

## **Chapter VII – Fulfilment of the National Research and Development Policy of the Czech Republic (2004–2008) and its update from 2006**

This chapter continues in the similar chapter of 2005 R&D Analysis. It contains information arranged in blocks on:

- Fulfilment of the National Research and Development Policy of the Czech Republic for 2004–2008 approved by the Government Resolution No. 5 of January 7, 2004.
- Fulfilment of the Harmonisation of the National Research and Development Policy of the Czech Republic for 2004–2008 with the National Innovation Policy of the Czech Republic for 2005–2010 and other relevant documents of the Czech Republic and the European Union, which was approved by the Government Resolution No. 178 of February 22, 2006.

The National Research and Development Policy (NR&DP) responds relatively flexibly to new facts and related documents influencing the actual situation in research and development. At present, this concerns mostly documents like Long-term main directions of research, National Innovation Policy, new act on public research institutions, and EU documents on revised Lisbon strategy, European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers. The evoked changes have been reflected in the material titled “Harmonisation of the National Research and Development Policy of the Czech Republic for 2004–2008 with the National Innovation Policy and other relevant documents of the Czech Republic and the European Union” and also resulted in the need to amend Act No. 130/2002 Coll. on R&D support. At the same time, the fulfilment of NR&DP tasks from past years has continued.

More detailed attention is dedicated to the most important documents and legislative measures. The most important of them are specified in more detail. The international co-operation in research and development is characterised separately.

### **National Research Programme I (NRP I)**

The national research programme is defined by law as a set of programmes dealing with basic and applied research by form of projects. NRP I was prepared and approved in 2003 and reflected then applicable national R&D policy in its thematic and cross-sectional programmes. Its thematic content was defined by experts using the “technology foresight” method. The Programme started in 2004.

Several drawbacks occurred in implementation of NRP I. The most serious was the complexity of coordination and unified evaluation and administration of the programme in the face of a high number of providers and inadequate administrative support for coordination activity and lacking agency background that would guarantee the administration of NRP I as a whole or its substantial part (e.g. all thematic programmes). In June 2006, the Ministry of Education, Youth and Sport (MEYS) informed the Government on the progress of NRP I and the Government took note of this report by Resolution No. 806 of June 28, 2006.

### **National Research Programme II (NRP II)**

The National Research Programme II (NRP II), approved by the Government Resolution No. 272 of March 9, 2005, implements a substantial part of NR&DP and defines concrete targets of support for 4–6 years for targeted funding of thematic and system priorities of the Czech research. The programme contains a list of criteria for ex-post and ex-ante evaluations, objectives of this programme as a whole and of its thematic and cross-sectional parts, and indicators for the objective fulfilment. In the view of Czechia’s membership in the European Communities, this programme had to be notified to the European Commission before its start.

In NRP II announced for 2006–2011 the problems of NRP I were successfully eliminated by reducing the number of providers to two – the Ministry of Education, Youth and

Sport and the Ministry of Industry and Trade. Problems resulting from an insufficient administrative or agency support should be solved continuously by partial or full transfer of the NRP II agenda to agencies. The National Innovation Policy recommends building the Technology Agency of the Czech Republic sponsored by the Ministry of Industry and Trade.

Of the proposed public funds for NRP II, ninety per cent is intended for 4 thematic priorities. Cross-sectional priorities will be funded also from other sources.

### **National Research Programme III (NRP III)**

At present, draft of this programme is being produced upon the Government Resolution No. 178 of February 22, 2006, which has to be submitted to the Government by February 2008. It will be based on thematic priorities of the long-term main directions of research and prepared using the method of technology foresight. NRP III is designed for 2009–2013 and will use a substantial part of public R&D expenditures. Departmental programmes approved by the Government after commencement of NRP III will not be fulfilling the research themes contained in this national programme; they will become its supplement.

### **Act No. 341/2005 Coll. on Public Research Institutions**

The Act effective from September 23, 2005 established a new type of legal person, a Public Research Institution (PRI) having research, including its infrastructure, as its main activity. The institution may provide other activities in the public interest and other for-profit business activity. All contractual relationships of PRIs are governed by the Commercial Code. The PRI's founder can be the ministry, another central authority of state administration, the Academy of Sciences of CR or a territorially self-governing unit. The act defines control and supervisory bodies and the way of the PRI's management. Institutions are entered into the PRI's register, which is available to public. The register will be maintained in both documentary and electronic form by the Ministry of Education, Youth and Sport, who will perform all administrative acts connected with the foundation or transformation of PRIs and all changes of details on individual PRIs.

The act changes the legal form of most of the existing state contributory organisations in the area of research and development, especially the workplaces of the Academy of Sciences of the Czech Republic. Also some research contributory organisations of the territorially self-governing units having research, including its infrastructure, as their main activity, are transformed to PRIs. The list of transformed organisations is attached as Annex to the Act. The founders were obliged to submit to MEYS the foundation deeds of the transformed PRIs by June 30, 2006. The date of entry in the register of PRIs is the date of establishment of the public research institution; for the transformed institutions this date is January 1, 2007 by law.

Act on PRIs has an impact also on numerous other provisions. Therefore, Act No. 342/2005 Coll. on amendment to certain acts in connection with adoption of Act on Public Research Institutions was adopted. The Ministry of Education, Youth and Sport has produced several methodological and internal accompanying materials for application of the act and preparation of PRIs and published them on its website:

- The Instruction of the Minister of Education, Youth and Sport No. 2/2006 approving the procedure for maintaining the Register of Public Research Institutions, providing entries and other related activities.
- Information to founder of public research institutions
- Procedure for maintaining the Register of PRIs

It can be expected that new public research institutions will come considerably closer to the higher education institutions with their form of management. The transparency of financial flows creates conditions for participation of the private sector in the research co-funding and application of research results in practice.

**Act on No. 227/2006 Coll. on Human Embryonic Stem Cell Research**

The act will enable to perform research on these cells under transparent conditions. The act also solves the issues of export and import of embryonic stem cells and prohibits the export of embryos for research purposes. It also contains a new regulation of the assisted reproduction corresponding with all requirements to ethical, civil law and family law regulation of the whole issue. The act also amends the Penal Code by enabling to punish the violation of law in this area. Act No. 227/2006 Coll. is effective from June 1, 2006.

The Ministry of Education, Youth and Sport will be competent by operation of law to decide on issue of permissions to conduct research on human embryonic stem cells and related activities, maintain register of human embryonic stem cell lines and provide control over this area. The act also regulates the research permitting procedure and other administrative acts relating to the research of human embryonic stem cell.

Details of the steps of MEYS as an administrative body are set by the Instruction of the Minister of Education, Youth and Sport No. 9/2006. Sample of the electronic form of the cell lines register is placed on the Ministry's website.

**Amendment to Act No. 130/2002 Coll. on R&D support**

The Research and Development Council and MEYS are preparing together a fundamental amendment to Act No. 130/2002 Coll. on R&D support from public funds and on amendment to some relating acts (Act on R&D support) in the line with the Government Resolution on the National Innovation Policy and on Integration of R&D Administration. The necessity of this amendment has been raised also by change of EU regulation in connection with preparation to budget period 2007–2013.

In the first phase of the amendment preparation from November 2005 to January 2006, a whole range of suggestions was collected in public discussions and from inquiries at providers of public R&D funds; these suggestions were later arranged into the concept of the amendment. Public discussion ended in March 2006. The discussion offered valuable suggestions items for this amendment. The Research and Development Council took note of the results on its 216<sup>th</sup> meeting on April 14, 2006 and imposed to start works on preparation of the factual aim of the amendment.

**Operational Programme Human Resources Development (OP HRD) for Measure 3.2: Promotion of tertiary education, research and development**

The Ministry of Education, Youth and Sport announced four programmes of support in 2005:

- Enhancement of quality in higher education
- Development of teacher study programmes
- Development of further education at institutions of higher education
- Development of human resources in research and development

Projects in unlimited numbers could be submitted only by the so called eligible applicants which were public, state and private institutions of higher education, professional workplaces cooperating with institutions of higher education, research and development institutions, and associations of employers. In September 2006, the Ministry of Education, Youth and Sport issued decision on the grant award based on a three-phase evaluation. Up to 75 % of funding is provided by the European Social Fund, 25 % by the state budget of the Czech Republic. The applicants must implement their projects on the territory of the Czech Republic, with the exception of the territory of the capital of Prague.

Two calls were announced in 2005, last call in this programme took place in August 2006.

### **Accession of the Czech Republic to Recommendation of the European Commission on the European Charter and on a Code of Conduct**

In March 2006, the European Commission issued its Recommendation on the European Charter for Researchers and on a Code of Conduct for the Recruitment of Researchers. The aim of these documents is to develop an integrated European strategy in the area of human resources in research and development, and provide equal rights and obligations for all research workers no matter in which Member State they work. The transparent and professional environment thus created has to improve the creative atmosphere and enhance performance of these research workers.

The Member States support the adoption of both Charter and Code, but some of them have raised certain suggestions and complaints. Also the form of implementation of this recommendation at national level differs between the Member States. It is imposed upon the Ministry of Education, Youth and Sport, in co-operation with the Research and Development Council and the Ministry of Industry and Trade, to produce and submit report on accession of the Czech Republic to these recommending documents by the end of 2006. A working group has been established for this purpose composed of representatives of competent central administrative authorities, institutions of higher education, research institutions and professional public in research and development. Internet address was established for public discussion. Both materials are placed on the portal of public administration in research.

The Ministry of Education, Youth and Sport submitted the resulting material to the Government and the Government approved it by Resolution No. 951 of August 16, 2006. The Government approved the accession of the Czech Republic to the above documents of the European Commission and imposed upon central authorities of public administration and the Academy of Sciences of CR to apply this approach on a continuing basis. By the same resolution, it also imposed on the Ministry of Education, Youth and Sport and the Research and Development Council to take the Charter and Code into account at preparation of a new National Research and Development Policy of the Czech Republic for submission to the Government by December 31, 2006.

### **Operational Programme Research and Development for Innovation (OP R&DfI)**

The programme is part of the preparation of the Czech Republic for drawing EU funds intended for implementation of policy of economic and social cohesion for 2007–2013. The European framework for implementation of cohesion policy is a set of regulations for the Structural and Cohesion Funds and the Community Strategic Guidelines. At the domestic level, this operational programme is based on the draft National Development Plan of the Czech Republic and the National Strategic Reference Framework of the Czech Republic for 2007–2013.

The global objective of OP R&DfI is to strengthen the research, development and innovation potential of the Czech Republic ensuring the growth, competitiveness and creation of jobs in regions at NUTS II level in such a way for the Czech Republic to become an important European place of concentration for these activities through institutions of higher education, research institutions and other relevant subjects.

Specific aims of OP R&DfI represent ways leading to attainment of the global objective. They reflect the results of analysis of the current economic and social situation in research and development, which has identified the research potential of Czechia and its strong and weak points. Specific aims are set to eliminate barriers to development and growth.

Global objective and specific aims form a starting point to formulate priority axes of OP R&DfI:

- Development of R&D capacities
- Development of capacities for Public and Private R&D Partnerships
- Strengthening of capacities of higher education institutions for tertiary education
- Technical assistance

First drafts of operational programmes were submitted to the Government in May 2006, others followed in October 2006. The Operational Programme R&D for Innovation must be formally approved by the European Commission. It is expected to do so by the end of 2006.

### **International aspect of NR&DP fulfilment**

The involvement of Czechia in the 6<sup>th</sup> EU Framework Programme is an important indicator for evaluation of other aims in the process of integration into the European Research Area (ERA). Five hundred and ninety-four Czech teams participate in project solutions with total contracted amount of EUR 70.63 mil. The Czech participation forms 1.4 % of all participants and the amount contracted for Czech teams represents 0.73 % of amount released by the European Commission from the 6FP budget so far.

The highest participation and highest contracted amounts are reported by Czech experts in Priority 1, i.e. Life sciences, genomics and biotechnology for health (LSH). Only minor is the Czech participation in Priority 4, i.e. Aeronautics and space (Space) and in the programme Science and society (Sci&Soc).

Positive fact is the continuing support and development of infrastructure (especially information and consulting services) for successful and efficient integration of the Czech research and development into ERA. The Czech Liaison Office for Research and Development (CZELO) was opened in Brussels on May 16, 2005 for providing services to research workers of all type of research and development organisations in the Czech Republic and promoting the successful integration of Czech research into the European research co-operation, mostly through Framework programmes for research and development.

Also worth mentioning is the EUREKA programme being an important instrument for the European strategy and co-operation in the area of applied and industrial research, and innovation activities. Czechia has been the first country from the Central and Eastern Europe since July 2005 that was entrusted with the yearly chairmanship of this programme.

The co-operation continues in COST programme – the European Co-operation in Scientific and Technical Research guaranteeing coordination of research by form of the so called harmonised European events – ACTION; important are also other multilateral activities like co-operation within NATO, EMBO, CERN and SÚJV (State Office for Nuclear Safety), OECD, ESA, SEI, Visegrad Group and INTAS (International Association for the Promotion of Cooperation with Scientists from the New Independent States of the former Soviet Union). Bilateral international co-operation takes place upon agreements. From the view of the Czech Republic's accession into EU it can be said that as a full member with a right to vote, Czechia takes part in nearly two hundred working groups and committees of EU Council – Competitiveness Council (e.g. CREST – Committee for Research and Technology). An increased attention is dedicated to involvement of young research workers in international co-operation.

In 2006, the preparation of the 7<sup>th</sup> Framework Programme (EC and EURATOM) was in progress. In July 2006, the Decision of the European Parliament and of the Council concerning the 7<sup>th</sup> Framework Programme EC (2007-2013) and the Decision of the European Council concerning the 7<sup>th</sup> Framework Programme EURATOM were approved.. Documents were approved including the overall budget. The 7<sup>th</sup> Framework Programme will be divided into main four fields – Co-operation, Ideas, People, and Capacities.

The office of the State Commissioner for European Research was established at the Ministry of Education, Youth and Sport by the Government Resolution to represent the Government on the meetings of bodies of the EU Council and European Commission concerning research and development issues. His/her task is also to co-ordinate the activities of domestic R&D subjects related to the participation in European research.

### **Conclusion**

The National Research and Development Policy, as well as its Harmonization, are being fulfilled without any serious problems. Updating policy measures are taken on continuing basis in a context of changing internal and external conditions. Works have started on the draft of a new policy. Public discussion took place in September to actual themes on the public research administration portal [www.vyzkum.cz](http://www.vyzkum.cz). New National Research and Development Policy has to be submitted to the Government by December 31, 2008.