: FINAL DRAFT  
DATE: SEPTEMBER 2010**

**JIŘÍ BLAŽEK  
CHARLES UNIVERSITY IN PRAGUE**

**A report to the European Commission  
Directorate–General Regional Policy**

## CONTENTS

1	EXECUTIVE SUMMARY .....	3
2	NATIONAL AND REGIONAL INNOVATION POLICY AND THE CONTRIBUTION OF ERDF .....	5
2.1	NATIONAL AND REGIONAL INNOVATION POLICY AND ERDF CONTRIBUTION ACROSS POLICY AREAS.....	5
2.2	ERDF CONTRIBUTION ACROSS POLICY AREAS.....	8
3	EVIDENCE AVAILABLE ON THE PERFORMANCE OF INNOVATION MEASURES CO-FINANCED BY ERDF .....	9
3.1	ACHIEVEMENTS UNDER THE CONVERGENCE OBJECTIVE.....	9
3.2	ACHIEVEMENTS UNDER THE COMPETITIVENESS OBJECTIVE .....	14
4	CONCLUSION: MAIN CHALLENGES FACED BY COHESION POLICY PROGRAMMES .....	16
	REFERENCES.....	18
	ANNEX A – BACKGROUND DATA ON EU COHESION POLICY SUPPORT TO INNOVATION .....	19
	ANNEX B – CLASSIFICATION OF INNOVATION POLICY AREAS, INSTRUMENTS AND BENEFICIARIES.....	22
	ANNEX C – CATEGORISATION OF EXPENDITURE TO BE USED FOR CALCULATING EU COHESION POLICY RESOURCES DEVOTED TO INNOVATION .....	23

## 1 EXECUTIVE SUMMARY

The pre-accession funds and, from the year 2004 the ERDF provided instruments to tackle the problem of the underdeveloped innovation infrastructure and the generally underdeveloped framework for innovation support in the Czech Republic. Two principal dimensions of the evaluation of ERDF effects must be distinguished. The first dimension is the financial support of projects whose effects can be expressed in outputs, results and even impacts (for examples see tables 1, 2, 5 below). However, given the rather underdeveloped institutional, legal and policy framework for innovations in the Czech Republic before the accession to the EU, the indirect effects resulting from the changes in the framework for innovation itself may be even more important. Examples of these indirect (non-financial effects) are a strategic/programming approach towards innovation support, introduction of new types of support initiatives (e.g. clusters, technology platforms, networks, research – industry links etc.). More generally, due to CP support, the European model for innovation support stressing, inter alia, the role of regional innovation systems for innovation creation, has been accepted not only on the national level but has also been accepted and implemented in a growing number of Czech Regions (see e.g. Chládek, 2010).

In the new programming period (2007–2013) ERDF innovation support has been strengthened significantly and is being channelled primarily via 2 OPs (OP Enterprise and Innovation and OP R&D for Innovations). All 3 key policy areas (innovation friendly environment, knowledge transfer and support to poles and boosting applied research) have been covered adequately, however, the major weakness is limited support to product development.

While there is a significant continuity in case of OP Enterprise and Innovation as the innovation support programmes from the previous period (2004–2006) were adapted and expanded, the second OP RDI started from scratch. Nevertheless, given the nature of these projects as well as a rather slow start, especially of OP RDI, the tangible results and the impacts can be expected only in the medium and long-term period. However, currently there are already regions where ERDF funded projects included in the regional innovation strategy have obtained remarkable achievements (e.g. South–Moravian region).

The largest effects of ERDF have been recorded in the field of innovation infrastructure (business incubators, science and technology parks, centres for TT etc.) and experience on the ground shows that ERDF funding is most effective in this sphere (i.e. in case of large-scale projects aimed at expanding R&D&I infrastructure) as all types of expenditure seem eligible. The increase in R&D capacities contrasts is not matched by an equivalent increase in their effects, e.g. number of firms supported by services provided by these entities. Nevertheless, the monitoring data from ongoing projects suggest that most of the target values set for 2015 will be exceeded. Important projects

have been launched also in the sphere of academia – industry cooperation as well in the sphere of cluster formation and development.

The policy framework for innovations is still relatively weak (for example, until now, the competence concerning R&D&I is shared among several governmental institutions and the key strategic document – the National Innovation Policy is rather a formal document without much practical relevance. In addition, self governing regions do not have any legally codified direct competence over R&D and Innovation and, therefore, with the exception of the South Moravian region only, do not have a coherent approach to innovation support (i.e. they do not have a well-designed and widely accepted strategy that addresses key weaknesses of the regional innovation system and would encourage the use of the existing strengths). However, the self-governing regions do have a competence over the secondary schools with direct labour market implications. For example, in several regions “Regional councils for human resource development” have been established mainly with the aim to improve matching of labour demand and supply. This is done by adjusting the secondary school curricula to favour the needed professions, and by promoting certain professions with a strong tradition in the region such as the aviation industry etc. Despite the fact that the regions lack any competence over (regional) universities, the regional representatives are trying to support universities at least indirectly, by lobbying, by involving them in the regional marketing and, seldom directly, by providing occasional financial support etc. Consequently, regional support of R&D&I in the Czech Republic varies enormously in extent and form. The existing evaluation studies related to the 2004–6 programming period focused on the evaluation of financial indicators and outputs. Moreover, the assessment of the outputs was performed on the basis of the targets that were quantified before the country’s accession to the EU and on the basis of very limited knowledge. These targets, therefore, did not represent suitable benchmarks. Consequently, existing evaluation studies provide little added value.

The main challenges to be addressed by ERDF are related to several “fractures” within the Czech innovation chain:

- a “Berlin wall” between the public research institutes (predominately focused on basic research) and applied research pursued in private firms (different values, motivations, work ethics, etc.). Therefore, activities currently supported by the EU CP focused on TT, mutual cooperation and clarification of IPR are of vital importance.
- insufficient human capital and infrastructure for R&D, the lack of modern forms of innovation financing like venture capital (sphere of greatest progress so far).
- insufficient discussion on the strategic focus of innovation relevant programmes (or calls) among relevant partners despite the fact that this type of communication in the forms of workshops has already started in some Czech regions.

- limited demand for innovation services from private firms as in many cases the firms grow purely on the basis of limited competition given the “economies of shortage” under communism.

## 2 NATIONAL AND REGIONAL INNOVATION POLICY AND THE CONTRIBUTION OF ERDF

### 2.1 NATIONAL AND REGIONAL INNOVATION POLICY AND ERDF CONTRIBUTION ACROSS POLICY AREAS

#### *National level innovation<sup>1</sup> policy*

The first National innovation policy (NIP) of the Czech Republic was approved only in July 2005, which makes the Czech Republic one of the very last EU countries to adopt such a policy.

The NIP is based on the following 4 key pillars:

1. To strengthen the role of R&D as a source for innovation
2. To develop “functional” cooperation between private and public sector
3. To ensure human resources for innovation
4. To enhance efficiency of public administration in R&D&I.

However, only few NIP measures have been implemented in practice despite the fact that each measure was assigned a time–schedule and responsibility. To our knowledge, there is no system of regular monitoring of implementation of NIP. Formally, the progress of implementation of NIP was to be a part of the annual “Analysis of R&D in the Czech Republic“, however, this has not been the case. Consequently, the institutional and policy framework for innovation can be considered weak or – more precisely – just emerging (Blažek, Uhlíř, 2007). Nevertheless, numerous projects aiming at the enhancement of both infrastructures for R&D and the soft skills in the sphere of R&D&I as envisaged in NIP were launched due to support from the SFs (ERDF and ESF). Thus it can be maintained that the resources provided via the EU Cohesion policy are the most significant source for changing the environment for innovation.

So far the innovation policy has largely focused on the support of cooperation between R&D institutions and the business sector. This tendency was reinforced by a growing inflow of foreign companies that started to set up their R&D centres in the Czech Republic and launched collaborative projects with Czech research institutes and exerted pressure on national authorities demanding more action on innovation policy. The demands of foreign investors for reliable partners accelerated the creation of a policy supporting technology transfer centres, business

---

<sup>1</sup> In the Czech NIP the innovation is defined broadly, i.e. in line with the third edition of the Oslo Manual.

incubators and clusters bringing together the research and business sector (Blažek, Uhlíř, 2007). The pre-accession funds and, from the year 2004 the Structural Funds, provided an instrument to tackle the problem of underdeveloped innovation infrastructure, especially through the programmes Inovace (Innovation–introduction of innovations), Rozvoj (Development–support to equipment by progressive technologies), Klastry (Clusters–mutual support of firms and other relevant actors) and especially Prosperita (Infrastructure for innovations such as science and technology parks, Centres for TT etc.) supported within OP Industry and Enterprise (2004–2006).

In the new programming period (2007–2013) support to innovation has been strengthened significantly and ERDF support is being channelled via 2 OPs (OP Enterprise and Innovation and OP R&D for Innovations). While there is a significant continuity with the previous period in the case of OP Enterprise and Innovation, the second OP RDI started from scratch which – in conjunction with sound and prudent project selection – resulted in a significant delay in the implementation of this OP (most calls are now open but the number of contracted projects is limited). Consequently, no outputs or result can be reported so far.

The focus of OPIE has shifted significantly towards the support of innovation as at least 7 out of 15 support programmes (“spheres of interventions”) directly focus on innovation. In addition to the above mentioned programmes from OP Industry and Enterprise (OPIE) which continue also under the new OP Enterprise and Innovations, several new programmes or adjustments were made. For example, a new programme, “Potenciál”, targeting the enhancement of capacities and the increase in the number of firms able to pursue their own R&D, was prepared. Likewise, 2 programmes for the enhancement of ICTs in firms have been launched. The focus of programmes seems to be coherent with the national innovation policy, though the key question remains – what real changes/results will these programmes and supported projects induce/produce?

Synergies between projects supported by the two OPs are limited (and will remain so in the near future) due to delayed implementation of OP R&D for Innovation. Given this and given the length of time it takes to construct R&D infrastructure, the real impacts of the newly built premises will be detectable only 3–5 years from now. It should be stressed, however, that achieving synergies is one of fundamental project selection criteria of the OP. Each major project supported under the “European centres of excellence” and or “Regional centres of excellence” priorities need, therefore, to have a clear strategy on how to achieve synergies in cooperation with other actors.

### ***Regional level***

By 2005 innovation policy was recognised, by all the responsible public authorities, both national and increasingly also the regional ones, as a key policy challenge and as a priority for the next programming period of Structural Funds (2007–2013). Nevertheless, the real ability of regions to prepare and manage development projects remains rather low, especially due to a shortage of professional development organisations with autonomous capacity for identifying and carrying out development projects in the interest of the regions.

Innovation centres are scarce and located only in the largest cities – Prague, Brno, Ostrava and Plzeň and all of them are relatively recent initiatives which only rarely give rise to tangible results. An important barrier to the development of innovation policy at the regional level is also a lack of awareness and understanding of this issue by regional policy makers. The elected regional representatives took-up their role in 2001 and were overwhelmed by their basic administrative functions. Consequently, issues like innovation policy or support to R&D were, at least for the first years, beyond the scope of the majority of the elected representatives. Moreover, the self-governing regions lack any legal competence over the sphere of R&D and innovation. Despite this, some regional representatives are aware of the role of R&D&I in the current globalized economies as well as the importance of this sphere for the image of the regions and therefore try to support regional universities at least by extemporary initiatives. Some Czech regions even tried to approach the issue of R&D and innovation in a more systematic way, for example by commissioning the elaboration of regional innovation strategies. The regional innovation strategies (RIS) started to be formulated by some Czech regions in the early 2000s. However, the efficient use of strategic/programming documents for steering development in regions is still in its infancy and many regional actors consider strategic documents as a mere exercise with limited practical relevance (Blažek, Vozáb, 2004). Therefore, even in cases where regional innovation strategy has been elaborated and approved by the respective Regional council, only fragments of these strategies have been implemented in practice (with the exception of the South Moravia region).

**To sum up, the key problems that have until recently hindered the development of a coherent innovation policy at a regional level in the Czech Republic are: a lack of sufficiently strong regional actors with competences and skills to design and deliver innovation policy; the lack of genuine partnerships in defining development priorities based on mutual respect among the key players and the lack of longer term development ambitions and unexplored needs of the business sector; the policy makers unawareness of the importance of research and innovation for the long-term development of the region; and the very formal nature of development strategies.**

Huge impetus for the whole sphere of the Czech R&D&I is expected from the current programming period as a significant amount of the Structural Funds is aimed at the support of R&D&I activity within the regions eligible for the EU Convergence Objective, i.e. in all Czech regions with the exception of Prague.

The situation in **Objective Competitiveness** (i.e. in Prague) is different, or rather, more clear cut. Surprisingly, despite a relatively lower amount of SFs money, and despite the fact that support to R&D&I represented only a modest part of ERDF funded SPD 2 (the dominant allocation of SPD 2 has been assigned to sustainable transport, anti-floods measures, and the revitalization of brown fields) the SFs (both ERDF and ESF) are the key sources for implementation of at least some of the priorities/measures of Prague's "Bohemian Regional Innovation Strategy" (BRIS). The predominance

of SFs support of R&D&I in Prague is of such that many claim that the BRIS would not be implemented at all if SFs money were not available via SPD 2 (and SPD 3) during the first programming period 2004–2006. For example, with SPD2 support Charles University established The Centre for Knowledge and Technology Transfer, a similar TT centre has been established with ERDF support for the Czech Academy of Sciences. The Innovation Centre of Business Incubators and the Innovation Biomedical Centre of the Institute of Experimental Medicine of the Academy are among the most important projects supported by ERDF. Nevertheless, given the short operational period of these as well as of similar centres of this kind, the tangible results of their activities can be expected only in the medium and long-term. In the current programming period (2007–2013), the OP Competitiveness (a successor of SPD2) is much more focused on R&D&I. Unfortunately, a fundamental weakness for R&D&I in Prague is the lack of political support from city authorities to innovations as the primary interest of the elected authorities in Prague lies in basic technical infrastructure like the inner ring and express ring-road around Prague, the further development of Prague public transport, including the extension of the Prague underground and – last but not least – environmental infrastructure, like a waste-water treatment plant (many of these projects are supported by ERDF).

**In brief, there is practically no link between the national innovation policy and pro-innovation activities on the regional level. The initiatives of regions are rather a result of a particular constellation of relevant actors, of their vision, capacities, will and interests resulting in a huge variety, both in range and scope, of innovation related activities (for an example of a highly positive approach, see part 3.2 of the South Moravian case study).**

## 2.2 ERDF CONTRIBUTION ACROSS POLICY AREAS

In contrast to the previous programming period 2004–2006, the sphere of innovation is now taken much more seriously in the Czech Republic. Currently, innovation related ERDF support is channelled primarily via two OPs in Objective Convergence (OP Research and Development for Innovations and OP Innovation and Enterprise) and 1 OP in Objective Competitiveness (OP Competitiveness – Prague). The overall design of all these 3 Operational programmes can be considered in line with the European approaches towards innovation support (for example support to regional innovation systems, science and technology parks, technology transfer, clusters etc). In addition, all these priorities and programmes are also supported by the development of relevant soft-skills such as technology scouting supported via ESF funded OPs (which are however, beyond the scope of this report).

The main OPIE measures relating to innovation are included in the following programmes:

1. “Potenciál” aiming at enhancing the capacities of firms for own R&D and at increasing the number of firms pursuing their own R&D (8.4% of total allocation under OPIE).



2. Three programmes to enhance new production technologies and ICTs in firms have been launched. (14.2%)
3. Programme Innovation aimed at protecting IPR, improving quality of production, technologies and services, introducing managerial changes into intra-firm processes, supporting cooperation between firms and public research institutions (14.0%)
4. Two programmes aimed at cooperation such as clusters, technology platforms (17.3%)

The main recipients of funding are private firms, business associations, R&D institutions, non-profit organizations, self-government units and natural persons.

The main measures supported via OP R&D for Innovations are European centers of excellence (33,1% of total allocation of this OP), regional centers for excellence (again 33,1%), commercialization and popularization of R&D (10,3%), strengthening of R&D capacities at universities (20%).

The focus of both operational programmes is up-to-date and is coherent with the national innovation policy. Nevertheless, the real impact of these programmes and supported projects remains unclear and depends mostly on the real quality of the individual project. However, the answer to this question will be clear only after a relevant number of projects have been completed.

There is no explicit support for inter-regional cooperation in innovation, nevertheless, support is provided for across region cooperation (programmes on clusters and technology platforms as well as several priorities within OP R&D for Innovations).

### **3 EVIDENCE AVAILABLE ON THE PERFORMANCE OF INNOVATION MEASURES CO-FINANCED BY ERDF**

#### **3.1 ACHIEVEMENTS UNDER THE CONVERGENCE OBJECTIVE**

Currently, despite this relatively modern policy framework mentioned above, to our knowledge, there is only limited quantitative information available on results and impacts of pro-innovation projects co-financed by ERDF in the programming period 2007–2013 due to relatively slow start of implementation of these OP, especially of OP Research and Development for Innovations (OP RDI). This slower start should not necessarily be interpreted negatively as the main reason for a certain delay in implementation of this OP is (along with the complexity of projects aiming at the establishment of centres of excellence of regional or even European significance) the stress on a quality selection procedure for these projects often of a flagship nature and the detailed examination of the mechanisms for each projects in order to guarantee that the money is used efficiently and effectively so that the promised targets can be met. Therefore, currently, only 15 projects were selected within this OP and none of them has been completed so far.

The focus on innovation support within OP Enterprise and Innovation is more dominant than in OP Industry and Enterprise (OPIE) 2004–2006. In OP IE innovation related programmes (Prosperity, Clusters and Innovations) were allocated 124 MEUR, i.e. 35,7% of this OP, in current OP Enterprise and Innovations this share reaches 39,7%, which is 1419 MEUR. Adding the figures of a programme supporting ICT and strategic services the share allocated to innovation related activities rises to 46,7%. Moreover, despite prevailing continuity, each programme has been assessed and adjusted if necessary. For example, in programme Prosperity a support to the creation of business angel networks has been added with the aim to boost this sort of innovation support which has a limited tradition within the Czech Republic.

The relatively slow implementation of the new generation OPs does not mean that there are no results and impacts that can be reported today, as numerous projects were supported under the previous programming period and are clearly linked to projects under preparation or are already financed under the current programming period.

Therefore, selected output and result indicators in the sphere of innovations will be provided (table 1), the available indicators of current OP Enterprise and Innovations will be given and finally on the ground experience in selected regions will be provided.

**Table 1: Selected indicators for OP Industry and Enterprise (2004–2006)**

	Original value	Target value for the end of programming period	Value at November 30, 2009
Number of established clusters	0	10	30
Share of functional clusters	(%)	1 <sup>st</sup> year 100%, 2 <sup>nd</sup> year 90% 3 <sup>rd</sup> year 80%	64,4%
No. of newly established business incubators (BI), science and technology parks (STP), and TT centres,	0	15	45
Number of firms supported by BIs, STPs, and TT Centres	0	300	189
Number of projects aiming at protection of IPR	0	50	52
Number of universities and research institutes involved in innovation projects	0	20	37
Newly build, reconstructed or acquired space (m2)	0	30 000	66946

Source: ISOP ++

**This table supports the view that the strengths of this OP lay especially in the sphere of capacity building (where in most cases the envisaged target values were exceeded), but much less so in achieving the real impacts like new patents, new technologies etc.. This is, however, not surprising given the nature of innovation processes as well as due to other factors mentioned above.**

**Table 2: Selected indicators for OP Innovation and Enterprise (2007–2013)**

	Original value	Target value	Value at March 31,
--	----------------	--------------	--------------------

			2010
No. of newly established science and technology parks (STP) and TT centres	0	40	4
No. of newly established business incubators (BI)	0	40	6
Number of innovation firms supported by BIs, STPs, and TT Centres	0	1300	3
Number of innovations and patents supported	0	1100	465
Number of innovations introduced	0	750	231
Number of new patents	0	350	51
Number of supported projects aiming at development of new technologies	0	550	166
Number of R&D jobs created	0	1000	331
New sources of alternative energy	0	120MW	4,9MW

Source: ISOP ++

**In the current OP, according to the result indicators significantly better achievements have been recorded despite the relatively slower start of this OP. For example, according to data on contracted projects, it seems quite likely that the target value of 1000 new R&D jobs will be exceeded. Likewise, the contracted value of projects focusing on renewable energy sources is currently (March 31, 2010) 146,3 MW which exceeds the target value for year 2015. Therefore, it seems likely, that the majority of the output and result indicators will exceed the target values.**

The data from table 1 and 2 also indicate that all three pillars of innovation support are important, i.e. to enhancement innovation friendly environment, knowledge transfer and support to clusters/poles and to boosting applied research and product development. Namely, the focus of programme Prosperita is on building an innovation friendly environment (construction as well support to running costs of Science and Technology Parks, Business Incubators and Centres for Technology transfer (until now 10 units of this kind have been supported in the current programming period). The list of activities supported by Prosperita thus encompasses both innovation environment and knowledge transfer. ERDF support to clusters has been vigorously pursued since 2004 and has been one of the major innovations within the Czech industrial policy since the accession. Until now, several dozen clusters have been supported, most of them are still active (see table 1). The benefits from ERDF support (typically building of joint research capacities or buying of new technologies, joint marketing etc.) are so far much more important than the effects from agglomeration or localisation economies achieved within clusters up to now. Detailed empirical case studies suggest that until now the other effects of participation in clusters (i.e. except for effects from ERDF support) on competitiveness of member firms is rather limited (see e.g. Blažek, Kuncová, 2010). Nevertheless, limited “spontaneous” effects of cluster support are inevitable in the early stage of cluster formation in the Czech Republic.

Finally, Programme Potencial (within OP Enterprise and Innovation), concerning the boosting applied research and product development, is explicitly designed to support the creation of and/or strengthen R&D units within firms. **To sum up, these 3 pillars of innovation support are strongly**

**supported within this OP.** In addition, recently, 11 projects aiming at reinforcing research capacities and commercialization have been supported via OP R&D for Innovation. Among supported projects for example is the Centre for research of alternative energy sources, or Laboratories for the development of advanced microtechnologies and nanotechnologies (both located in Brno).

Interesting insights into the “on the ground” effects of innovation related interventions of ERDF in all 3 relevant spheres (i.e. innovation friendly environment, knowledge transfer and support to clusters/poles, boosting applied research and product development) provide analysis of experience accumulated so far in an effort to create an innovation support strategy in some Czech regions.

For example, in the South Moravian region, often considered the most progressive region in the sphere of innovation support in the Czech Republic, several highly interesting and relevant projects supported by ERDF have been completed recently; in the sphere of innovation friendly environment, in 2008 a Technology incubator (cca 2,5 MEUR) was opened, in 2009, the biotechnological incubator INBIT was created (over 4 MEUR). Currently, these two incubators nest firms that employ more than 200 highly qualified people and firms employing another 150 employees have already left the incubator successfully (the list of nested firms can be found at <http://www.jic.cz/tenant-companies>). There are two interesting projects in the sphere of knowledge transfer and cluster support: the Bio-informatics cluster (0,5 MEUR) implemented in 2007 –2008 and the Centre for TT of Masaryk University in Brno (implemented in 2006–2008, worth cca 1 MEUR). The main results of the Cluster is the formation of a network and of a solid and institutionalized platform that is able to prepare joint projects for the newly established Technology Agency of the Czech Republic as well as the 7th FP. In particular, the flagship CEITEC project financed by OP RDI focuses on exploring synergy between life-sciences and nanomaterials. In case of the CTT, a team was set up to draft the procedural rules for IPR handling within the Masaryk University as well as create positions for technology scouts for 2 key areas, i.e. life-sciences and ICT; the first 5 spin off firms have been established by Masaryk University in Brno.

The projects being prepared in South Moravia region are much more ambitious and of significantly larger scale. They range from the 1st class R&D infrastructure such as CEITEC to the Scientific museum. (Projects seeking support for the amount of 600 MEUR via OP Research and Development for Innovations have until now been prepared in the region).

**Experience shows that ERDF funding is the most effective in case of large-scale projects aiming at expanding R&D&I infrastructure where there are no expenditure eligibility problems.**

Consequently, a typical model of synergy between Czech and ERDF money is the following; while ERDF invests in the development of this type of infrastructure, Czech money (obviously, in addition to necessary co-financing) is used to cover the running costs, finance consultancy teams, finance a set of complementary projects such as micro-loan funds, seed funds, patent funds, innovation

vouchers etc. In the case of these smaller projects the Czech money is more flexible, readily available and less administratively demanding. In addition, a synergy with other funding sources is being achieved in the South Moravia region including ESF, EU 7th FP, CIP, national and regional and city programmes/budgets, private money and even sponsorship (e.g. with the help of sponsors the South Moravian Centre for International Mobility has set up the SOPHIA foundation to support talent (mostly firms operating in technology sectors) .

**In the second largest Czech city – the city of Ostrava, the heart of the largest old industrial region in the Czech Republic – the impacts of the EU cohesion support were felt well before the Czech accession into the EU.** For example, one of the most important drivers of regional development and now of regional innovation strategy is RDA Ostrava which was set up under the PHARE programme. Already in 1993, the RDA facilitated the establishment of a Business Innovation Centre (BIC) in Ostrava which enhanced innovation friendly environment. Likewise, in 1997, under the lead of RDA the Science & Technology Park, a joint project of the Technical University (and other universities) and City of Ostrava, was created. As regards cluster support, already in 2002, the RDA in cooperation with Czechinvest (government agency for attracting FDIs) with the regional government and Union for the Moravia–Silesia Region, began to support the establishment of regional clusters via cluster initiatives targeting systemic interactions and cooperation between business and academia (Skokan, 2009). Clusters were supported via the ERDF Cluster programme funded by OP Industry and Enterprise (2004–2006) and are today supported under the same programme via OP Innovation and Enterprise (2007–2013). The Centre for Advanced Technologies (2007 – OPIE) and Regional Centre for TT (also 2007 – OPIE) are among the most important projects supported by ERDF. Currently, several major projects to be financed via OP RDI are being the assessed (including the flagship project “IT4Innovation” for approx 100 MEUR).

Given the lack of output, result and impact indicators, at least selected financial indicators can be provided to illustrate the overall progress in the implementation of innovation support according to the 3 pillars of innovation policy (see table 2b).

**Tab. 2b: Selected financial indicators according to the 3 pillars of innovation policies (end of March 2010).**

	Relevant programmes	Demand/ allocation	Expenditure incurred (contracted) (% of total allocation)
Innovation friendly environment	Potential	82%	32%
Knowledge transfer and support to clusters/poles	Prosperity, Cooperation	32%	14%
Boosting applied research and product development	Innovation	81%	37%
Other: support to new production technologies, ICT and strategic services	Development, ICT	84%	33%

## 3.2 ACHIEVEMENTS UNDER THE COMPETITIVENESS OBJECTIVE

### Objective Competitiveness – Prague

It is necessary to stress that there are significant differences between the former SPD2 and current OP Competitiveness in several key aspects. Firstly, the territorial coverage of SPD 2 was restricted to Prague's affected neighbourhood and was not eligible for R&D&I support as relevant institutions were spread around the whole city. The current coverage of the whole city is much more suitable, and also increases the competition for EU funding, so better projects can be selected from a larger pool of applications. The second major change is that The City of Prague authorities have assumed total responsibility for OP Competitiveness and perform the functions of MA and of IB. (Previously, the City of Prague authorities only covered the role of one of two IBs, the second IB was the Centre for Regional Development affiliated to the Ministry for Regional Development that acted as MA). This makes management of this OP more coherent and gives final beneficiaries greater guarantees as no differences of opinions (e.g. on eligibility issues) can emerge between the MA and IB. In the current programming period (2007–2013), the OP Competitiveness is much more focused on R&D&I than the former SPD 2, see Table 4.

**Table 4: Comparison of SD 2 and OP Competitiveness**

	SPD 2	OP Competitiveness
Total allocation	142 591 ths. EUR	234 936 ths EUR
Allocation on innovation activities	15 059 ths. EUR	53 333 ths. EUR
Allocation used	15 059 ths. EUR	24 000 ths. EUR (until April 2010)
Number of supported projects	11	19

Source: Managing Authority of OP Competitiveness, April 2010.

The supported priorities in OP Competitiveness do not fit neatly into the 3 innovation pillars used in this report (i.e. innovation friendly environment, knowledge transfer and support to clusters/poles and boosting applied research and product development). Innovation related projects are supported within the sphere of intervention 3.1 “development of innovation environment and of partnership between R&D institutions and the business sector”, 22,7% of total allocation to this OP amounting to approx. 64 mil. EUR. At the end of March 2010, 41% of the 2007–2013 allocation had been contracted. Table 5 shows the value of relevant “area of newly built or reconstructed R&D capacities” indicator.

The second relevant priority (with 11.9 mil. €, i.e. 4,3% of this OP) targets the improvement of the environment for enterprises and supported activities of public sector bodies (mostly local governments of Prague quarters) aiming to provide better services to businesses. However, also a centre for education of mentally handicapped people has been supported under this priority. Until the end of April only 5 projects and only 20,7% of the 2007–2013 allocation had been contracted.

Priority 3.1. (i.e. the “development of innovation environment and partnership between R&D institutions and business sector”) has recorded great demand, so far project applicants have asked for 304% of the available allocation. (The data relates to end of March, 2010, source: Monthly monitoring report for March, 2010, Ministry for Regional Development, Prague, April 2010). The demand for priority 3.2 (improvement of the environment for enterprises) is significantly lower, 67% of total allocation (and March, 2010). Nevertheless, **given the early implementation phase of this OP, it is currently impossible to elaborate on outputs or results of these projects, nevertheless, it is possible to provide data on contracted values of monitoring indicators (see table 5 below).**

**Table 5: Selected monitoring indicators of OP Competitiveness**

	Planned indicator	Value of indicators contracted till April 20, 2010	Values of indicators achieved by April 20, 2010
Area of newly built or reconstructed R&D capacities	2500 m2	4994 m2	0
New R&D jobs created	110	49	0
Number of licences or patents created	3	14	1
Number of licences or patents bought	n.a.	59	0

Source: MA OP Competitiveness, April 20, 2010

### Summary of ERDF contribution

On the basis of available information, ERDF contribution to innovation policy can be summarized as follows:

- **the availability of ERDF sources clearly enhanced the quality of support programmes in the sphere of innovation (new activities supported, new types of support, stress on mutual cooperation among firms as well as among private firms and public research institutes etc).**
- the ERDF sources expanded the volume of money available to innovation support
- **sizeable amount of ERDF funding and resulting need to develop a reasonable strategy for using these sources vis a vis the Lisbon strategy has inspired the Czech debate on innovations, knowledge economy and overall competitiveness**
- **ERDF funding has given rise to a vast increase of R&D capacities of European standard, nevertheless, the impacts in terms of patents, top publications, spin/off firms, growth of R&D staff etc. are limited due to delay in implementation of these large/scale operations.**
- **perhaps the major weakness/challenge of the Czech ERDF strategy in the sphere of innovation is the fact, that a sizeable amount of money is spent on purchasing new technology by Czech firms instead of supporting own R&D activities leading to the development of new technologies/products.**

- Possible adjustments are mostly related to formal features of support programmes as the overall strategy seems to be adequate. For example, the establishment of cluster support requires the setting up of a new legal entity and a relatively high number of partners.

## 4 CONCLUSION: MAIN CHALLENGES FACED BY COHESION POLICY PROGRAMMES

Given the relatively early stage of development of innovation system on both the national and regional levels, there are numerous urgent challenges of various types IN THE Czech Republic. Most of these challenges are being addressed by the current generation of OPs, but available information suggest that achieved results may vary significantly, with consequent variations in effectiveness and efficiency of particular priorities and projects. The main reason for this is a limited experience with the support mechanisms on the demand and supply side of innovations (private firms, research institutes, universities, development agencies, various public sector bodies). **Current experience suggests that significant results can be achieved only when the key actors are extraordinary committed to achieving a desirable change or – more precisely – to set the whole system in motion steering it in a desirable direction.** In addition, the projects supported should not be “blind” but set within a well thought out development/innovation strategy. Therefore, soft factors like individual enthusiasm and motivation to acquire the relevant information and build a network of relevant actors seem to be the decisive success factors in the current programming period. In this context, the support via several strands of cohesion policy represents a unique opportunity.

Nevertheless, a group of interrelated but deep-rooted factors is probably far more difficult to address through a proper policy initiative. These are related **to limited concrete opportunities for cooperation in high-tech segments due to several types of fractures within the innovation system.** The first type of a “fracture” is that sometimes even the top Czech research institutes do not dispose of the strategic knowledge needed by firms operating at the global level, when, for example, the research orientation of relevant institutes do not match the needs of the firms. This situation forces the high-tech Czech firms to seek out foreign partners. The second type of fracture is quite common when the research institutes do not have a potential counterpart among private firms in the region to commercialize their results. Such firms are located only in the most developed countries (USA, the UK, Germany). Finally, the third major type of system fracture is when the innovation needs of local firms are “too simple” or “unattractive” for the R&D institutes (Csank, 2010). Unfortunately, in the Czech Republic, the regions suffer from all 3 types of fractures at the same time.

In addition, severe limitation of innovation capacities of Czech firms are severely limited by the fact that their integration into GPN means that most of them only supply a partial component and



do not have direct links with customers. Therefore, they do not receive sufficiently strong feedbacks from the market, as the feedback is mediated via their upper tier supplier.

Solving such problems is difficult if not impossible. Firstly, addressing the fractures within the innovation chain requires a thorough qualitative analysis of needs and real demands of firms on the one hand and of real (potential) supply from research institutes on the other hand. (This type of survey has been carried out in a few Czech regions recently). On the basis of this analysis, an attempt can be made to remove at least some barriers within the particular regional innovation system. Secondly, a strategy based on the current knowledge on innovation creation and support (global production networks, local buzz – global pipelines, knowledge bases, myopia, etc.) should be designed trying to enhance cooperation among local actors and building links to global actors. Inevitably, due to limited sources of all types, this cannot be done across all fields and branches at once, but only for selected priority spheres (with all the risks associated with this sort of “pick the winner” strategy). One aspect of this strategy might be a targeted effort to attract suitable talents or even investors or firms that would help to fill the gaps in the innovation system. Another important component of such a strategy might be to help firms to escape from their dependence on information supplied by their upper tier contractor e.g. via support from ST parks and/or mutual cooperation (clusters, technology platforms etc.).

## REFERENCES

- BLAŽEK, J., UHLÍŘ, D. (2007): Regional Innovation Policies in the Czech Republic and the case of Prague: An emerging role of a regional level? *European Planning Studies*, Vol. 15, No. 7, p. 871–888.
- BLAŽEK, J., VOZÁB, J. (2004): The Institutional and Programming Context of Regional Development in the Czech Republic: A critique, In: Drbohlav, D., Kalvoda, J., Voženílek (eds): *Czech Geography at The Dawn of the Millenium*, Olomouc, Česká geografická společnost, str. 255–268
- BLAŽEK, J., KUNCOVÁ, I. (forthcoming): Clusters: fashionable concept or an effective tool for enhancement of firm competitiveness?, *Politická ekonomie*,
- BLAŽEK, J., ŽÍŽALOVÁ, P., et al, (2010): Where does the knowledge for knowledge intensive industries come from? The case of biotech in Prague and ICT in Ostrava (in print)
- CSANK, P. (2010): Innovation demand as factor of TT: the case of Southern Moravia (in print)
- CHLÁDEK, P. (2010): Implikace přístupu *Constructing Regional Advantage* na příkladu Regionální inovační strategie Jihomoravského kraje (in print)
- SKOKAN, K. (2009): Regional Clusters and the Transformation of Old Industrial Regions. In: 3<sup>rd</sup> Central European Conference in Regional Science. Conference Proceedings. Košice: TUKE. pp. 761–774. ISBN 978–80–553–0329–1.

### ***Interesting evaluation studies***

To our knowledge, no special evaluation studies aimed at evaluation of results and impacts in the sphere of innovation support have been undertaken in the Czech Republic. Only a set of studies focused upon analyses in the sphere of R&D and its link to competitiveness commissioned by the Ministry of Regional Development is available.

Examples of these are:

Porovnání aktivit podporujících rozvoj inovací a znalostní ekonomiky mezi odpovídajícími programy regionů Cíle 1 a Cíle 2 (Comparison of activities supportive to innovations and knowledge economy within relevant OPs in Objective Convergence and Objective Competitiveness). Ministry for Regional Development, Prague, 2009, 22p.

Analýza vazeb mezi Národní politikou výzkumu, vývoje a inovací ČR na léta 2009 – 2015 a Národním strategickým a referenčním rámcem ČR 2007 – 2013 a operačními program podporujícími rozvoj inovací a znalostní společnosti. (Analysis of links between NIP 2009–2015 and OP supporting innovation and knowledge economy), Ministry for Regional Development, Prague, 2009, 83p.

**The author would like to thank to the following people for their insights provided during the interviews:**

Ing. Miloslava Boučková, Ing. Per Tůma, Ing. Ondřej Ptáček (Ministry of Trade and Industry (MA OP Innovation and Enterprise))

Ing. Marcela Nováková, Ing. Martin Škréta, Ing. Kateřina Vágnerová (MA/IB OP Prague Competitiveness)

Ing. David Sventek, Director of the Regional Office (MA ROP Moravia–Silesia).

RNDr. David Uhlíř, Ministry of Education, OP Research and Development for Innovation

Mgr. Petr Chládek: Manager of RIS South Moravia

Prof. Karel Skokan: Technical University of Ostrava (the former Director of ST Park in Ostrava).

Mgr. Pavel Csank (Berman Group) private consultant in the sphere of regional development and innovation support

Ing. Vít Šumpela, Ing. Kateřina Dvořáková (director, and member of Dept. of Management and Coordination of NSRF), Ministry for Regional Development, Prague.

## **ANNEX A – BACKGROUND DATA ON EU COHESION POLICY SUPPORT TO INNOVATION**

The data on the ERDF resources allocated cover the FOI codes defined as being relevant for support of RTDI, or, more precisely, those that cover the bulk of resources devoted to innovation (see annex B for the list of codes). Experts should assess the appropriateness of this common definition and, if necessary, adjust the coverage to the national case in consultation with the core team. Note: experts should complete the final column only in respect of the National and Regional programmes totals and not for each regional programme.

**Table 1 – Total ERDF resources allocated per programme (2007–2013)**

Programme	Total ERDF resources for innovation	Total ERDF	Innovation support as % of total ERDF	Main initiatives implemented
OP Technická pomoc		247 783 172	0.0%	Not relevant
Integrovaný operacní program	505 325 778	1 582 390 162	31.9%	Development of the information society in public administration, e-government
Total Objective 0	505 325 778	1 830 173 334	27.6%	
ROP NUTS II Jihovýchod	3 498 641	704 445 636	0.5%	
ROP NUTS II Střední Morava		657 389 413	0.0%	
OP Podnikání a inovace	1 914 651 176	3 041 312 546	63.0%	Cooperation (Clusters), Potential, Prosperity, Innovation, ICT and strategic services, key words of support: infrastructure for R&D, patents,

				innovation, TT, cooperation, new R&D capacities
jobsROP NUTS II Severovýchod	5 514 244	656 457 606	0.8%	
OP Životní prostředí	169 644 866	4 917 867 098	3.4%	No directly relevant measures, innovations are planned e.g. within measure „Energy savings and waste heating systems“.
OP Doprava		5 774 081 203	0.0%	
ROP NUTS II Severozápad	13 628 788	745 911 021	1.8%	No direct measure, innovations are planned e.g. in introduction of new products in tourism industry
ROP NUTS II Střední Čechy	2 200 000	559 083 839	0.4%	
ROP NUTS II Moravskoslezsko		716 093 217	0.0%	
OP Výzkum a vývoj pro inovace	1 998 207 054	2 070 680 884	96.5%	European and Regional Centres of Excellence, commercialization and popularisation of R&D results, enhancement of R&D capacities at universities
ROP NUTS II Jihozápad		619 651 254	0.0%	
Total Objective 1	4 107 344 769	20 462 973 717	20.1%	
OP Praha Konkurenceschopnost	74 833 714	234 936 005	31.9%	Development of innovation environment and partnership between research institutes and business sector, key words, development of R&D Infrastructure and of mutual cooperation, e.g. enhancement of research on blood circulation within the Institute of Clinical and Experimental Medicine. Establishment of the Centre of Polymer Materials and Technologies within the Institute of Macromolecular Chemistry of the Czech Academy of Science
Total Objective 2	74 833 714	234 936 005	31.9%	
Overall total	4 687 504 261	22 528 083 056	20.8%	

Source: core team on EC data.

**Table 2**

CZECH REPUBLIC		
Policy Area	Categorisation of Expenditure (FOI codes)	Total ERDF
<b>Objective 0</b>		
Assistance to SMEs for the promotion of environmentally-friendly products and production processes (...)	06	
Investment in firms directly linked to research and innovation (...)	07	
Other measures to stimulate research and innovation and entrepreneurship in SMEs	09	
R&TD activities in research centres	01	
Boosting applied research Total		
Advanced support services for firms and groups of firms	05	
Developing human potential in the field of research and innovation, in particular through post-graduate studies ...	74	
Information and communication technologies (...)	11	

Information and communication technologies (TEN-ICT)	12	
Other measures for improving access to and efficient use of ICT by SMEs	15	
Services and applications for citizens (e-health, e-government, e-learning, e-inclusion, etc.)	13	505 325 778
Services and applications for SMEs (e-commerce, education and training, networking, etc.)	14	
Innovation friendly environment Total		505 325 778
Assistance to R&TD, particularly in SMEs (including access to R&TD services in research centres)	04	
R&TD infrastructure and centres of competence in a specific technology	02	
Technology transfer and improvement of cooperation networks ...	03	
Knowledge transfers and poles Total		
Total Objective 0		505 325 778
<b>Objective 1</b>		
Assistance to SMEs for the promotion of environmentally-friendly products and production processes (...)	06	291 215 853
Investment in firms directly linked to research and innovation (...)	07	298 946 839
Other measures to stimulate research and innovation and entrepreneurship in SMEs	09	165 860 213
R&TD activities in research centres	01	318 840 696
Boosting applied research Total		1 074 863 601
Advanced support services for firms and groups of firms	05	328 631 468
Developing human potential in the field of research and innovation, in particular through post-graduate studies ...	74	
Information and communication technologies (...)	11	151 928 655
Information and communication technologies (TEN-ICT)	12	95 062 456
Other measures for improving access to and efficient use of ICT by SMEs	15	132 601 236
Services and applications for citizens (e-health, e-government, e-learning, e-inclusion, etc.)	13	
Services and applications for SMEs (e-commerce, education and training, networking, etc.)	14	112 297 136
Innovation friendly environment Total		820 520 951
Assistance to R&TD, particularly in SMEs (including access to R&TD services in research centres)	04	179 733 362
R&TD infrastructure and centres of competence in a specific technology	02	1 493 358 646
Technology transfer and improvement of cooperation networks ...	03	538 868 209
Knowledge transfers and poles Total		2 211 960 217
Total Objective 1		4 107 344 769
<b>Objective 2</b>		
Assistance to SMEs for the promotion of environmentally-friendly products and production processes (...)	06	1 342 659
Investment in firms directly linked to research and innovation (...)	07	7 618 975
Other measures to stimulate research and innovation and entrepreneurship in SMEs	09	8 961 633
R&TD activities in research centres	01	7 618 975
Boosting applied research Total		25 542 242
Advanced support services for firms and groups of firms	05	2 464 609
Developing human potential in the field of research and innovation, in particular through post-graduate studies ...	74	7 618 975
Information and communication technologies (...)	11	4 368 213
Information and communication technologies (TEN-ICT)	12	
Other measures for improving access to and efficient use of ICT by SMEs	15	2 464 609
Services and applications for citizens (e-health, e-government, e-learning, e-inclusion, etc.)	13	5 710 873
Services and applications for SMEs (e-commerce, education and training, networking, etc.)	14	1 342 660
Innovation friendly environment Total		23 969 939

Assistance to R&TD, particularly in SMEs (including access to R&TD services in research centres)	04	7 618 974
R&TD infrastructure and centres of competence in a specific technology	02	7 618 975
Technology transfer and improvement of cooperation networks ...	03	10 083 584
Knowledge transfers and poles Total		25 321 533
Total Objective 2		74 833 714

Source: core team on EC data

## ANNEX B – CLASSIFICATION OF INNOVATION POLICY AREAS, INSTRUMENTS AND BENEFICIARIES

Policy area	Short description
Innovation friendly environment	<p>This category covers a range of actions which seek to improve the overall environment in which enterprises innovate, and notably three sub groups:</p> <ul style="list-style-type: none"> <li>• innovation financing (in terms of establishing financial engineering schemes, etc.);</li> <li>• regulatory improvements and innovative approaches to public services and procurement (this category could notably capture certain e-government investments related to provision of services to enterprises);</li> <li>• Developing human capital for the knowledge economy. This category will be limited to projects in higher education aimed at developing industry orientated courses and post-graduate courses; training of researchers in enterprises or research centres.</li> </ul> <p>The category also covers initiatives geared towards improving governance capacities for innovation and knowledge policies (e.g. specific technical assistance funding, support for regional foresight)</p>
Knowledge transfer and support to innovation poles and clusters	<p>Direct or indirect support for knowledge and technology transfer:</p> <ul style="list-style-type: none"> <li>• direct support: aid scheme for utilising technology-related services or for implementing technology transfer projects, notably environmentally friendly technologies and ITC;</li> <li>• indirect support: delivered through funding of infrastructure and services of technology parks, innovation centres, university liaison and transfer offices, etc.</li> </ul> <p>Direct or indirect support for creation of poles (involving public and non-profit organisations as well as enterprises) and clusters of companies</p> <ul style="list-style-type: none"> <li>• direct support: funding for enterprise level cluster activities, etc.</li> <li>• indirect support through funding for regrouping R&amp;D infrastructure in poles, infrastructure for clusters, etc.</li> </ul>

Boosting applied research and product development	<p>Funding of “Pre-competitive development” and “Industrial research” projects and related infrastructure. Policy instruments include:</p> <ul style="list-style-type: none"> <li>• aid schemes for single beneficiary or groups of beneficiaries (including IPR protection and exploitation);</li> <li>• research infrastructures for non-profit/public organisations and higher education sector directly related to universities.</li> </ul> <p>Any direct or indirect support for the creation of innovative enterprises (spin-offs and start-ups)</p>
---	--

Instruments	Short description
Infrastructures and facilities	<p>Building and equipment for laboratories or facilities for university or research centres,</p> <p>Telecommunication infrastructures,</p> <p>Building and equipment for incubators and parks for innovative enterprises</p>
Aid schemes	<p>Grants and loans for RTDI projects</p> <p>Innovative finance (venture capital, equity finance, special bonds, etc.) for innovative enterprises</p>
Education and training	<p>Graduate and post-graduate University courses</p> <p>Training of researchers</p>

Beneficiaries	Short description
Public sectors	<p>Universities</p> <p>National research institutions and other national and local public bodies (innovation agencies, BIC, Chambers of Commerce, etc..)</p> <p>Public companies</p>
Private sectors	<p>Enterprises</p> <p>Private research centres</p>
Others	<p>NGOs</p>
Networks	<p>cooperation between research, universities and businesses</p> <p>cooperation between businesses (clusters of SMEs)</p> <p>other forms of cooperation among different actors</p>

## ANNEX C – CATEGORISATION OF EXPENDITURE TO BE USED FOR CALCULATING EU COHESION POLICY RESOURCES DEVOTED TO INNOVATION

FOI	Priority Theme
-----	----------------

Code	
	<b>Research and technological development (RTD), innovation and entrepreneurship</b>
01	R&TD activities in research centres
02	R&TD infrastructure (including physical plant, instrumentation and high-speed computer networks linking research centres) and centres of competence in a specific technology
03	Technology transfer and improvement of cooperation networks between small businesses (SMEs), between these and other businesses and universities, postsecondary education establishments of all kinds, regional authorities, research centres and scientific and technological poles (scientific and technological parks, technopoles, etc.)
04	Assistance to R&TD, particularly in SMEs (including access to R&TD services in research centres)
05	Advanced support services for firms and groups of firms
06	Assistance to SMEs for the promotion of environmentally-friendly products and production processes (introduction of effective environment managing system, adoption and use of pollution prevention technologies, integration of clean technologies into firm production)
07	Investment in firms directly linked to research and innovation (innovative technologies, establishment of new firms by universities, existing R&TD centres and firms, etc.)
09	Other measures to stimulate research and innovation and entrepreneurship in SMEs
	<b>Information society</b>
11	Information and communication technologies (access, security, interoperability, risk-prevention, research, innovation, e-content, etc.)
12	Information and communication technologies (TEN-ICT)
13	Services and applications for the citizen (e-health, e-government, e-learning, e-inclusion, etc.)
14	Services and applications for SMEs (e-commerce, education and training, networking, etc.)
15	Other measures for improving access to and efficient use of ICT by SMEs
	<b>Human capital</b>
74	Developing human potential in the field of research and innovation, in particular through post-graduate studies and training of researchers, and networking activities between universities, research centres and businesses

### ***Policy resources devoted to Innovation***

February Monthly Monitoring Report, March 2010, Ministry for Regional Development, Prague

Mid-term evaluation of the Regional Development Strategy of the Czech Republic, Berman Group 2009 (personal participation).

Ex ante evaluation of NSRR of the Czech Republic (2007–2013), Berman Group, (personal participation)

SPD 2 (Prague (2004–2006)

Czech Republic Final Draft, September 2010



OP Innovation and Entrepreneurship, (2007–2013), Annual Report 2008

OP Industry and Entrepreneurship (2004–2006), documents related to selected calls

OP Research and Development for Innovation (2007–2013)

Strategic report on implementation of SFs (Berman Group, Prague, 2009), personal participation

Hodnocení absorpční kapacity Operačního programu Podnikání a inovace 2007 – 2013 ve vztahu k cílovým skupinám (Evaluation of absorption capacity of OP Entrepreneurship and Innovation) in relation to particular target groups (Berman Group, 2009).

Ex post evaluation of OP IE (2004–2006), Berman Group, 2008 (personal participation).

Ex Post Evaluation of the ERDF in Objectives 1 & 2 (2000–2006)

Work Package 11: Management and implementation, Country Report Czech Republic, (Co-author)

Analysis of R&D in the Czech Republic 2009, ANALÝZA STAVU VÝZKUMU, VÝVOJE A INOVACÍ

V ČESKÉ REPUBLICE A JEJICH SROVNÁNÍ SE ZAHRANIČÍM V ROCE 2009, Office of The Government, Prague, 2009.