



European Centre for the  
Development of Vocational Training

## **ERO National Research Report 2006**

# **ERO National Research Report**

<b>Country:</b>	SLOVAK REPUBLIC
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## 1. LINKS BETWEEN NATIONAL VET/HRD RESEARCH AND DEVELOPMENT INITIATIVES AND VET/HRD POLICIES (IN PARTICULAR RECENT REFORMS/INNOVATIONS).

To be a genuinely competitive, knowledge-based economy, the European Union must become better at producing knowledge via research and development. In this respect, the Lisbon agenda and the new EU Financial Perspective for the programming period 2007-2013 proposed by the European Commission emphasize an exigency to develop research and create networks of centres of excellence that will enhance national and transnational cooperation. Therefore the Slovak Republic will be joined to the Structural Funds financial means with the aim to strengthen the knowledge capacities by extending research and development capacities and by ensuring, through innovation, education and a modern infrastructure, research spreading to all regions. Research and development, innovation and the transition to the knowledge economy ranking among the top priorities within the three new objectives of EU regional policies (Convergence, Regional Competitiveness, and European Territorial Co-operation) are subsequently reflected by national policies.

The Slovak Government ascribed to the Lisbon Strategy and determined specific measures to be taken in all its priority areas. By Resolution of the Slovak Government No. 140/2005 of 16 February 2005 the Slovak Republic adopted the national reform programme **Competitiveness Strategy for Slovakia until 2010** ([www.iminerva.sk](http://www.iminerva.sk); [www.finance.gov.sk](http://www.finance.gov.sk)). At the same time the Government undertook to adopt measures for the implementation of the Lisbon Strategy in compliance with the conclusions of the Spring European Council by 1 May 2005 (Resolution of the Slovak Government No. 189/2005 of 9 March 2005).

The Competitiveness Strategy for Slovakia until 2010 represents the economic strategy which is to become the basis for the Slovak Government's policy until 2010, within which the government declared its intention to create conditions for the growth of the country's economic competitiveness. The strategy is built on two main pillars - successful completion of structural reforms and policies aimed at improvements in the following four areas: *Information society; Science, research and innovation; Investments in people and education; Business environment.*

As soon as Slovakia's Government adopted the Strategy, action plans were developed in accordance with the four identified basic areas for the period until the end of 2006. Action plans approved by the Resolution of the Slovak Government No. 557/2005 of 13 July 2005 represent instruments for the achievement of the set objectives and they define the main tasks for the individual areas, the institutions responsible for their performance and deadlines.

Following the approval of the Action Plan for Science, Research and Innovation by the Government, the Ministry of Education of the Slovak Republic now focuses on implementation of reform steps as well as on achievement of strategic goals set by the Competitiveness Strategy. Very important step in this reform was the adoption of the Act No. 172/2005 Coll. of 21 March 2005 on the Organisation of State Support for Research and Development, which entered into force on 1 July 2005.

*Action plan on Science, Research and Innovation* includes the following tasks leading to the reform of R&D system in the Slovak Republic:

- To build up the central state agency in support of Research and Development;
- To work up the long term intents and objectives of the National S&T Policy by 2015;
- To work up a system of assessment of quality science and research results;
- To propose a new system of the National R&D Programmes;
- To propose a new system for state support of the National Centres of Excellence

- To design of a new financial instruments to support the human resources in science, research and innovations
- To propose an instrument for support of international S&T cooperation and simplification of drawing finance for R&D from EU sources.

**Research and Development Agency** ([www.apvv.sk](http://www.apvv.sk)) established by Act No. 172/2005 Coll., supports all areas of research and development. On 1 July 2005 the Agency for Support of Research and Development (established by Act No. 203/2001 Coll.) transformed into Research and Development Agency. The Agency should contribute to rise of the quality of research and development by providing financial means in the free competitive environment. The crucial selection criterion is the quality of research proposal.

The Government of the Slovak Republic by its Resolution No. 845 from 26 October 2005 named members of the Agency Board, which approved the Agency Statute that was consequently adopted by the Government by its Resolution No. 250 of 22 March 2006. On 15 November 2005 the Minister of Education of the Slovak Republic appointed a new Director of the Agency.

The Agency programme aimed at support of human potential in research and development and science communication was approved by the Government Resolution No. 216 of 8 March 2006. Currently the Agency is preparing the 1st public call in the frame of this programme. Main targets of the R&D part of the programme are:

- To create conditions for continuous improvement of skills and knowledge of researchers after completion of doctorate studies;
- To stimulate creation of closer links with Slovak researchers working in foreign research and development institutions with researchers in Slovakia;
- To stimulate the most productive workers in research and development and create possibilities for academia-industry mobility;
- To improve awareness in ethical issues within the research and development community.

In March 2006 the Government of the Slovak Republic also approved the Statute of the **Science and Technology Council** of the Government of the Slovak Republic (Resolution No. 277/ 2006 of 29 March 2006), which acts as a permanent advisory body to the Government. The council is chaired by the Minister of Education of the Slovak Republic and decides on strategic and conceptual documents regarding the research and development policy in the Slovak Republic.

The Ministry of Education is currently preparing implementation of a new system of assessment of science and research results quality, a granting scheme for support of research and development centres of excellence . Central Information Portal for Research and Development is currently under construction at the Ministry.

The Structural Funds of the European Union play a substantial role to help all regions build research and innovation capacities. Investment in regional R&D and innovation is expected to increase from 2007 onwards; as the EU's regional policy will increasingly focus on knowledge, research and innovation. In this context, the National Strategic Reference Framework for 2007 – 2013 is currently under preparation. In the first version of this document, the Government proposed R&D to be one of specific priorities and proposed to allocate the amount of EUR 800 million for the specific priority 2.3 Research and Development for the "Convergence" objective. Following operational priorities are proposed within this specific priority :

- Renewal and building of technical infrastructure of research and development;
- Support of research and development workplaces networks with outputs on excellent level as pillars of regions development and regional cooperation support;
- Research-driven knowledge and technology transfer applied practically.

National VET/HRD research was traditionally based on bottom up activities within the VEGA (Scientific Granting Agency) and KEGA (Cultural and Educational Grant Agency) granting schemes, and top-down state R&D programmes (see ERO National Report 2004 on respective 10 programmes) as well as state order based institutional research of the Ministry of Education and the Ministry of Labour affiliated institutions. Besides aforementioned changes related to establishment of Research and Development Agency the European Social Fund has a specific impact on R&D:

- Programming the current ESF and also ongoing programming for the Structural and Cohesion Funds offers important signals for future operational goals for funding from European resources but also it signals national priorities worth of research. The National Strategic Reference Framework for 2007-2013 was discussed by the government on 12th April 2006 and made public at the government's website. Although not yet approved the preparatory phase and the current version of the documents offers a lot of stimuli for professionals.
- Despite not being designed for research and development purpose ESF funding attracts part of R&D professionals, which in particular in VET has a brain drain affect. On the other hand, however, it contributes to strengthening links between R&D and training of relevant target groups, which can support dissemination of R&D outputs.
- Sometimes considered as fragmented, national/regional/sectoral policies receive an important impulse from the Structural and Cohesion Funds projects, and a feedback from implementation of projects creates a demand for VET/HRD related research and development as well as for cohesion efforts in respective policies.

## 2. LINKS BETWEEN EU SPONSORED VET/HRD RESEARCH AND DEVELOPMENT INITIATIVES AND VET/HRD POLICIES ( IN PARTICULAR RECENT REFORMS/INNOVATIONS).

Slovakia has a relatively strong R&D potential but its output quality is well behind the most developed countries. Thereby the main aim of Competitiveness Strategy for Slovakia until 2010 (the National Lisbon Strategy) and the subsequent **Action Plan for Science, Research and Innovation**, approved by the Slovak Government in July 2005, is to improve research, development and innovation systems to be comparable to the international standards. Implementing the Action Plan, the Slovak government was able to increase the amount of finances aimed at the support of science, research and innovation. This also ministered to Slovak subjects to profit from financial means from the EU funds (European Social Fund, EC Framework programmes for research, development and demonstrations, financial tools of EEC, European Science Foundation, etc.)

In 2004 and 2005, human resources development for R&D was a question of urgency in Slovakia. The year 2005 was marked by specific horizontal themes of the 6<sup>th</sup> Framework Programme. The best results were reached in following topics: information society technology, nanotechnology and sustainable development. On the contrary, life science, genomics and biotechnology and health lagged behind, although these topics were the most successful in the 5<sup>th</sup> Framework Programme from the point of Slovak applicants. No directly VET/HRD related projects with Slovak participation are performed within 6<sup>th</sup> FP in contrast to two projects within 5<sup>th</sup> FP. It is caused predominantly by the change of priorities; the priority human resource development has been removed and the only VET relevant priority within 6<sup>th</sup> RP is the priority "citizens and governance in a knowledge-based society". On the other hand the "European Science Education Network 2003" coordinated by IUVENTA- NAFYM, a Ministry of Education of the Slovak Republic managed organisation, has a strong VET related impulses due to the focus on young people up to age of 18 and enhancement the interest of youth in science and technology.

A new initiative within the European Union known as “Researchers in Europe” was launched in 2005 to improve and promote public understanding of the important role researcher play in society. Slovak Government agrees that this is to be a strategic point of the up-coming period and therefore declares its support for mobility of researchers and for creation of centres of excellence.

Implementation of the EU VET/HRD research initiatives at national level will release new policies development in Slovakia` especially a quality base for networking is a key to success. Nevertheless involvement of Slovak VET/HRD researchers in European activities is insufficient, as visible e.g. from Research Forum Education and Society (WIFO) at <http://www.b.shuttle.de/wifo/vet-pr/CEEC05.pdf>, where Slovakia is together with Latvia and Bulgaria among Europe’s worse performing countries.

### **3. OVERVIEW OF IMPORTANT ISSUES AND THEMES ADDRESSED IN CURRENT VET/HRD RESEARCH AND DEVELOPMENT PROJECTS.**

Although Leonardo da Vinci projects are not primarily aimed at research and development there are some R&D and VET relevant features in the projects reflected here together with APVV, VEGA and KEGA grant scheme projects. All relevant projects were clustered into five thematic groups: ICT (11 projects), Teachers/trainers/facilitators (9), Students/curriculum/competences (7), Minorities (5), and Politics/society (8). Numbers of projects identified for processing and uploading into the database are in brackets. 20 projects have been already processed, of which 10 have been selected for the annex below:

An ongoing education reform programme as well as current priorities of programme schemes emphasise e-learning as a new form of skill acquisition. Not surprisingly, introduction of information society and e-learning were topics of projects of the first group represented here by projects No 1 and No 2. Teachers, trainers and other facilitators (in this case career guidance counsellors) related projects are represented by projects No 3-5. No lesser importance is given to themes addressing the curricular reform and key competences development. Representatives of this kind of themes are projects No 6-10. Improvement of schooling of minorities is a hot topic. In particular, adjustment of the provision of educational services to the Roma minority traditions and culture needs more than research; a coherence of research findings, public policy measures, and implementation of respective measures in accordance with identified recommendations of experts. Currently, only one project of this cluster is included into the database (No 9). Transformation process of economy and accession of the Slovak Republic into the EU made adjustment to these changes an important research topic. A representative of this kind of projects is project No 10.

#### **ANNEX: SELECTION OF ERO BASE PROJECTS.**

1. VEGA 1/9199/02 Technology education for information society  
[http://www.trainingvillage.gr/etv/projects\\_networks/ero/prj\\_view.asp?theID=782](http://www.trainingvillage.gr/etv/projects_networks/ero/prj_view.asp?theID=782)
2. SK/02/B/F/PP-142256 Efficient e-learning network services establishment for education without borders – EEDUSER (LdV project)  
[http://www.trainingvillage.gr/etv/projects\\_networks/ero/prj\\_view.asp?theID=911](http://www.trainingvillage.gr/etv/projects_networks/ero/prj_view.asp?theID=911)
3. KEGA 3/0212/02 Innovation of complementary pedagogical study of secondary school vocational subject teachers  
[http://www.trainingvillage.gr/etv/projects\\_networks/ero/prj\\_view.asp?theID=576](http://www.trainingvillage.gr/etv/projects_networks/ero/prj_view.asp?theID=576)
4. SK/01/B/F/PP – 142 220 Modular distance learning for European mobility career counsellors (LdV project)

- [http://www.trainingvillage.gr/etv/projects\\_networks/ero/prj\\_view.asp?theID=799](http://www.trainingvillage.gr/etv/projects_networks/ero/prj_view.asp?theID=799)
5. KEGA 3/2312/04 Innovation of the system of pre-service and in-service training of secondary school vocational economic subject teachers  
[http://www.trainingvillage.gr/etv/projects\\_networks/ero/prj\\_view.asp?theID=973](http://www.trainingvillage.gr/etv/projects_networks/ero/prj_view.asp?theID=973)
  6. VEGA 1/2533/05 The key competences of students in technical study branches in national and European context  
[http://www.trainingvillage.gr/etv/projects\\_networks/ero/prj\\_view.asp?theID=768](http://www.trainingvillage.gr/etv/projects_networks/ero/prj_view.asp?theID=768)
  7. VEGA 3/3003/05 Forming and evaluating psychomotoric skills of students in technically oriented subjects  
[http://www.trainingvillage.gr/etv/projects\\_networks/ero/prj\\_view.asp?theID=751](http://www.trainingvillage.gr/etv/projects_networks/ero/prj_view.asp?theID=751)
  8. SK/05/B/F/LA-177427 Transparency in the Acquired Language Competences (LdV project)  
[http://www.trainingvillage.gr/etv/projects\\_networks/ero/prj\\_view.asp?theID=777](http://www.trainingvillage.gr/etv/projects_networks/ero/prj_view.asp?theID=777)
  9. VEGA 0081/03 The status and the role of Roma woman in society  
[http://www.trainingvillage.gr/etv/projects\\_networks/ero/prj\\_view.asp?theID=771](http://www.trainingvillage.gr/etv/projects_networks/ero/prj_view.asp?theID=771)
  10. VEGA 1/9221/02 Development of human resource management in Slovak organisations in the process of Slovakia's integration to the European Union  
[http://www.trainingvillage.gr/etv/projects\\_networks/ero/prj\\_view.asp?theID=802](http://www.trainingvillage.gr/etv/projects_networks/ero/prj_view.asp?theID=802)

#### 4. MAJOR INSTITUTIONS INVOLVED IN VET/HRD R&D IN YOUR COUNTRY.

- **Slovak University of Technology in Bratislava, Faculty of Materials Science seated in Trnava, Department of Engineering Pedagogy and Psychology**, [http://web.mtf.stuba.sk/sk/pracoviska/katedry/kipp/index\\_1024.htm](http://web.mtf.stuba.sk/sk/pracoviska/katedry/kipp/index_1024.htm), provides pre-graduate and post-graduate training of technical subjects teachers. Key research activities of the department have been oriented towards competences in pedagogy of VET teachers, innovation of training of technical subjects teachers, and quality of education.
- **University of Economics in Bratislava, Faculty of National Economy, Department of Pedagogy**, [http://nhf.euba.sk/katedry/kpg\\_a.htm](http://nhf.euba.sk/katedry/kpg_a.htm), offers pre-graduate and post-graduate training of economic subjects teachers. Its research activities have been focused in particular on innovations in economic education including new curriculum development.
- **Technical University of Košice: Department of Engineering Education**, <http://www.tuke.sk/kip/>, offers complementary pedagogical study providing secondary vocational subjects teachers – diploma engineers, with teacher qualification. The department is accredited by the international organisation International Gessellschaft fur Ingenieurpädagogik (IGIP) in Klagenfurt. **The Centre for Information and Telecommunication Technology**, <http://www.tuke.sk/CITT/>, is focused on the research on application of artificial intelligence, on expert activities in the field of operational systems, and educational activities related to ICT.
- **Matej Bel University, Banska Bystrica: Faculty of Economics** provides study programmes in tourist trade, economy and business management, public economy and services. The scope of its research activities also includes human resource and quality management issues. Research activities of the **Department of Economics and Human Sciences**, <http://www.econ.umb.sk/katedry/asp/ke.asp>, are focused e.g. on the issues of European citizenship and implementation of EU legislation the field of administrative law into the system of public administration in the SR. **Faculty of Natural Sciences, Department of Informatics**, <http://www.fpv.umb.sk/kat/ki/>, is focused on educational activities and research in the field of ICT.

- **Pavol Jozef Safarik University Kosice, Faculty of Natural Science, Research and Educational Centre for ICT**, <http://vecit.science.upjs.sk/>, provides educational and research activities in the field of ICT.
- **Comenius University, Bratislava**, <http://www.uniba.sk/>, **Faculty of Philosophy, Faculty of Education, Faculty of Social and Economy Sciences, Faculty of Natural Science Research and Educational Centre for ICT**. Comenius University is the oldest and greatest university in the SR. As a scientific institution it comprises research in almost all scientific disciplines.
- **University of Constantine the Philosopher, Nitra, Faculty of Education, Institute of Technology Education**, <http://www.utv.ukf.sk/>, provides training of future teachers in didactics and technology. The research activities are focused primarily at application of ICT in education, and creation of educational environment.
- **University of Trnava, Faculty of Education**, <http://pdf.truni.sk/>, provides teacher training for basic and secondary school teachers. Within its research activities the priority is given to application of ICT in education and to the educational theory.
- **Institute of Social Sciences, Slovak Academy of Sciences, Kosice**, <http://www.saske.sk/SVU/>, is focused on a research in history, sociology and social psychology. The topics in the field of social sociology research also include the human capital issues, and its links to educational system and labour market.
- **Institute for Sociology, Slovak Academy of Sciences, Bratislava**, <http://www.sociologia.sav.sk/>, aims at the research of current problems of Slovak society resulting from political and social changes in the SR.
- **Research Institute of Child Psychology and Patho-psychology**, Bratislava, <http://www.vudpap.host.sk/>, is the only institution in the SR dealing with a comprehensive research of mental development of children. The activities comprise research in the three key areas: mental development of healthy children, mental development of handicapped children, and the issues of social development of children and youth.
- **Institute for Labour and Family Research** (up to 28 February 2006 Centre for Work and Family Studies), <http://www.sspr.gov.sk/>, arose on September 1, 2003 from the merger of the Bratislava International Centre for Family Studies and the Research Institute of Labour, Social Affairs and Family. The Occupational Safety Research and Educational Institute became the part of it in January 2004. The Institute is the Ministry of Labour, Social Affairs and the Family of the SR affiliated institution focused on the sociological research related to social and family policy, labour market and employment policy, and in the field of occupational safety and health.
- **State Institute of VET**, Bratislava, <http://www.siov.sk/>, is the Ministry of Education SR affiliated institution. It is a methodological, pedagogical, co-ordinating and training institution responsible for vocational education and training issues at secondary VET schools. The activities include the development of educational programmes and educational standards, co-operation in development of textbooks, in-service teacher training, involvement in international projects, developing methods for simulation of activities for training firms.

- **National Institute for Education**, Bratislava, <http://www.statpedu.sk/>, is the Ministry of Education of the SR affiliated institution. Its mission is to carry out research in education and provide pedagogical guidance to primary and secondary (especially grammar) schools. The main activities include curriculum development, consultancy, methodology and in-service teacher training.

## 5. FUNDING FRAMEWORKS AND SUPPORT STRUCTURES.

R&D in the SR is carried out by higher education institutions, research institutes of the Slovak Academy of Sciences, public sector research institutes, all funded from the state budget, and private research institutes funded by the private sector.

The Ministry of Education of the SR is the central authority in the area of national research and development policy. R&D is supported top-down within 10 state R&D state programmes (six complex and four thematic). Within the state R&D programmes approved by the government (Resolution of the Government No. 1007/2002) the complex programmes most relevant to VET are as follows:

- the complex programme No 1 Informatisation of Society, in particular 1.2 Informatisation of education;
- within No 6 Contribution of Social Sciences to Development of Society in particular 6.2 aimed at regional development, 6.5 aimed at transformation of economy, and 6.9 aimed at social system transformation and risks of social cohesion violation.

Within 4 thematic programmes the most relevant programmes are s follows:

- the thematic programme No 1 Development of personality and skills of young PhD students below 35 years,
- No 2 aimed at support and effective utilisation of R&D infrastructure,
- No 3 Prognoses of the development of science and technology till 2015,
- No 4 in particular 4.1 Human resource development and 4.1.2 Labour sources and labour market.

Bottom-up research is implemented via the Research and Development Agency and two sectoral agencies – the Scientific Grant Agency VEGA and the Cultural and Educational Agency KEPA. VEGA projects are submitted by institutions from the education sector in accordance with the priorities of science policy approved by the Ministry of Education of the SR, and based on recommendations of scientific community. KEPA projects are submitted by HEI for the solution of current issues related to education and art.

The methodology for preparation of state R&D programmes for 2005-2006 was based on Act No. 132/2002 on Science and Technology) (§15 to §17) and on the Concept of National Science and Technology Policy till 2005. A new Act 172/2005 was approved in March 2005, newly stipulating state support of science and technology, and transforming the Agency for the Support of Science and Technology to the Research and Development Agency. The main objective of this law is to create the clear conditions of R&D environment in Slovakia in accordance with Lisbon Strategy and Barcelona Target. After increasing the transparency in funding flows and increasing the efficiency in investment, funding sources from the state budget for science and research will increase. Newly prepared state programme for establishment of National Research Centres is currently under preparation. New system of state programmes should be introduced by the end of 2006.

According to the database of the Statistical Office of the SR, there is overall decline of the expenditure for R&D. Even while public resources in absolute value slightly increased, their share on GDP declined (2004: 0.59% GDP). Figures for 2005 will be available in October 2006 but there is expectation of slight increase compared to 2004. In respect to the Barcelona target (3% GDP total

expenditure on science and research) the Government of the Slovak Republic approved 1.8% GDP as a national target to be reached by 2010.

With regard to research activities funded by the Ministry of Education of the Slovak Republic from the State budget via state programmes – the total amount of funding in 2004 was 723 800 000 SKK. Actual financial data of the state programmes for the year 2005 will be available in October 2006 and provided by the Statistical Office of the Slovak Republic.

## 6. PROFESSIONAL RESEARCH ASSOCIATIONS AND NETWORKS.

No professional research associations in the field of VET and HRD are currently in place in Slovakia. However, networks aimed at VET and HRD within which research and development might be addressed are established, e.g. **Association of Adult Education Institutions** ([www.aivd.sk](http://www.aivd.sk)) and **Slovak Association for Human Resources Management and Development** ([www.zrrlz.sk](http://www.zrrlz.sk), member of European Association for Personnel Management and World Federation of Personnel Management Associations).

Traditional professional bodies, such as the **Slovak Pedagogical Society** ([www.ucm.sk/FF/slovensky/SPS](http://www.ucm.sk/FF/slovensky/SPS)), **Slovak Psychological Society** ([www.psychologia.sav.sk/sps](http://www.psychologia.sav.sk/sps)) and **Slovak Sociological Association** are in function. They support research in VET/HRD within respective fields.

Research initiatives and networking was supported by the **Centre of the Development of Science and Technology** (SARC, [www.sarc.sk](http://www.sarc.sk)) established by Ministry of Education of the Slovak Republic in 1992. In February 2006 SARC has been incorporated into the organisational structure of the Research and Development Agency ([www.apvv.sk](http://www.apvv.sk)) and became **International Cooperation Department**. Research and Development Agency now also provides support for participation of research subjects in European R&D projects, and serves as contact points e.g. for Framework Programmes, COST and EUREKA; it also coordinates SIKAS+, a Slovak Information and Consultation Academic Network.

## 7. BRIEF REVIEW/ASSESSMENT OF THE CURRENT R&D ACTIVITIES AND INDICATION OF FUTURE ISSUES THAT NEED TO BE ADDRESSED. THIS SECTION SHOULD BE COMPLETED BY A RESEARCH EXPERT.

### 7.1

**Firstly, comment briefly on the status, effectiveness and impact of current VET/HRD R&D activities in your country.**

**(One third of a page)**

VET/HRD related research is insufficiently developed due to several reasons:

- There was no VET research specialised institution in Slovakia within former Czechoslovakia; there were only isolated researchers within universities and one department at the Institute of Experimental Pedagogy of the Slovak Academy of Sciences. A department within the Pedagogical Institute affiliated to the Ministry of Education SR served Slovak VET schools making use of the research infrastructure of Research Institute of VET in Prague.
- In contrast to VET research, the research in the field of labour, social and family affairs had solid grounds, partly also due to backing by the Research Institute of Labour, Social Affairs and Family located in Bratislava, with responsibility for Czechoslovakia as a whole, to some extent balancing the dominance of Prague in VET; this research infrastructure gradually diminished due to the brain drain (many of researchers entered politics) and gradual reduction of the number of research positions.
- During 1990s hard times of restructuring economy insufficient funding of research caused reduction of research activities; and what is more serious research in VET and HRD is still only

in limited extent able to reflect the new socio-economic conditions and to offer results usable in policy making. After 2002 first signs of revival in research are visible. It will however need more time to create efficient research teams in these fields. Within this context a research study within the state programme of R&D aimed at social protection of young PhD students is of crucial importance.

- There are no vivid links between almost exclusively private productive sector and almost exclusively public research institutions; private research institutions are still rare.

Although policy making cannot be considered as separated from research initiatives the Slovak Republic is far from the developed system of mutual interlinking of policy making and research. Policy-making is influenced from ad hoc short-term research activities rather than from long-term and interrelated research of well-established research teams. The year 2006 is hoped to be crucial in both: increasing funds invested in research and more sophisticated mechanisms in support of research after implementation of new legislation (which came in force only in 2005).

Completed by Juraj Vantuch

## 7.2

**Secondly, briefly outline and comment on those issues that need to be addressed by R&D in the future. (One third of a page)**

The Slovak Republic needs to strengthen activities aimed at popularisation and presentation of science and research results and at out-reach activities in this field to attract society and focusing particularly on youth to enhance their interest in science and research at the level of primary and secondary schools. Science can evolve only in the country just when there is sufficient demand for research in the society and when it has adequate social prestige. Therefore it is necessary to improve science and research perception by society as one of corner stones of improving well-being of citizens. This is also one of the tasks of the Action Plan for Science, Research and Innovation of the Competitiveness Strategy for Slovakia until 2010. This programme is aimed at improvement of the public perception of science and its role in the society and everyday life, at increase of interest of young people for scientific career as well as support of public involvement in the dialogue on transfer of knowledge into society.

Improvement of information infrastructure will be the second important point to be carried out in near future. It means to provide more consultation and further education/trainings services to R&D and business sector. After the support of these activities, Slovakia will be profitable more from increased knowledge potential of businessmen and science community. Also qualification of workers will be improved; new business subjects with a view of innovation firms will be supported. Herewith closer interconnection R&D vs. business sector will be launched and HRD will be more appreciable. All aspects mentioned are a guarantee for more competitive Slovak economy, which will reflect the Lisbon Strategy priority and will assure more successful EU policy implementation.

Central Information Portal is proposed to be created at the Ministry of Education of the SR with the aim to monitor data on publicly funded R&D projects. It is supposed to be operated at the end of 2006 and will represent a great contribution to transparent and efficient use of public R&D funding.

Completed by Petra Lipnická, Miloslava Molnárová, Juraj Vantuch

## 8. VET/HRD CONTACT PEOPLE.

Full name	E-mail address	Function	Particular expertise related to VET/HRD
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			research
Sandor Albert, ass. professor	<a href="mailto:albert.sandor@selyeuni.sk">albert.sandor@selyeuni.sk</a>	Selye University, Komarno; rector	VET, quality assurance
Ján Bajtoš, professor	<a href="mailto:bajtos@science.upjs.sk">bajtos@science.upjs.sk</a>	Technical University, Kosice	VET, curriculum development in technology
Iveta Radičová, professor	<a href="mailto:iveta.radicova@savba.sk">iveta.radicova@savba.sk</a>	Institute for Sociology, Bratislava, Director Minister of Labour since October 2005	Social policy
Rudolf Šlosár, professor	<a href="mailto:slosar@euba.sk">slosar@euba.sk</a>	University of Economics, Bratislava, Head of Dpt	VET, curriculum development in economy education
Ivan Turek, professor	<a href="mailto:tureki@stonline.sk">tureki@stonline.sk</a>	Slovak University of Technology, Bratislava	VET, teacher trainer training, quality assurance
Roman Hrmo, ass. professor	<a href="mailto:roman.hrmo@stuba.sk">roman.hrmo@stuba.sk</a>	Slovak University of Technology, Bratislava, Head of Dpt	VET, teacher trainer training
Mariana Kundrátová, ass. professor	<a href="mailto:mariana.kundratova@stuba.sk">mariana.kundratova@stuba.sk</a>	Slovak University of Technology, Bratislava	VET, teacher trainer training
Viera Prusáková, ass. professor	<a href="mailto:viera.prusakova@fphil.uniba.sk">viera.prusakova@fphil.uniba.sk</a>	Comenius University, Bratislava	CVET, Andragogy
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## 9. REFERENCES TO VET/HRD RESEARCH RESOURCES.

Information listed above is derived from the following websites:

- **Úrad vlády Slovenskej republiky** [Government Office of the Slovak Republic]: <http://www.vlada.gov.sk/>
- **Ministerstvo školstva SR** [Ministry of Education of the Slovak Republic]: <http://www.minedu.sk/>; in particular **sekcia vedy a techniky** [Science and Technology Policy Division]: <http://www.minedu.sk/VaT/VaT.htm>, and **odbor vedy a techniky na vysokých školách** [Department of Science and Technology at HEI]: <http://www.minedu.sk/VS/OVTVS/ovtvs.htm>
- **Agentúra na podporu výskumu a vývoja** [Research and Development Agency]: <http://www.apvv.sk/>
- **Portál Veda a technika v SR** [Science and Technology in the SR portal] <http://www.veda-technika.sk/>
- **Ministerstvo financií SR** [Ministry of Finance of the SR]: <http://www.finance.gov.sk/>
- **Ministerstvo práce, sociálnych vecí a rodiny SR** [Ministry of Labour, Social Affairs and

Family of the SR]: <http://www.employment.gov.sk/>

- **Portál ESF:** [http://www.esf.gov.sk/content/01\\_esf\\_06.php](http://www.esf.gov.sk/content/01_esf_06.php)
- **Slovenská technická univerzita v Bratislave**, Materiálovotechnologická fakulta so sídlom v Trnave, Katedra inžinierskej pedagogiky a psychológie [Slovak University of Technology in Bratislava, Faculty of Materials Science seated in Trnava, Department of Engineering Pedagogy and Psychology]:  
[http://web.mtf.stuba.sk/sk/pracoviska/katedry/kipp/index\\_1024.htm](http://web.mtf.stuba.sk/sk/pracoviska/katedry/kipp/index_1024.htm)
- **Ekonomická univerzita v Bratislave**, Národohospodárska fakulta, Katedra pedagogiky [University of Economics in Bratislava, Faculty of National Economy, Department of Pedagogy]: [http://nhf.euba.sk/katedry/kpg\\_a.htm](http://nhf.euba.sk/katedry/kpg_a.htm)
- **Technická univerzita v Košiciach** [Technical University of Košice]: Katedra inžinierskej pedagogiky [Department of Engineering Education] <http://www.tuke.sk/kip/>; Centrum pre informačné a telekomunikačné technológie [Centre for Information and Telecommunication Technology] <http://www.tuke.sk/CITT/>; Inštitút celoživotného vzdelávania [Institute of Lifelong Education] <http://www.tuke.sk/icv/>
- **Univerzita Mateja Bela**, Banská Bystrica [Matej Bel University, Banská Bystrica]: Ekonomická fakulta, Katedra humanitných vied [Faculty of Economics, Department of Economics and Human Sciences] <http://www.econ.umb.sk/katedry/asp/ke.asp>; Fakulta prírodných vied, Katedra informatiky [Faculty of Natural Sciences, Department of Informatics] <http://www.fpv.umb.sk/kat/ki/>
- **Univerzita Pavla Jozefa Šafárika**, Košice, Prírodovedecká fakulta [Pavol Jozef Safarik University, Kosice, Faculty of Natural Science]: Výskumno-edukačné centrum informačných technológií [Research and Educational Centre for ICT] <http://vecit.science.upjs.sk/>; Centrum celoživotného vzdelávania [Centre for Lifelong Learning] <http://ccv.science.upjs.sk/>
- **Univerzita Komenského, Bratislava**, Filozofická fakulta, Pedagogická fakulta, Fakulta sociálnych a ekonomických vied, Prírodovedecká fakulta/Výskumno-edukačné centrum informačných technológií, [Comenius University, Bratislava, Faculty of Philosophy, Faculty of Education, Faculty of Social and Economy Sciences, Faculty of Natural Science/Research and Educational Centre for ICT] <http://www.uniba.sk/>
- **Univerzita Konštantína Filozofa**, Nitra [University of Constantine the Philosopher]: Pedagogická fakulta, Ústav technológie vzdelávania [Faculty of Education, Institute of Technology Education] <http://www.utv.ukf.sk/>
- **Trnavská univerzita**, Pedagogická fakulta [University of Trnava, Faculty of Education] <http://pdf.truni.sk/>
- **Prešovská univerzita** [Presov University] <http://www.unipo.sk/>
- **Slovenská poľnohospodárska univerzita**, Nitra [Slovak Agricultural University, Nitra] <http://www.uniag.sk/>
- **Slovenská akadémia vied** [Slovak Academy of Sciences]: Spoločenskovedný ústav, Košice [Institute of Social Sciences, Kosice] <http://www.saske.sk/SVU/>; Sociologický ústav, Bratislava [Institute for Sociology, Bratislava] <http://www.sociologia.sav.sk/>
- **Výskumný ústav detskej psychológie a patopsychológie**, Bratislava [Research Institute of Child Psychology and Patho-psychology, Bratislava] <http://www.vudpap.host.sk/>
- **Inštitút pre výskum práce a rodiny**, Bratislava [Institute for Labour and Family Research, Bratislava] <http://www.sspr.gov.sk/>
- **Štátny inštitút odborného vzdelávania**, Bratislava [State Institute of VET, Bratislava]

<http://www.siov.sk/>

- **Slovenské národné observatórium odborného vzdelávania, Bratislava** [Slovak National Observatory of VET, Bratislava] <http://www.siov.sk/> > SNO
- **Štátny pedagogický ústav, Bratislava** [National Institute for Education, Bratislava] <http://www.statpedu.sk/>
- **Národná agentúra programu Leonardo da Vinci v SR** [National Agency of the Leonardo da Vinci Programme in SR] <http://www.saaic.sk/leonardo/>

#### 10. ABSTRACT.

Research in VET/HRD in the SR is fragmented as a consequence of long-year lacking financial and institutional backing. Currently the whole R&D system is still in the transformation process. Many new policies and instruments were introduced in 2005 and are being prepared for implementation in 2006. This is expected to gradually improve situation and conditions for all areas of research along with a significant increase of investments in research and development since 2006. There is a positive signal; Slovakia officially declared the intention to increase investment in R&D up to 1.8% GDP till 2010 from below 0.6% GPD in recent years. Nevertheless without making a research in VET/HRD attractive for young scholars a lack of quality researchers caused by brain drain into politics and business since 1990s cannot be made up.