

## **Chapter VIII – Fulfilment of the National Innovation Policy of the Czech Republic for 2005–2010**

For many years, the Czech Republic has been lacking any conceptual document that would formulate the state's role in promoting innovations and the principles of linking innovative activities with the field of research and development. It was only in 2004 that the Government approved a general framework document titled the "National Innovation Strategy". By its Resolution of March 24, 2004 approving this strategy the Government at the same time imposed upon the Research and Development Council to produce a concrete and detailed national innovation policy.

The Government approved the draft of the National Innovation Policy of CR for 2005-2010 by its Resolution No. 851 of July 7, 2005. Works on preparation of this policy were closely linked to works on the draft Strategy of the Economic Growth, especially its chapter on research, development and innovations. In its preparation, the links to the revised Lisbon strategy of the European Union were taken into account as well.

The policy formulates and substantiates four strategic objectives:

- Strengthen research and development as a source of innovation
- Establish well-functioning public and private partnerships
- Guarantee human resources for innovation
- Make the performance of the state administration in research, development and innovation more effective

Each objective has tasks defined necessary for its achievement, tools for executing the respective tasks and for each tool there are measures necessary for its implementation, coordinators and managers for these measures, terms of implementation, indicators of the implementation success, and the method of evaluation. The policy contains 48 concrete measures. Most measures were imposed on the Ministry of Education, Youth and Sport (21 in total) and the Ministry of Industry and Trade (11 in total). The National Innovation Policy is available on [www.vyzkum.cz](http://www.vyzkum.cz).

This chapter gives brief information on fulfilment of measures with terms of implementation set for 2005 and 2006. It contains details on several measures with term of implementation 2007, the fulfilment of which started in advance. The Council has requested data on their fulfilment from competent coordinators and managers.

Following parts evaluate the results so far achieved in the policy fulfilment. The evaluation is only brief due to following two reasons:

- The policy was approved in July 2005, the fulfilment of many tasks is only at the beginning, and part of the tasks has term of implementation 2007 and later.
- Resolution of the Government from July 2005, by which the policy was approved, imposed on the Chairman of the Council to evaluate the fulfilment of the National Innovation Policy in 2007 and submit a proposal of necessary measures to the Government.

### **VIII.1 Fulfilment of measures necessary for implementation of the objective "Strengthen Research and Development as a source of innovation"**

Twenty-six measures were imposed for implementation of this objective. Below details on fulfilment of measures are mentioned being significantly important for fulfilment of the policy as a whole, for which sufficiently concrete data are available.

According to Measure 1, the public R&D expenditures have to be increased each year by 20 – 25 % to reach the level of public R&D expenditures of 1 % of GDP by 2010. In 2006, expenditures will be increased only by 10.5 % of 2005 expenditures. In the next years, the imposed increases will apparently not be met either. The fulfilment of the objective in 2010 is thus endangered.

Measure 2 to “update the National Research and Development Policy of CR (NR&DP) with respect to the National Innovation Policy (NIP)” was fulfilled. Harmonization of NR&DP and NIP was approved by the Government Resolution No. 178 of February 22, 2006.

Measure 5 imposes on the ministries and other providers of public funds to research and development to give preference to approved long-term main directions of research (LMDsR) while preparing new R&D programmes and activities since 2006. The measure is being fulfilled; the approved LMDsR also form basis for two fundamental programme documents of the draft National Research Programme III and the draft Operational Programme Research and Development for Innovation (OP R&DfI) for using the EU structural funds.

Concerning the Protection of Intellectual Property, problems affected by unsatisfactory knowledge of legal directions and procedures in this field still persist. The Measure 11 imposed upon the Ministry of Education, Youth and Sport to strengthen education in science and engineering study programmes at universities on MSc and PhD levels. Knowledge of the protection of intellectual property and its economic application, including retrieval and assessment of commercial potential of R&D results, will be enhanced. The above mentioned Measure is being fulfilled within the framework of „Development of Human Resources“ Programme.

Measure 12 to “coordinate the preparation of the updated National Development Plan at the level of state administration authorities with regard to the National Innovation Policy” is fulfilled, too. Proposals for three mutually linked operational programmes for 2007-2013 were prepared: Entrepreneurship and Innovation OP, Research and Development for Innovation OP and Education for competitiveness OP.

Successfully implemented are Measures 18–20 to improve conditions for creation of clusters as an effective tool of the regional policy, including preparation of experts and managers for performance of these clusters. The Ministry of Industry and Trade guaranteed the training of 88 cluster facilitators. The certification of cluster facilitators and managers will take place in the first half of 2007. The implementation of the cluster strategy will continue within the operational programmes for 2007–2013.

The Ministry of Education, Youth and Sport guarantees Measure 28 and supports selected projects within the Human Resources Programme being part of the National Research Programme II to provide communication activities for development of public awareness of innovative processes.

### **VIII.2 Fulfilment of measures necessary for implementation of the objective “Establish well-functioning public private partnerships”**

Six measures were imposed to implement this objective, of them four are to commence in 2007 or later.

Measure 29 imposed upon the Council in collaboration with the Ministry of Finance to analyse, after evaluating the impacts of tax relieves for R&D funded by business entities, the advantages and disadvantages of establishment of a fund for supporting research, development and innovation following the Hungarian example. The measure is not fulfilled; the fulfilment is postponed to 2007 after completion of a more detailed evaluation of impacts of tax relieves on the state budget revenues and changes in the private R&D expenditures.

In 2006, the preparation started to support “spin-offs”, i.e. companies established by a split from universities or public research institutions (one of three partial activities of Measure 31). The support to establishment of “spin-off” companies was included into the proposal of applicable operational programmes for 2007–2013.

### **VIII.3 Fulfilment of measures necessary for implementation of the objective “Guarantee human resources for innovation”**

Eight measures were imposed to implement this objective. Most of them are long-term activities with gradual implementation. Measures 33–35 imposed on the Ministry of Education, Youth and Sport to use from 2006 the increased funds intended for higher education institutions first of all in development programmes based upon the Long-term plan of the Ministry of Education, Youth and Sport and its update according to NIP and adjust the methodology for allocation of these funds. The fulfilment of these measures has started and will continue in the following years.

In compliance with Measure 36, the Ministry of Education, Youth and Sport has to open development programmes aimed at increasing the number of graduates in the Science&Engineering study programme. Its fulfilment has been slightly delayed. Programmes for improvement of material and technical conditions for learning and research in Science&Engineering disciplines are prepared and will start in 2007.

Measures 37–39 imposed on the Ministry of Education, Youth and Sport in collaboration with the Ministry for Regional Development and the Industrial Property Office to provide financial and consulting support to projects of research and development workers' training. It should be especially aimed at searching for and valuating the commercial potential of R&D results, technology transfers, copyright and industrial rights protection, etc. The measures are being fulfilled at regional level within the framework of the existing operational programme Human Resources Development supported by EU structural funds.

The Measure 40 imposed on the Ministry of Education, Youth and Sport in collaboration with the Council to prepare and proclaim the Czech Charter for Researchers and Code of Conduct for the Recruitment of Researchers in CR, in relation to the framework documents of the European Commission. The measure was guaranteed by the Ministry of Education, Youth and Sport. The Ministry of Education, Youth and Sport submitted the resulting material to the Government and the Government approved it by its Resolution No. 951 of August 16, 2006. The Government approved the accession of CR to the above framework documents of the European Commission and imposed on the central administration bodies and the Academy of Sciences of CR to apply continuously this approach. The implementation should remove the existing barriers to mobility of research workers and increase the attractiveness of professional career in research and development. Details are given in Chapter VII on the fulfilment of the National Research and Development Policy.

#### **VIII.4 Fulfilment of measures necessary for implementation of the objective “Make the performance of the state administration in research, development and innovation more effective”**

Eight measures were imposed to implement this objective. Measures are to contribute to provision of following partial objectives:

- Reduce the number of existing 22 budgetary departmental chapters, from which the research and development is supported;
- Determine the state administration's responsibility in the area of innovation;
- Ensure that a feedback exists between the measures of the state and needs of enterprises and other participants of the innovation process;
- Ensure continual and coherent process for preparation of strategies and policies and its links to implementation programmes.

The implementation of first two above mentioned objectives needs an amendment to the Competence Act No. 2/1969. But results of the general election to the Chamber of Deputies of the Czech Parliament have delayed the preparation works by at least one year. Measures 41 and 42 that should be implemented during 2006–2008 will not be dealt with until 2007. The status of the Council was extended by the area of innovation; the personal capacity of the Council Secretariat was slightly increased according to Measure 43, which was thus fulfilled.

The feedback between the measures of the state and the needs of enterprises and other stakeholders in the innovation process has to be guaranteed by Measures 45 and 46. Measure 45 to “establish an information system for innovation similar to R&D IS using its know-how” has its deadline in 2008. In view of the facts given in the previous paragraph, the term of its implementation will be postponed by approximately one year.

Measure 46 imposed on the Czech Statistical Office to introduce into Czechia the methodology of statistical surveys on innovation in relation to the European Commission's Regulation No. 1450 of August 13, 2004. The methodology was introduced and the Czech Statistical Office made its survey on innovation in Czechia for 2003-2005 according to this methodology. Partial results from this survey were used in Chapter IV “Innovation, Competitiveness”.

Last of the above mentioned partial objectives – to “ensure continual and coherent process for preparation of strategies and policies and its links to implementation programmes” should have been ensured by Measures 47 and 48. The Measure 47 imposed on the Council and the Ministry of Education, Youth and Sport to harmonize the National Research and Development Policy and the National Innovation Policy in 2006. The measure has been fulfilled. For details see Chapter VII on fulfilment of the National Research and Development Policy.

Also Measure 48 to “compulsorily examine in evaluating the draft R&D programmes their compliance with the National R&D Policy and the National Innovation Policy and correspondingly amend the methodology for evaluation of R&D and its results” is being fulfilled.

### Conclusion

The National Innovation Policy of CR for 2005–2010 was approved by the Government in July 2005. Nearly eighteen months of its implementation has confirmed the necessity and usefulness of this document. The implementation measures with deadlines allocated more or less evenly along the whole period of the policy are being fulfilled step by step.

There are only two major problems at present. Regarding the state budget deficit and the state's indebtedness, the pace of increasing the public support to R&D is not as high as expected. Same problems are in many other EU Member States. Also certain measures for making the state administration in research, development and innovation more effective, which require amendment to the Competence Act and some other acts, as the case may be, are postponed. The results of general election held in the middle of 2006 do not permit for the moment to reach the necessary political consensus on preparation of these legislative changes.