



Ministry of Education, Science, Research and Sport of the Slovak Republic

# **OPERATIONAL PROGRAMME**

## **EDUCATION**



Bratislava – September 2012

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## 1 Summary Content of the Document

The **European Social Fund** (hereinafter the *ESF*) contributes to the objectives of economic and social cohesion referred to in Article 158 of the Treaty establishing the European Communities by promoting policies and priorities intended to achieve full employment, enhance labour quality and productivity and support social inclusion and cohesion in compliance with the guidance and recommendations of the European Employment Strategy.

Pursuant to Regulation (EC) No. 1081/2006 of the European Parliament and of the Council of 5 July 2006 on the European Social Fund and repealing Regulation (EC) No. 1784/1999 (hereinafter the *ESF Regulation*), the ESF needs to address three key issues to achieve those objectives:

1. Employment disparities, social inequalities, gaps in capabilities and lack of jobs in the enlarged Union;
2. Economic and social restructuring which is a consequence of globalisation and development of a knowledge-based economy;
3. Demographic changes resulting in less and less numerous and ageing labour force.

**Operational Programme Education** (hereinafter *OP Education*) is a reference document on whose basis support will be provided to the human resource development, tapping on national and the ESF resources. It defines the global objective, priority axes, measures and activities which will be supported in the territories of the *Convergence* and the *Regional competitiveness and employment* objectives over the 2007 – 2013 period. Geographically, it covers the entire territory of the Slovak Republic (hereinafter *Slovakia* or *SR*). *OP Education* implements specific priority 3.1 *Modern education for a knowledge-based society* under the National Strategic Reference Framework of the Slovak Republic for the 2007 – 2013 period (hereinafter the *NSRF*). Within the meaning of Article 3 of the *ESF Regulation* which defines the scope of assistance, *OP Education* supports improvements of the labour force adaptability through enhancing the quality and access to life-long learning.

The **initial part** of *OP Education* brings a brief description of the document preparation, application of the partnership principle, results of the ex-ante evaluation and experience from the 2004 – 2006 programming period. It also outlines the links to strategic documents of the EU and of the Slovak Republic.

The **analytical part** provides information on the recent social and economic situation in education in the Slovak Republic with regard to the European Union context. By underlining positive aspects of the Slovak educational system and by defining the areas of difficulties, that chapter makes the basis for focusing investments from the European Social Fund. The findings resulting from a description of the recent situation and from the SWOT analysis lead then to phrasing of the identified needs on which the intervention should focus.

The **strategic part** follows-up the socio-economic analysis results and defines the thematic focus of the intervention. *OP Education* focuses on a comprehensive life-long learning system, with the intention of adapting it to the labour market requirements and improving its readiness and the readiness of research and development for high added-value production which is typical for a knowledge-based society. The global objective of *OP Education* is “ensuring competitiveness of Slovakia in the long run by adapting the system of education to the needs of a knowledge-based society”.

Further to the identified needs of the Slovak educational system, the next part defines the various **priority axes** of *OP Education*:

- 1 Reform of the educational and vocational training system

- 2 Continuing education as an instrument of human resource development
- 3 Support to education of persons with special educational needs
- 4 Recent education for a knowledge-based society for Bratislava region
- 5 Technical assistance for *Convergence* objective

The text indicates the focus of the priority axes, their objectives, framework activities and examples of specific activities through which *OP Education* will be implemented. Specific measures are focused on strengthening of human capital, in particular through supporting education in the various segments of the educational system: regional schools, higher education institutions and continuing education. Intervention is realised by creating and introducing reforms into educational and vocational training systems in order to improve the capabilities of people to react to the needs of a knowledge-based society and life-long learning, by enhancing the capabilities of the training staff toward innovations and a knowledge-based economy and by creating networks of tertiary education institutions, research and technology centres and undertakings. Support to the education of persons with special educational needs facilitates social inclusion and sustainable integration of disadvantaged groups on the labour market, including the marginalised Roma communities (hereinafter the *MRC*). The NSRF defines specific priority 3.1 *Modern education for a knowledge-based society* as the key one. Therefore, it is necessary to establish an effective and flexible system of *OP Education* management and implementation under technical assistance. This chapter also includes a description of horizontal priorities of the NSRF, of complementarities with and of the dividing lines from other operational programmes.

Under the total financial allocation for the Slovak Republic for the 2007 – 2013 period, *OP Education* has been allocated € 600 000 000 for the *Convergence* objective and € 17 801 578 for the *Regional competitiveness and employment* objective. That allocation represents EU funds which would be increased by both public and private Slovak funding when projects are implemented. The chapter on **Financial Plan** lays down the indicative annual commitments, the financial plan by priority axes and funding sources and the categories of support.

The **implementation part** describes the implementation process of *OP Education* in accordance with Council Regulation (EC) No. 1083/2006 of 11 July 2006 laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund and repealing Regulation (EC) No. 1260/1999 (hereinafter the *General Regulation*) and in accordance with the System of Management of the Structural Funds and the Cohesion Fund for the 2007 – 2013 Programming Period. It defines the authorities involved in the programme management and implementation and the monitoring, evaluation, publicity and financial management, control and audit systems.

More details of the operational programme at the level of measures with regard to the content and financial planning are contained in the **Programming Manual for OP Education**. It brings examples of specific activities, indicators at the level of measures, eligible expenditures, categories of intervention, eligible beneficiaries, target groups and financial plans of the various measures which are compliant with the guidance of the Central Coordination Authority for operational programmes contained in the National Strategic Reference Framework of the Slovak Republic for the 2007 – 2013 period (hereinafter the *CCA*). The intention behind preparing a programming manual is to provide information similar to that contained in the programming complements for the 2004 – 2006 period but in doing so, beware of duplicity of information.

## 2 Preparation of the Operational Programme

Support to upbringing and education at all levels of the educational system makes a necessary component in creating a modern Slovak society in which education is the basic precondition of Slovakia's competitiveness in the long run. Through contributions from the ESF, the operational programme will finance the shaping of and support to human capital toward acquiring basic skills and key competences necessary in a knowledge-based economy and for the labour market throughout Slovakia. The eligible locations for the implementation of projects under the *Convergence* objective are the NUTS 3 regions of Trnava, Trenčín, Nitra, Žilina, Banská Bystrica, Prešov and Košice. The operational programme also includes the *Regional competitiveness and employment* objective, which is the Bratislava region as NUTS 3.

The operational programme with its several objectives focuses on supporting the reform in education throughout Slovakia and the removal of existing disparities in various regions will be ensured by financial allocations made to backward regions (EUR 600 million for the *Convergence* objective and EUR 17 million for the *Regional competitiveness and employment* objective).

### 2.1 Justification of a Programme with Several Objectives

With regard to Article 32 (1) of the General Regulation which lays down that “an operational programme shall cover only one of the three objectives referred to in Article 3, save as otherwise agreed between the Commission and the Member State”, the Ministry of Education, Science, Research and Sport of the Slovak Republic (hereinafter the *Education Ministry*) has proposed one operational programme for the *Convergence* objective and the *Regional competitiveness and employment* objective under the NSRF specific priority *Modern education for a knowledge-based society*.

The main reasons for such approach are as follows:

- ***Homogeneity of the issue of education throughout Slovakia***

The issue of education cannot be geographically divided into the *Convergence* objective and the *Regional competitiveness and employment* objective as the difficulties and challenges in education are identical for both objectives. Slovakia has prepared a concept of reform in education (Millennium, draft act on upbringing and education, act on higher education, strategy of life-long learning (hereinafter *LLL*) and life-long guidance (hereinafter *LLG*), Action plan for Education and Employment) which covers the entire Slovak Republic. The School Education Policy is a national policy created by the Education Ministry which lays down its framework (concepts, legislation, standards and methodology) in cooperation with regions. It is the single education policy by which we want to contribute to eliminating and removing of regional disparities. Implementation of national projects under a single OP will ensure a uniform education policy throughout Slovakia. The process of evaluation is expected to become simplified.

The education reform will affect all areas without any difference and all levels of education in a uniform way throughout the country. The links between the education content and the labour market needs, acquisition of basic skills and key competences, raising the quality of LLL and reflecting the needs of a knowledge-based society require a comprehensive and uniform nation-wide approach (including the Bratislava self-governing region). Homogeneity of the issue of education throughout Slovakia is the main reason for having prepared a single operational programme for both objectives.

- ***Administrative streamlining***

Administrative support of one operational programme for both objectives is more simple, flexible and effective.

In the programming period of 2004 – 2006, the same procedures were applied under the *Human resources* sectoral operational programme, as well as under the Single Programming Document NUTS II Bratislava Objective 3; the only difference was in the intervention rates. The implementation procedures and methods of OP *Education* for both objectives will remain the same in the 2007 – 2013 programming period. Experience made in the previous programming period has resulted in a need to streamline certain implementation methods and make them more efficient.

- ***Low financial allocation for the Regional competitiveness and employment objective***

The administrative support of one operational programme is closely linked to the amount of allocation intended for the *Regional competitiveness and employment* objective (€ 17.8 million) which is very low in comparison with the allocation for the *Convergence* objective (€ 600 million). It is inefficient and uneconomic to administer an OP with such a low financial allocation separately. The costs of implementation would be much higher than the value added of the individual projects.

## ***2.2 Application of the Partnership Principle***

Partnership makes one of the basic principles of the European Union's (hereinafter the *EU*) structural policy within the meaning of collaboration of the European Commission (hereinafter the *EC*) with a Member State, its authorities at the national, regional and local levels, and with socio-economic partners and other entities. The General Regulation lays down the principles and rules for partnership, programming, evaluation, management including financial management, monitoring and control based on joint responsibility of the Member States and the Commission. Partnership includes the preparation, implementation, monitoring and evaluation of operational programmes.

The Education Ministry collaborated with the Ministry of Construction and Regional Development of the Slovak Republic (hereinafter the *Regional Development Ministry*) already in the initial phases of phrasing the strategic, specific and operational priorities in the preparation of the NSRF. In the first phase of the NSRF preparation, specific priority 3.1 *Modern education for a knowledge-based society* was created with the representatives of School Regional Authorities (hereinafter the *SRA*), of higher territorial units (hereinafter the *HTU*), representatives of the Council of Higher Educational Institutions, the Slovak Academy of Sciences (hereinafter the *SAS*), the Slovak Rector's Conference and the relevant public administration authorities (the relevant sections in the Education Ministry and in the Office of the Slovak Government's Plenipotentiary for Roma Communities). That has resulted in defining the intentions behind all measures contained in specific priority 3.1, specifying their justification and laying down the group of eligible beneficiaries and eligible target groups.

In the next phase, the respective parts of specific priority 3.1 were submitted to the Minister of Construction and Regional Development to be incorporated in the NSRF which was subject to discussions with the representatives of regions, the Association of Towns and Municipalities of Slovakia (hereinafter the *ATMS*) and the Union of Slovakia's Towns and Cities (hereinafter the *USTC*). The discussion resulted into comments and proposals made by regions, the ATMS and the USTC, concerning specific priority 3.1 which were taken into account and a project pipeline was prepared. When preparing the NSRF, the common comments and proposals of non-governmental organisations were taken into account, too.

In line with Article 11 of the General Regulation, the partnership principle became the key element in the preparation of OP *Education*. The process of preparation of specific priority 3.1 *Modern education for a knowledge-based society* involved each of the above-mentioned partners, in particular the



representatives of regions. The partnership principle was applied in the form of working groups, working meetings and bilateral discussions.

Upon completion of specific priority 3.1 by the Education Ministry, the document was submitted to an extended commenting round within the sector as a part of the NSRF. The document was also submitted for commenting to the higher territorial units, non-governmental organisations and representatives of the relevant authorities in public administration. Their various comments have been fully or partially incorporated in the document.

The final version of *OP Education* includes the discussion results of the **working group for OP Education** which was established in good balance from representatives of the education sector, self-governing regions, social partners and civic society. The institutions invited, i.e. the school regional authorities, the methodology and pedagogical centres and other organisations reporting directly to the Education Ministry, representatives of the academic community, the Labour Ministry, the Health Ministry, the Regional Development Ministry, the Office of the Government of the Slovak Republic (hereinafter the *Government Office*), representatives of local and regional governments, higher territorial units and the third sector) and of the relevant sections in the Education Ministry, nominated their expert representatives. Partners submitted their comments and proposals in meetings of the working group for *OP Education* in person, by e-mail or in writing. In the inter-agency commenting round, the requirements and standpoints of other sectors were taken into account as well. The prevailing majority of comments has been incorporated in the document. The list of the working group members for *OP Education* is contained in Annex 5 to *OP Education*.

The **partnership principle** will be applied in all phases of the *OP Education* implementation; participation of social partners and regional and local government authorities is foreseen in the gradual shaping of strategy, in progress monitoring, evaluation and selection from the submitted grant applications and in ensuring publicity (see Chapter 7 *System of Implementation*).

## 2.3 Ex-Ante Evaluation

Ex-ante evaluation of *Modern education for a knowledge-based society* as a specific priority and *OP Education* for the *Convergence* objective and for the *Regional competitiveness and employment* objective was performed by an external valuator selected by public procurement from three bids submitted. The reason for his selection was the lowest price and the shortest time of delivery. Afterward, a contract for work was concluded pursuant to Article 536 and the following of the Commercial Code. The ex-ante evaluation was performed between 10 February 2006 and 30 November 2006.

The main objective of ex-ante evaluation of the specific priority *Modern education for a knowledge-based society* within the context of future operational programmes was the following:

- (i) Evaluate the analytical sources including a SWOT analysis, identification of disparities and development factors;
- (ii) Evaluate the suitability, justification and consistency of the priority strategy, i.e. consider its internal logic so as to ensure logical links of the analyses results, objectives, priorities, financial sources and measurable indicators including the assessment of its expected impacts;
- (iii) Evaluate the coherence of the priority strategy with the Slovak and Community policies and strategic documents;

- (iv) Evaluate the quality of the existing and the proposed system of management with regard to its functionality and efficiency for the management, monitoring, evaluation and financial management processes.

The author performed an ex-ante evaluation of the NSRF specific priority from the following viewpoints:

- Assess the suitability, relevance and feasibility of the strategy proposed with regard to its link-up to the SWOT analysis and attainment of its objectives;
- Evaluate the internal strategy/document logic so as to ensure logical links of the analyses results, objectives, areas of intervention, financial sources and measurable indicators including the assessment of its expected impacts;
- Evaluate if the areas of intervention and objectives are well defined, consistent and well balanced within the specific priority, if the specific priority reflects the qualified opinion and if its objectives are relevant, quantifiable and if their attainment is realistic;
- Evaluate the incorporation of the horizontal priority/priorities within the specific priority;
- Evaluate if the specific priority is a suitable means for addressing problems encountered by Slovakia, sector or region, if it is a step forward within the meaning of a positive change in the socio-political situation of Slovakia; Assess the expected impacts of the specific priority on the economic, social and environmental situation in Slovakia;
- Assess the suitability and efficiency of financial sources from the viewpoint of the expected impacts;
- Evaluate the suitability of the distribution of funds to Slovakia's regions;
- Assess the suitability of the proposed priority strategy with regard to ensuring compliance with the relevant regulation, directives, EU strategies, national and regional strategic documents of Slovakia in that area and their contribution to the attainment of the objectives of EU cohesion policy and objectives of Slovakia's national policies;
- Analyse the adequacy, quality and effectiveness of the implementation system and assist in the preparation of project selection procedures and criteria;
- Evaluate the overall compliance of the specific priority and the NSRF (in particular in regard with analyses, strategies, priorities and objectives, indicators).

### **Phases of ex-ante evaluation:**

**Phase I** *Evaluation of the strategy coherence with the policies and Slovakia's strategic national and regional documents and the Community policies and strategic documents*

This phase focused on asking if the priority is coherent with regional and Slovakia's national strategic documents and the Community strategic documents and policies and if it contributes to the attainment of their objectives.

**Phase II** *Evaluation of the specific priority analysis and ranking of the identified disparities and development potential*

This phase provided answers to the question to what extent the analysis of a given area within a specific priority is coherent with the SWOT analysis, the key disparities and the development in the NSRF; and as the analysis identifies relevant difficulties whether it is able to form a basis for phrasing the priority objectives.

**Phase IIIa** *Evaluation of the strategy justification and consistence, i.e. of suitability of the priorities and objectives identified*

This phase focused on asking if the objectives and priorities are adequately justified (if they are based on a thorough analysis), consistent and synergic with one another, non-conflicting, if they comply with the needs identified and if they reflect possible external impacts. It also considered if the proposed objectives and priorities are optimal with regard to sustainable development, employment and cohesion policy at the regional level.

**Phase IIIb** *Evaluation of the proposed financial framework (the amount and structure of investments)*

This phase was carried out in parallel with the assessment of expected impacts and it provided answers to questions if the priority is feasible with the given financial allocations, if the proposed financial framework complies with the needs and absorption capacity and if the financial allocation is sufficiently economic with regard to the results expected.

**Phase IV** *Evaluation of the expected results and impacts*

This phase focused on the measurement and evaluation of the expected outputs, outcomes and impacts of the interventions planned on the economic, social and environmental situation and on proposing more adequate alternatives. This phase also included an evaluation of the system of indicators and their values. The preparation has necessitated additional research (focus group meetings, questionnaire research, a series of interviews) to obtain the necessary data, which posed intensified requirements on the evaluation time framework.

**Phase V** *Evaluation of the proposed priority implementation system, i.e. of procedures for management, monitoring and evaluation and financial management with regard to their functionality and efficiency*

This phase was seeking for answers to the question if the existing or proposed implementation system is suitable for implementing and monitoring of the proposed interventions and it proposes modifications or alternatives to the end of improving efficiency, achieving higher economy and decrease its complexity while maintaining the principles of transparency, subsidiarity, partnership and other principles resulting from the European Communities requirements.

**Phase VI** *Final evaluation of the proposed document and of the incorporated changes*

This phase examined to what extent and in which manner the author reflected the recommendations in the specific priority occurring during the various phases of partial evaluation, to what extent and in which manner it summarises the results of previous phases and assesses alternatives and prospects for negotiations with the EC.

The main interim outputs of the ex-ante evaluation:

- Modification of the names of measures,
- Modification of the specific measure objectives,
- Proposal of the structure of measures,
- Modification and amendment of activity types,
- Modification of socio-economic analysis, SWOT analysis and key disparities and the main development factors,
- Ranking of needs (hierarchy of priorities),
- Logical and operational consistency of the objectives,
- Optimal nature of the proposed objectives and priorities with regard to sustainable development, employment and cohesion policy,
- Evaluation of the proposed financial framework,
- Draft system of indicators to quantify the objectives and to evaluate the implementation of OP Education,
- Recommendations concerning the proposed implementation system, i.e. procedures for management, monitoring, evaluation and financial management with regard to their functionality and efficiency,
- Final report from ex-ante evaluation of the operational programme Education of the NSRF.

The findings contained in the final report from ex-ante evaluation refer to the need of repeated and interim evaluation of the intervention focus when preparing the different calls, focusing specifically on programming, the channels of intervention, financial structure and intervention effects and variants. With regard to the broadly conceived objectives of the priority axes, it will be necessary to progressively detail the areas of difficulties which would be subject of the various calls, based on empirically verified models of intervention effects from specialised literature and from experience made during the 2004 – 2006 programming period. The process of implementation by means of calls

will also include a selection of instruments, objectives, financial allocation, detailing of eligible activities and project indicators. With regard to achieving the set-out objectives it will be necessary throughout the programming period to perform analyses of the progress made and of the desired interventions in collaboration with experts at education, with social partners, regional and local governments and representatives of employers and of the third sector.

**Table 1: A summary of recommendations from the final report**

<b>No.</b>	<b>Recommendation</b>	<b>Recommended changes in OP <i>Education</i> doc</b>
[1]	Introduction of mechanisms for an incremental strategy formation (hereinafter the IFS)	- Provide framework specifications of partnership instruments; - Include in OP <i>Education</i> an obligation to develop mechanisms for IFS;
[2]	Develop causality models of intervention and the lessons learned in the 2004 – 2006 programming period	- Contained in [1]
[3]	Re-work the SWOT analysis	- Re-work the SWOT analysis in accordance with methodology recommendations
[4]	Strengthen the link between analysis and strategy	- Point out which needs are addressed by the different areas of intervention
[5]	Ensure variants of intervention and evaluation of specific intervention instruments	- Contained in [1]
[6]	Strengthen partnerships and ensure more synergy with the existing strategic initiatives including horizontal priorities	- Contained in [1]
[7]	Define in more detail the scope of powers and guarantees delegated to IB/MA	- None; can be covered by a contract or another type of document
[8]	Regularly publish the time schedule of calls with sufficient details	- Contained in [1]
[9]	Ensure a functioning monitoring system including indicator collection beyond the framework of binding objectives	- None; should be contained in separate documents/methodology procedures outlining the monitoring system
[10]	Ensure good quality and possibly the most objective procedures for evaluating grant applications	- None; this should be contained in a relevant manual/guidance
[11]	Improve support to project authors and simplify the grant application form	- None; this should be contained in applicable documents/methodology guidance
[12]	Raise the quality of financial management procedure and improve the budget flexibility and focus of control on the expenditure evaluation with regard to project objectives	- None; should be contained in separate documents/methodology procedures defining the financial management

Throughout the ex-ante evaluation process, working meetings and consultations were held of the specific priority author – the Education Ministry and the ex-ante evaluator. The ex-ante recommendations were progressively incorporated in the specific priority and are taken into account by this operational programme.

## **2.4 Strategic Environmental Assessment**

With regard to the substance of the European Social Fund which focuses on intangible operations in human resource development, this operational programme does not establish prerequisites for operations of material environmental impact, like infrastructure development projects, in particular within the meaning of Annex I and Annex II to Directive 85/337/EEC, as amended.

If there is a later need to implement infrastructural projects, in particular with regard to the application of Article 34 (2) of the General Regulation, the need to prepare a strategic environmental assessment will be reconsidered.

Based on the afore-mentioned, the managing authority with the approval of the relevant national authorities does not consider necessary at present to perform the strategic environmental assessment for this operational program in line with Directive 2001/42/EC of the European Parliament and Council of 27 June 2001 on environmental impact assessment of certain plans and programmes. The afore-mentioned shall be valid without any effect on the environmental impact assessment according to national legislation or other measures implementing Directive 2001/42/EC.

In accordance with Act No. 24/2006 on environmental impact assessment and on the modification and amendment of certain acts, the Managing Authority for OP *Education* decided not to prepare the Strategic Environmental Assessment.

## **2.5 Programming Period 2004 – 2006**

### **2.5.1 Basic Information**

The first shorter programming period was the time for Slovakia when the authorities involved in the Structural Funds management and implementation were getting acquainted with the SF issues, were preparing programming documents, setting up systems and management and control processes. That period was typical by making experience which was used to improve and bring more efficiency into systems and processes and to be tapped on in the preparation of the National Strategic Reference Framework, *OP Education*, the programming manual and other documents for the 2007 – 2013 programming period.

Being an intermediate body under the managing authority (hereinafter the *IB/MA*), the Education Ministry implemented two programming documents in the 2004 – 2006 programming period: the Sectoral Operational Programme *Human resources* and the Single Programming Document *NUTS 2 Bratislava Objective 3*.

#### **2.5.1.1 Sectoral Operational Programme *Human Resources* (SOP HR)**

The global objective of the SOP *Human Resources* which was implemented in the territory of objective 1 was the “growth of employment based on qualified and flexible labour force”. The intention behind priority 3 *Raising the qualification and adaptability of employees and entrants of the labour market* which was implemented by the Education Ministry in the role of IB/MA was to ensure that the labour force would dispose the capabilities required by the labour market. That was achieved by improving the collaboration between the educational system and the labour market services, by

supporting the adaptability of employees through continuing education and LLL, by ensuring the compliance of educational plans with the labour market needs.

The IB/MA implemented three measures of priority 3. The table below bring an overview of measures, interest of the final beneficiaries/recipients of assistance (hereinafter *FB/RoA*) and the rate of their success.

**Table 2: Grant applications submitted and approved, by measures of SOP *Human resources***

Measure No.	Measure description	No. of grant applications submitted	No. of grant applications approved	Success rate (per cent)
3.1	Adaptation of vocational training and education to the requirements of a knowledge-based society	472	210	44,49 %
3.2	Extending the scope, improving and wider rendering of continuing education so as to improve employee qualification and adaptability	607	278	45,79 %
3.3.A	Development of career guidance in issues of professions and employment	145	87	60,00 %
<b>Total</b>		<b>1224</b>	<b>575</b>	<b>46,97 %</b>

During the 2004 – 2006 programming period, the most interest was shown in measure 3.2 **Extending the scope, improving and wider rendering of continuing education to the end of improving employee qualification and adaptability** which can be documented by the highest number of projects approved. From the material point of view, the projects submitted under measure 3.2 were intended to raise the number and quality of LLL programmes, to introduce new forms of education and to stimulate the requirements on continuing education. They mostly applied to persons threatened by unemployment and persons with a low level of education and skills, as well as to the creation of new programmes/courses in continuing education and products to be provided to the public or to undertakings. Projects were also aimed at creating new programmes in continuing education, their pilot verification and at creating and development of instruments for the monitoring and evaluation of quality in education. This also is the reason why *OP Education* has the ambition to follow-up those topics.

Measure 3.1 **Adaptation of vocational training and education to requirements of a knowledge-based society** focused on targeted linking of the vocational education and training system in tertiary education with the labour market needs. The measure focused in particular on the development of key competences, on the creation and development of modular structure in vocational education, on an expansion of tertiary education institutions, on a support of programmes of widening and raising the quality of practical training and vocational practice, on a support of programmes improving the access to vocational education and training for all, including pupils with learning disorders, from families with poorly stimulating social environment and from socially disadvantaged families including Roma communities, for which the above phrasing is typical within the meaning of the diction. The measure equally focused on improved integration of the Roma population in the mainstream education system. As the indicated thematic areas are relevant, a support of similar activities is expected in the programming period 2007 – 2013 as well.

The main objective of sub-measure 3.3A **Development of career guidance** was a support to activities which would improve the information flow toward students at all levels of schools focusing on their later education opportunities and career prospects. Through guidance, students were actively led toward clarification of their own objectives, toward improved self-confidence and self-esteem and toward a better knowledge of the world of labour and requirements of production.

**Table 3: Evaluation of previous demand and absorption of measures under SOP *Human resources***

<b>Measure</b>	<b>Financial allocation 2004-2006 (EUR) – ESF + state budget</b>	<b>Demand % (as at 31 March 2007)</b>	<b>Contracting % (as at 31 March 2007)</b>	<b>Drawing* % (as at 30 June 2007)</b>
<b>3.1</b>	<b>27 339 949</b>	255,93 %	88,94 %	14,27 %
<b>3.2</b>	<b>31 811 125</b>	235,60 %	92,33 %	11,15 %
<b>3.3.A</b>	<b>7 834 198</b>	164,81 %	85,02 %	10,67 %

\* disbursed bulk payment requests

Under SOP *Human resources*, the highest interest was shown in drawing funds under measure 3.1 (the highest amount) and under measure 3.2 (the highest number of applicants). Compared to other measures, measure 3.1 is distinguished by higher drawing due to higher drawing by national projects with a higher financial allocation.

#### **2.5.1.2 Single Programming Document NUTS 2 – Bratislava Objective 3 (hereinafter the *SPD*)**

The global objective of the SPD which was implemented in the objective 3 territory is “improving the region’s competitiveness through the development of human resources”. The Education Ministry in the position of IB/MA participated in implementation of priority 2 *Development of life-long learning and support to research and development within the context of enhancing the quality of human resources*. That priority focused on supporting sustainable economic growth and improving the competitiveness, adaptability and employment quality in the Bratislava region through the development of human resources.

The IB/MA implemented two measures of priority 2. The table below brings an overview of measures, interest of the final beneficiaries/recipients of assistance and the rate of their success.

**Table 4: Grant applications submitted and approved, by measures of SPD**

Measure No.	Measure description	No. of grant applications submitted	No. of grant applications approved	Success rate (per cent)
2.1.	Stimulation and quality improvement in education for the needs of employers and of the business sector	290	152	52,41 %
2.2.	Improved employment quality and competitiveness in the Bratislava region through the development of human resources in research and development	106	67	63,21 %
Total		396	219	55,30 %

During the 2004 – 2006 programming period, measure **2.1 Stimulation and quality improvement in education for the needs of employers and of the business sector** proved to be the most interesting. The objective of measure 2.1 was raising the adaptability and competitiveness of undertakings through better provision of education activities to employed persons and new entrants to the labour market, whereby the labour force would be equipped with the necessary qualifications required by the modern labour market. The projects focused mainly on supporting the reform of regional schools, continuing education of pedagogical staff, on supporting tertiary education institutions and better collaboration between the educational system and the labour market services. Examples of activities: systemic support to key technical competencies of pupils, design of an evaluation system in vocational education and training, innovation of pedagogical documentation, syllabi, curricula, including adaptation of teacher skills for such changes, design of modular educational programmes, innovation of instruction supported by information and communication technologies (hereinafter the *ICT*), support to the open school system and conducting courses to improve managerial, entrepreneurial and key skills of teachers, trainers and students.

The objective of measure 2.2 **Improved employment quality and competitiveness in the Bratislava region through the development of human resources in research and development** was improving the employment quality and raising the qualifications of research and development staff and sharing knowledge about new technologies and excellence, whereby the competitiveness of the Bratislava region was increasing. The attainment of the objective was supported mainly by activities supporting the transfer of new technologies and excellence to workplaces, integrating science and research institutions and undertakings laying high stress on information in the international innovation and research network and on strengthening the institutional capabilities of research and development institutions, specifically of universities and Slovak Academy of Sciences, being an effective link in the innovation chain.



**Table 5: Evaluation of existing demand and absorption of measures under the SPD**

<b>Measure</b>	<b>Financial allocation 2004-2006 (EUR) – ESF + state budget</b>	<b>Demand % (as at 31 March 2007)</b>	<b>Contracting % (as at 31 March 2007)</b>	<b>Drawing* % (as at 30 June 2007)</b>
<b>2.1</b>	<b>16 067 318</b>	190,25 %	81,70 %	10,70 %
<b>2.2</b>	<b>10 641 906</b>	128,46 %	85,95 %	10,58 %

\* disbursed bulk payment requests

Under the Single Programming Document NUTS 2 – Bratislava Objective 3, measure 2.1 proved to be the most attractive with regard to the interest in drawing of funds (both in terms of the highest requested amount and the highest number of applicants).

#### **Technical Assistance Measure**

Technical assistance was a special horizontal measure with the aim of supporting the implementation of all priorities and measures contained in the operational programme with regard to ensuring efficient and effective implementation. During the 2004 – 2006 programming period, *Technical assistance* was a special measure under SOP *Human resources* and a special measure under the SPD.

Within the meaning of Regulation of the European Commission No. 2004/448/EC, the *Technical assistance* measure for SOP *Human resources* and for the SPD has been split up into two sub-measures:

#### **The *Technical assistance* measure under SOP *Human resources* was split up into:**

- I. Sub-measures supporting management, implementation, monitoring and control
- II. Sub-measures including additional expenditures of technical assistance

#### **The *Technical assistance* measure under the SPD was split up into:**

1. Limited technical assistance – expenditures on direct programme management
2. Unlimited technical assistance – expenditures on technical support of projects

**Table 6: Evaluation of existing demand and absorption for the *Technical assistance* measure under SOP *Human resources*.**

<b>Measure</b>	<b>Financial allocation 2004-2006 (EUR) – ESF + state budget</b>	<b>Demand % (as at 31 March 2007)</b>	<b>Contracting % (as at 31 March 2007)</b>	<b>Drawing* % (as at 30 June 2007)</b>
Sub-measure I	<b>2 942 513</b>	100,00 %	100,00 %	34,36 %
Sub-measure II	<b>758 616</b>	100,00 %	100,00 %	14,28 %
<b>Technical Assistance</b>	<b>3 701 129</b>	<b>100,00 %</b>	<b>100,00 %</b>	<b>30,25 %</b>

**Table 7: Evaluation of existing demand and absorption for the *Technical assistance* measure under the SPD NUTS 2 Bratislava Objective 3**

<b>Measure</b>	<b>Financial allocation 2004-2006 (EUR) – ESF + state budget</b>	<b>Demand % (as at 31 March 2007)</b>	<b>Contracting % (as at 31 March 2007)</b>	<b>Drawing* % (as at 30 June 2007)</b>
Sub-measure 1	449 236	100,00 %	100,00 %	51,83 %
Sub-measure 2	179 694	100,00 %	100,00 %	9,93 %
<b>Technical Assistance Measure</b>	<b>628 930</b>	<b>100,00 %</b>	<b>100,00 %</b>	<b>39,86 %</b>

### 2.5.2 Evaluation of the Achieved Effectiveness and Efficiency of the Projects Implemented

At the time being, the progress of projects implemented is monitored at the level of projects and measures. With regard to the fact that no project implementation for the 2004 – 2006 period was closed at the time when *OP Education* was prepared, it is impossible to see the performance of result and impact indicators and make use of them in the evaluation of intervention effectiveness. At the programme level, no mid-term evaluation was performed in the shorter programming period. The final overview of the intervention effectiveness for the 2004 – 2006 period will be available at the end of 2008 (result) or 2009 (impact), respectively.

The intervention evaluation and effectiveness is to be viewed also with regard to the amount of funds actually used for the given period according to the tables containing evaluation of the existing demand and absorption (see Table 3 and Table 5). The reasons of a low drawing of the ESF funds in the sector of education are the following:

- A later start of contracting caused by a delayed delegation of powers from the Regional Development Ministry and a delay in the beginning of implementation of most ESF-funded initial projects in the education sector to 1 January 2005;
- Unlike other ministries, the Education Ministry is in charge of absolutely the highest number of small projects, as the idea has been to help mainly schools in the regions and not to support recurrent nation-wide programmes – therefore, the high number of payment requests per employee;
- Unlike large investment projects, the ESF funds are intended to develop human resources and educate target groups, i.e. they are of non-investment nature; therefore, a high number of petty expenditure items supported by numerous bookkeeping vouchers has to be accounted for to allow the drawing;
- Increase of personnel capacities in the Education Ministry: by 48 new public officers as at 12 April 2007 (compared to the situation as at 31 December 2006).

To increase drawing, the Education Ministry took the following steps:

- Within its European Integration Section, the **sub-department for eligibility of EU SF expenditures** was established, whereby the factual and financial aspects of implementation have been separated;
- **Improved information to final beneficiaries/recipients of assistance regarding the financial management of ESF projects** through training courses organised throughout Slovakia and publishing an information manual to the end of ensuring seamless implementation of various projects with regard to their financial management (the above-mentioned steps improve the quality of the payment requests submitted);
- Enforce a **change in the amount of advance payment** from 20 % to 40 % of the relevant part of the project budget;
- Change in the system of financial management of the SF – **streamlining of financial management** – introduction of summary sheets for selected expenditure types (personnel costs, travelling compensations, support to participants);
- **Intensified work – extra hours and weekends;**
- Extension of the deadline for the submission of summary payment requests to the Finance Ministry for SPD BA Objective 3 till 19 December 2006 (initially, 31 October 2006);
- **Disbursement of increased advance payments** at the end of November 2006 **for organisations financed wholly and partially from the state budget**, based on an exception of the Finance Ministry.

### 2.5.3 Experience from the 2004 – 2006 Programming Period

The most serious difficulties encountered by the Education Ministry in the ESF management and implementation include:

- Insufficient staffing of the IB/MA:

Throughout the programming period, findings were made concerning insufficient staffing which affected the quality of the processes performed. Their consequences were observed mainly in the control processes, both regarding administrative control and verification on the spot. Another difficulty with regard to staffing was the relatively high turnover of the IB/MA employees. The beginning of the 2007 – 2013 programming period has been marked by insufficient staffing due to overlapping of two programming periods.

The IB/MA paid higher attention to the above-mentioned issues by motivating its staff financially, by recruiting new capacities and by improving working conditions. Stress was also laid on professional growth of employees and therefore, the IB/MA staff received training and participated in other educational events mainly in SF management, SF financial management, financial control and the like. To make the operational programme implementation more efficient and to strengthen the insufficient administrative capacities for the 2007 – 2013 programming period, the Education Ministry established Agency of the Ministry of Education for the EU SF which plays the role of the IB/MA for *OP Education*.

- Low drawing from the ESF funds:

The low drawing from the ESF was caused mainly by the high number of small projects, slow contracting due to delays in the project evaluation following the published calls, delayed transfers of interim payments and accounting for advance payments due to shortcomings established in the payment requests submitted by final beneficiaries/recipients of assistance, slow processing of the requests due to insufficient staffing and due to a relatively complicated ESF financial management system.

So as to eliminate that difficulty, several measures have been adopted, of which the most efficient turned out to be the following: the possibility given to the final beneficiaries/recipients of assistance to

account for the provided advance payments as a combination of advance and interim payments and streamlining of financial management. The low drawing from the ESF has resulted into a failure to comply with the n+2 condition for the SPD NUTS 2 Bratislava Objective 3 programme, which means a task for the IB/MA in the 2007 – 2013 programming period to pay more attention to continuous and seamless drawing from the ESF and to ensure accelerated project approval as a part of the calls published.

The system of financial flows is regulated in a binding way in the SF and CF Financial Management System for the 2007 – 2013 programming period, prepared by the Finance Ministry. Experience made in the shorter programming period of 2004 – 2006 has also shown the need to prefer national projects with a higher financial allocation and nation-wide impact to the implementation of a high number of small demand-oriented projects which are administration-intensive.

- Unreadiness of the Specialised Staff for SF Drawing:

The execution of ex-ante financial control requires high professional skills on those who manage the expenditures and must have comprehensive knowledge of financial relations both in the public and the private sector (issues like budget relations, accounting, taxation, financial control) on one hand. The same is expected from the final beneficiaries/recipients of assistance on the other. The payment requests from calls published in 2004 have contained numerous factual shortcomings, which caused their lengthy and difficult administration. On the other hand, the payment requests from calls published in 2005 and 2006 improved significantly as a result of the adopted correcting measures. The lengthy process of project financial management is therefore partially to be attributed to the difficulties to decide if a subject expenditure item is eligible with regard to the respective activity and if the applicable legal standards have been followed. That requires checking extensive documentation (accounting documentation, underlying documentation which demonstrates the performance of activities). The exacting nature of project financial management and insufficient personnel capacities have lead to on-going delays in the project financial management with negative consequences on the implementation of projects on their own and the related drawing from the ESF.

- Difficulties with the ITMS and the ISUF:

The most serious difficulties with regard to the IT systems included: poor functionality of the IT Monitoring System (hereinafter the *ITMS*) and the Information System of Funds Accounting (hereinafter the *ISUF*), including their mutual connection and links to the State Treasury, frequent system failures which in case of ISUF caused delays in the settlement of payment requests; at the beginning of the programme and project implementation, the systems failed to comply with requirements ensuring successful monitoring of implementation and therefore, the systems had to be modified and further developed. In February 2005, the data (values of project evaluation criteria) entered in the system got lost. Upon identification and elimination of a system failure, the data had to be re-entered. Another difficulty was related to numerous claims on access rights for the staff of various bodies, which were not provided flexibly enough, leading thus to additional time delays in the assistance implementation phase. In 2006, there were requirements on various reporting outputs to support the monitoring of assistance implementation. Due to the annual closing, the ISUF and the Budget Information System (hereinafter the *BIS*) are unavailable every year.

For the 2007 – 2013 programming period, new requirements on IT systems have been specified, taking into account the previous experience of all bodies involved in the SF management and implementation.

- Insufficient control processes:

The control processes have been affected by several factors, the most serious being insufficient personnel capacities and lack of experience of the IB/MA staff with regard to execution of ex-ante financial control. Such factors have caused that control within the meaning of Article 4 of Regulation No. 438/2001 was more or less formal and with a relatively low quality. Both the managing authority

(hereinafter the *MA*) and the *IB/MA* adopted measures to increase the existing personnel capacities and to ensure their professional growth through education in financial management, irregularities and financial control.

Improving and bringing efficiency to control systems and processes has remained one of the most important *MA* and *IB/MA* tasks in the new programming period of 2007 – 2013. Effective financial management in implementing EC interventions will be ensured by the *MA* by strengthening on-the-spot controls.

- Findings of EC audits performed in ESF-financed projects:

The EC audits came to a conclusion that certain types of expenditures (like personnel expenditures) rely on the budget but do not express the actual expenditures. The final beneficiaries are not allowed to exceed the units approved in their cost estimates, i.e. to carry over the funds saved and expend them when the final beneficiary really needs to use that money (rigid project budgets). As a result, the final beneficiaries declare in their working sheets amounts equalling to the maximum limit laid down in the cost estimate, which results in reporting funds based on the “budget reality” but not really expended on project activities. The bills supporting overhead expenditures (expenditures on telecommunication fees, stationery) do not provide sufficient assurance that the respective expenditures make part of the respective assistance.

On the final beneficiary level, delays were identified in the processing of payment requests. That leads to a risk that certain major categories of final beneficiaries (non-governmental organisations, entities without own funds) would decide not to apply for ESF grants any more. That risk may threaten successful implementation of operational programme Education.

Other findings include insufficient human resources to ensure the execution of administrative controls and on-the-spot controls pursuant to Article 4 of Regulation No. 438/2001 and the related performance of tasks and objectives pursuant to Article 34 of Regulation No. 1260/1999. That causes delays in the settlement of requests for interim payments and accounting for advance payments on the *IB/MA* part.

In respect to the findings of EC audit and the overlapping of two programming periods of 2004 – 2006 and 2007 – 2013, the Education Ministry has implemented the following measures to speed up the settlement of requests to final beneficiaries/recipients of assistance:

- Trainings have been performed on the updated manual for final beneficiaries/recipients of assistance;
- Use of new working sheets for a more detailed description of the works performed;
- Use of new forms for monitoring reports which take into account the requirements of linking activities and activity expenditures, in particular in case of personnel expenditures;
- Allow changes to be performed in the budget which enable drawing of funds in a flexible way, i.e. when the activity really occurs (e.g. allow change of units from months to projects or hours);
- Increase of personnel capacities in the *MA*: by 48 new public officers as at 12 April 2007 (compared to the situation as at 31 December 2006);
- Increase of personnel capacities in the *IB/MA* for the 2007 – 2013 programming period: Agency of the Ministry of Education of the Slovak Republic for the EU SF was established as at 1 January 2007 (expected No. of employees: 220).

- Tapping on Experience from the EQUAL Initiative:

The basic objective of the EQUAL Initiative whose main mission was to introduce prerequisites and provide room to seek for, verify and apply new approaches in addressing the difficulties in combating all forms of discrimination and inequality on the labour market is addressed by *OP Employment and social inclusion*. *OP Education* follows up the **EQUAL** Community Initiative in education and support to acquiring and renewing the skills necessary on the labour market, in particular by supporting the development and maintaining the quality of human resources through educational

programmes, establishing prerequisites for rebuilding the existing process of education into a life-long learning process and by shaping progressive approaches to efficient mastering of the cutting-edge technologies, especially IT.

## 2.6 Links to EU and Slovakia's Strategic Documents

The operational programme has been prepared in line with the European Community regulations on the Structural Funds and the National Reference Strategic Framework. Its content has been harmonised with other strategic documents aimed at employment and education at the national and European levels. Such key documents include:

- the Lisbon Strategy;
- European Employment Strategy (hereinafter the *EES*);
- Working programme of the Commission “Education and Vocational Training 2010”;
- Recommendation of the European Parliament and Council on key competences for LLL (see Annex 7 of *OP Education*);
- Community Strategic Guidelines (hereinafter the *CSG*);
- The 7th Framework Programme of the EC for research, technical development and demonstration activities;
- Strategy of Slovakia's Competitiveness by 2010 and the follow-up action plans;
- Implementation of the European Youth Pact in the Slovak environment and its inclusion in the Strategy of Slovakia's Competitiveness by 2010 – action plans;
- National Reform Programme of the Slovak Republic for 2006 – 2008;
- National Action Plan of Employment for 2004 – 2006;
- National Education and Upbringing Programme in the Slovak Republic for the Forthcoming 15 to 20 Years (the Millennium project);
- Concept of LLL in the Slovak Republic;
- LLL and LLG Strategy;
- State Policy Concept in Relation to Children and Youth;
- Conception of Continuing Development of Higher Education in Slovakia for the 21<sup>st</sup> Century;
- Concept of Integrated Education of Roma Children and Youth, including Secondary and Higher Education;
- National Action Plan of Social Inclusion 2004 – 2006;
- National Action Plan of the decade for inclusion of the Roma population 2005 – 2015.

*OP Education* is fully compliant with the **Community strategic guidance for economic, social and territorial cohesion** which defines the basic framework for national strategic reference frameworks of Member States to the end of enforcing harmonic, well-balanced and sustainable development of the Community. The priority axes of *OP Education* focus mainly on topics contained in the second and third guidance: “Improved knowledge and innovations for growth” and “More and better jobs”.

By its focus, *OP Education* fulfils the **EU employment recommendations**, the European Employment Strategy and follows-up Slovakia's strategic documents (Strategy of support to employment growth based on a reform of the social system and labour market, National action plan of employment for 2004 – 2006), **Commission working programme *Education and vocational training 2010***, **Memorandum of LLL**, the **Bologna declaration**, Recommendation of the European Parliament and Council of 18 December 2006 on key competences for LLL (2006/962/EC). In those strategic documents, education makes one of the cornerstones of support to economic and social activity and employability. The operational programme is intended to reform the system of education and improve labour force qualification. The content or forms of the different priority axes of *OP*

*Education* overlap with the activities laid down by the **EC Community programmes**. Thus, they can be combined with one another, which would increase their synergic effect.

### 2.6.1 Lisbon Strategy

In March 2000, the Lisbon European Council recognised the important role of education as an integral part of economic and social policy which is an instrument for strengthening Europe's global competitiveness and a guarantee to ensure cohesion of the European communities and full-fledged development of its citizens. The European Council defined a new strategic objective for the Union for the next decade – **building a competitive and dynamic knowledge-based economy of higher social cohesion and higher employment levels**. The development of high-quality vocational education and training makes a decisive and integral part of this strategy, in particular in the issues of support to social integration, cohesion, mobility and employability.

As a follow-up of the Lisbon Strategy, Slovakia drew up the **National Reform Programme** and action plans of the Strategy of Slovakia's Competitiveness Development by the Year 2010. The priority axes of the operational programme are based on and are fully supportive of the development part of the Strategy of Slovakia's Competitiveness Development by the Year 2010 – the National Lisbon Strategy whose introduction sets out that “competitiveness of Slovakia in the long run can only be ensured in a single way: by establishing conditions for the development of the so-called knowledge-based economy. In other words, our economic growth must be based on the capability of Slovak people to work with continually new information, produce new knowledge and apply both in practice. Therefore, it is necessary to focus by 2010 on the development of those areas which would support growth of the creative potential of the Slovak economy.”

The strategic and specific priorities of the NSRF are fully compliant with the priorities of the National Reform Programme of the Slovak Republic for 2006 – 2008 (hereinafter the *NRP*). *The Strategy of Slovakia's Competitiveness by the Year 2010, the so-called Lisbon Strategy for Slovakia* (hereinafter the *LSS*) is founded on the basic approach of the EU Lisbon Strategy, which is the development of economic competitiveness. In the long-run, Slovakia's competitiveness can only be ensured in a single way, which is the development of a knowledge-based economy. Therefore, the *National Reform Programme 2006 – 2008* which is based on the LSS and is more specific about the visions, objectives and policies for the next 3 years, has its priorities focused on the following areas: business environment, science, research and innovations, information society, education and employment contributing to the innovative potential of the Slovak economy, development of a knowledge-based economy and employment.

In the follow-up action plan for *Education and employment*, as well as in the *National Reform Programme, Part III.1 Modern educational policy*, those priorities are detailed in the different partial tasks and specified objectives, measurable indicators and time sequence of their fulfilment.

The biggest “Lisbon” challenges from the view of Slovakia include education in which stress is laid in particular on LLL. In achieving the objectives of the Lisbon agenda in education, Slovakia's selected key priorities include<sup>1</sup>:

- Enhancing the quality and improving the system of general and vocational education as well linking the study and training branches and the labour market needs;
- Ensuring foreign language teaching in primary and secondary schools so that the school-leavers would master two foreign languages as a minimum;
- Preparation of a legislative solution with a stress on LLL in the system of education in Slovakia;

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<sup>1</sup> Source: Objectives of vocational education and training in the Slovak Republic in accordance with the principles of the Copenhagen declaration. State Vocational Education Institute, Bratislava 2004.

- Extending the scope and improving the quality of continuing education with a stress on improving qualification, adaptability of labour force and development of career guidance;
- Progressive raising of the share of public expenditure on schools;
- Ensuring introduction of a system for the assessment of education quality;
- Ensuring the introduction of a credit system in studies;
- Fostering a competitive environment in schools by supporting their institutional diversification and by extending the operation of private schools;
- Allowing that a balance is established between education supply and demand;
- Improving the quality and accessibility of education for national minorities and ethnic groups to the end of their integration in the civic society.

The annual report of the EC concerning the revised Lisbon Strategy for the spring European Council on 8 – 9 March 2007 identified the following *strengths in the fulfilment of the National Reform Programme of the Slovak Republic* in education: measures toward creating an information society, progress in the reform of higher education in parallel with new measures for the support of ICT use and integration of disadvantaged children in the system of education. The European Commission identified research, development, innovations and education to be *the weakest areas in the implementation of measures* and thus *the highest priorities of Slovakia*, as they lack a clear strategy and priorities. More activities are needed for the processes of enhancing the skills of job-seekers and promoting LLL. Further efforts will have to be devoted to the reduction of long-term unemployment, especially that of marginalised groups, including the Roma minority.

## 2.6.2 OP Compliance with the NSRF

To become a prosperous country, attractive in the long run for investment and life of its recent and future population, Slovakia must make a full-fledged use of its further development opportunities and of the related changes bringing it closer to the most developed EU countries. According to the 2007 – 2013 National Strategic Reference Framework of the Slovak Republic, when comparing Slovakia with the most developed countries we can see Slovakia legs behind in many aspects and to different extents. Thus, the vision of Slovakia's economic and social development should focus on coming closer to the level and quality of economic development in the European Union. Therefore, the vision has been defined in the NSRF as the **“overall convergence of Slovakia's economy to the EU 15 average by means of sustainable development”**. The NSRF specifies its main vision as “building-up a competitive and dynamic economy; an economy based on responsibility, initiative, innovations and creativity of free citizens, which ensures a better satisfaction of their vital needs and – at the same time – maintains the quality of the environment for the future generations”, whose main component is the “development of a knowledge-based economy and enhancing its significance in the society”. Such changes “can be achieved through a process of overall convergence”.

Based on the strategy starting points and as a follow-up of the set-out Slovakia's strategic objective, the NSRF strategy has been based on **three strategic priorities and their three objectives** which the country will strive to achieve through financing of projects during the 2007 – 2013 programming period. In addition to priorities in the development of infrastructure and priorities of institutional support to the development of innovations, informatisation and a knowledge-based economy, the NSRF identifies the key development factor, which is the support to human potential capable of personally provide for other priority areas or further develop them. Dynamic development and modernisation of the society in all sectors require innovative approaches accelerating the economic development and competitiveness of the country. The support of economic environment requires investment in LLL, research, development and innovations.

By its focus, *OP Education* supports strategic priority 3 *Human Resources* and contributes to achieving the objective “raising the employment, growth of labour force quality for the needs of a knowledge-based economy and raising the social inclusion of risk groups”. Three basic key disparities



of the NSRF for Human resources and education rest in the insufficient number of citizens involved in LLL, inadequate links between the content of education and the labour market needs and a relatively low quality and efficiency of the education rendered, compared to the needs of a knowledge-based society are sufficiently addressed by the content of priority axes of *OP Education*.

A **knowledge-based society** must rest on well-educated population which is able to work with continually new information, produce new knowledge and apply both in practice. The most important skills which need to be developed and supported in that respect include digital and language literacy, communication, organisational skills, crisis management, team work and flexibility.

The attainment of the NSRF strategic objective for the 2007 – 2013 programming period requires higher investment in the education, including public expenditure. Ensuring a high level of employment and prerequisites for high labour productivity through modern educational policy is the best guarantee of long-lasting high standard of living for all Slovakia's population. Public policy in human resources must provide all citizens accessible opportunities and support the capability of permanent education, of absorbing new information and continuously changing one job for another.

Strategic priority No. 3 of the NSRF **Human resources** has been detailed in the following specific priorities:

- 3.1 Recent education for a knowledge-based society,
- 3.2 Support to the growth of employment and social inclusion,
- 3.3 Modernisation of the health sector.

With regard to the above-listed priorities, Resolution of the Slovak Government No. 1005 of 6 December 2006 adopted three operational programmes (hereinafter the *OP*). *OP Education*, *OP Employment and social inclusion* and *OP Health*. Their synergies, complementarities and dividing lines are described in section 5.7.

### 2.6.3 Regional Strategic Documents

The following documents were taken into account when preparing *OP Education*:

- Strategy of human resource development in the Košice self-governing region for 2006 – 2013;
- Concept of development of the secondary school system in the Nitra self-governing region with an outlook up to 2015;
- Development programme 2003—2013 of the Nitra self-governing region;
- Action plan of the Development programme of the Nitra self-governing region;
- Programme of economic and social development of the Trnava self-governing region;
- Programme of economic and social development of the Prešov self-governing region 2004 – 2006;
- Programme of economic and social development of the Trenčín self-governing region;
- Programme of social, economic and cultural development of the Banská Bystrica self-governing region;
- Action plan of human resource development: Key findings of employment survey – Žilina self-governing region;
- Employment action plan of the Bratislava region for 2005 – 2006;
- Existing status and concept of long-term development of secondary schools founded by the Bratislava self-governing region;
- Recent status and long-term intent of development of the secondary school system;
- Strategic action plan of employment and building of partnership on the regional, sub-regional and local levels – an analysis for the Bratislava region;

- Development strategy of the Bratislava self-governing region adopted by the parliament of the Bratislava self-governing region by its resolution No. 36/2003.

### 3 Recent Situation in Education

At the time being, Europe is switching to the so-called learning society which stresses LLL of a human being as one of the main principles of the development of economic prosperity in the European Union. The onset of an information society and globalisation of economy pose new tasks for the system of education and bring it to a new, higher level. In its own region, school must become the place of education for the young population as well as the place of life-long learning.

Moreover, it must be the centre of culture, sports and community life. In developing the system of education, the objective must be creating an environment for sound competitiveness of schools, differentiation and focus on quality and performance. As Slovakia has become an EU member on 1 May 2004, our schools must be capable of competing with schools in other EU countries, of being their partners and – in many aspects – be able to set the pace of development in various sectors.

Analysis of recent situation in education and the outlined development options for primary, secondary and higher education institutions, and for science, research and continuing education make the starting point for achieving higher quality, compatibility with the European Union, and in particular ways to creativity and preparedness of the schools leavers/graduates with regard to their vocational, language and IT skills. In principle, the system of education must react flexibly to the pace of development in the various industrial sectors.

#### 3.1 Key Education Terminology

The concept of life-long learning has been defined in the LLL Memorandum of the EC as a targeted continuous educational activity so as to enhance knowledge, skills and competences. The European Commission sees the LLL as a umbrella concept for **all systems of education** (formal, non-formal and informal learning) and **all levels of education** (pre-school, primary, secondary, tertiary and continuing education).

LLL brings together activities of upbringing and education carried out in the school education sub-system (kindergartens, primary, secondary and tertiary schools) and in the extra-curricular education sub-system (corporate, sectoral, interest, civic and other education). The first subsystem is indicated as formal education, the other one as non-formal education.

The formal education includes:

- a) Regional schools (primary schools and secondary schools, mostly founded by the self-governments) which provide the basic knowledge, skills and competences in initial education;
- b) Higher education institutions (their nature and mission determines their significant position in the entire system of education; they are established by law or by state permission granted by the Slovak Government and, in case of private tertiary schools, by granting state permission; they provide knowledge, skills and competences which allow their graduates participate in production with a high value added and move flexibly on the labour market in a knowledge-based economy).

**Formal education** is governed by the following acts:

- Act No. **29/1984** Coll. on the system of basic and secondary schools (the school act), as amended, laying down the position and tasks of schools, school personnel and compulsory school attendance;
- Act No. **416/2001** Coll. on the transfer of certain competences from state administration authorities to municipalities and to higher territorial units whereby a part of competences was delegated to the regional level;
- Act No. **131/2002** Coll. on higher education and on the modification and amendment of certain acts, as amended, which established the legislative basis for the transformation of higher education in Slovakia;
- Act No. **596/2003** Coll. on state administration in education and school self-government and on the modification and amendment of certain acts laying down the founding function of schools, financial rules and devolution of competences toward higher independence, flexibility and open nature of schools;
- Act No. **597/2003** Coll. on financing of primary schools, secondary schools and school facilities, which significantly changed the financing system of regional schools and has introduced normative financing per pupil.

**Non-formal education** is regulated by the following acts:

- Act No. **455/1991** Coll. on sole trading (the Sole Trader Act), as amended;
- Act No. **279/1993** Coll. on school facilities, as amended, which regulates certain types of non-formal education (like education in language schools);
- Act No. **386/1997** Coll. on continuing education and its amendment No. 567/2001 Coll. characterising types of continuing education, conditions for accreditation of educational programmes, for issuing of certificates of education and sources of financing of continuing education;
- Act No. **311/2001** Coll. (the Labour Code), as amended;
- Act No. **5/2004** Coll. on employment services;
- Act No. 578/2004 on health care providers, medical personnel, professional organisations in health care and on the modification and amendment of certain acts;
- Others - Order of Government the Slovak Republic No. 322 of 3 May 2006 on the manner of continuing education of medical professionals, institute of specialised disciplines and institute of certified professions, No. 742/2004 on professional competences for performing medical professions.

The formal and non-formal education may be characterised as organised activities targeted at the acquisition of knowledge, capabilities and skills necessary for performing specific activities, which are both implemented by institutions, structured by objectives, number of classes and support to learning. Recently however the EC puts more stress on activity of the learning subject and has added informal (non-institutional) learning to the subsystems mentioned – based on everyday activities linked with work, family or leisure time; such learning is not structured, does not lead to obtaining a certificate, is rather occasional, unintentional.

In addition to primary, secondary and tertiary education, **continuing education** makes part of Slovakia's educational system and its provision is a public task. The language of instruction and testing in continuing education is the state language; continuing education may also be rendered in a different language than the state language, depending on the interest of its participants and capacities of the educational institutions. It can be organised in schools when their main activities are over, in organisations established to complement educational programmes in the formal system, in workplaces, in interest organisations, etc. Educational institutions in continuing education are governed mainly by the demand for education; they make the part of the educational system which – by its nature – is the most flexible to the labour market requirements (the latest knowledge, education prevails on issues which can immediately be used in practice) and to learners (effective education based on methods adapted to learners).

Continuing education is considered to be education which allows anyone complement, extend and deepen the education acquired, re-qualify or satisfy his interests, or which provides preparation for acquiring a level of education in the school system. Those who have completed educational activities receive certificates of completion. The content of education is not linked to a standard or requirement of a specific educational objective and the documents proving completion are not valued as a qualification for the performance of a specific activity. The acknowledgement of certificates by employers depends on the employer position, as continuing education is not concluded by issuing official qualification documents/certificates.

### **3.2 Political and Social Context**

The support to a knowledge-based society is a clear priority of the Slovak Government declared in the Policy Statement of the Slovak Government, compliant with the programme objective: “The Slovak government considers shaping of a knowledge-based society to be its priority because only that is the society which is a prerequisite of democratic development, progress in science and technology, economic growth and social security, employment and growth.”<sup>2</sup>

In Slovakia, the authority responsible for education is the Ministry of Education of the Slovak Republic. According to Act No. 575/2001 Coll. on the structure of operation of the government and on the structure of central state administration, the area of responsibility of the Education Ministry covers primary schools and secondary schools (regional schools), higher education, continuing education, children and youth, science and development, and sports.

The main activities of the Education Ministry focus on the Slovak government’s priority – building of a knowledge-based society, in particular with regard to investments in human resources and in human capital. In accordance with the Policy Statement of the Slovak Government adopted by the National Council of the Slovak Republic on 31 July 2006, the Education Ministry prepared the **Priority tasks of the Ministry of Education of the Slovak Republic for 2006 – 2010**. The document is a time schedule and a list of tasks to be accomplished by the Education Ministry with regard to creating a knowledge-based society by the year 2010.

Over that period, the Education Ministry will focus on the following main objectives in the various fields of education and upbringing:

#### **In the regional system of education:**

- Draw up a concept of foreign language teaching in primary and secondary schools;
- Assess the qualifications status of pedagogical staff in regional schools and the standard of training of graduates from teacher-training colleges;
- Draw up draft Concept of professional teacher development within the career system;
- Prepare a draft act on the situation of pedagogical staff of schools and school facilities;
- Draw up a new draft act on education and upbringing (school act) to address changes in the content of upbringing and education in regional schools;
- Draw up a concept of two-tier educational programme model in vocational education;
- Draw up a concept of the education information system.

#### **In higher education:**

- Adopt the amended act on higher education, with a stress on the decisive areas in higher education: education, research, development, innovative, artistic and creative activities, including the accomplishment of their mission, with a stress on the development and quality of tertiary education, institutional evaluation and funding of higher education institutions,

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<sup>2</sup> Policy Statement of the Slovak Government, August 2006.

accreditation of higher education institutions, placement of graduates in practice, evaluation by quality parameters and international cooperation.

**In continuing education:**

- Prepare a draft act on LLL.

According to the aforementioned, the operational programme was drafted at a time when the existing concepts and acts in education and upbringing were amended or new ones were drafted and thus, they could not be sufficiently taken into account in its drafting. Therefore, all relevant concepts will be used later, when the calls are prepared (i.e. incremental strategy formation of using the ESF/*OP Education* – see section 7.4).

### **3.3 Financing of LLL**

The financing system of almost all education forms has been significantly and dynamically changing over the previous years and the process of changes is to be seen as an open one. Entities participating in the education financing have changed, new relations and financial flows, new quality, new powers and responsibilities have been established.

The resources coming to LLL can be split up into two basic groups:

1. Public sources (derived from a public budget);
2. Other sources (funds expended by business entities, the third sector, the European Union, private sources of LLL participants).

With regard to the amount of sources and their relationship to the structure, it is possible to relatively exactly tell what amount of funding is intended for formal education. The formal school-based system of education is clearly defined by legislation and its funding is defined by law. Its funding sources include in particular the state budget, municipality and higher territorial unit (hereinafter the *region/regional*) budgets, contributions made by founders, contributions from pupils and parents, profit from business activities, donations, earnings from the lease of school premises and equipment, and others. The available amounts of funding intended for the formal system of education are laid down in normatives and therefore, they can be characterised as stable.

The re-distribution of funds in non-formal education, in particular in continuing education is regulated by acts, too. However, the legal regulation of non-formal education is heterogeneous and several legislation standards have been valid for a short time only.

The amount of funds earmarked for non-formal education cannot be exactly quantified at the time being. The difficulties to quantify are caused by missing of a uniform methodology for posting the funds intended for educational activities. That basic weakness makes it difficult to determine later how efficiently such funds have been used.

With regard to funding sources, the system of funding in life-long learning is considerably heterogeneous and it is relatively difficult to define its different sources of financing.

The system of re-distributing the funds is today clearly defined by normatives for public sources. That mainly applies to the system of formal education.

The implementation of certain national reforms which promote the common European interest – attainment of the Lisbon objectives – should partially be supported by the European Community funds extended by the European Social Fund, following Article 3 (1) (1) of Regulation of the European Parliament and Council (EC) No. 1081/2006. The fact that investments coming from the state budget to human resources and supporting research and development has been under the European Union's average in the long run, deserves special attention.

**Education expenditures** can be measured by various indicators (see Table 8). The total public expenditures in education expressed in terms of its share in GDP or GDP per capita in the Slovak Republic is still slightly less than the EU 15 average (by 8 – 16 %, or by 26 % during 2000 – 2002) but the absolute expenditures per pupil/student are as much as three times less in fact. Another Slovakia's specific feature is the low share of private funds in ensuring the education – over 2000 – 2002, the share of private expenditures on funding of the school system was three to four times less than the EU 15 average. There is however a strong reason to believe that the indicators of private expenditures on education have started to change over the last years, due to changes in legislation (see also below).

<b>Table 8: Expenditures on education<sup>3</sup></b>					
<b>Indicator</b>		<b>Year</b>			
		<b>1997</b>	<b>2000</b>	<b>2002</b>	<b>2003</b>
Total public expenditures on education in terms of share in GDP	SR	4,80	4,15	4,35	4,34
	EU 15	5,03	4,94	5,22	-
Expenditures on public and private educational institutions in terms of GDP per capita	SR	-	17,8	18,5	-
	EU 15	-	24,2	25,3	-
Expenditures on public and private educational institutions per pupil/student <sup>4</sup>	SR	-	1 680,9	2 013,9	2 305
	EU 15	-	5 308,0	5 878,1	6 002
Private expenditures on education in terms of share in GDP for all levels of education	SR	-	0,15	0,20	-
	EU 15	-	0,61	0,59	-

### **3.4 Educational Structure of Slovakia's Population**

With regard to the **demographic development**, there was a moderate increase (growth index of 101.99) between 1991 and 2001, however, the average age is increasing which leads to an increase in the ageing index.<sup>5</sup> "According to the most probable variant of the population development forecast up to 2025 it is assumed that Slovakia should have a population of approx. 5.2 million by the year 2025, which is 180 thousand less than today."<sup>6</sup> According to the forecast, the population at the productive age will be shrinking from 2007 onwards, and the share of children aged 0 – 14 will decrease by the year 2025 from the recent 18 % to 12 %.<sup>7</sup>

That statistics indicates that in education, the society will face great challenges like how to ensure sufficient qualified labour force at the productive age and how to successfully cope with the ageing of population. Such development needs to be reflected in LLL (at the level of primary, secondary and tertiary schools and in continuing education). Adequate instruments are missed today to address the needs of the ageing population with regard to placement on the labour market. For specific proposals of measures, see the strategic part of *OP Education*.

<sup>3</sup> Zdroj: Eurostat. Novšie údaje nie sú v súčasnosti dostupné.

<sup>4</sup> Public expenditures on pre-school to secondary education of persons aged 3 – 18, USD/PPP.

<sup>5</sup> Regional Development Ministry, 2005.

<sup>6</sup> Ibidem.

<sup>7</sup> Ibidem.

At present, over one third of the adult population has completed secondary education with the school-leaving examination called matura (36.0 %) and approximately one in ten has graduated (9.9 %). According to the data of the Statistical Office, 54.2 % of persons in Slovakia have received nothing more but apprenticeship or secondary education without a matura exam (including persons with basic education only or without any education). The data is slightly more favourable for young people (aged 25 – 29): almost half of that age group (47.1 %) has received secondary education with a matura examination and 16.7 % of them have received tertiary education.

**Table 9: Population aged 15+ by education and gender – Slovak Republic (2Q/2005)<sup>8</sup>**

<b>Education</b>	<b>Total</b>		<b>Men</b>		<b>Women</b>	
	<b>No.</b>	<b>No.</b>	<b>No.</b>	<b>No.</b>	<b>No.</b>	<b>No.</b>
	(thousand)	(thousand)	(thousand)	(thousand)	(thousand)	(thousand)
Primary	1135.5	25.6	434.8	20.4	700.7	30.4
Vocational (apprent.)	1159.6	26.1	701.9	33.0	457.8	19.8
Secondary (without matura examination)	92.8	2.1	46.1	2.2	46.7	2.0
Vocational (with matura examination)	163.2	3.7	98.8	4.6	64.4	2.8
Complete general secondary	251.8	5.7	91.2	4.3	160.7	7.0
Complete secondary vocational	1148.0	25.9	503.5	23.7	644.5	27.9
Higher vocational	30.2	0.7	8.9	0.4	21.3	0.9
Tertiary (incl. scientific qualific.)	437.8	9.9	233.2	11.0	204.6	8.9
No school education	16.8	0.4	9.2	0.4	7.6	0.3
<b>Total</b>	<b>4435.6</b>	<b>100.0</b>	<b>2127.5</b>	<b>100.0</b>	<b>2308.1</b>	<b>100.0</b>

Source: Results of sample survey of labour force, 2/2005; Statistical Office of the Slovak Republic, Bratislava; own calculations

As indicated in Table 10, the number of persons with upper secondary education (secondary education without a matura examination and vocational and secondary with a matura examination) significantly prevails in the educational structure of adult population who have completed their process of education – it is as much as 75 %. In other European states, the share of persons with such education in terms of percentage is lower but, on the other hand, such countries have higher shares of persons with higher education than Slovakia. The share of population with higher education in the total population of our country is still low in our country with regard to the future development and prospective needs of qualified labour force, and may contribute to a lower competitiveness of our

<sup>8</sup> Source: Institute of School Information and Prognosis – Department of higher education analyses and prognosis: Unemployment of Graduates (Final Report). Leading author: PhDr. Ľubomíra Srnánková, Bratislava 2005. More recent data is not available at present.

economy. With its 11 % of persons with higher education, Slovakia ranks among the last countries together with Italy (10 %) and Portugal (9 %).

**Table 10: Education completed by adult population (age 24 – 64) – selected European states – 2002 Distribution of population aged 25-64 by the completed level of education (%)<sup>9</sup>**

State	Pre- primary & primary	Lower secondar y	Higher secondary education		Post- secondarye (non- terciary)	Tertiary education		Total	TOTAL (all levels of education)
			(ISCED 3B+3C)	(ISCED 3A)		B type	A type & scient.train		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>Luxemburg</i>	23	15	26	14	3	7	12	<b>19</b>	100
<i>Belgium</i>	19	21	8	24	1	15	13	28	100
<i>Denmark</i>	<i>n</i>	20	46	5	1	8	20	28	100
<i>Netherlands</i>	12	22	24	13	5	3	22	25	100
<i>Norway</i>	<i>n</i>	13	40	12	3	3	28	31	100
<i>Sweden</i>	8	10	<i>x(4)</i>	49	<i>x(6)</i>	15	18	33	100
<i>Finland</i>	<i>x(2)</i>	25	<i>a</i>	42	<i>n</i>	17	16	33	100
<i>Island</i>	2	32	7	23	10	6	20	26	100
<i>UK</i>	<i>n</i>	16	41	15	<i>n</i>	8	19	27	100
<i>Ireland</i>	21	18	<i>a</i>	23	12	10	16	26	100
<i>France</i>	17	18	30	10	<i>N</i>	12	12	24	100
<i>Spain</i>	32	26	6	11	<i>n</i>	7	17	24	100
<i>Portugal</i>	67	13	<i>x(4)</i>	11	<i>x(4)</i>	2	7	9	100
<i>Italy</i>	20	33	8	26	2	<i>x(7)</i>	10	10	100
<i>Greece</i>	37	10	4	25	5	6	13	19	100
<i>Switzerland</i>	3	12	46	6	7	9	16	25	100
<i>Austria</i>	<i>x(2)</i>	22	49	7	7	7	7	14	100
<i>Germany</i>	2	15	52	3	5	10	13	23	100
<i>State under transformation – a selection</i>									
<i>CZK</i>	<i>n</i>	12	43	33	<i>x(4)</i>	<i>x(7)</i>	12	12	100
<i>Hungary</i>	3	26	29	27	2	<i>n</i>	14	14	100
<i>Poland</i>	<i>x(2)</i>	18	35	31	4	<i>x(7)</i>	12	12	100
<i>SR</i>	1	13	40	35	<i>x(4)</i>	1	10	11	100

*a* – data not applicable, the category does not match

*x* – data included in another column of the table (for instance, *x(2)* means that the data is included in column 2)

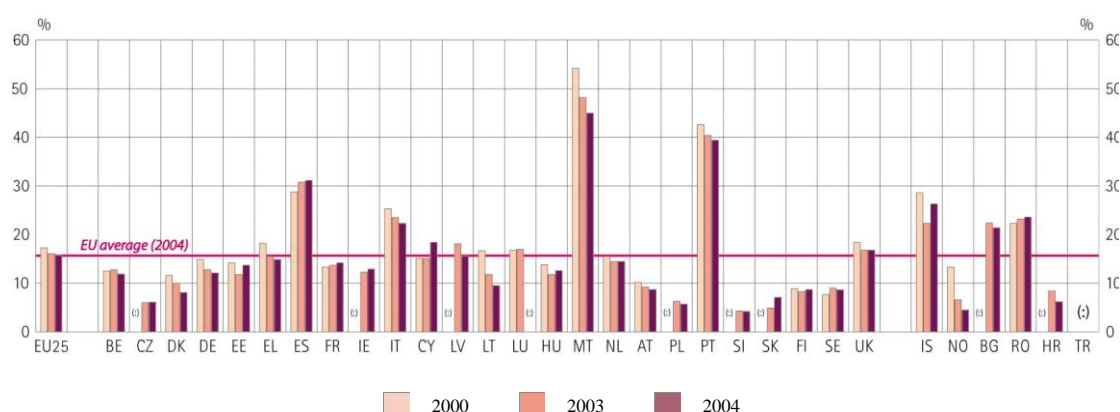
Source: Education at a Glance. OECD Indicators 2004. OECD 2004, p.46

<sup>9</sup> Ibidem. More recent data is not available at present.



An increasing acceptance of the value of education by the young generation can be proven by the fact that the share of persons with higher levels of education is increasing in the age group of 25 – 29. The young people who are early leavers of the education system (an EU benchmark) are defined by the *Eurostat* as a population percentage, aged 18 – 24, with nothing more but lower secondary education who do not participate in continuing education and training. In Slovakia, that indicator was 4.9 % in 2004 and 7.1 % in 2004 (in which: 7.8 % men and 6.4 % women). The EU milestone which should not be exceeded in 2010 is 10 %. As for young people who are early leavers from the educational system, Slovakia can boast with three times lower values on average compared to the EU 15, EU 25 or newly EU 27 (see also the chart below).

**Chart 1: Young early leavers from the system of education<sup>10</sup>**



In the long run, that may contribute to the progressive improvement of our population's competitiveness. Slovakia also reports very good results in the indicator of completed upper secondary education in the population aged 20 – 24 (EU benchmark). Together with the Czech Republic (and also other countries like Norway and Croatia), Slovakia has an over 90 % share of persons with completed secondary education. Specifically for Slovakia: 94.5 % in 2000, 94.1 % in 2003, 91.3 % in 2004 (in which 91.1 % were men and 91.5 % women in 2004). For a more detailed comparison of the population percentages, aged 20 – 24, with at least upper secondary education completed, see the chart below.

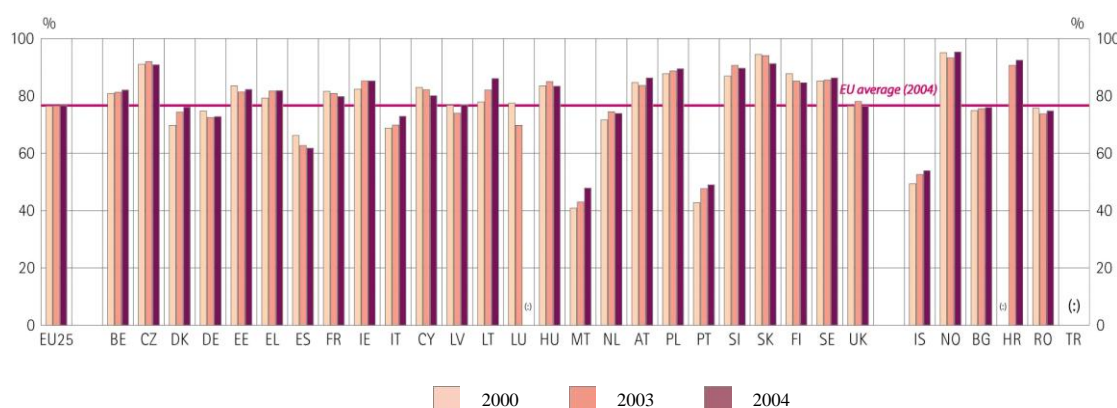
**Table 11: Total No. of early school leavers (%)<sup>11</sup>**

	Year			
	2002	2004	2005	2006
SR	5.6	7.1	5.8	6.4
EU 15	18.7	17.7	17.3	17.0
EU 25	16.6	15.6	15.2	15.1

<sup>10</sup> Source: Communication from the Commission "Modernising education and training: a vital contribution to prosperity and social cohesion in Europe – Draft 2006 joint progress report of the Council and the Commission on the implementation of the "Education & Training 2010 work programme".

<sup>11</sup> Zdroj: Eurostat (Labour Force Survey).

**Chart 2: Completed upper secondary education<sup>12</sup>**



It is obvious that Slovakia is clearly above the average in two out of five benchmarks of the EU Council: the number of young early leavers is under 10 % in the long run, and the average number of young persons aged 20 – 24 with secondary education of 91.5 % is high above the EU average (85 %) (OECD Education at a Glance, 2005).

However, when comparing the number of persons with tertiary education in the population to other European countries, Slovakia's situation is not favourable. A high level of general education in the working population is considered a pre-condition for a competitive European economy<sup>13</sup> and, at the individual level, it is a pre-condition for a successful entry of the labour market and access to higher education.

### 3.5 Education and Employment

Changes in Slovakia's economic conditions have caused a decline of several traditional employers, change in the focus of production and services (traditional production sectors have declined and are substituted by new ones), occurrence of small employers – sole traders, arrival of new foreign investors which has logically resulted in new employer demands and requirements on vocational knowledge, practical skills and competences of the school leavers/graduates. Education has a significant impact on employment and unemployment on Slovakia's labour market – the opportunities to be employed improve with the increasing level of education. The room for highly qualified people has been growing on the labour market.

A relatively steep increase in the number of business entities active in the developing industrial sectors and the resulting increase of the number of jobs will inevitably lead to higher requirements for the vocational education and training system, on re-qualification and on increasing the employee qualifications. The main Slovakia's difficulties in human resources – with regard to the needs of the industry – may be summarised as follows:

- Absent training of specialists for new professions which are required by the priority sectors of our industry;
- Inadequate cooperation between industry and secondary and tertiary schools;

<sup>12</sup> Source: Communication from the Commission "Modernising education and training: a vital contribution to prosperity and social cohesion in Europe – Draft 2006 joint progress report of the Council and the Commission on the implementation of the "Education & Training 2010 work programme". .

<sup>13</sup> Commission Staff Working Document: Progress towards the Lisbon Objectives in Education and Training, Report based on indicators and benchmarks, Report 2006.

- Low capacities for continuing education of low competitiveness.

In spite of its favourable economic development and the progressively decreasing unemployment rate over the last period, Slovakia still fights a high unemployment rate if compared to other European states. According to the data of the EU statistical office Eurostat, the unemployment rate throughout the EU was 7.5 % in January 2007, while it was as much as 11 % in Slovakia (if comparing to November 2005, it decreased by 4 %). Following Poland (12.6 %), the Slovak unemployment rate ranks second within the European Union. The lowest unemployment rates in the EU were reported by Denmark (3.2 %), followed by the Netherlands (3.6 %) and Estonia (4.2 %).

As for the *employment structure*, workers with complete secondary vocational and higher vocational education (789.2 thousand, which is 35.9 % of workers) represent the largest educational group on the Slovak labour market. Another large group is made by trained (without a maturita examination) and workers with secondary education without a maturita examination (749.3 thousand, which is 34.1 %). Workers with tertiary education made 15.5 %. Basic education only was received by 104.0 thousand workers, which is less than 5 % (see table 12). The employment rate of the different educational groups which is a percentage share of workers with the given level of education in the population of the same educational group relatively clearly increases toward higher educational levels. The highest employment rate can be seen in persons with tertiary education (77.8 %).

**Table 12: Workers by education and age – Slovak Republic (2Q/2005)<sup>14</sup>**

Education	Total (15 years +)		Aged 25 – 29	
	No. (thous.)	%	No. (thous.)	%
Primary	104.0	4.7	(4.3)	1.4
Vocational (apprent.)	692.8	31.5	78.6	25.2
Secondary (no maturita)	56.5	2.6	8.8	2.8
Vocational (apprent) with maturita examination	115.1	5.2	24.0	7.7
Complete general secondary	98.8	4.5	17.4	5.6
Complete vocational secondary	769.0	35.0	110.7	35.5
Higher vocational	20.2	0.9	(3.0)	1.0
Tertiary (incl. scientific qualific.)	340.5	15.5	65.0	20.8
Total	2196.8	100.0	311.8	100.0

( ) – Lower reliability data (Its relative standard error is higher than 20 %)

Source: Results of sample survey of labour force, 2/2005; Statistical Office of the Slovak Republic, Bratislava; own calculations

<sup>14</sup> Source: Institute of School Information and Prognosis – Department of higher education analyses and prognosis: Unemployment of Graduates (Final Report). Leading author: PhDr. Ľubomíra Srnánková, Bratislava 2005. More recent data is not available at present.

The education **structure of the unemployed**, on the other hand, clearly shows that the least attractive for employers are the job-seekers with secondary education without a matura exam and unqualified job-seekers. In 2Q/2004, there were as many as 284.1 thousand unemployed with basic education and with secondary education without a matura exam, which was 66.8 % of the total number of 425.3 thousand unemployed. On the other hand, unemployed with tertiary education made only a 4 % share (4.2 %).

**Table 13: Unemployed by education and age – Slovak Republic (2Q/2005)<sup>15</sup>**

Education	Total (15 years +)		Aged 25 – 29	
	No. (thous.)	%	No. (thous.)	
Primary	116.1	27.3	19.0	29.4
Vocational (apprent.)	159.8	37.6	18.6	28.8
Secondary (no matura)	8.2	1.9	2.1	3.3
Vocational (apprent) with matura examination	21.6	5.1	5.1	7.9
Complete general secondary				
Complete vocational secondary	15.5	3.6	2.3	3.6
Higher vocational	84.6	19.9	13.0	20.1
Tertiary (incl. scientific qualific.)	(1.7)	(0.4)	-	-
	17.7	4.2	(4.5)	(7.0)
Total	425.3	100.0	64.6	100.0

„-“ – phenomenon not established in the survey

( ) – Lower reliability data (Its relative standard error is higher than 20 %)

Source: Results of sample survey of labour force, 2/2005; Statistical Office of the Slovak Republic, own calculations

Unemployment of young people is a problem in other countries, too. In most EU countries, a relationship is observed between the education achieved and unemployment: coming to lower levels of education, the unemployment increases. In most European states, young people with tertiary education make a group which is the least at risk with regard to unemployment.

Despite positive results concerning the level of completed education in Slovakia (91.5% of persons aged 20 – 24 with completed secondary education), the statistics indicate that there is a relatively high percentage of unemployed with apprentice education (37.6%) and complete secondary vocational education (19.9%). One of the reasons is the imbalance between the qualifications acquired and the demand for such qualifications on the labour market. There is no mechanism to establish the labour market needs and the cooperation between schools and the business sector and regions is not adequate. The high unemployment of young people may partially result from the lack of information and missing comprehensive system of lifelong guidance.

<sup>15</sup> Ibidem. More recent data is not available at present.

### 3.6 Regional Schools

**Regional schools** make a system of primary and secondary schools (primary school, vocational school, secondary vocational school, grammar school, secondary specialised school and special schools), centres of practical instruction, basic schools of art and school facilities. As certain competences of that system were transferred on from state administration authorities to municipalities and self-governing regions after 2001, that part of education is indicated in Slovakia by the expression “regional school system”.

By adopting Act No. 596/2003 Coll. on state administration in education and school self-government, and on the modification and amendment of certain acts, realistic preconditions have been established for competitive educational environment through founders of schools and school facilities. An important novelty with regard to the system organisation was the occurrence of private schools and the transfer of a part of state administration in education to municipalities and self-governing regions. The transfer of competences means, for instance, the right to found/establish and close schools, allocate funds, audit the financial and material management of schools. That step, on the one hand, has resulted in rationalising and optimising the system of schools and school facilities and is an opportunity to more efficiently use the budget sources. On the other, merging schools and school facilities has brought problems like closing of specialised classrooms. One may view the interventions of some founders in the competences of primary school headmasters and the low standard of the measured educational results in foreign languages vs. educational benchmark/standard as a negative phenomenon.

The fundamental task regarding modern educational policy shall be to prepare a draft **new school act** (act on upbringing and education) during the year 2007. The adoption of the draft is expected in 2008. The adoption is closely linked to the guidelines of the EU Council No. 23 and No. 24 intended to adapt the education in response to new qualification requirements or, to raise the quality of investment in the human capital. The adoption of the new school act is expected to conclude the reform in primary and secondary schools; stress would be laid in particular on the content of education which would ensure the transformation of traditional school into a modern one, as defined by the Millennium document – National programme of upbringing and education in the Slovak Republic for the forthcoming 15 to 20 years. The school act would regulate anew all types of education, starting with pre-primary and ending with LLL. The act would lay down the principles, objectives and conditions under which upbringing and education is to be performed. Accreditation would be introduced for upbringing and educational programmes and the content, methods and forms of education and upbringing would be innovated.

The State Vocational Education Institute prepared the Standard of secondary vocational education and upbringing in the Slovak Republic<sup>16</sup> for formal education in secondary schools in 2002. Educational standards for interim and final assessment of the education process quality are, however, missing. With regard to quality of the education content, a low level of partnership can be identified of the sectors, self-governments, employers, labour offices, educational institutions and other social partners when creating the education content.

One of the most significant changes to be introduced by the reform of regional schools is the **introduction of a two-tier model of educational programmes** proposed by the Education Ministry. Introduction of the model will allow each school – based on its professional responsibility – realise those objectives of education which are defined by the state on the one hand (the so-called state educational programmes) while respecting the educational needs of pupils, regions, employers and labour market on the other (the so-called school educational programmes).

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<sup>16</sup> The document is available at <http://www.siov.sk/siov/dokhtm/1vzdprog/12standr.htm>.

**Quality evaluation** is not at the desirable level in Slovakia yet. The concept of a two-tier model of educational programmes should make an adequate two-tier evaluation model. The external quality evaluation should be based on the self-evaluation of the school, followed up by external evaluation boards on which employers should be represented as well. The draft *Concept of a two-tier model of educational programmes in vocational education and training in Slovakia* was approved by the Slovak Government in its Resolution No. 489 of 6 June 2007<sup>17</sup>.

At present, a document called **Concept of foreign language teaching in primary and secondary schools** is being prepared in order to address the unfavourable situation in foreign language teaching in Slovakia (absence of a single model of learning plan for foreign languages, ineffective foreign language teaching, lack of qualification of foreign language teachers, absence of a solution in Slovakia's language policy in the Education Ministry, inadequate financial remuneration of teachers). The proposed concept is based on the existing situation and offers specific solutions like, for instance, mitigation of high variability of learning plans for foreign languages, elimination of lacking qualification and of high turnover of foreign language teachers, introduction of teaching of two foreign languages in all branches of studies, modification of basic pedagogical documents for primary and secondary schools so as to make them compliant with the principles of continuity in foreign language teaching. The basis for drawing up the concept and draft strategy of its implementation has been the output of the ESF project Deepening of effectiveness in foreign language teaching with regard to Slovakia's accession to the European Union carried out by the National Institute for Education.

Slovakia has long years of tradition in **developing the talents of children and youth** which needs to be consolidated, professionalized and expanded, either through primary schools of arts, contests, correspondence seminars and various topic-oriented competitions or athletic schools, particularly for those pupils who have not any access to them today. For further development and exploitation of experience, it is necessary to **prepare and implement a new model of work with talented pupils**. Under the new model, efficiency of leading gifted and talented youth would improve. Unlike the existing model which is mainly pupil-oriented, more attention would be paid to teachers who foster the pupils' interest in their subject by various means and approaches. Centres of talent development will make an irreplaceable instrument of systemic support and – in collaboration with other involved organisations – they will provide for assistance to teachers and organisers of various activities supporting talented pupils.

### 3.6.1 Primary Schools

**Primary schools** provide primary education by successful conclusion of the 9th grade, provide for intellectual, emotional and senso-motoric development of pupils in line with scientific knowledge and in line with the principles of patriotism, humanity and democracy. They provide ethical and aesthetic upbringing, upbringing by work, health education, physical training, environmental and religious upbringing. As a rule, the primary school has nine grades and a zero grade is an option. From the fifth grade onward, it is usually differentiated according to the pupil's interests and capabilities. Primary school consists of two stages, the first being four years and the second being five. According to the Yearbook of Statistics in Education SR<sup>18</sup> there are 2 284 primary schools in Slovakia at present (of which, 2 146 founded by state, 111 by churches and 27 private ones) with 510 510 pupils and 33 736 internal teachers.

According to PISA (*Program for International Student Assessment*) survey, Slovakia can boast good results in reading with understanding. By 2010 (compared to the year 2000), the EU has undertaken to decrease the percentage of 15-year-old pupils with poor reading results by 20 % as a minimum (an EU

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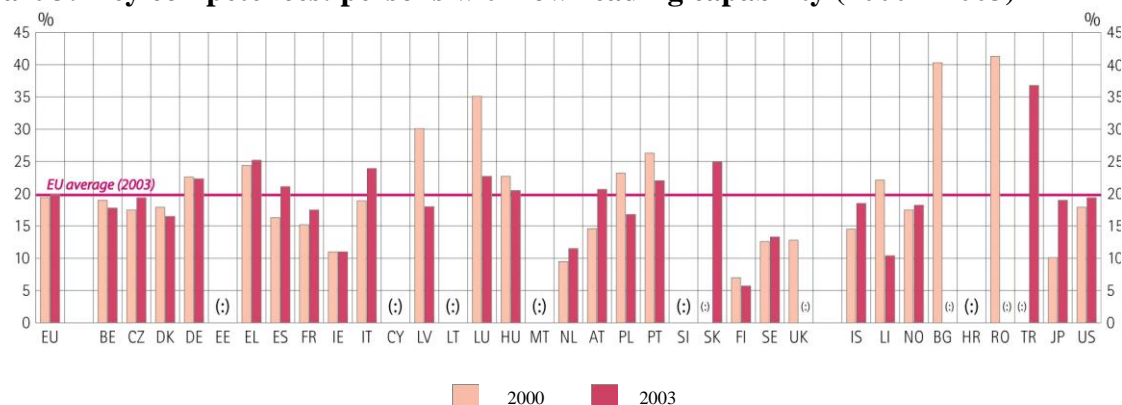
<sup>17</sup> Source:

<http://www.rokovania.sk/appl/material.nsf/0/6F16469462C3C049C12572ED00291F3E?OpenDocument>

<sup>18</sup> Source: Yearbook of Statistics in education. Bratislava, Institute of School Information and Prognosis 2006.

benchmark). As illustrated by the diagram below, Slovakia is achieving better results than the European average.

**Chart 3: Key competences: persons with low reading capability (2000 – 2003)<sup>19</sup>**



In 2003, Slovakia achieved 24.9 % for that indicator, which is a value exceeding the 2010 milestone set forth by the EU. The capability to read in one's mother tongue is one of the key competences which makes the basis for continuing education of an individual and equally is a prerequisite of employment and social inclusion of each individual.

In certain primary schools, there are gradual improvements in **spatial, material and technical and psycho-hygienic conditions of instruction**. The number of schools which receive grants for reconstruction and rehabilitation of school premises, buildings, sports grounds, for performing educational activities concerning healthy life style, environmental education and informatisation of instruction, increases. Classrooms with IT equipment have been established in all schools through the Infovek project. In primary schools, there is one computer per 24,5 pupils.<sup>20</sup> The improving computer literacy can be seen in a more efficient use of computers in instruction. Starting 2004, with a prospect of 2008, ICT is being implemented in the curricula at all levels of schools, which would ensure computer literacy of each pupil.

A decreased number of pupils in schools allows **developing a competitive environment**, in which it is mainly schools in the towns and cities that compete for pupils through non-traditional forms of instruction or by an extended offer of educational programmes. Some schools are more open, they present themselves in local mass media, on web sites and by organising programmes and concerts. Deepening of cooperation between schools and municipalities can be seen in opening of computer classrooms in primary schools to the public in the afternoons.

The on-going problem of basic schools rests in **insufficient expertise** in teaching certain subjects (*stage 2*) and mainly in foreign language teaching. At stage 2, progressive teaching methods and forms are used less, **classical teaching forms prevail**, without any visual aids and without any stimulation of creativity or improving the pupils' competences. Often the teaching aids and teaching equipment are obsolete.

The increasing aggressiveness of pupils is obvious; the number of pupils with learning and behavioural disorders grows. Little attention is paid to talented pupils; different types of handicaps are not taken into

<sup>19</sup> Source: Communication from the Commission: "Modernising education and training: a vital contribution to prosperity and social cohesion in Europe – Draft 2006 joint progress report of the Council and the Commission on the implementation of the "Education & Training 2010 work programme". Data source: OECD PISA Database. More recent data is not available at present.

<sup>20</sup> Finance Ministry, 2005.



account with regard to individually integrated pupils. There are difficulties in drawing up individual educational and upbringing programmes for pupils with special educational and upbringing needs.<sup>21</sup>

### 3.6.2 Secondary Schools

**Secondary schools** provide their pupils secondary vocational education, complete secondary vocational education, complete secondary general education and higher vocational education. They prepare pupils to perform vocations and activities in national economy, administration, culture, arts and other areas of life (including tertiary studies). They prepare pupils for creative work and professional activities in vocations. There are the following types of secondary schools: grammar schools, secondary specialised schools, secondary vocational schools and associated secondary schools (secondary vocational schools and secondary specialised schools). According to the Yearbook of Statistics in Education SR<sup>22</sup>, there are 852 secondary schools in Slovakia with 317 995 pupils and 21 516 teachers (excluding headmasters and their deputies). In Slovakia, there are 247 grammar schools, 259 secondary specialised schools and 218 secondary vocational schools and vocational schools.

Deficiencies in the **system of secondary schools** are observed in shaping of their regional network because the process of including schools and especially of further branches in the network is not coordinated. Many secondary school leavers have difficulties with placement on the labour market, as they often fail to satisfy the employer requirements, for instance, they are not able to solve problems, they lack flexibility, do not speak foreign languages and are not computer literate. The existing structure and content of education are sufficiently harmonised neither with technical and technological changes nor with the requirements put on the individual by a knowledge-based society. Education is not adequately targeted at the acquisition of the necessary key competences and is insufficiently linked to the business sector.

As already mentioned above, the standard of secondary education in Slovakia proves **high values of indicators in its population's level of education**.<sup>24</sup> Except for the Bratislava region, more than half of the population reaches the ISCED 3c level only. Even though the share of pupils in vocational education in all pupils gradually decreases, it still remains high above the EU 15 level for both genders (see Table 14).

In secondary schools, the assumption that the **school-leaver would be placed on the labour market** is an important determinant. Although educational programmes are well prepared from pedagogical aspects and the requirements of the education sector, they do not guarantee relevancy from the point of the employer and labour market need, as the employer competences are not reliably and transparently laid down by generally binding regulations. A full-fledged involvement of secondary school leavers on the labour market requires that the needs of a knowledge-based society are reflected

Table 14: Share of pupils in vocational education in all pupils (%) <sup>23</sup>				
Gender		Year		
		1999	2001	2003
Boys	SR	82,8	81,1	79,8
	EU 15	61,9	56,3	57,1
Girls	SR	76,4	74,2	70,9
	EU 15	55,8	53,5	55,6

<sup>21</sup> State School Inspection: Reports on the situation and level of education and upbringing in schools and school facilities in the Slovak Republic in the academic year 2005/2006, Bratislava 2006.

<sup>22</sup> Yearbook of Statistics in Education SROV. Bratislava, ISIP 2006.

<sup>23</sup> Source: *Eurostat*. The indicator is measured toward the end of the second level of education. More recent data is not available at present.

<sup>24</sup> According to the *National Reform Programme*, the share of early school leavers, i.e. the percentage of population aged 18 – 24 with the lowest education not continuing their education over 2002 – 2005 fluctuated between 4.9 and 7.1, while the same indicator of the EU 25 average was between 15.7% and 16.6 % (Finance Ministry, 2005).



in their competency profiles and in the content of education. That is supported by e.g. organising vocational practice of pupils in organisations, institutions and private companies. For instance, a network of specialised schools is being created which collaborate with the Slovak Union of Automotive Industry. Slovakia's **sectors of economy** have significantly **penetrated** the lives of secondary schools and both sides draw benefits from mutual collaboration. Recent and prospective needs of the labour market with regard to the developing sectors of industry (mechanic, electrical engineering and chemical sectors) require a transformation in the content of education and methods of instruction in mathematics, natural sciences, informatics, economic and other technical branches of study, designing of new study materials and introduction of new teaching methods of those subjects.

In spite of requirements of the labour market concerning skills and capabilities of school leavers, conservative teaching methods prevail in secondary schools. Mechanisms for the dissemination of information and development of modern pedagogical methods are missing, ICT means are inadequately used in the educational process and mechanisms for the evaluation of educational Programmes and institutions are not existent. Some secondary schools struggle with **lack of textbooks, laboratories for subjects of general education and foreign languages**; the standard in teaching of specialised subjects is average and the supply of optional subjects is restricted. The equipment and furnishing of schools is becoming technically obsolete.

One of basic shortcomings is the stagnation and drop in the quality of education in those study and training branches which are relatively little attractive for pupils and their parents. In systems of formal education, a significant role is played by efficiently working **career guidance services**. At the

same time, such services exert pressure on the evaluation and selection of education supply optimal for the client. The existing system of career guidance services is not satisfactory and does not comply with actual needs.

Table 15: Foreign language teaching <sup>25</sup>				
Indicator	Year			
	1999	2001	2003	2004
No. of foreign languages per pupil/student at ISCED 2 level	1,3	1,1	1,1	1,1
No. of foreign languages per pupil/student at ISCED 3 level	1,4	1,4	1,5	1,5
English as a foreign language at ISCED 3 level	94,2 %	95,9 %	96,7 %	97.1 %

In general, thanks to the involvement in the INFOVEK<sup>26</sup> project, for instance, we witness faster penetration of modern educational technologies to schools, even though their level is still not adequate. Slovakia's **schools** are under-**equipped** and their use of ICT<sup>27</sup> is inadequate. Foreign schools use advanced didactic technologies, such as beamers, Smart Boards, simulation programmes etc., which are missing in our schools. In secondary schools, there is one computer per 13.3 students.<sup>28</sup> The number of laboratories is increasing and computer literacy is improving, which allows better access of pupils and teachers to information; computer skills of pupils develop while applying theoretical knowledge in specialised subjects.

Schools get significantly involved in regional and international projects – experience sharing, communication in foreign languages, fund raising to modernise school equipment, which has a positive effect on the employment of school leavers even outside Slovakia. The involvement of schools in designing ESF projects, and Socrates and Leonardo programmes is growing, which leads to

<sup>25</sup> *Zdroj:* Eurostat. Novšie údaje nie sú v súčasnosti dostupné.

<sup>26</sup> The purpose of the Infovek project is to train the young generation in Slovakia for living and finding their place in the information society of the 21st century. The project was implemented under the patronage of the Education Ministry and funded from the state budget.

<sup>27</sup> Labour Ministry, 2004.

<sup>28</sup> Finance Ministry, 2005.

improvement of pupil and teacher competences and allows their mobility. The effective managerial work of secondary school headmasters is also seen in improved spatial and material conditions for the education process, in a higher quality of that process by project funding.<sup>29</sup>

Schools achieve good results in specialised competitions and participate in vocational cooperation with secondary schools abroad. Numerous specialised schools organise vocational practice of their pupils abroad. Depending on the number of foreign languages per pupil/student, the **foreign language teaching** changes only little; however, the importance of English as the first foreign language increases (see Table 15). An analysis of recent situation in foreign language teaching was prepared, which makes part of the above mentioned national project Deepening the effectiveness of foreign language teaching with regard to Slovakia's accession to the European Union. A draft Strategy of foreign language teaching is under preparation. The lack of qualified foreign language teachers continues. The decreasing number of pupils in schools leads to a decrease in pedagogical staff. A lower number of teachers in schools must thus ensure teaching of subjects for which they are not professionally qualified.

The missing system of evaluation and self-evaluation of the quality of education in secondary schools leads to lack of data on the **quality of education**. The professional and pedagogical guarantor for addressing the vocational education and training issues in secondary vocational schools and in secondary specialised schools in Slovakia is the State Vocational Education Institute (hereinafter the *SVEI*). Its role is gathering, analysing and disseminating information on up-to-date issues of vocational education and training in Slovakia and to provide information and methodology services. The competencies for **evaluation and quality control** in vocational education and training are defined by legislation as a role of the State School Inspection (hereinafter the *SSI*). Educational standards have not been designed, introduced and applied in Slovakia and quality assurance has been marginal so far. Methods of quality evaluation are only being designed.

### 3.6.3 Pedagogical Staff

In the long run and in all types of schools in Slovakia, the female teachers traditionally outnumber the male ones. On average, the **share of women** in the total number of teachers in regional schools is approx. 80 %. In 2005 for instance, the Slovak primary schools, where this share is the most distinctive, employed 34 914 teachers in total, of which 29 388 women, which is more than 84 %. In secondary specialised schools and in vocational schools, the percentage of women is lower: less than 70 % (secondary specialised school) and less than 65 % (secondary vocational schools). A high share of women in the total number of teachers is seen also in grammar schools in the long run. In 2005 it was almost 74%<sup>30</sup>.

There is no **adequate financial motivation** for the exercise of teacher profession, and for the development of pedagogical staff through continuing education. In 2006, the average monthly wage in education reached SKK 15 439, while the average wage in national economy reached SKK 18 761<sup>31</sup> in the same year. In the long run, the **continuing education** of pedagogical staff has been poorly funded and adequate conditions have not been ensured for a comprehensive and differentiated satisfaction of educational needs of the pedagogical staff in schools and school facilities. Innovation methods and visual instruction are often missed in the preparation of pedagogical staff for teaching. As teachers often participate in the development of textbooks in addition to their teaching work, their continuing education seems to be of key importance.

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<sup>29</sup> State School Inspection: Reports on the situation and level of education and upbringing in schools and school facilities in the Slovak Republic in the academic year 2005/2006, Bratislava 2006.

<sup>30</sup> Source: <http://www.statistics.sk/pls/elisw/vbd>.

<sup>31</sup> Source: Statistical Office of the Slovak Republic.

In the academic year 2004/2005, the State School Inspection carried out comprehensive inspections in 550 schools and school facilities. The results suggest, that even though the school managements in general motivate pedagogical staff and provide for room for their continuing education activities, only 39% of teachers in the reviewed schools have participated in continuing education.<sup>32</sup>

At present, the issue of **continuing education** in Slovakia is partially governed by generally binding legislation, namely by Decree of the Ministry of Education of the Slovak Republic No. 41/1996 Coll. on professional and pedagogical competences of pedagogical personnel, as amended, and by Decree of the Ministry of Education of the Slovak Republic No. 42/1996 on continuing education of pedagogical personnel. In neighbouring countries (like the Czech Republic, Poland or Hungary), the subject issue is governed by an act or by a government order.

The Education Ministry prepared the ***Concept of professional development of teachers in the career system***, adopted by the Slovak Government on 18 April 2007. The content of the concept brings a comprehensive solution to the issue of professional development and career growth of a pedagogue, which has only partially been implemented over the last decade. The existing system of continuing education and the qualification tests of pedagogues with cycle 2 of tertiary education, make partial prerequisites for applying quality changes which correspond to the intensions of the national programme of upbringing and education. The concept objective is raising the professional competences and quality of pedagogues in schools, school facilities and social service facilities or in facilities for socio-legal protection of children where the process of education and upbringing is provided, by designing a system of requirements and conditions for their professional development and career growth. The concept strategy is based on a progressive implementation of 5 steps – designing of profession standards, career system, continuing education system, credit system and system for evaluation and remuneration of pedagogues. The concept objective is to establish such a system of remuneration, which would ensure the average wage of pedagogical staff equalling to a multiple of 1.4 of the average wages in national economy.

The most significant positive changes in education of pedagogical personnel may include the involvement of **teachers in the ECDL programme** and other computer literacy courses. Teachers improve their qualifications by various forms of studies and an increasing number of them is interest in continuing education. High attention is devoted to extending and developing the computer literacy of pupils and teachers. As schools are progressively better equipped with ICT, computer laboratories are introduced and the frequency of use of teaching software and computer equipment in the process of upbringing and education is growing, the number of teachers trained for ICT must increase. Improving the computer literacy of teachers is a prerequisite of a more intensive application of innovative trends in education.

With no competition, there is no managerial approach to school management and methodology guidance of teachers. The methodology bodies in schools are often formal, not seeking causes of negative phenomena and relations and not adopting measures for improvement. Schools often lack their own psychologists, special pedagogues, social workers, computer network administrators, sports facilities keepers, ICT engineers, etc.

### **3.7 Tertiary/Higher Education**

Within the meaning of Act No. 131/2002 of 21 February 2002 on higher education and on the modification and amendment of certain acts, higher education institutions are “the supreme educational, scientific and arts institutions” with a reserved right to render higher/tertiary education.

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<sup>32</sup> Source: Rosa, V. et al. 2006. Report on the state of continuing education of pedagogical staff in schools and school facilities in the Slovak Republic in the academic year 2004/2005. The report makes part of the State School Inspection Report, [www.ssiba.sk](http://www.ssiba.sk).

There were 15 higher education institutions or independent faculties in Slovakia in 1989. By establishing new ones or by splitting of the existing higher education institutions, their number increased over the years to come. As at 28 February 2007, there were in total 33 higher education institutions in Slovakia; in which 20 were public, 10 private and 3 state schools. In the 18 public higher education institutions, there were 101 faculties; two public higher education institutions were not structured to faculties.

After 1989, the **Slovak higher education** was subject to deep changes which created legislative and organisational prerequisites for Slovakia's inclusion in the European educational and research area. With regard to implementation of the Bologna – Berlin – Bergen process in the Slovak tertiary schools, one may claim that significant progress has been achieved in the fulfilment of the main recommendations of the Bologna process regarding the scalability of education, quality assurance, recognition of diploma and parts of studies. The European educational area is based on two main levels of studies (pre- and post-graduate) and the ECTS system of credits or a system compatible with the ETCS which have been introduced in Slovakia.

Since 2002, the Education Ministry has every year financially supported the **priority development intents** in tertiary education in a systemic way. Throughout that period, including 2006, the support focused on **the following three major areas**:

- a) Improvement of conditions for the use of IT in higher education institutions;
- b) Innovation and building of unique workplaces;
- c) Support to effectiveness of doctoral studies and qualification growth of young employees in higher education institutions.

<b>Table 16: No. of students and graduates of public tertiary schools<sup>33</sup></b>			
<b>Year</b>	<b>Daily studies</b>	<b>External studies</b>	<b>No. of graduates</b>
2000	93 122	38 593	19 116
2001	95 019	44 974	22 345
2002	100 422	45 505	23 914
2003	100 591	52 114	26 594
2004	106 194	50 367	28 907
2005	114 801	56 309	30 965
2006	122 935	60 576	34 535

The **newly admitted students** in public tertiary schools prove a growing share of students in external studies from 28.5% (2000) to 33.2% (2005) and – correspondingly – the share of graduates (from 25.6% in 2000 to 32.3% in 2005, respectively).<sup>34</sup> The share of newly admitted students in the population aged 19 also increased in 2006, when the share of newly admitted students made **75.2% in the population aged 19** (45.9 % in daily studies and 29.3 % in external studies). Such growth was due to the year-to-year decrease of population aged 19 (by 4.2 %) as well as by an increase in the number of students newly admitted to tertiary schools (by 6.4 %).<sup>35</sup>

In 2006, the highest number of **students** attended tertiary schools in the previous history, namely **209 517** which is a year-to-year increase by 10.4 %.<sup>36</sup> The growth of the number of tertiary school students and graduates over 2000 – 2006 should be considered a positive development, which is captured in Table 16. The number of applicants admitted to tertiary schools increased significantly: from 16 % of the population year in 1990 to 26 % in 2000 and 55 % in 2004.<sup>37</sup> The numbers of admitted students show a growing trend. The number of students of purely technical branches has slightly decreased, while the number of students in humanities/social sciences has considerably increased.

<sup>33</sup> Štúdium I. a II. stupňa. Zdroj: ÚIPŠ, 2005a.

<sup>34</sup> Source: Institute of School Information and Prognosis: *Higher Education in Slovakia: Figures and Charts*. Bratislava: ISIP, 2005 (hereinafter ISIP 2005).

<sup>35</sup> Source: 2006 annual report on the condition of higher education. Ministry of Education SR, May 2007.

<sup>36</sup> Source: 2006 annual report on the condition of higher education. Ministry of Education SR, May 2007.

<sup>37</sup> Source: Labour Ministry 2004; Education Ministry 2005b. *Annual report on higher education in 2004*. Bratislava: Education Ministry 2005 (hereinafter Education Ministry 2005b).

<b>Table 17: No. of students in tertiary schools<sup>38</sup></b>		
	<b>Private</b>	<b>Public</b>
2002	529	1 523
2003	650	1 500
2004	828	1 280
2005	1 357	1 244
2006	2 251	1 188

A similar trend of the increase in students and graduates can be observed over the last years in public, private and state tertiary schools, as it can be seen from Table 17 and Table 18. The increase in the number of students of private and state tertiary schools between 2002 and 2006 is 67.6 % and the increase in the number of their graduates is 39 %.

In the third cycle of higher education, there is an increase in the numbers of admitted applicants, students and graduates

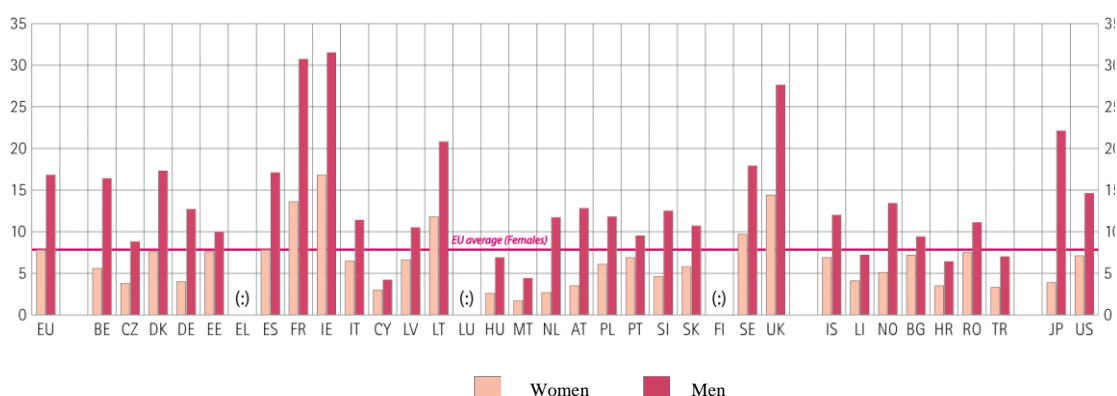
<b>Table 18: No. of graduates from tertiary schools<sup>39</sup></b>		
	<b>Private</b>	<b>Public</b>
2002	0	343
2003	15	322
2004	52	294
2005	49	321
2006	42	435

of doctoral studies, which are summarised in Table 19. It develops with similar dynamism as the number of all higher education students. In 2006, the positive trends in doctoral studies continued: compared to the previous year, the number of **PhD students rose by 9.4 %** and the number of graduates by 21.8 % in daily studies. For the first time, there were PhD students in daily studies in two private tertiary schools.

<b>Table 19: No. of PhD students in public tertiary schools<sup>40</sup></b>			
<b>Year</b>	<b>Students</b>	<b>Newly admitted</b>	<b>Graduates</b>
2000	7 504	1 905	409
2001	7 964	1 922	510
2002	8 530	2 122	712
2003	9 217	2 597	701
2004	9 971	2 773	836
2005	10 398	1 207	1 010
2006	10 541	1 264	1 137

Since 2000, the number of graduates in mathematics, science and technical branches (EU benchmark) has increased by 16 % in European countries. Regarding that indicator, Slovakia belongs to successful countries reaching the European average and proving the biggest growth (along with Poland, Spain and Italy) in the number of graduates from mathematics, natural sciences and technical studies over recent years (see chart 4).

**Chart 4: Higher education graduates in mathematics, sciences and technologies per 1000 (aged 20-29)<sup>41</sup>**



<sup>38</sup> Zdroj: Ústav informácií a prognóz školstva – Štatistická ročenka školstva.

<sup>39</sup> Zdroj: Ústav informácií a prognóz školstva – Štatistická ročenka školstva.

<sup>40</sup> Zdroj: ÚIPŠ, 2005a.

<sup>41</sup> Source: Communication from the Commission: "Modernising education and training: a vital contribution to prosperity and social cohesion in Europe - Draft 2006 joint progress report of the Council and the Commission on the implementation of the "Education & Training 2010 work programme". Data source: Eurostat (UOE), EU figure for 2000 and 2003: DG Education and Culture estimate.

In the long run, Slovakia is threatened by a permanent **lack of graduates** from mathematics, natural and technical sciences, despite the positive trend of increasing interest in tertiary education. In those branches, the interest of young people in teacher training decreases. As those branches of science are important for the development of a knowledge-based society, measures are to be adopted to increase the number of graduates from mathematics, natural sciences and technical branches to make such studies more attractive for women and to develop the labour market in research.

Due to the introduction of a three-tier system in tertiary education, a progressive **increase of the bachelor studies share** in the total tertiary education of graduates is seen as follows: In 2000 – a ratio of 81:19 on behalf of master studies, and a ratio of 69:31 on behalf of master studies in 2004.<sup>42</sup>

Social sciences, disciplines and services make more than 50% of the number of graduates and technical sciences approx. 25%.<sup>43</sup> From the point of efficiency of the funds expended, one may claim that the percentage of successful graduates from humanities (50 %) is lower than the percentage of graduates from technical branches (61 %)<sup>44</sup>.

In higher education, **transformation of branches of studies** has been completed into programmes of studies which has opened up opportunities for more active adaptation in the higher education content to the needs of practice and the development of a knowledge-based society. Inadequate capabilities of students to apply the knowledge acquired at school in resolving specific issues poses a critical problem of the Slovak education system. In that respect, one may point out inadequate cooperation with local and regional stakeholders in education, employment and guidance while creating the content of study programmes.

Raising the quality of higher education institutions has been supported by legislative measures (adoption of the amendment of the higher education act) and by financial subsidies to introduce and extend motivation scholarship to the best and most active higher education students and introduction of subsistence grants which has ensured the equality of access to higher education. Moreover, prerequisites (criteria, plans) were introduced to develop comprehensive accreditations of higher education institutions as a basis for evaluating their quality and their differentiation by quality (university vs. non-university higher education institutions, research universities vs. universities). In 2005, independent Academic Ranking and Rating Agency<sup>45</sup> performed the first evaluation of tertiary schools for the first time in history. **Inadequate monitoring of the work done by faculties and higher education institutions** may be still pointed out. The web sites of faculties practically do not provide data about placement of their graduates on the labour market and about the success in their studies in all three cycles. Nor is the placement of graduates monitored by criteria for the valuation of quality of higher education institutions.

The **amended Act on higher education**, approved by Resolution of Government No. 352/2007 of 18 April 2007 is oriented at the support of quality of tertiary schools. It is intended to profile the higher education institutions into universities and specialised tertiary schools. Under the amended act, a university provides education in study programmes in all three cycles and carries out in particular basic research. A specialised tertiary school provides tertiary education in study programmes in the first cycle and carries out in particular applied research. The amended act on higher education allows Slovak tertiary schools to provide for study programmes in cooperation with other tertiary schools, including those established abroad.

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<sup>42</sup> Hromada, I.; Sloboda, B.; Vantuch, J.: Report on Education Policy: National Report on the Attainment of Objectives of the European Commission's Working Programme Education and Vocational Training 2010. Bratislava. Education Ministry 2005 (hereinafter Education Ministry 2005a).;

<sup>43</sup> Ibidem.

<sup>44</sup> Ibidem.

<sup>45</sup> The document is available at <http://www.arra.sk/oldweb/ARRA-Sprava2005-SK.pdf>.



The main drawbacks in the Slovak higher education include in particular the missing long-term concept of higher education, the long-term critical situation in its funding, the underestimated and unsupported science in higher education institutions, non-existent institutional forms of quality monitoring and assurance, little attractiveness of the academic environment – in particular to young people, financial and social underestimation of personnel in higher education institutions and often, little activity in the approach of higher education institutions to solving of their problems. The critical situation is demonstrated mainly by good quality workers abandoning higher education institutions, young talented people not interested in the work in higher education institutions, high average age of the professional elite, deepening internal debt and – in many cases – falling quality of instruction and research.

### Mobility of Tertiary School Students

<b>Table 20: Mobility of tertiary school students<sup>46</sup></b>	
<b>Year</b>	<b>Students abroad</b>
1998	3 000
1999	3 800
2000	4 200
2001	8 300
2002	10 400
2003	13 500

Despite a positive year-to-year development, a low **mobility of students** and staff is to be considered a drawback of the existing situation. In the academic year 2005/2006, 1165 students took opportunity to take a part of their studies abroad under the Socrates educational programme and 361 students under the CEEPUS exchange programme.

In 2005, the Slovak Government approved the **Programme to support the mobility of students, PhD students, tertiary school teachers and scientific workers**. Under this new scholarship programme, 178 students and PhD students<sup>47</sup> studied abroad in the academic year 2006/2007. Also the number of students who came to Slovakia<sup>48</sup> under these programmes increased. In compliance with the need to create a European higher education area, this programme ensures availability of tertiary schools to the same extent for both locals and foreign students.

As shown in table No. 20, the cross-border **tertiary school student** mobility increases. This trend is considered satisfactory, as it has the potential to indirectly contribute to the inclusion of Slovak tertiary schools into international research networks. The increase in student mobility is also caused by the introducing a credit system to higher education, mainly with the vision of transferring credits within the EU, which would absolutely improve the horizontal and vertical mobility of students in tertiary education. Its value is however still not adequate, as 30 000 students would have to travel abroad and study every year, if every student of a tertiary school should spend at least one semester in a different country<sup>49</sup>. As it can be seen from table 20, Slovakia reaches approx. one third of the assumed number. Practical stays of students abroad are organised by the non-profit organisation Slovak Academic Information Agency (hereinafter the SAIA) and supported by projects under the EU programmes Leonardo da Vinci and Socrates. For illustration, only 4.2 % of daily students from the Academy Fine Arts Bratislava, 2.2 % from the Veterinary Medicine University Košice, 1.8 % from UKF Nitra and 1.7 % from Comenius University Bratislava<sup>50</sup> studied abroad longer than one month in 2004.

It is difficult to monitor the **brain drain**, as a part of the total number of young people going abroad after their graduation does not remain out of the country for long, or does not go in for vocational or

<sup>46</sup> Zdroj: Eurostat.

<sup>47</sup> Source: Portal of the national scholarship programme for the support of mobility of students, PhD students, tertiary school teachers and researchers: <http://www.scholarships.sk/0051.nsp?lang=sk>.

<sup>48</sup> Source: 2006 annual report on the condition of higher education. Ministry of Education SR, May 2007.

<sup>49</sup> In compliance with the objectives of the Bologna declaration.

<sup>50</sup> Should each student travel and stay at least one month at a foreign university during his/her 5-year studies, that rate would have to be approx. 20 %.

scientific activities in the new place of their stay. The support to student (and higher education institution teacher) mobility must not be a threat of brain drain but a natural part of education.

The ability to offer attractive **study programmes in foreign languages** is still low in Slovak public tertiary schools. The share of students of other nationalities in students of public tertiary schools is only 1%.<sup>51</sup> The teaching of selected subjects or branches in foreign languages makes it easier to decide about further studies in tertiary schools established abroad, study stays and participation in international scientific and research cooperation.

### **3.8 Tertiary School Teachers and Human Resources in Research & Development**

One of the basic characteristics of higher education is its basis in good quality research & development activities which significantly shapes its profile. The existence of research and development workplaces of excellence provides all prerequisites that – in collaboration with the business sector – the scientific, technological and innovations results would be implemented and appreciated in production processes and sectors with high value added. Projects of industrial and science & technology parks and business incubators make preconditions for a more efficient introduction of research and development knowledge to the business sector.

Yet, the existing standing of research and development in the Slovak higher education institutions does not provide an adequate support to scientific education and to the transfer of know-how and the results of research & development to educational institutions. At present, we witness an inadequate transfer of knowledge, experience and innovative practice from science and research to practice. The communication and dialogue of research, educational institutions (including higher education institutions), enterprises and the population are poor, just as the commercial utilisation of the research and development results.

One of reasons of that rests in inadequate funding of science and technology in higher education institutions. The total value of expenditures on higher education institutions and in particular of expenditures on research and development in higher education institutions as a share in GDP ranks Slovakia among the least performing EU countries. The situation in funding by the business sector is alarming: the share of expenditures as a share in GDP has been sinking over the last years.

Even though the **number of employees in research and development**<sup>52</sup> in Slovakia has moderately increased over the last years (from 16 108 research & development workers in 2003, and 17 354 in 2004 to 17 526 in 2005), the share of expenditures on research & development in GDP has been decreasing (from 0.58 % in 2003, through 0.53 % in 2004 to 0.51 % in 2005<sup>53</sup>). Due to poor investing, the technical equipment in all sectors of research and development is relatively poor as well.

As for **human resources**, Slovakia's problem lies in a high fragmentation and lack of coordination in research & development, inadequate standard of the human infrastructure in research & development with regard to quality and quantity. Research and development cannot be carried out without high quality human resources. The escape of highly qualified labour force in research & development to other countries (the so-called brain drain) due to unattractive and de-motivating conditions in research

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<sup>51</sup> Ibidem.

<sup>52</sup> The employees in research and development include researchers, technical and equivalent personnel and support staff. The category of researchers includes employees of a decisive significance for creating and social utilisation of scientific knowledge. They include scientists, scientists – teachers, scientists – technicians, researcher and development employees, managers and employees involved directly in the planning and management of research and development activities of researchers, employees on study visits and employees in doctoral studies.

<sup>53</sup> Source: Statistical Office of the Slovak Republic.



& development (like inadequate, obsolete technical infrastructure, de-motivating remuneration) is another big weakness. Official statistics on brain drain from Slovakia are still missing. Many countries face the phenomenon of brain drain, as there is a global demand for educated and talented people. Both the public and private sectors compete for scientists. The reasons lie in inadequate remuneration which is significantly below the salaries in the private sector; in the inability of a part of research groups and departments to send young people for study visits to foreign workplaces of excellence, and inadequate conditions for the return of PhD students and graduates from PhD studies from abroad (poor remuneration, unwillingness to compare one's work with the standard abroad).

In **2006**, there were **9 624 teacher jobs in higher education**. In 2005, they were 9 560. The number of staffed professor jobs rose to 1 343 in 2006 (32 more than in 2005).<sup>54</sup> The number of student per teacher in higher education (or professor/associate professor) differs very much case by case and does not allow drawing clear results in general. The high average age of professors by function (58), professors by function with the scientific degree of DrSc (as much as 62)<sup>55</sup> is alarming, which underlines the **unfavourable age structure of the teacher base**.

The lack of interest of young people in academic carrier is also an expression of the **inadequate and inadequately growing financial remuneration of tertiary school teachers**. The salaries of tertiary school teachers are significantly lower than the offers to young capable employees by private companies. For comparison of opportunities of the young, see the table below. The average salary of an employee in a public higher education institution was SKK 20 681 in 2006 which is **8.7 % more** than in 2005. The average salary of a teacher in a public higher education institution was SKK 26 902 in 2006 which is **7.8 % more** than in 2005. The average salary of a professor in a public higher education institution was SKK 38 500 in 2006.<sup>56</sup>

**Table 21: Scale of salary tariffs for teachers in higher education institutions, research and development personnel and medical personnel (SKK/month)<sup>57</sup>**

Salary grade	Years of experience	Scale of salary grades by salary classes and salary grades					
		Salary class					
		9	10	11	12	13	14
1	up to 2	12 130	14 220	15 260	16 360	17 590	19 010
2	up to 4	12 620	14 790	15 880	17 030	18 310	19 780
3	up to 6	13 130	15 380	16 510	17 690	19 030	20 560
4	up to 9	13 620	15 960	17 130	18 360	19 750	21 340
5	up to 12	14 110	16 540	17 760	19 040	20 460	22 110
6	up to 15	14 610	17 130	18 380	19 710	21 190	22 890
7	up to 18	15 110	17 700	19 010	20 370	21 900	23 680
8	up to 21	15 600	18 290	19 620	21 040	22 630	24 450
9	up to 24	16 100	18 870	20 250	21 710	23 340	25 230
10	up to 28	16 590	19 450	20 870	22 390	24 070	26 010
11	up to 32	17 090	20 030	21 500	23 050	24 780	26 780
12	over 32	17 590	20 610	22 120	23 720	25 500	27 560

The indicator values in **research** are highly unsatisfactory. If measuring the research potential by the capability to win project grants, then the higher education institutions managed to win approx. 20 % of the value of the research grants available.<sup>58</sup> The most frequent reasons of the **poor ability to win**

<sup>54</sup> Source: 2006 annual report on the condition of higher education. Ministry of Education SR, May 2007.

<sup>55</sup> Source: Statistical Office of the Slovak Republic.

<sup>56</sup> 2006 annual report on the condition of higher education. Ministry of Education SR, May 2007.

<sup>57</sup> Source: Annex 5 of Act No. 553/2003 Coll.

<sup>58</sup> Education Ministry 2005.

**funding for scientific and research projects** include the high administrative load of project and grant management, inadequate remuneration of the scientists involved in them, the poor capability of the management in higher education institutions to establish a connection to practice and thus, ensure utilisation of the research results and the missing administrative fund-raising capacities for scientific and research projects and for the introduction of innovation.

The complement to the National Reform Programme of the Slovak Republic for 2006 – 2008 of December 2006 repeatedly stressed the importance of upbringing and support to good quality scientists. The Education Ministry plans to draw up the priorities in science and technology and the tools for stimulating investment of the business sector in research and development in the near future. The objectives and intentions are presented in the document *Long-term intention of state policy in sciences and technology by the year 2015* which is under preparation.

### 3.9 Continuing Education as a Part of Life-Long Learning

Due to structures, models and mechanisms surviving from the previous century, the various LLL systems (**formal, non-formal and informal education**) have existed independently and isolated from one another. They have undergone (higher education institutions) and are undergoing (regional schools) changes, or have developed very extensively (continuing education) but the results fail to meet expectations and the comparisons of indicators they achieve with the European Union average are not satisfactory. Conditions have not been established to evaluate and compare the results achieved by various types of continuing education to the education provided by the school system. The condition declared by the Lisbon process and defined by the Copenhagen Declaration has not been met: creating an open system of education which would allow acquiring equivalent education in the school and out-of-school education systems, allow a switch between those two subsystems and extend the population's opportunities to acquire education necessary for active participation in the life of the society.

The **formal system of education** proves to be closed and rigid to a high degree and unable to constructively use the complementary functions of the non-formal system of education to shorten the time necessary for acquiring a new qualification or to extend the initial one. With small exceptions to the rule (e.g. fire protection engineers, tourist guides), it awards officially recognised qualification certificates. The main system *negative* is the inability of the formal system of education to flexibly react to newly emerging professions and to the introduction of new technologies and innovations to the practice by introducing new branches of training and studies. The process for developing and introducing new training and study branches is unbearably long (approx. 6 years or more), which completely fails to meet the needs of employers and the practice. In order to ensure an adequate supply of educational activities, the continuous review and monitoring of recent and prospective labour market needs at the national and regional levels is inadequate.

The **non-formal system of education** is prominent by its ability to immediately react to the new needs of education, to innovations and introduction of new technologies by the development of tailored educational programmes. Its *difficulty* rests in the fact that it does not provide officially recognised partial or full qualification certificates and has not introduced a state-controlled quality assurance system which would ensure non-formal education quality equivalent to that of formal education. The absence of framework standards is a problem, as they would determine the minimum basic requirements for a certain branch of activity. The educational institutions providing education outside the formal system operate on the basis of supply and demand on the labour market.

**Informal learning** is now the least employed subsystem of education based on the natural capabilities of a human being to discover and learn, and which has the potential to lead toward acquiring a

formally recognised qualification while providing all conditions for practical mastering of professions (learning by doing).

Inadequate compatibility and permeability between the sectors of formal, non-formal and informal education and the permeability of schools on the horizontal and vertical levels remain to be problems. One of the consequences of such situation is that the qualifications, knowledge and skills acquired in the non-formal and informal education are insufficiently recognised by the society and by the employers. Employers are not adequately interested in the education of their own employees.

In February 2008, the Education Ministry prepared the **draft Strategy of life-long learning and life-long guidance** which was approved by Government Resolution No. 382/2007 on 25 April 2007. The draft strategy of LLL and LLG identifies the following **priorities**:

1. Monitoring and forecasting of the education needs of citizens and employers;
2. Ensuring a system for managing the quality of life-long learning and life-long guidance,
3. Recognition of the results of non-formal education and informal learning,
4. Efficient investment in life-long learning and life-long guidance;
5. Development of key competences for life-long learning;
6. Provision of comprehensive information services for LLL and LLG and the development of learning regions;
7. Efficient planning and use of the SF for the completion and development of the LLL and LLG systems.

At the time being, Slovakia ranks deep below the EU average in the participation of adults aged 25 – 64 in **continuing education**. With regard to the increasing age limit for retirement and the ageing of population, continuing education as a part of life-long learning is the key factor in the development of the Slovak society. The Eurostat 2005 figures indicate 5 % of adults (aged 25 – 64) in Slovakia participating in any education over the last 4 weeks before the survey (see Table 22 and Chart 5) while the objective to be achieved by the EU in 2010 is 12.5 %. Even though Slovakia at present lags behind the 12.5 % benchmark in continuing education of adults aged 25 – 64, the achievement of the benchmark can be considered realistic if life-long learning is stimulated and if the European Social Fund is used efficiently.<sup>61</sup> The percentage of male and female population aged 25 – 64 participating in education and training is comparable: 4.7 % of men and 5.2 % of women in 2005<sup>62</sup>.

**Table 22: Share of adult population (aged 25 – 64) participating in continuing education<sup>59</sup>**

	Year			
	2002	2003	2004	2005
SR	9,0	4,8 <sup>60</sup>	4,6	5,0
EU 15	8,5	9,9	11,1	11,9

#### **Chart 5: Participation of adults in life-long learning (2005)**

(Percentage of participation of the population aged 25 – 64) in any education over the last 4 weeks before the survey)<sup>63</sup>

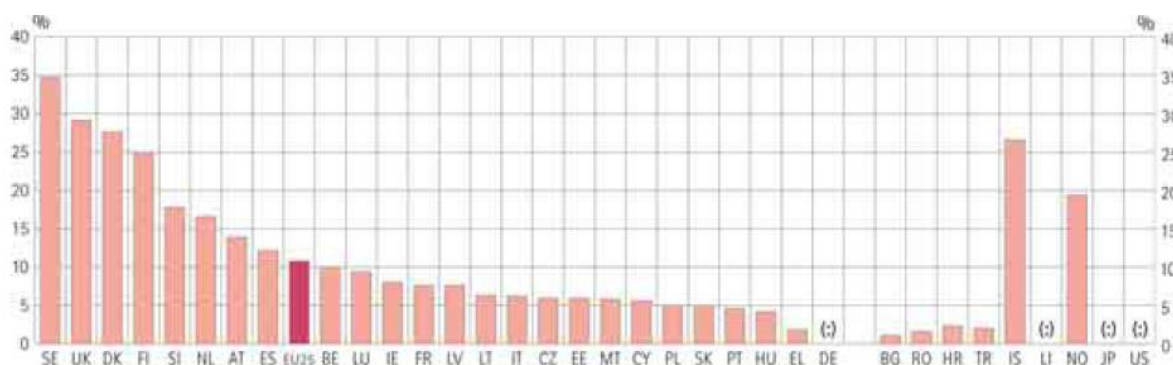
<sup>59</sup> Zdroj: Eurostat.

<sup>60</sup> V roku 2003 došlo vo výpočte hodnoty pre SR k zmene metodiky.

<sup>61</sup> Source: Report on educational policy, Ministry of Education, 2005.

<sup>62</sup> Source: Eurostat.

<sup>63</sup> Source: Eurostat.



**The fact that Slovakia lags behind in continuing education has a major impact on functioning of the labour market and employment.<sup>64</sup>**

**It is continuing education, whose flexibility with regard to the needs of the labour market may solve this problem.**

In continuing education, several **obstacles** may be seen. The quality of continuing education programmes and the system of verification and qualification recognition remain difficult.<sup>65</sup> The “works toward recognition of non-formal and informal education are partially hampered by the resistance of formal education representatives who have identified this agenda as a risk for the position of schools, but mainly by insufficient discussion of its benefits for both the citizens and employers”<sup>66</sup>. A significant negative of the continuing education system in Slovakia is the non-existence of a comprehensive and transparent information system on possibilities of life long learning.

Despite a wide network of educational institutions providing educational programmes in continuing education, their equality, verification systems and recognition of education results remain a big problem. The quality of educational activities is assessed by their accreditation by the Education Ministry, in particular with regard to active employment policy.

There is not any system to monitor in general the **quality of services provided in continuing education**. Law regulates quality assessment in continuing education through accreditations of educational activities awarded by accreditation boards (for continuing education, for specialised activities in physical culture, for instance) on the basis of meeting the conditions stipulated by law. There are however also such educational institutions in the Slovak educational market which do not apply for their educational activities to be accredited as doing so is not mandatory by law. The system for training specialists on continuing education (counsellors, methodologists, trainers/lecturers, education managers) is missing. There is not a sufficient feedback from participants in continuing education and employers, the network of educational institutions is little efficient and there is not any system for quality assessment and certification of educational institutions in non-formal education. A national qualification system which would correspond with the European qualification framework for lifelong learning is missing, too.

**Over the last decades, the educational system and guidance have insufficiently reacted to the needs of the Slovak labour market and in particular the following has been observed:**

1. Absence of an open life-long learning system for the labour market;
2. Inadequate capability of the formal education system to flexibly react to the emerging needs of new qualifications by developing and introducing new branches of training and studies;

<sup>64</sup> Source: Finance Ministry, 2005.

<sup>65</sup> Source: Labour Ministry 2004.

<sup>66</sup> Source: ISIP 2005a.

3. Mutual impermeability of the formal and non-formal system of education;
4. Absence of recognition of non-formal education results to the end of acquiring qualification;
5. Quality of non-formal education insufficiently guaranteed by the state;
6. Absence of interim monitoring and research of education needs at the national level;
7. Absence of a life-long guidance system for all phases of education and active life of a human being;
8. Inadequately clear and efficient ways of funding formal and non-formal education and informal learning;
9. Insufficient development of key competences for life-long learning;
10. Persistence of gender stereotypes.

## Life-Long Guidance

In Slovakia, services of life-long guidance are provided mainly in the sectors of education and labour, social affairs and family. There are however institutions which also provide such services and operate outside the sectors mentioned. The existing system of guidance provides insufficient coverage to certain population groups: employed population, craftsmen and sole traders, unregistered unemployed, population in post-productive age and marginal groups.

### *Life-Long Guidance in the Competence of Institutions in the Sector of Education*

Life-long guidance makes a part of the system of upbringing and special pedagogical guidance defined in Act No. 279/1993 Coll. on school facilities and is outlined in more detail by Decree of the Ministry of Education of the Slovak Republic No. 43/1996 Coll. on details in upbringing guidance and guidance facilities. The various components of widely conceived guidance services in the system of education are the following:

- Counsellors/guides in upbringing in primary and secondary schools;
- School psychologists;
- School special pedagogues;
- Pedagogical & psychological guidance centres;
- Special pedagogical guidance centres;
- Children's integration centres.

**Guidance services for tertiary school students** make a relatively new element in the system of life-long guidance services and have not become a matter of-course in all higher education institutions yet. Developing such services is however imposed by Act No. 132/2002 Coll. on higher education, as amended, according to which "every higher education institution shall provide its applicants, students and other persons information and guidance services related to their studies and placement opportunities of the graduates derived from its study programmes".

In addition to the system of facilities of upbringing guidance and guidance for tertiary school students, there are services of **information centres for young** which operate as civic associations in fifteen cities and towns in Slovakia, focusing on young people up to 30 years of age. Right in the place of their operation or on their internet site ([www.icm.sk](http://www.icm.sk)) they provide information and guidance services with regard to the choice of vocation and selection of profession (information on vocations, information on studies and working opportunities at home and abroad, etc.).

The support institutions in the guidance service system in the sector of education are the following:

- **Research Institute of Children's Psychology and Psychopathology** which is the methodological and research centre of guidance in upbringing in Slovakia through its Laboratory of Methodology and Research of Guidance in Upbringing and Psychology and Prophylaxis.
- The **National Vocational Education Institute** and its Department of research, strategy and career guidance monitors the needs of the labour market, mainly the development of economy, the development of technologies and new qualification requirements of professions, monitors and evaluates how school leavers/graduates are placed on the labour market and the status and

development of their unemployment, analyses the reasons for such development, monitors and evaluates the development trends of employment structures, forecasts of future development, proposes measures for a successful transition of vocational school leavers to the labour market.

- The **National Institute for Education** provides specialised and methodology support to facilities of special pedagogy guidance.
- The **Institute of School Information and Prognosis** and a network of school computer centres process and disseminate information concerning the opportunities of studying at secondary and higher education institutions at home and abroad.

### 3.10 Continuing Education in the Health Sector

Health care is a specific sector where life-long learning is a necessity with a very significant impact on the growth of employment. It is the only sector generating jobs and – at the same time – providing a healthy labour force for other sectors. It is the medical personnel who – being employed in a single sector – has direct effect on the entire population's health by pursuing their professions. Taking into account the phenomenon of *double employment*, the quantity of qualified medical labour force continuously deepening their professionalism through LLL has an effect on the labour market at two levels. Firstly, the health sector employs medical personnel who secondarily – by pursuing their professions – contribute to improvements of the population's health condition and, by doing so, affect the employment rate.

The level of education of the medical personnel is – as a consequence – seen in the amount of public expenditure on health care. That is caused by the fact that health care of higher quality and efficiency provided by well-educated medical personnel minimises errors in the health care rendered, which are linked with additional public expenditures like, for instance, repeated hospital treatments, wrong diagnoses with the resulting longer treatment, etc.

#### *Continuing education of medical personnel in the European and Slovak context*

The importance attributed by the EU to the special position of medical education in the educational system is generally stressed by *separate (so-called sectoral) EU directives* which specifically regulate the system of recognition of professional qualification documents and the manner of establishment in various EU member States for medical professions (*European Parliament and Council Directive No. 2005/36/ES* – effective from 1 September 2007, following up *Council Directive No. 93/16/EEC* of 5 April 1993, allowing free movement of physicians and mutual recognition of their diploma, certificates and other formal qualification documents – of 7 September 2005 on recognition of professional qualifications).

Within the context of these EU directives, continuing education of medical personnel includes continuing, specialisation and certification education. LLL of medical personnel is considered important, but it is not the EU Member States who are obliged to introduce and realise this type of education (within the meaning of Article 22 (b) of European Parliament and Council Directive No. 2005/36/ES on recognition of professional qualifications: “According to procedures specific for every EU Member state, life-long learning and vocational training ensure that the school leavers are able to keep up with professional development in the scope necessary for maintaining safe and effective practice”).

Within the meaning of the above EU directives, the EU distinguishes the following in the education of medical personnel:

- *Life-long learning* which includes vocational education, i.e. from a nurses college, through specialisation and certification studies, up to systematic education provided by chambers

(seminars, congresses, study visits, etc.) and extra-specialisation and supra-specialisation studies, etc.;

- *Continuing education* of medical personnel (including systematic education) which underlines its systematic nature and may also include specialisation and certification courses, but is primarily oriented toward the execution of practical activities (more than 50 % of credits is acquired for the execution of specialised working activities in practice and self-studies).

Both types of education include specialisation and certification education which is contained in the achieved professional qualification, save those medical professions for which the minimum educational requirements are harmonised with the EU level.

By its accession to the European Union in May 2004 in accordance with the single EU principles, Slovakia adopted detailed measures for the medical staff to undergo adequate continuous vocational training so as to keep pace with the progress in science and technology in ensuring safe health care of good quality.

So as to ensure a close relationship with the needs of medical practice in Slovakia, the Ministry of Health of the Slovak Republic (hereinafter the *Health Ministry*) is the guarantor of the life-long learning of medical staff. The Health Ministry:

- Is the only authority with the powers and responsibilities *in drawing up the minimum standards of education* for specialisation, certification and systematic education of medical personnel;
- By law manages the specialised component of education in nursing colleges;
- Has its own *Accreditation Board for the accreditation of educational programmes* carried out by the various educational institutions regarding specialisation, certification and systematic education of medical personnel; The Accreditation Board of the Ministry of Health of the Slovak Republic is the advisory body of the Health Ministry in matters of education of medical personnel.

In Slovakia, health care is the only sector in which *systematic education of medical personnel is a statutory requirement*<sup>67</sup> (continuous renewal of knowledge and capabilities adequate to the expertise in accordance with the progress in the sector during a physician's tenure, which are deepened and maintained upon achieving professional qualification for performing the profession of a physician).

#### *An Analysis of Human Resources in Health Care*

The health care system places ambitious requirements both on the professional competence of a medical worker in the process of care for other persons, and on the maturity of the specific specialist's personality to cope with the responsibility and expectations from correctly provided health care, often under difficult conditions. It is the workload which is recently manifested by more and more frequently observed occurrence of the burnout syndrome, early mortality of medical personnel due to a high number of extra hours and work which exhausts one both physically and mentally.

With regard to the above-mentioned, it is necessary to underline that Slovakia – due to the existing situation and due to several factors affecting its population (understaffing not only due to the ageing of population – see the table below, sickness rate, requirements resulting from labour law regulations, etc.), needs to **re-staff** the sector with qualified personnel. That is possible only through education provided by health care organisations, as the practical part of education can only be taken in institutions of the health sector. And the reason is that those are certified and managed by the Health Ministry with regard to methodology and subject matter (which means that for those institutions, a certification only by the Education Ministry does not suffice). That finding fully confirms the justification and urgent need of support to life-long learning in health care, as there, investment in education equals investment in the population's health.

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<sup>67</sup> Act 578/2004 Coll. on health care providers, medical personnel and services related to health care provision, Ordinance of the Government SR No. 742/2004 Coll. on professional qualifications for the pursuit of medical vocations, Ordinance of the Government SR No. 322/2006 Coll. on the manner of continuing education of medical personnel, the system of branches of specialisation and the system of certified working activities.



The difficulty of the Slovak health system rests in the on-going lack of qualified staff with various specialisations in the system which poses a threat to continuity in rendering health care (including the level of prophylaxis), in particular in certain parts of the system, like general out-patient health care, public health, rescue medical service and care for psychical and mental health.

Transformation of the health system in 2002 – 2006 has even more underlined the under-staffing by specialists like pathologists, medical rescue staff, general practitioners, dentists, nurses, midwives, anaesthesiologists, psychiatrists and psychologists. Their lack results from several factors, in particular from a poor demographic structure of the personnel, low production of specialists educated and trained by educational facilities and a turnover of the personnel both within the system and within the EU.

Statistical indicators of demographic development in health care professions in general point at an alarming situation in the numbers of qualified personnel to provide health care, specifically a low growth of qualified personnel in the Slovak health care system. *Out of the total number of medical personnel, 28 % is the share of workers in the old-age-pension and pre-old-age-pension age, while the same share of physicians and dentists is as much as 40 %.*

**Table 23: Percentage of medical personnel at pension and pre-pension age**

	Recent number	% at pension and pre-pension age	Need of new personnel by 2013
General practitioners	2 424	54	1 300
Dentists	2 966	57	1 700
Specialists	12 600	40	5 000
Nurses and midwives	34 000	20	10 000
Medical rescue personnel	300	X	1000
Radiology personnel	200	X	300
Total	52 490	28	19 300

Source: National Centre of Medical Information, Ministry of Health SR

Health care facilities equally report **a low increase in graduates from educational institutions** in selected medical professions (e.g. nurses, midwives, radiology assistants). The low number of students not capable of saturating the needs of the health care system by the necessary number of specialists is a problem.

On the basis of analyses and estimates made in the defined categories of medical personnel one may claim that the existing system of education would not produce even such numbers of personnel to ensure simple labour force re-production (e.g. the previous average production of 25 graduates in general medicine a year is to be increased by another 175 graduates to reach the necessary number of 200). Furthermore, the number of students in continuing education in selected health care specialisations is not sufficient to saturate the needs of the system. If, for instance, higher education institutions annually produce 500 general physicians, it seems adequate to ensure by **motivation instruments which influence the behaviour after graduation as soon as during higher studies**, that at least 200 of them would specialise in general medicine in continuing education. The situation is similar with graduates from specialisation studies in stomatology. It is assumed that higher education institutions will produce graduates whose content of education and certificate of education (from



stomatology studies) would be incompatible with the European Union requirements. It would namely require **further follow-up practice under a leadership of a dentist or by specialisation in stomatology for approx. 5 years more**).

### *Decline in Medical Personnel*

The information of the Health Ministry suggests that the **salary conditions are not the only reason** why medical personnel consider leaving Slovakia and working elsewhere or oscillate between health facilities and other sectors.

**Family and other social background** which they have in Slovakia and to which they are significantly attached belong to the factors which greatly influence their decision-making. Preference of the “unknown environment” in a foreign country to the “known environment” in one’s own country is more pronounced in younger persons which can be justified by their mentality. That finding is confirmed by statistical data concerning the age structure of Slovak medical personnel in selected professions (general practitioner for adult and dentist) migrating for work to other EU Member States, according to which the largest group significantly differing from others is that of physicians aged 31 – 40 and nurses aged 26 – 35.

The low saturation of selected medical professions in practice is – to a certain extent – given by the lack of selected specialised medical professionals on the EU market in general, which may cause a decline in medical personnel from Slovakia.

According to the data of the Health Ministry on administrative activities in issuing certificates of completed education for pursuing a medical profession in Slovakia to pursue a medical professional in another Member State (issuing of a certificate is an indication of the intention to leave abroad for work), qualified personnel is leaving to work abroad; that decline is not compensated for by an equivalent increase in foreigners intending the pursue of their profession in Slovakia.

During the period starting by Slovakia’s accession to the European Union, i.e. between 1 May 2004 and 3 May 2007, 4020 individuals in medical professions requested issuance of certificates, where 3296 certificates have been issued and 724 were rejected (or are being issued). In that number, there were 1575 physicians and dentists and 1373 nurses and midwives. Out of them, the biggest share is made by persons in productive age.

To compare the data with information available in the Health Ministry and covering the period starting 14 May 2004 and ending in December 2004: on the one hand, 846 certificates confirming equivalency of education completed by Slovak medical personnel to the end of pursuing medical profession in another Member state were issued, and on the other, only 30 foreigners expressed their interest in pursuing medical profession in Slovakia.

The table below brings an illustration by categories of medical personnel to whom such certificates were issued.

**Table 24: No. of certificates of equivalency of completed education for Slovak medical personnel**

Category			Number	
Physician	Of which specialising mainly in	General medicine	840	1 484
		Pathology	11	
		Anaesthesiology and intensive medicine	121	
		Psychiatry and psychology	33	
Dentist			91	
Pharmacist			119	
Nurse			1 301	
Midwife			72	
Physiotherapist			188	
Radiology assistant			28	
Medical rescue personnel			13	
Total			3 296	

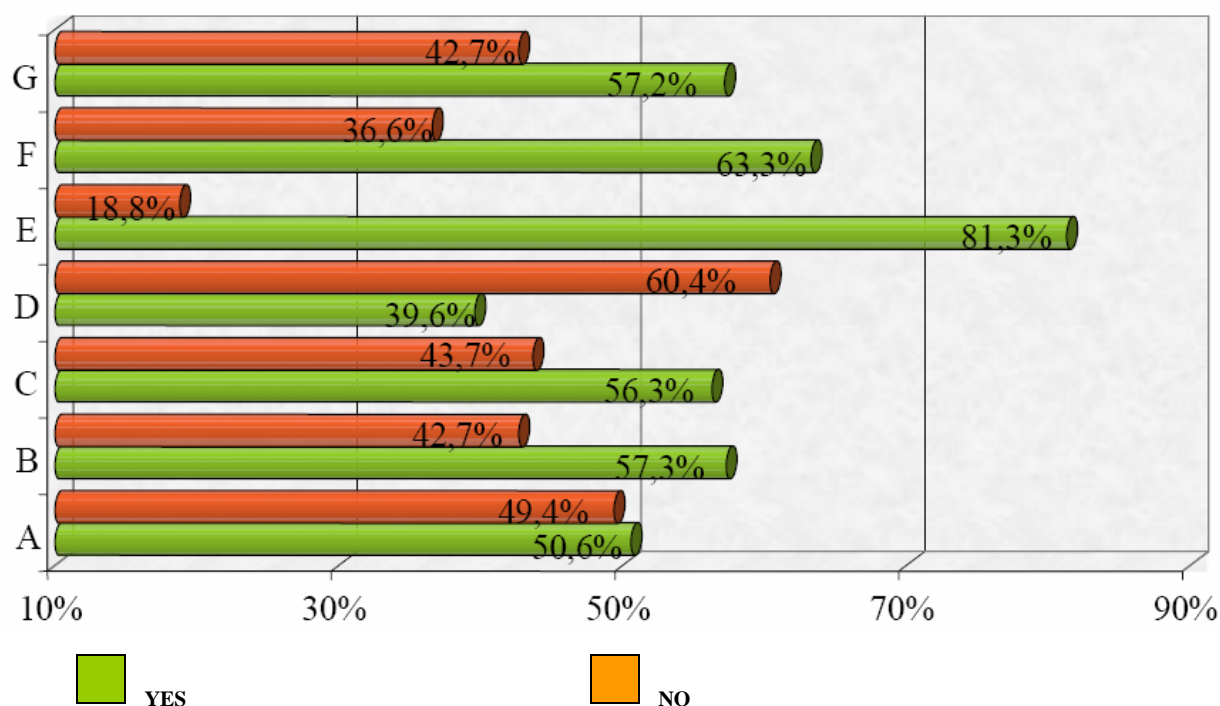
While in 2004, 846 certificates were issued out of the total number of certificates indicated in the table, it was 1282 in 2005, 958 in 2006 and only 210 over the first four months of 2007, which shows a decreasing trend compared to 2004 when 334 certificates were issued over the same period.

In December 2006, a study prepared by the Labour and Family Research Institute<sup>68</sup> was issued, focusing on availability of labour markets in the selected EU countries. The research<sup>69</sup> performed brought some significant information with regard to graduates in medical professions. “The inclination of respondents to look for jobs abroad varied, depending on the branch of studies from which they graduated. The most significant inclination to migrate was seen in the group of graduates from medical and pharmaceutical sciences where eight in ten respondents are willing to migrate abroad for work; on the contrary, the lowest inclination to migrate was seen in the group of graduates from agricultural sciences where one in ten respondents expressed their interest to work abroad” (see Chart 6 below).

<sup>68</sup> Source: Availability of labour markets in the selected EU countries and the development trends on the Slovak labour market, research task VÚ 2118-2006, IPPR, leading author: PhDr. Daniela Reichlová, authors: PhDr. Eneke Hanzelová, CSc., PhDr. Zuzana Kostolná, PhDr. Daniela Reichlová, Bratislava, December 2006

<sup>69</sup> “A semi-categorised questionnaire of inquiry type was used to collect empirical data and information, with thirteen questions concerning attitudes and identification. The selective group of respondents consisted of 802 students in the final years of bachelor and master studies in public higher education institutions in Slovakia. The data collection in the field was performed during May – June and was carried out by the inquiry network of the Institute of School Information and Prognosis.”

**Chart 6: Inclination to migrate abroad by branches of studies**



*Source: IVPR, 2006*

**Legend:**

A. Natural sciences

B. Technical sciences and disciplines (mining, metallurgy, mechanics, informatics, electrical engineering, other technical chemistry, food processing)

C. Technical sciences and disciplines (processing of wood, construction, transport, architecture, special technical branches)

D. Agricultural, forestry and veterinary sciences

**E. Medical and pharmaceutical sciences and disciplines – 81.3 %**

F. Humanities – sciences, disciplines and services (philosophy, economy, trade and services, political sciences, law)

G. Humanities – sciences, disciplines and services (history, languages, pedagogy, teaching, psychology, physical training)

**“It is in particular the graduates from medical and pharmaceutical sciences (almost seven in ten) who consider working abroad in the branch they studied and in a position requiring higher education.”**

Some data concerning graduates from other branches is available for comparison. “The expectation of finding a job abroad in the branch and position requiring higher education was significantly lower: that ambition is shared by almost three in ten graduates from natural sciences and technical sciences (mining, metallurgy, mechanical engineering, informatics, electrical engineering, chemistry and food chemistry) and two in ten graduates from humanities (philosophy, economy, trade and services, political sciences and law)<sup>70</sup>. **As the survey results suggest, it is in particular the graduates from medical and pharmaceutical sciences who combine their jobs abroad and working in their**

<sup>70</sup> Only graduates from humanities and agricultural sciences plan finding a job in another branch than studied, yet in a position requiring graduation. It is remarkable that the willingness to be employed in another branch and in a position not requiring graduation was higher than the willingness to give up only the branch studied. Only three in ten of graduates from humanities (27.6 %) and two in ten graduates from technical studies (20.7 %) consider taking in any job abroad. This inclination is significantly lower with graduates from natural sciences and the trend was completely absent with graduates from medical studies. It is in particular the graduates from agricultural studies (six in ten), natural sciences (five in ten) and technical studies (four in ten), as opposed to the graduates from medical studies (almost two in ten) who do not significantly count on working abroad.

branch of studies and their inclination to change their professional focus is visibly lower than that of the graduates from other studies. The interest of respondents to work abroad and their inclination to qualification mobility by branches of studies is illustrated in Table 25.”

**Table 25: Structure of graduates interested in working abroad by branches of science**

<b>Persons interested in working abroad, by branches of science (N = 447)</b>				
Branch	Within branch and HE position	Different branch but HE position	Other branch and lower position	Not interested in working abroad
A	28,2 %	9,4 %	12,9 %	49,4 %
B	27,6 %	18,2 %	11,5 %	42,7 %
C	23,7 %	11,9 %	20,7 %	43,7 %
D	17,9 %	4,7 %	17,0 %	60,4 %
E	68,8 %	12,5 %	0,0 %	18,8 %
F	21,0 %	14,7 %	27,6 %	36,6 %
G	7,7 %	23,9 % <sup>P</sup>	25,6 %	42,7 %

*Source: IVPR, 2006*

**Legend:**

*A. Natural sciences*

*B. Technical sciences and disciplines (mining, metallurgy, mechanics, informatics, electrical engineering, other technical chemistry, food processing)*

*C. Technical sciences and disciplines (processing of wood, construction, transport, architecture, special technical branches)*

*D. Agricultural, forestry and veterinary sciences*

**E. Medical and pharmaceutical sciences and disciplines – 68.8 %**

*F. Humanities – sciences, disciplines and services (philosophy, economy, trade and services, political sciences, law)*

*G. Humanities – sciences, disciplines and services (history, languages, pedagogy, teaching, psychology, physical training)*

The analysis of the expected time of staying in a foreign country suggests that it is in particular the graduates from medical faculties who have an inclination to permanent migration. Almost every other respondent – graduate from a medical faculty (38.5 %) considering to look for a job abroad considers staying abroad permanently. The time which the respondents expect to spend abroad while working, by branches of studies, is summarised in Table 26.

**Table 26: Time which the respondents expect to work abroad, by branches of studies (%)**

Time period	A	B	C	D	E	F	G
Up to 6 months	2,3	3,6	6,6	9,5	7,7	12,8	10,4
6 – 12 months	14,0	12,7	15,8	16,7	3,8	23,1	28,4

Over 1 year	46,5	43,6	44,7	35,7	15,4	41,0	34,3
Over 5 years	11,6	6,4	7,9	7,1	19,2	5,1	4,5
Permanently	4,7	2,7	3,9	2,4	38,5	3,8	7,5
Do not know	20,9	30,9	21,1	28,6	15,4	14,1	14,9

*Legend:*

*A. Natural sciences*

*B. Technical sciences and disciplines (mining, metallurgy, mechanics, informatics, electrical engineering, other technical chemistry, food processing)*

*C. Technical sciences and disciplines (processing of wood, construction, transport, architecture, special technical branches)*

*D. Agricultural, forestry and veterinary sciences*

***E. Medical and pharmaceutical sciences and disciplines – permanently – 38.5 %***

*F. Humanities – sciences, disciplines and services (philosophy, economy, trade and services, political sciences, law)*

*G. Humanities – sciences, disciplines and services (history, languages, pedagogy, teaching, psychology, physical training)*

The results of the study are alarming for the health sector. In the light of that information, the support of continuing education primarily of **medical personnel in selected understaffed specialisations (in particular of graduates)** is a highly efficient tool of motivation. A tool which – by ensuring a targeted utilisation of intervention by applying the regional approach through higher territorial units – leads to **keeping** the qualified medical personnel in the system and to provision of health care in the respective Slovakia's regions.

*Status of the material and technical infrastructure in health care within the context of educational needs*

The need of ensuring good quality human capital in health care is closely connected to the need of developing and raising the quality of the material and technical infrastructure.

Most of the infrastructure in Slovak hospitals is obsolete or not functional and does not allow rendering modern care in good quality. The average age of medical equipment in Slovakia is 11 years and there are major differences between its various categories. In centres for chronic and long-term care, the equipment is four years old but in regional hospitals, that value is four times more – as one can see from the chart below. Even though medical facilities in Slovakia are highly functional and work relatively well, there are facilities which are technologically much more obsolete than others, much more sophisticated facilities which came into being over the last years. The existing inventory consists of equipment of the 1970-ies and equipment purchased over the last five years.

Therefore, it is necessary to bring together the planned support both as investments in human resources and investments in health infrastructure in a targeted manner.

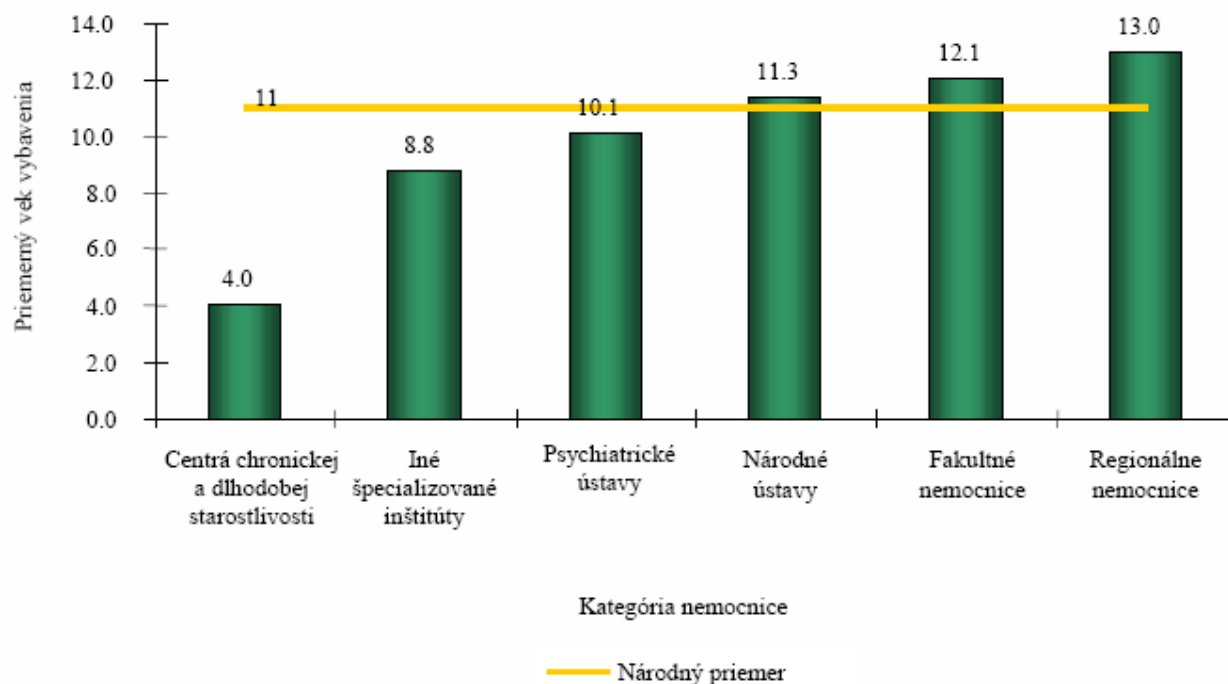
In spite of the intentions behind the previous formation of the network of health care providers over the past periods like the effort to homogeneously spread out-patient facilities and to respect regional needs, the existing scope and structure of the provider network is inadequate. Taking into account the above difficulties, the existing network does not satisfy the population's need and the *lack of qualified specialists* from among general practitioners, specialists and nurses is seen in **selected specialisations** with major **differences between regions**.

Due to their standing and competences, the regions as recipients of assistance can become guarantors of a targeted use of interventions in this area in education of medical personnel. In their position, they

are best informed about their specific features and needs and are the carriers of primary interest to ensure health care in the respective region so that the medical staff would be stabilised in their places, municipalities or out-patient clinics, wherever necessary in the region, so as to be motivated to stay within that region and their specialisation.

**Along with the need of implementing investment plans concerning the material and technical infrastructure and new technologies in health care, it is necessary to perform an adequate amount of educational and training activities because the investment in new technologies will potentially attract new medical personnel with a need of its continuing education.**

**Chart 7: Average age of medical equipment, by hospital categories**



Zdroj: Analýza spoločnosti Sanigest Internacional – Hodnotenie nemocníc Slovensko 2004.

*Vertical axis:* Average age of equipment

*Horizontal axis:* Categories of hospitals

Centres of chronic and long-term care

Other specialised institutions

Psychiatric clinics

National health facilities

Teaching hospitals

Regional hospitals

*Yellow line:* National average

Source: Analysis prepared by Sanigest International – Assessment of Hospitals, Slovakia 2004

### 3.11 An Analysis of Situation in the Education of Persons with Special Educational Needs

The indication of *persons with special educational needs* in *OP Education* shall mean:

1. Pupils with special upbringing and education needs;
2. Pupils coming from socially disadvantaged environment;
3. Persons with disabilities;
4. Members of the marginalised Roma communities.

Within the meaning of Article 3 (2) of Act No. 29/1984 Coll. on the system of primary and secondary schools, **pupils with special education and upbringing needs** (hereinafter the *PSEUN*) mean pupils with mental, hearing, sight or physical disabilities, pupils with poor health, pupils with disturbed communication capability, autistic pupils, pupils with development disorders in learning or behaviour, pupils with heavy mental disability placed in social care homes, pupils with disorders of mental or social development and intellectually talented pupils. Such pupils shall receive education corresponding to the individual capabilities by employing special forms and methods matching their disability.

Within the meaning of the Concept of integrated education of Roma children and youth, including the development of secondary and higher education, adopted by Resolution of Government SR No. 438 of 26 May 2004, a **child from a socially disadvantaged environment** (hereinafter the *SDE*), is a child with learning and attitude difficulties occurring on the basis of dysfunctional social conditions resulting from social exclusion (e.g. poverty, unemployment, alcohol addiction, violence, inadequate education of parents, non-standard housing and hygienic conditions and the like). Socially disadvantaged environment shall mean an environment which – with regard to its social and language conditions – leads to the assumption that a child would not master the schoolwork of the first grade of primary school over one academic year. As the definition of a SDE suggests, those are mainly such difficult children who live in unfavourable social conditions. Their parents are not able to bring up their children and are not capable of understanding the children's basic needs.

#### Disabled Person

The Declaration of Rights of Disabled Persons in the statement of the UN General Assembly defines a disabled person as anyone who is not able to ensure, fully or partially, the needs of common social life due to inborn or acquired lack of physical or mental capabilities.

For the purpose of the operational programme, the expression *marginalised Roma communities* (hereinafter the *MRC*) – in accordance with the NSRF text – shall indicate **such groups of Roma who suffer from high social exclusion and deprivation**. MRC may be considered those living in separated or segregated settlements, who are subject to discrimination in various areas regulated by the state or local governments. In such locations, the key indicators of poverty and social exclusion accumulate.

#### 3.10.1 An Analysis of Education of the MRC

Persons belonging to one or several marginalised groups are only little competitive on the labour market. The problems of insufficient social inclusion are observed most dramatically in the Roma ethnic. The nature of problems of the MRC lies in their social exclusion and unequal access to the opportunities of their human and economic development. The unequal level of development of living conditions and the neglected infrastructure in regions with a higher share of Roma, combined with their low mobility and flexibility on the labour market supports their marginalisation in the society.

Persons coming from the marginalised Roma communities are exposed to a high risk of unemployment and poverty which are a consequence of their low level of education.

Ignoring the natural socio-hierarchical **rules of social life** in Roma communities, e.g., of the natural position, social roles and overall action of the individual family members, of individual families as a whole within the community (the community leader *vaida* and mothers with many children have the highest social status, and others) poses a risk of building up and maintaining a communication barrier and thus, a lower probability that the objectives and instruments for the implementation of projects would be identified correctly to improve the standing of Roma communities. The approach of the majority population to the solution of problems of the Roma ethnic has for a long time been marked by a low involvement of Roma leaders in designing the fundamental documents.<sup>71</sup> Employing of such well-established stereotypes in the Roma communities would break through the communication barrier between the Roma communities and the representatives of the majority population, being one of the reasons why projects for the support of social inclusion of Roma communities are ineffective. At the same time, social exclusion is the reason why several previous programmes and measures of social integration have proven inefficient.

### *Demographic Situation of the Roma Population*

According to the census in 2001, the official number of Roma in Slovakia was 89 920, which is 1.7 % in total population. That information is based on their admitting to belong to that ethnic group, whereby Roma make the second largest minority following the Hungarian minority, which is 9.7 % in total population with 520 528 persons. Yet the number of people claiming to be of Roma nationality does not comply with the number from the census itself, as those considering the Roma language to be their mother tongue prevail over those who claim to be of Roma nationality.

The key source to estimate the Roma population outside a census is the project of mapping Roma communities which the Slovak government performed with the support of sponsors. According to that project, there were some 320 000 Roma in Slovakia, approx. 280 000 of which lived in groupings considered by the major society as the “Roma communities”. According to Boris Vaňo, it is estimated that some 40 % of Roma lived in segregated settlements in 2002.<sup>72</sup>

The census also provides a limited view at the geographic concentration of Roma. Other references and estimations below are in correlation with the geographic data of the census. According to the census, 88.5 % of the Slovak Roma live in three out of eight Slovak regions – in the east Slovak regions of Košice and Prešov and in the eastern part of central Slovakia – in the region of Banská Bystrica.

**Table 27: An estimate of age structure of the Roma population<sup>73</sup>**

Total	Aged 0 – 14		Aged 15 – 44		Aged 45 – 64		Aged 65+	
	No.	Share	No.	Share	No.	Share	No.	share
390,000	132,000	33.8%	185,000	47.4%	50,000	12.8%	23,000	5.9%

**Table 28: Roma population and its share in mandatory school attendance (6 – 15) (based on estimations from Table 25)<sup>74</sup>**

<sup>71</sup> Annual report of the Union of Slovakia’s Towns and Cities 2004.

<sup>72</sup> Vaňo, Boris, “Demography of Roma Children,” in *Roma Children in the Slovak System of Education* (Andrej Salner, ed.), 2005, Slovak Government Institute.

<sup>73</sup> Vaňo, Boris, “Demography of Roma Children,” in *Roma Children in the Slovak System of Education* (Andrej Salner, ed.), 2005, Slovak Government Institute.

<sup>74</sup> Ibidem.



Year	Aged 0 – 14		Aged 6 – 15	
	Number	Share in the total Roma population	Number	Share in general age group
2005	131,746	32.7 %	93,400	14.3 %
2010	124,225	28.5 %	81,700	15.0 %
2015	129,704	27.7 %	81,600	15.7 %
2020	134,334	26.9 %	88,400	16.5 %
2025	131,041	25.1 %	90,700	17.1 %

### *Situation in Education of the Roma Community*

Inadequate education makes Roma excluded from the possibility to find a job and thus, it limits the opportunities of their future involvement in the society. A large portion of Roma has not even completed primary education. Only a small part of Roma continues studying at secondary schools but many of them never manage to complete their secondary studies. There only is a minimal number of Roma in higher education institutions. Insufficient education is the reason why Roma are unemployed and why the future opportunities of their involvement in the society are limited.

**Table 29: Students in secondary and higher education institutions in the academic year 2003/2004 by national or ethnic groups<sup>75</sup>**

National/ethnic group	Slovak	Hungarian	Czech	Roma
Secondary vocational school				
Associated secondary schools	69 721	4 935	138	53
Secondary specialised schools	287	461	1	0
Grammar schools	81 149	5 797	190	113
Higher education institutions (public)	75 978	6 318	242	4
Secondary vocational school	92 949	4 182	198	15

The persisting tendency to improperly place Roma children in schools for mentally and physically disabled poses a particularly serious problem. Language barriers, isolation of Roma communities and segregation in common schools lead to lagging behind of Roma children. Roma are segregated even in underfinanced, substandard, purely Roma schools or in separate classes of standard schools.

Slovakia's significant priority regarding the access to education is the integration of children and youth from the MRC into standard school environment which would allow that target group to significantly increase their opportunities of placement on the labour market. The high percentage of unemployment is an omnipresent problem. As reliable data regarding Roma unemployment is missing, the government estimates their unemployment to be the double of the overall unemployment, while in some areas, the Roma unemployment is estimated to be as much as 100 %. The main barrier in Roma employability remains the **inadequate level of their skills and education** which for an employer means that higher training and education costs are to be expended on such employees.<sup>76</sup>

The access to education is difficult in particular due to **poverty** and – according the UNDP – also due to “earlier marriages and deliveries, collapse of centralised educational and socialisation opportunities in the 1990-ies, isolation of Roma communities and the growing role of ethnicity in educational institutions.”<sup>77</sup> Poverty, dependence on the social system, along with the historical heritage, have

<sup>75</sup> ISIP 2004.

<sup>76</sup> United Nations Development Programme (UNDP). 2005. *Employing the Roma: Insights from business*. Bratislava: UNDP and Ernst & Young, 2005.

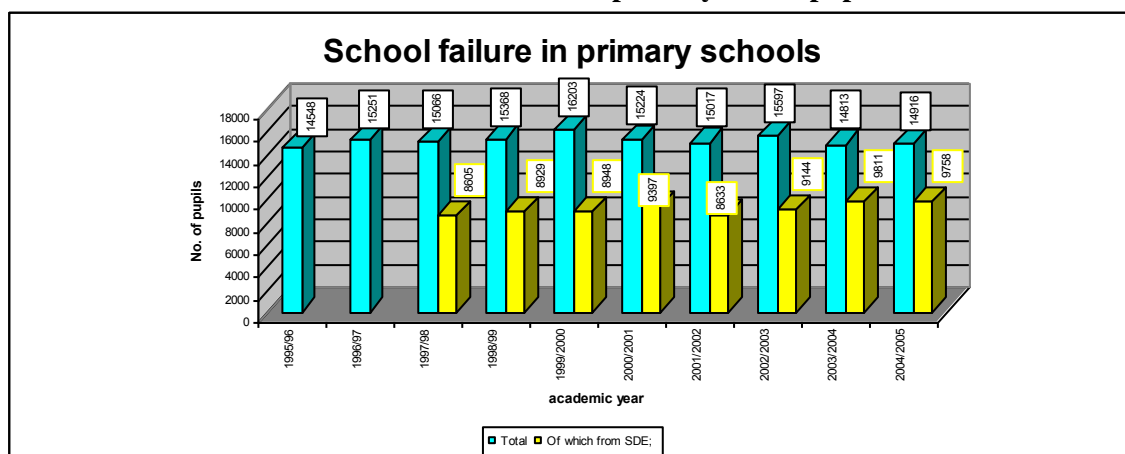
<sup>77</sup> Ibidem.

resulted in recent social exclusion with discrimination elements. While the substance of the Roma issue is of socio-economic nature and is linked to poverty, the access to opportunities of their human and economic development foresees a full-fledged exercise of human rights whose priority in the long run is education.

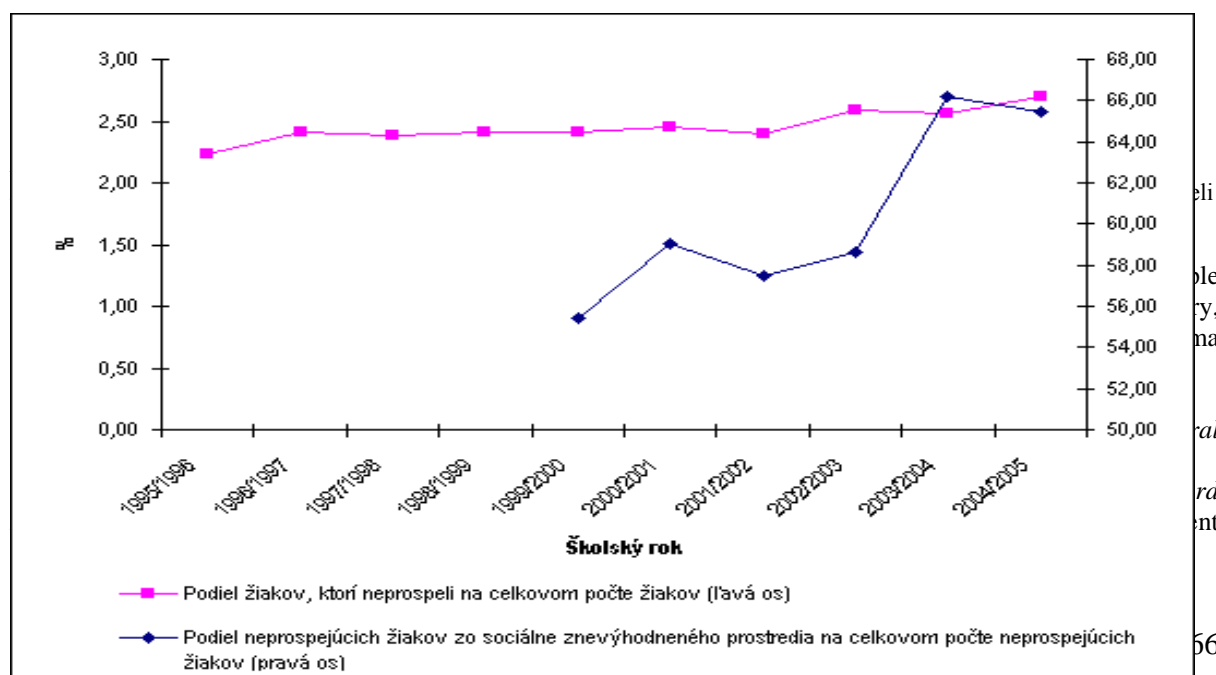
There is a high share of Roma children in primary education in the regions of Banská Bystrica (14.19 %), Košice (19.24 %) and Prešov (14.49 %).<sup>78</sup> According to a UNDP research carried out in 2002, in Slovakia 11 % Roma have not completed primary education, 36.8 % indicated primary education to be the highest education they completed<sup>79</sup>, 11.3 % have incomplete and 31 % complete vocational education, 1.6 % incomplete and 6.5 % complete secondary education; only 0.6 % of the Roma indicated higher education.<sup>80</sup>

The fact that a child does **not speak any Slovak when entering primary school** leads to the elementary inability of that child to understand the language, the instruction on its own, which in turn leads to the inability to learn. As much as 78 % of children of Roma ethnicity starting the mandatory school attendance prove not to speak Slovak.<sup>81</sup> That also may be the factor that causes the **huge failure of Roma pupils in primary schools** which is reported to be dozens of percent (sometimes it is even 70 % to 80 % or even more than 90 % who fail). The data in the charts below indicate a high share of pupils coming from a SDE (the most part of that group makes pupils from MRC) in the total school failure.

**Chart 8: Illustrated overview of school failure in primary school pupils in Slovakia**



**Failure in primary school pupils in Slovakia, academic years 1995/96 – 2004/05**



*Blue line:* Share of underperformers from socially disadvantaged environment in the total number of underperformers (vertical axis on the right)

According to the chart, the difficult academic year is 2003/2004 when the social reform was implemented and affected also the failure of pupils. Due to social laws, the share of pupils in material need has increased among pupils from SDE (who used to be mostly pupils from the Roma communities by the year 2004).

Even though the percentage of **early school leavers** (benchmark of the EU Council) in Slovakia is significantly above the average (the number of young early school leavers was 5.8 % in 2005), That percentage is higher for pupils coming from the MRC, as a large portion of early school leavers is made by pupils the MRC.

### Zero Grades in Primary Schools

By Act No. 29/1984 Coll. on the system of primary and secondary schools (the School Act), as amended by Act No. 408/2002 Coll., the opportunity of establishing a zero grade of primary school has been introduced (Article 6 (1) and (2)) with effect from 1 September 2002. It is intended for children who have reached physical age of six years as at 1 September but fail to prove maturity for school, come from SDE and – with regard to their social and language environment – it is improbable that they master the schoolwork of the first grade in primary school during one academic year.

Despite the decreasing number of pupils attending state primary schools, the number of schools, classes, zero forms and pupils in zero forms is increasing. The number of schools with zero forms increased by 209.68 % from 2001, the number of classes by 182.35 % and the number of pupils by 176.42 %.

In non-state primary schools, the number of pupils in zero forms increases. The number of such schools and classes increased by 500 %. The number of pupils attending such classes increased by 218.5 %.

### Teacher Assistants

As of 1 January 2004, the Education Ministry introduced **teacher assistant** as a profession in the education system: *as a pedagogical employee carrying out the upbringing and educational process at schools and school facilities and taking part in establishing of the conditions necessary to overcome in particular the language, health and social barriers of a child in ensuring the upbringing and educational process.*

**Table 30: The reality according to statistical reports for academic year 2004/2005**

<b>No. of teacher assistants by regions and school/school facility types during academic year 2004/2005</b>				
according to the relevant statistical reports as at 15 September 2004				
<b>Region</b>	<b>Type of school</b>			
	<b>Kindergarten</b>	<b>Special</b>	<b>Primary</b>	<b>Total</b>
Bratislava	6	23	9	38
Trnava	3	24	19	46
Trenčín	0	4	10	14
Nitra	3	12	10	25
Žilina	0	10	10	20
B. Bystrica	11	39	109	159
Prešov	35	27	101	163
Košice	7	51	113	171
<b>Slovakia</b>	<b>65</b>	<b>190</b>	<b>381</b>	<b>636</b>

**According to statistical reports as at 30 September 2005, i.e. concerning academic year 2005/2006**

- In 35 kindergartens – 44 teacher assistants,
- In 4 special kindergartens – 6 teacher assistants,
- In 489 primary schools – 729 teacher assistants,
- In 109 special primary schools – 194 teacher assistants.

Total: 973 teacher assistants.

### **Special Schools**

The system of special education consists of schools for pupils with various kinds of disabilities, special classes in common schools and individual education in common classes. The most pupils with SEUN are the children and pupils with a light mental disability. The most pupils with mental disability are Roma children. The leavers from special schools or from classes for pupils with mental disabilities do not complete primary education and therefore, continue their vocational training in vocational schools or practical schools, not in common secondary schools.

The relatively high number of Roma pupils persisting in special schools for mentally disabled pupils has been caused mainly by using standard tests to assess school attendance maturity and intelligence potential without any regard to the environment the child comes from. That negative should be eliminated by the development of new, specific tests<sup>82</sup> which have been introduced in practice in 2004.

### **Content of Education**

The education results of pupils depend from multiple factors (e.g. family environment, teacher personality, pupil personality, school environment, material and technical equipment of schools, etc.). A considerable part of youth including pupils coming from the MRC leave school with knowledge and skills, capabilities and attitudes which are not sufficiently useful on the labour market and that part of youth adds up to the crowds of unemployed.

Explosion of information and technologies of information transfer have caused that those preparing the curricula and textbooks try to get as much knowledge in the schoolwork as possible. That has resulted in curricula and textbook overloaded with information, leading to overstrain in pupils and teachers. The situations occur when the teacher only explains the schoolwork and examines the pupils but does not have time and room for good practice of the schoolwork; the pupils lack time and room for understanding and such deformations lead to neurotic behaviour of teachers, pupils, reluctance to learn and educate oneself. As a consequence, room has not been made to apply alternative methods and individual approach in instruction.

The textbooks used at present are in general conceived from the majority point of view, even though some – to a certain extent – try to cover the point of view of the minorities. The specific features of Roma pupils regarding their culture and language are not adequately respected. Recently, special textbooks are being prepared in the Roma language; several selected textbooks (*Roma history textbook*, *Roma reading book*) already exist and are used in selected cases. The **Roma language**, except for a few schools with experimental verification of Roma language teaching, is not officially used at schools. It is only used by teacher assistants in the non-formal part of the teaching process.

The above mentioned facts plus other above-mentioned factors significantly affect the high failure rate of pupils coming from the MRC in the system of education.

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<sup>82</sup> Deliverables of PHARE 2001 project – Test of school attendance capability for socially disadvantaged children and RR screening – a test barrier to exclude mental retardation of children aged 6 – 10 from SDE.

### 3.10.2 An Analysis of Education of Persons Coming from SDE and Pupils with SEUN

**The social standing of pupils and students** is derived mainly from the social standing of their families which depends on several factors. One of them is the financial standing of the family determining the satisfaction of educational, material and cultural needs as well as the opportunities of self-fulfilment. The financial standing of many families and of the pupils themselves is often uneasy, in many cases almost unbearable.

Even though in the long run, the inequality of income in Slovakia belongs to the lowest worldwide, the partial devolution of costs for the provision of educational services from the state budget to municipal and family budgets has resulted in a situation when the “children of poorer parents started receiving poorer education.”<sup>83</sup>

Being employed is the most significant instrument for decreasing the risk of poverty. The socio-economic situation of the population is an expression of high unemployment in Slovakia and its individual regions. The Košice region belongs to regions with the highest unemployment rate in Slovakia. According to data as at 31 August 2005, the registered unemployment rate was 17.18 % in the Košice region; the first three positions among its districts taken by Trebišov (24.05 %), Rožňava (23.27 %) and Sobrance (21.83 %).

The unemployment rate is closely linked to the condition of material need. From regional perspective, the highest share of persons in material need in the total population in 2005 was registered in the Košice region (12.39 %) and Banská Bystrica region (10.62 %). As for the districts, the most critical situation is that in the districts of Rožňava (17.95 %) and Trebišov (17.17 %)<sup>84</sup>.

From the view of pedagogy, **behavioural disorders** are understood as broad, diverse series of maladaptive behaviour with regard to its ethiology, while the individual is resistant to common educational impact, his behaviour is of longer lasting nature and an expression of his personality.

Article 38 (2) of the Constitution of the Slovak Republic reads that persons with disabilities are entitled to assistance in training for their vocation and Article 42 guarantees every citizen the right to education.

One should appraise legislative regulations and methodological documents issued by the Educational Ministry which have – despite the lack of funding – affected the process of training of children with special educational needs.

To improve coordination of the upbringing and educational process of children with special education needs, the Education Ministry issued **several methodology documents** in active collaboration with the National Institute for Education in Bratislava. They are in particular:

- Education of sick pupils and pupils with impaired health in special classes of common primary schools (1998);
- An overview of regulations concerning the placement of pupils in the process of upbringing and education and concerning its organisation in schools established in health care facilities (1998);
- Concept of special pedagogy guidance (1998);
- Information & methodology document on integration of pupils with special pedagogical needs in primary schools from 1 September 1999;
- Information & methodology document called “Task of school special pedagogue in primary school” in effect from 1 September 1999.

**Disabled pupils are integrated** in common primary schools and secondary schools. Therefore, it is mainly up to the founders, headmasters and teachers in schools what environment they create for

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<sup>83</sup> Ibidem.

<sup>84</sup> Social standing of students in daily secondary studies in the Košice region, Košice 2006.

adequate upbringing and education of those pupils. “School integration means upbringing and education of pupils with special educational needs.”<sup>85</sup>

The existing forms of school integration are the following:

- a) Integration in special classes where pupils with special educational needs are educated in primary schools and secondary schools in separate classes. A part of instruction may be performed in a class jointly with other pupils of the school; teachers of both classes are present during the instruction. The pupil may take some subjects outside the special class;
- b) Individual integration when pupils with special education needs are included in classes and upbringing groups with other pupils of the school and are educated according to an individual education programme; the curricula and methods of upbringing are adapted to their needs.

Education in special classes follows the curricula and syllabus of common primary schools. If necessary, the curricula and syllabus are used which are valid for the respective type of special school. Mentally disabled pupils are educated according to the curricula and syllabus valid for special schools.

**The content of schoolwork is not sufficiently differentiated for poor performers and talented pupils.** The content of schoolwork is exaggerated in all kinds and types of schools which prevents internal differentiation of pupils or giving attention to poor performers, introducing innovations in methods of education; that prevents applying a more humane approach of teachers to pupils, etc.

### **Teacher Assistant in the Education and Upbringing of Children and Pupils with SEUN**

With the approval of a school or pre-school facility founder, the headmaster of a primary school, special primary school or primary school for pupils with a specific type of disability may appoint a teacher assistant who participates in shaping of the conditions necessary for overcoming in particular the health or socially-conditioned barriers of a child or several children or, of a pupils or several pupils with special educational and upbringing needs in ensuring the process of upbringing and education.

A teacher assistant may be appointed in such school classes which are attended by a child or pupil with special educational needs in whose upbringing and education – with regard to that child’s or pupil’s level and degree of disability – it is not possible without a teacher assistant to guarantee safety and health protection of that pupil or of other pupils in the class, as well as overcoming of barriers which that pupil cannot overcome due to his disability. Introduction of a teacher assistant as a profession in upbringing and education of children and pupils with special educational needs is not linked to the number of disabled children or pupils but to the magnitude of disability.

The professional and institutional basis of the system of special schools and guidance is the strong point of the Slovak system of education.

In special schools, pupils with special educational needs are educated, whose disability or intellectual talent prevents their education in other schools under Act No. 29/1984 Coll. on the primary and secondary school system. Special forms and special methods are applied, allowing the use of compensation aids so as to involve the pupils in the working process and life of the society.

Special school pedagogues, special pedagogical guidance centres and children’s integration centres make a subsystem of special pedagogical guidance in which professional care is provided to disabled children by means of diagnostics, psychological, psychotherapy, special pedagogical, rehabilitation, guidance and methodological activities; in the form of out-patient care, short-term training stays and visits to the environment in which the child lives, special attention is paid to their social integration. Issues of professional integration, career guidance with seeking optimal possibilities on the labour

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<sup>85</sup> See Act No. 29/1984 Coll. on the system of primary and secondary schools (the School Act), as amended, Section XV, Article 32a (1) of the Act No. 365/2004 Coll. on equal treatment in certain areas and on protection against discrimination and on the modification and amendment of certain acts (the Anti-Discrimination Act).

market make an integral part of the role of such facilities.

### 3.12 Specific Features of the Bratislava Region

From the point of economic activities, the Bratislava self-governing region (hereinafter the *BSGR*) is the most developed. Its GDP stands for almost one quarter of the total national GDP of Slovakia. The Bratislava region produces 23.61 % of the total GDP, i.e. SKK 209.45 billion. Generation of GDP per capita is more than twice the GDP value per capita in other Slovakia's regions<sup>86</sup>.

With its 39.3 % share in revenues, the Bratislava region dominates the Slovak industry. Unlike the rest of Slovakia, the industrial companies with their seat in that region have mostly undergone transformation and export their production to the EU markets. In the years to come, the production will continue to be dominated by the automotive and petrochemical sectors, strongly depending on the performance of the two strongest companies – Volkswagen, a.s. and Slovnaft, a.s.<sup>87</sup>

The specific features of the Bratislava region with regard to the labour force supply to the labour market are the following:

- a) A relatively high level of formal education and qualification of the labour force;
- b) A wide supply of vocational education and training opportunities in institutions providing secondary education;
- c) A high concentration of higher education institutions and a wide network of continuing education institutions of regional and supra-regional significance;
- d) A high concentration of research and development institutions;
- e) A low level of registered unemployment;
- f) Relatively high average wages.

As at 5 June 2007, there were 160 primary schools in the Bratislava region, 138 of which were state, 10 private and 12 church schools. State primary schools are founded by municipalities. Moreover, there were 30 special primary schools in the Bratislava region<sup>88</sup>. The number of pupils in **primary schools** has been slowly decreasing over the last years but the average number of pupils in the class is still slightly higher than the national average (22.5 vs. 22). Very good cooperation, material and methodological support to schools by their founders and school authorities can be considered a significantly positive phenomenon. The involvement of schools in the cultural and social life of municipalities is equally a positive phenomenon.

However, classical methods and forms of work still prevail in the teaching process; creative elements are missing. The use of teaching equipment and teaching aids is absent. The testing results of pupils of the 9<sup>th</sup> form have indicated persisting deficiencies in the pupils' knowledge in mathematics and foreign languages. Improvement is needed in applying school legislation.

As at 5 June 2007, there were 4 conservatories, 45 grammar schools and 17 secondary special schools, 38 secondary specialised schools and 22 secondary vocational schools<sup>89</sup> in the Bratislava region. Almost two thirds of secondary schools (out of 140) provide secondary vocational education (secondary specialised schools – SSS and secondary vocational schools – SVS) which still is below the national average.

The number of pupils in **secondary schools** in 1000 differs by districts, starting from 7 in the Malacky district and ending at over 100 in the districts of Bratislava I, II and III; the average for all districts is

<sup>86</sup> Source: Hospodárske noviny, 10.08.2005.

<sup>87</sup> Source: Employment action plan of the Bratislava region for 2005 – 2006;

<sup>88</sup> Source: [www.uips.sk](http://www.uips.sk).

<sup>89</sup> Source: [www.uips.sk](http://www.uips.sk).

however identical with the national average. The teacher base of secondary schools expressed by the number of students per teacher is stronger in the Bratislava region than the national average; there are 9.14 students per teacher in the Bratislava region (the Slovak average is 10.75).<sup>90</sup>

The secondary schools in the region are to train qualified specialists for the needs of the labour market so as to satisfy the requirements and needs of the economic development in the Bratislava region. With regard to opportunities of education in secondary schools, the supply in absolute figures exceeded the demand by more than 5000 places in 2002, which is more than 14 %. On the one hand, there is a high demand for grammar school education; on the other, some specialisations in SVS have suffered lack of interest and unused capacities for a long time. The reasons of that phenomenon can be – inter alia – seen in the inadequate permeability of the various forms of education and schools, in the missing system of professional and carrier guidance, in the effort to postpone the decision about one's future profession to a later age, etc.

The quality of school work greatly depends on the **quality** of its **pedagogical personnel**. That its related to the issue of meeting the qualification and vocational prerequisites by pedagogues for pursuing their jobs. Numerous teachers have left, many consider leaving school services, in particular due to a low remuneration of their work. In 2006, the average monthly wage in education reached SKK 15 439, while the average wage of employees in national economy reached SKK 24 860<sup>91</sup> in the same year. It is education which – out of all sectors – employs the most people with higher education. Inadequate financial motivation for pursuing the teacher vocation and for one's own development is one of the reasons for inadequate involvement of pedagogical personnel in continuing education.

In 2007, 5 public, 2 state and 4 private higher educational institutions have their seat in Bratislava. Bratislava is the largest and most significant tertiary school centre in Slovakia providing almost a complete range of all study branches. The region hosts one fourth of Slovakia's **higher education institutions**, among them the three biggest ones (Comenius University Bratislava, Slovak Technical University Bratislava and University of Economics Bratislava). In the sector of **tertiary schools**, the specific features of the Bratislava region are seen best – 36.03 % of the total number of tertiary school students in Slovakia studied in tertiary schools in the Bratislava region in the academic year 2004/2005. Tertiary schools provide for a high standard of education to the population not only in the Bratislava region. Therefore, it is much more difficult to evaluate the impact of tertiary education on the region than the impact of other levels of education, as most tertiary schools in the Bratislava region are of supra-regional and national significance.

The extensive supply of educational opportunities and structure of jobs in the region results in the educational level of the population in the region, which is higher than the national average – almost 25 % of all region's population aged over 25 have university education (compared to the national value of 10.7 %). A high concentration of higher education graduates in the region however potentially exerts a higher competitive pressure on staffing, even though there are not any surveys yet to confirm such assumption (or, which would measure the degree to which non-qualification aspects apply in hiring employees).

The teacher base, however, similarly to the nation-wide teacher base, is typical by its unfavourable age structure and lack of personnel with higher scientific and pedagogical degrees.

The level of education of the population in the Bratislava region is relatively high: 17 % with tertiary education, almost 30 % with secondary education with a matura examination and 19.2 % with secondary education without a matura examination. The chart below brings an overview of the educational structure.

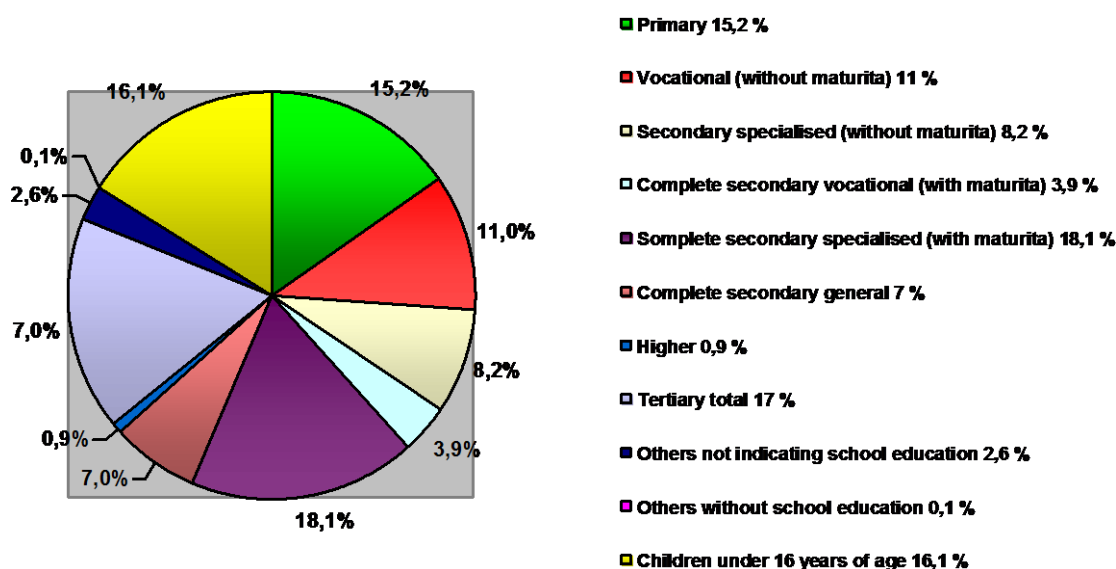
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<sup>90</sup> Calculation based on the ISIP data of 2002, reported by the Labour Ministry in 2003.

<sup>91</sup> Source: Statistical Office of the Slovak Republic.



Chart 9: Educational structure of population in the Bratislava region<sup>92</sup>



The position and tasks of education and training for the labour market are determined by the fact that the higher education one completes, the higher the probability of being employed or self-employed. A high level of education of economically active population makes good prerequisites for being employed in professions with a higher value added, related to new technologies and procedures which may progressively change the overall structure of professions in the region.

With regard to regions, the Bratislava region achieved in 2005/2006 the lowest unemployment rate of school-leavers/graduates in the long run<sup>93</sup>.

In the Bratislava region

- The average unemployment level of grammar school leavers is 1.3 %,
- The unemployment of leavers from secondary specialised schools is 3.9 %,
- The unemployment of leavers from branches without a maturita exam is 5.2 %.

Compared to other regions, the Bratislava region proves the highest absorption of school-leavers/graduates (for school-leavers from secondary vocational schools, for instance, it is 71 %<sup>94</sup>).

Regional **disparities in employment and unemployment** are seen also from the angle of unemployment of school leavers/graduates. In case of tertiary school graduates, the overall situation on the labour market in the subject region is combined by with a series of other factors. The lowest number of registered unemployed tertiary school graduates (145) was reported in the **Bratislava region** as at 30 September 2005; in a region with **the lowest unemployment rate (3.0 %)**. Throughout Bratislava, the labour offices registered altogether 114 unemployed graduates, which was 4.4 % of their total number<sup>95</sup>.

In the Bratislava region, **continuing education** is provided mainly by secondary and higher education institutions, education institutions reporting to the central state administration authorities and institutions for the education of legal entities and natural persons. Continuing education is provided by

<sup>92</sup> Source: Development Strategy of the Bratislava Self-Governing Region, 2003.

<sup>93</sup> The school-leaver/graduate unemployment rate (SLGUR) is the share of registered unemployed school-leavers/graduates in the number of pupils finishing school over a period of two years. If the school types, levels of education and branches of education are considered, the denominator is adapted according to the relevant school-leaver/graduate group.

<sup>94</sup> *Institute of School Information and Prognosis – Employment of secondary school leavers – 2005/2006 season.*

<sup>95</sup> Institute of School Information and prognosis – Unemployment in higher education institution graduates – final report.

a variety of providers, methods, organisation, management and financing. New study activities under the framework of continuing education for seniors are offered by the third-age universities. They are provided in Bratislava by two universities (the Comenius University and the Slovak University of Technology) but other faculties of higher education institutions in Slovakia also participate in the programmes of the third-age universities.

In continuing education, the difficulty rests in the lack of reliable statistical data. Courses of foreign language teaching, ICT and management make 42 % of the courses provided. Compared to the remaining territory of Slovakia, continuing education in the Bratislava region has a relatively better starting line due to a high concentration of initial education institutions, central state administration authorities and a high number of business entities. Efficient operation of the continuing education system however lacks the necessary legal and institutional hinterland to provide guidance and stimulate participation therein, not only by employees and employers but by wide population groups.

### **3.10.3 Research and Development in the Bratislava Region**

The Bratislava region disposes extensive and good quality research and development potential due to the concentration of higher education and research and development institutions of regional and supra-regional importance in Bratislava. The load-bearing institutions are the Slovak Academy of Sciences and higher education institutions.

After 1990, the institutions in science, research and development underwent significant transformation accompanied by a decrease in the number of employees. The main problem lies in high fragmentation and missing coordination in research and development, inadequate level of the human infrastructure in research and development with regard to quality and quantity, low share of funding from the business sector in research and development expenditures and poor equipment with devices in all research and development sectors.

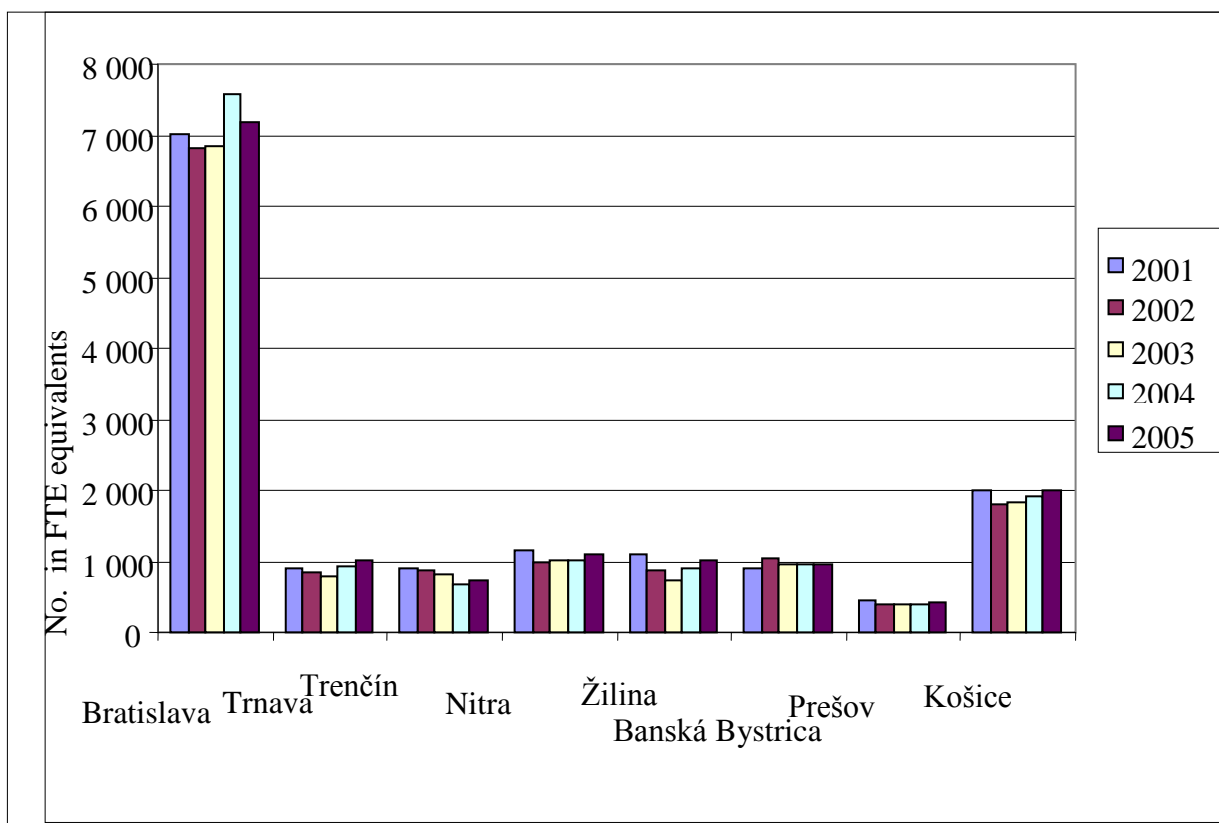
The total expenditures on research and development in the Bratislava region in 2003 amounted to SKK 3 389 118 thousand, in which the state budget expenditures amounted to SKK 2 277 246 thousand; in terms of percentage, it was 48.3 % (63.8 % from the state budget) of the country. The private sector in the region contributed 27.1 %, state budget 67.9 %, not-for-profit private sources 0.8 % and foreign sources 4.2 % to the total R&D expenditures in Slovakia. In 2003, research and development in the Bratislava region employed 10 135 persons, which was 48.4 % of the national figure.

For the Bratislava self-governing region it is typical to accommodate almost 50 % of research capacities (human resources and institutions) of all Slovakia; together with the concentration of higher education institutions, they stand for a significant potential in raising the region's competitiveness. The chart below reveals the significant concentration of research and development personnel in the Bratislava region.

#### **Chart 10: Development of staffing in research and development during 2001 – 2005, by regions<sup>96</sup>**

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<sup>96</sup> Source: Statistical Office of the Slovak Republic.



From the economic, social and science & technical viewpoint, the Bratislava region is the most developed region of Slovakia. It is the driving force of the economic development. The strategic objective of the Bratislava region has become raising of the region's competitiveness by – inter alia – stimulating innovative technologies, development of information technologies, transfer of technologies, support of small and medium enterprise oriented toward innovation, building and development of science & technology parks. Such plans have found their expression performing several initiatives in the Bratislava region, leading to the establishment of a science & technical or technology park (locations Jarovce – Kittsee, Patrónka, Devínska Nová Ves, Plavecký Štvrtok, Istrochem, Malacky, Senec – Červený Majer) which would appreciate the region's knowledge potential in the development of higher technologies. At the time being, an initiative is successfully implemented in the area of Plavecký Štvrtok under the euro Valley project (associating institutions from business sector and local governments) to accommodate high-tech companies and some workplaces of the Slovak University of Technology and of research institutes.

The weak points in research & development are represented by the on-going inadequate utilisation of research & development capacities in strengthening the competitiveness of the Bratislava region, the persisting poor connection of research & development to the business practice, the opening gap between research & development and international standards and inadequate level of cooperation between research & development and the business sector.

### 3.13 SWOT Analysis

Within the meaning of Article 37 (1) (a) of the General Regulation, *OP Education* brings an analysis of the situation in education with regard to its strong and weak points.

The **strong and weak points** have been defined in the SWOT analysis within the context of intervention as the identified internal factors and capacities which make a potential contribution to the solution of a given problem (need) or – vice versa – stand for weaknesses.

On the other hand, the **opportunities and threats** have been identified within the intervention context as external factors and environmental conditions with regard to the solution of a given problem (need).

The distinction between items as strong points and opportunities defines, which factors *OP Education* would take as a basis, which would be actively exploited/developed and which are within its reach (strong points); which factors are favourable for addressing a need but are not addressed by *OP Education* strategy or out of reach of *OP Education* (opportunities). In this SWOT analysis, the delineation between internal – external interface with regard to *OP Education* means addressed/developed – not addressed/not developed. The same applies to the classification of items as weaknesses and threats.

Following a comprehensive analysis of all relevant segments of education and of all relevant target groups which participate in the process of education, the following table can be compiled with strengths, weaknesses, opportunities and threats which directly or indirectly affect the recent and future situation of the system of education in Slovakia.

**Table 31: SWOT Analysis**

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• High share of population with completed secondary education compared to the EU average</li> <li>• Low share of early leavers from the system of education failing to achieve qualification compared to the EU average</li> <li>• Significant value of education as an individual priority</li> <li>• Very well organised formal system of education</li> <li>• Increase in the interest in education, particularly in foreign languages, management, ICT as well as vocational education</li> <li>• High supply and relatively high interest in education within the non-formal system of education</li> <li>• Extensive network and good accessibility of educational institutions</li> <li>• All schools equipped with computers and connected to the Internet</li> <li>• Existence of knowledgeable specialists in the regions, e.g. in methodological &amp; pedagogical centres, pedagogical &amp; psychological guidance centres and in specialised guidance</li> <li>• Existence of workplaces focusing of training and continuing education of pedagogical staff and teachers of tertiary schools</li> <li>• Existence of draft Concept of professional teacher development within a career system,</li> <li>• High percentage of graduated specialists in the teaching profession</li> <li>• Comprehensive accreditation of institutions providing tertiary education supported by the draft Act on Higher</li> </ul>	<ul style="list-style-type: none"> <li>• Low expenditure on education in terms of share in GDP</li> <li>• Unsuitable structure of labour force qualifications with regard to the labour market needs and employer requirements</li> <li>• Low flexibility of educational institutions and profiles of school leavers/graduates in formal education</li> <li>• Insufficient focus of the content of education on labour force flexibility and adaptability and persistent traditional methods of instruction based on memorising which do not support the development of key competences</li> <li>• Low level of partnership of sectors, self-government, employers, labour offices, educational institutions and other social partners in creating the content of education</li> <li>• Low share of population with completed tertiary education</li> <li>• Inadequate connection of the existing subsystems of career guidance services to one another (school system and employment)</li> <li>• Poor collaboration with local/actors in education, employment and guidance</li> <li>• High administrative load and missing administrative capacities to acquire financial resources for scientific &amp; research projects and for introducing innovations</li> <li>• Unfavourable situation of human resources in research and development linked to the “brain-drain” and ageing of researchers</li> <li>• Missing interest of graduates from teacher training colleges to exercise the teacher profession</li> <li>• Low financial remuneration of pedagogical personnel, higher education institution teachers, PhD students and workers in research &amp; development</li> </ul>

Strengths	Weaknesses
<p>Education as a quality guarantee of tertiary education</p> <ul style="list-style-type: none"> <li>Existing network of scientific y research institutions and potential of highly qualified labour force suitable for the R&amp;D development</li> <li>Positive experience in international programmes in education and quality management like Leonardo da Vinci, Socrates, The 6th Framework Programme</li> <li>Existence of the position of assistant teacher who support the integration of persons from SDE and persons with SEUN in mainstream education</li> <li>Positive perception and experience with teacher assistants in integration of the MRC and growing professional and social competences of teacher assistants in primary schools</li> <li>Equal access of men and women to education at all levels of schools</li> <li>Possibility of establishing zero forms in primary schools pursuant to the Act No. 29/1984 Coll. on the system of primary and secondary schools (the School Act)</li> <li>Regulation of continuing education of medical personnel by legal standards</li> </ul>	<ul style="list-style-type: none"> <li>Absence of an information system and comprehensive guidance in continuing adult education</li> <li>Unresolved system components in non-formation education (quality assurance, financing, recognition of the results of education)</li> <li>Low share of economically active population in continuing learning</li> <li>Legislative environment unfavourable for establishing higher specialised schools (ISCED 4) providing post-secondary education</li> <li>Low share of graduates from natural and technical sciences</li> <li>Difficulties in determining the quality and education programmes, insufficient monitoring mechanisms and the resulting lack of comparable data on the quality of education</li> <li>Absence of a system to assess the quality of education (formal, tertiary and continuing), underdeveloped quality culture</li> <li>Low standard of the school management and marketing</li> <li>Poor material and technical equipment of educational institutions, lack of state-of-the-art teaching aids, specialised literature for studying and ICT</li> <li>Unsatisfactory use of ICT in instruction</li> <li>Insufficient continuing education of pedagogical personnel, higher education institution teachers and managing personnel in education</li> <li>Most higher education institutions do not offer study programmes in foreign languages; the faculties and their teachers are poorly motivated to develop courses in foreign languages</li> <li>Insufficiently clear and effective ways of funding formal and non-formal education and informal learning;</li> <li>Low level of internationalisation in all levels of schools</li> <li>Low international mobility of higher education students</li> <li>Absence of certification for education institutions in non-formal education</li> <li>Absence of a national qualification framework</li> <li>Environment inadequately stimulating for continuing education, insufficient interest of employers in the education of their own employees</li> <li>Non-existent system of mutual recognition of the results in formal, non-formal and informal learning on the horizontal and vertical levels</li> <li>Lack of familiarity with the state language by a part of Roma population leading to exclusion of children from marginalised groups in education (particularly in the first forms of primary schools) and – in some cases – to their unjustified inclusion in special schools</li> <li>Relatively low number of teacher assistants with regard to the target group needs, particularly in areas with higher</li> </ul>

Strengths	Weaknesses
	<p>concentration of the Roma ethnic</p> <ul style="list-style-type: none"> <li>• Absence of a comprehensive systemic solution and of creating alternative education for persons with special educational needs</li> <li>• Lack of qualified medical personnel</li> <li>• Understaffing by specialists in health care</li> </ul>

Opportunities	Threats
<ul style="list-style-type: none"> <li>• Increased expenditure on education from public and private sources</li> <li>• Political stress on the need of life-long learning as one of four priorities of the development of the Slovak society</li> <li>• Creating a comprehensive system to monitor the labour market needs</li> <li>• Existing measures of the state ensuring equality in the access to education, including integration of the marginalised population groups</li> <li>• Starting up the curriculum reform on all levels of education creating a flexible system of education and vocational training, with an emphasis on subjects especially in natural and technical sciences and mathematics</li> <li>• Enhancing the quality of instruction by introducing new methods and forms of instruction</li> <li>• The ever-growing demand of the sophisticated labour market for graduates from natural and technical sciences and mathematics</li> <li>• Facilitate involvement of the private sector and businesses in drawing up of learning programmes, create partnerships for the development of education on the regional level, with an emphasis on a relationship between the strategy of the regions development to the structure of branches of studies and training</li> <li>• Linking the universities to research, development and the business sector</li> <li>• Intensified collaboration of educational institutions on the international level, transfer of knowledge from abroad</li> <li>• Development of skills and mechanisms which are relevant for the transfer of technologies and know-how in the practice</li> <li>• Introduction of a career growth system for pedagogical staff and teachers in tertiary schools through continuing education, including their education for career guides</li> <li>• Education of school management including medium management in quality management</li> <li>• Introduction of quality assessment on all levels of formal education, based on comparable criteria, existence of independent external evaluation of schools by the State School Inspection and its on-going quality improvement</li> <li>• Increasing interest in mobility</li> <li>• Significant quality and efficiency improvements in</li> </ul>	<ul style="list-style-type: none"> <li>• Negative population trends and unfavourable age structure</li> <li>• Low expenditure on education in terms of share in GDP</li> <li>• Persisting very high level of unemployment in Slovakia, with a high share of long-term unemployed elderly persons and young people; high unemployment rate of the Roma ethnics</li> <li>• Absence of long-term strategic planning of human resources</li> <li>• Insufficient care for the development of human resources in education, research and development causing brain drain of good quality human resource (like PhD students and young scientists and researchers) to the private sector</li> <li>• Persisting lack of interest of graduates from teacher training colleges to exercise the teacher profession</li> <li>• Persisting low financial remuneration of pedagogical personnel, higher education institution teachers, PhD students and workers in research &amp; development</li> <li>• Distorted labour market which would require only a certain types of qualification, little awareness of the importance to establish the labour market needs</li> <li>• On-going rigidity and increased isolation of the system of education from the needs of the economy</li> <li>• Persistent unfavourable situation of human resources in research and development linked the “brain-drain” and ageing of researchers</li> <li>• Low motivation toward professional growth for pedagogical staff and tertiary school teachers; teachers not prepared for working with persons with special educational needs, including MRC</li> <li>• Little reflection of reasons for the decreasing quality of education in the intended reform plans, absence of generally accepted objective quality criteria</li> <li>• Absence of legislation supportive to establishing higher specialised schools (ISCED 4) providing post-secondary education</li> <li>• Inadequate implementation of LLL and LLG strategy</li> <li>• Non-existence of a link between the upbringing and career guidance at schools with labour offices</li> <li>• Reluctance on the part of employers and of the formal system to recognise education acquired in the non-formal system</li> <li>• Lack of interest of the decision-making sector to establish</li> </ul>

Opportunities	Threats
<p>language education</p> <ul style="list-style-type: none"> <li>• Exploitation of non-formal education forms in leisure activities of children and youth, emphasising key competences and managerial, language and social skills</li> <li>• Transformation and exploitation of capacities of existing institutions providing continuing education</li> <li>• Existence of European tools, e.g., of Europass</li> <li>• Stabilisation of medical personnel</li> <li>• Introduction of quality models</li> <li>• LLL and life-long guidance (LLG) as an indirect instrument for sustainable development of the society</li> <li>• Creating an efficient system for financing life-long learning and life-long guidance</li> <li>• Purpose-oriented and coordinated use of ESF funds for achieving the targets of life-long learning and life-long guidance strategy</li> <li>• Bringing the results of the non-formal system of education on the same level as those of the formal system</li> <li>• Creating a system of carrier guidance as a prerequisite for the selection of profession in accordance with the labour market needs</li> </ul>	<p>conditions for implementing innovative elements in the non-formal system and reluctance of the formal system to accept those innovative elements</p> <ul style="list-style-type: none"> <li>• Close relationship between the socio-economic situation of the family and the level of education achieved by its children</li> <li>• Unsatisfactory educational standard of members of the MRC and unsatisfactory participation of Roma children in pre-primary training</li> <li>• Imbalanced integration of Roma in the society</li> </ul>

### 3.14 Major Disparities and Development Factors

**Table 32: Development scheme of key disparities and development factor with a regional projection at NUTS 2 level**

Key disparities	Regional projection					Main development factors	Regional projection				
	West Slovakia	Central Slovakia	East Slovakia		Bratislava		West Slovakia	Central Slovakia	East Slovakia		Bratislava
1. Inadequate focus of the content of education on the development of key competences as a precondition of the labour force flexibility and adaptability and inadequate exploitation of the ICT potential in the process of education	x	x	x		x	a. Building up a pedagogical R&D basis which would provide systemic solutions to educational reforms and an improvement in the social status and standing in the society of pedagogical personnel (1, 2, 3, 4)	x	x	x		X
2. Low flexibility of profiles of the leavers/graduates from formal education with regard to the labour market and employer requirements and little involvement of the sectors, self-governments and social partners	x	x	x		x	b. Creation of educational programmes, contents and methods or forms of education compliant with the needs of a knowledge-based economy and focus of the content of education on key	x	x	x		X

in creating the content of education					competences; adaptation of the supply in continuing education to the labour market requirements (1, 2, 3, 5, 6)				
3. Absence of a functioning system of education quality assurance and a persisting rigidity and increasing isolation of the system of education from the needs of the economy	x	x	x	x	c. Creating a coherent system for monitoring the quality of education, in particular upon completion of the different levels of education and completion standards (3)	x	x	x	X
4. Low GDP share expended on education and inadequate care for the development of human resources in education causing good teachers to leave schools (ageing and decrease in the number of researchers), brain drain	x	x	x	x	d. Extensive network and relatively good accessibility of educational institutions, existing network of scientific and research institutions and potential of highly qualified labour force suitable for the development of research and development (4, 6)	x	x	x	X
5. Relatively high unemployment rate in Slovakia, with a high share of long-term unemployed elderly persons and young people	x	x	x	x	e. Establishing partnerships for the development of education at the regional level (2, 3)	x	x	x	X
6. Low share of economically active population in life-long learning including teachers and managerial staff in education	x	x	x	x	f. Increased interest of employers and citizens in continuing education and political emphasis on the need of life-long learning as one of four priorities for the development of the Slovak society (1, 3, 6)	x	x	x	x
7. Inadequate legislative support to the recognition of formal (in various countries of the world), non-formal and informal (self-education, etc.) education	x	x	x	x	g. Measures of the state ensuring the drafting of legislation (7,3)	x	x	x	x
8. Poor socio-economic standing and relatively high risk of poverty for families struck by unemployment	x	x	x		h. Measures of the state ensuring equality in the access to education, integration and re-integration and extended access to education for marginalised population groups (8, 9)	x	x	x	x
9. Inadequate standard of education and imbalance in the integration of the marginalised population groups in the society, particularly of the Roma community members	x	x	x		i. Preparation of development concepts of the system of education with regard to the education needs of marginalised groups (8, 9)	x	x	x	x



## 4 STRATEGY OF THE OPERATIONAL PROGRAMME

The strategy of *OP Education* is based on the analytical part and defines the objectives and thematic areas of intervention which need to be addressed under *OP Education* in order to attain the Lisbon objectives and intentions behind the educational system reform. **The strategy continues in Chapter 5 Priority Axes which further develops the strategy of ESF interventions up to the level of examples of specific activities.**

### 4.1 Global Objective of OP Education

#### Global Objective of *OP Education*

Based on the results of the socio-economic context of interventions, the global objective of the operational programme is defined as follows: *“Ensuring competitiveness of the Slovak Republic in the long run by adapting the system of education to the needs of a knowledge-based society”*. The existing economic and social situation in education requires interventions into all components of the system of education, as well as in the area of research and research.

In the **long run, Slovakia’s competitiveness** can be ensured only by performing the necessary structural reforms and by establishing prerequisites for the development of a knowledge-based economy. In other terms, Slovakia must become not only a knowledge-based economy but also a knowledge-based society. In that respect it is necessary to focus on the overall reconstruction of the traditional school into a modern one, on increasing the accessibility and quality of tertiary education, on opening up the system of continuing education to the widest possible group of citizens and on improving the level of education of marginalised groups.

A **knowledge-based society** requires a new content and processes of education, based in Slovakia’s environment and coming up from positive development trends of the education level in economically active population, existing status of an extensive network of well accessible educational institutions, growing interest of the population in education, in particular in foreign languages, management, vocational education and use of ICT and a relatively high quality standard of graduates in mathematics and natural and technical sciences. It also contributes to the solution and elimination of negatives like the low share of economically active population in life-long learning, insufficient permeability of schools on both the horizontal and vertical level, application of traditional school principles, low level of school management and marketing, poor teacher activity and motivation for continuing education and ICT exploitation.

A knowledge-based society needs people who are well educated and dispose skills required by new jobs with a high value added. It is important for the citizens to be prepared for such type of society by the system of education, to be able of critical thinking in everyday life, analyse and evaluate social phenomena and react flexibly to changes of the labour market needs. The life-long learning system is about human capital development all life long, so as maintain one’s position on the labour market. It must give the pupils and students opportunity to master the fundamental key skills so as to become flexible labour force on the labour market capable of adaptation to the requirements of a knowledge-based society. Our economic growth must therefore be based on the capability of people to permanently work with new information, produce new knowledge and apply the knowledge in practice.

The socio-economic analysis of education in Slovakia suggests that it is necessary to support forecasting of future education needs. In planning and managing the system of education one cannot

react ad hoc, but competent decisions are to be adopted, based on the knowledge of the labour market development with the necessary time-lead. As a rule, several years pass before a change in the education content leads to the release of a school-leaver/graduate to the labour market. It is suitable to complement formal education (in primary, secondary and higher education institutions) by non-formal, more flexible forms and seek a way of their recognition by employers (e.g. corporate, sectoral, interest, civic and other education).

## **4.2 Thematic Focus of the Intervention**

Raising the level of education of the population and adapting the structure of the syllabus, curriculum and study courses to the needs of the labour market is a topical need of our society if the existing trends are to be reflected in accordance with our striving toward a knowledge-based society. With regard to the long-term perspective of sustainable development of Slovakia as a competitive economy, the country must have the ambition to create products with a high value added.

In respect to the outcomes of the existing situation analysis in education and of the SWOT analysis, the following needs were identified:

- Enhance the capability of educational institutions to establish the labour market needs and adapt the content of education to the needs of the knowledge-based society (with a stress on natural and technical sciences and mathematics), shorten the time to create, approve and introduce new branches of training and studies;
- Develop a system of training and continuing education of pedagogical personnel and higher education institution teachers;
- Establish and introduce a system of quality management and control with regard to the teaching content and processes in the regional system of schools and in higher education institutions; raise monitoring of the work done by higher education institutions and faculties including contacts with graduates, public relations and contacts with enterprises and the surrounding community;
- Establish prerequisites for ICT utilisation in the teaching process;
- Establish preconditions preventing the brain drain from pedagogical practice and science & research base;
- Develop the quantity and quality of international cooperation programmes and improve incoming and outgoing foreign mobility;
- Introduce a system of quality assessment and certification of life-long learning institutions and enhance the quality of institutions through enhancing the quality of human resources;
- Increase the share of adult population participating in continuing education and support an introduction of a comprehensive career guidance system;
- Introduce methods for the research of labour market needs and raise active involvement and influence of employers on the quality, content and scope of education leading toward acquisition of qualification (including the introduction of innovations);
- Support origination of networks of learning regions;
- Ensure viability and compatibility of formal, non-formal and informal sectors of education and allow continuous acquisition of qualification even through non-formal education;
- Integrate children from risky and marginalised groups into standard school environment and remove language barriers in children coming from the Roma ethnic before they start mandatory school attendance;

- Establish adequate conditions for improving the level of education in persons with special educational needs, including members of the MRC;
- Educate persons working the in integration of persons with special educational needs in the society (with a special focus on teacher assistants);
- Ensure re-staffing by qualified personnel in health care;
- Stabilise the health personnel and prevent the brain drain.

#### 4.2.1 Reform of Primary and Secondary Schools

The basic action for ensuring long-term competitiveness of Slovakia in the human resource development is to **finalise the reform of primary and secondary schools. The reform of the content is aimed** at creating room for creative work of pedagogues, for strengthening of upbringing, for improving the comprehensive development of cognitive functions of pupils.

The main objectives of the reform of content to be supported by *OP Education* are the following:

- Creating a modern, flexible school system;
- Establishing conditions for the development of higher cognitive capabilities of pupils by developing their competences;
- Ensure a transition from factual learning to the development of key competences, open the school and link it to the surrounding environment and the entire society;
- Perform a didactic reform aimed at the application of modern teaching strategies, effective forms and methods of education;
- Modify the objectives of education and the content of upbringing & educational programmes so that they would provide the school leaver a competency profile for continuing further educational path or for placement on the labour market, and to provide him the capability and the need of life-long learning.

The reform of primary and secondary education system is to ensure rendering of education for **mastering of key competences** for all pupils. A pupil equipped with new key competences is better prepared to the permanently developing and more-and-more sophisticated labour market as well as for his follow-up education in the system of tertiary or continuing education. *OP Education* will focus on the support of key competences within the meaning of the Recommendation of the European Parliament and Council of 18 December 2006 on key competences for life-long learning (Annex 7 of *OP Education*).

Changes in the system of education must ensure a high level of the pupil's freedom to choose a school and an opportunity of the school to choose the form, methods and content of education. The overall transformation of traditional school into a modern one will rest in an overall change of school from an institution passing over knowledge into a learning community, from the stress on the content of schoolwork to the stress on the process of instruction. That must be linked to a universal and well developed system for measuring the quality of learning, process of instruction, institutions and founders. To do that, the following steps are to be undertaken:

- Perform a transformation of the traditional school into a modern one with regard to its content and processes and introduce an overall change in the content, methods and forms of education leading from memorising information toward the capability to acquire, evaluate and use information (for instance, switch from teaching to learning); from pupil's passiveness to his activity, independence, creativity, experiencing of the pupil's work; from a classical teacher to a teacher guide; from the focus on the average pupil to a differentiated and individual approach to pupils);

- Support alternative methods in upbringing and education (for instance, switch from frontal work of pupils to pupil cooperation and project-oriented instruction; from isolated subjects to their integration);
- Foster and improve education in foreign languages, ICT, mathematics, science and technologies;
- And basic entrepreneurial knowledge and skills for each secondary school leaver.

The **content of the reform** rests in the innovation of content and methods and improved quality of education toward the needs of the labour market in a knowledge-based society and thus, raising the adaptability of school leavers to the requirements of employers. It is necessary to improve the compliance with the curricula content and rationalise the network of study and training branches in all types of secondary schools with regard to the regional conditions and the labour market needs. It is necessary to perform surveys, to develop forecasts and proposal of further development of Slovakia's industry, to identify and propose areas with good prospects for all levels of education and design systemic measures for supporting the development of vocational and secondary education (focusing e.g. on automotive technology and production of motor vehicles).

So as to improve the quality of instruction and adaptation to the labour market needs, the Education Ministry must ensure **innovation of the pedagogical documentation** to comply with national and EU standards. In implementing the above-stated priorities of *OP Education*, it is mainly projects aimed at **innovative methods, instruments and forms of education** which are supported within the regional system of schools. To achieve those objectives, it is necessary to develop the principles of the content reform, establish a two-tier system of education based on the national and school curricula, innovate the curriculum and draw up standards for content and performance in the various subjects of instruction and areas of education. Innovation of the pedagogical documentation must be based on strengthening of certain areas of the curriculum so as to extend the language competences of primary and secondary school leavers (foreign languages), improve the information literacy of pupils (ICT) and stress the individual approach.

The prerequisite of a successful entry of school leavers to the labour market is a new **quality** of vocational education and training depending on a systemic approach and active involvement of employer entities in addressing its objectives, content and structure, cooperation with institutions associating employers, with employers, central state administration authorities, authorities of local self-governments and other entities in adapting the existing branches of training and studies to the labour market requirements, also by creating new branches.

The reconstruction of the content of education is closely linked to quality, experience and motivation of teachers; therefore, one should focus not only on intensifying the system reform but also on **enhancing the quality of teacher training**, with a stress on mastering ICT skills and use, on speaking of foreign languages. Moreover, it is necessary to improve the teacher's social status, introduce motivation tools to attract and keep qualified teachers and motivate the teachers toward integrating innovative pedagogical methods in the teaching process. To achieve that, it is necessary to:

- Improve the quality of teacher work, in particular by making the teacher profession more attractive for good teachers and by improving the conditions for their training and permanent development of their skills;
- Educate managerial staff in schools and school facilities in introducing quality management system which would apply to all school processes and all school employees;
- Educate guides in the system of upbringing guidance, ensure the supervision and quality control of their work so as to improve the quality of pupil training for the labour market; improve the conditions of the guides work, especially through ICT.

The achievement of curricular reform in the regional system of schools foresees also **bringing more efficiency into the management of schools and school facilities and ensuring institutional quality** by establishing a system of their assessment. Moreover, more collaboration of schools is desirable

with social partners at the local, regional and international levels to the end of strengthening the overall position of the school within the context of an open school system.

#### 4.2.2 Modernisation of Tertiary Schools

If Slovakia wishes to tap on the human, knowledge and research potential of higher education institutions, it must introduce the necessary conditions allowing to improve their performance, modernise them and become competitive; in short, become the leading force in their own restoration and play their role in the building a knowledge-based society foreseen by the Lisbon Strategy. In a knowledge-based society, higher education institutions and R & D have the role of ensuring prerequisites for creating products and services with a high value added through upbringing of the human potential which is capable of creating or working with new sophisticated technologies, or – in collaboration with the public or private sector – applying the R&D results in the design of such technologies.

In tertiary schools, it is necessary to focus on **expanding the capacities** (by diversifying higher education institutions), **a significant quality and flexibility raising of higher education, human resource development and involvement of higher education and R& D institutions in innovation networks.**

The key to extending the capacities and raising the quality of higher education is a flexible system in which higher education institutions react in particular to requirements of the labour market and the young people, but also to the demand for life-long learning; the best of them are – at the same time – centres of research and development at a level comparable to international. Through their activities, tertiary schools should become one of the driving forces of social and economic development of the region in which they are located. The **instruments** for achieving such objectives are the following:

- Establish conditions for innovation of study programmes also, for instance, in collaboration with the private sector or with higher education institutions established abroad;
- Improve the quality of teachers (in particular by making the teacher profession more attractive for good teachers and by improving the conditions for their professional, in particular scientific growth);
- Support the acquisition of general competences in graduates from all higher education institutions (e.g. communication and analytical skills and team work), and widening of practical skills acquired by previous studies (languages, digital literacy or enterprise);
- Support the mobility both of students and teachers which must become an automatic part of education; remove mobility barrier with a stress on language training and facilitating of diploma recognition;
- Strengthen research, development and innovations in higher education institutions and in research & teaching workplaces.

In Slovakia it is necessary to significantly **increase the share of population with higher education.** In line with the global trend, the position of graduates from bachelor studies will be supported as full-fledged tertiary studies in the economic practice and society. Regarding the access to tertiary education, conditions need to be established for its widening, so as to allow increasing the number of students so that the population percentage going through tertiary education would progressively come closer to the values valid in developed countries. The focus will first of all be on widening the access to the first stage of tertiary education (**bachelor studies**). For the success of the three-tier higher education, it will be necessary to ensure that the labour market create an adequate demand for graduates from bachelor study programmes and only a part of them would continue at the second stage of higher education. Stress is laid not only on quantitative accessibility of higher education but also on better links between higher education and practice. Strengthening of cooperation with practice is also expected in research and development, in particular by strengthening the business sector motivation to cooperation with higher education institutions.

The priority however is to extend the access to higher education in general to anyone showing interest

to do so under LLL and a support to accessibility of higher education for students from DSE. Wider exploitation of information technologies and new education forms, in particular in external studies (virtual universities, distance education, etc.) will allow increasing the number of students.

One of the key aspects of quality assurance in higher education is the connection between **the content of education and the needs of a knowledge-based society** at all three stages of higher education (bachelor, engineer, master and PhD.). The content of study programmes must reflect the needs of the labour market which – over the last years – demands mainly graduates from higher education institutions with a high level of practical skills capable of managing new sophisticated technologies, build over the basic theoretical knowledge in the respective branches and capable of flexible reactions to the changing conditions in the job structure, to new technologies and working environment (work mobility). Should the university study programmes overcome the on-going discrepancy between the qualification of graduates and the needs of the labour market, they should be structured so as to directly improve the employability of graduates and in general provide a wider support to employees. With regard to employer needs it is necessary to innovate the existing and to create new programmes or branches of studies, including hands-on bachelor study programmes and continuing education programmes in cooperation with the private sector and organisations representing the business sector and the small and medium enterprise. Stays in enterprises included in the system of credits may become a part of the study programmes or study plans. The opportunity to provide tertiary education of the second and especially third stage should be derived from the quality achieved by the given higher education institution in the given branch of science and research.

The intention to develop production with a high value added may only be fulfilled if Slovakia has good quality human resources available with tertiary education in stages 1 – 3. It is necessary to create preconditions to foresee trends regarding the content and type of education in particular in collaboration with higher education institutions, taking into account recent and expected requirements of practice, global development trends and prediction signals of science and technologies regarding the future development trends and tendencies.

**OP Education will ensure involving higher education institutions** in international cooperation and in **the development and innovation networks**. In line with the amended Act on Higher Education, *OP Education* will support academic mobility – **a higher education institution will be able to admit a student from another higher education institution for a part of his studies, including a higher education institutions established abroad.**

To support effective international cooperation, *OP Education* will co-finance involvement of higher education institutions **in the research and development networks** and in student and teacher **mobility networks**. Higher education institutions should lay more stress on providing higher education in a global language and on the support of student and researcher mobility.

In order to enhance the quality of tertiary education, all the actors involved in higher education must start seeing the assurance and **development of quality culture** in tertiary schools as their priority for further development of those institutions. The process of quality assurance must be performed at two levels. The first one is the internal system of quality control by which the tertiary schools on their own set systems and processes capable of measuring progress and trends in the indicators measured and on their basis, decide on further action in achieving the defined objectives. The second one is the evaluation process which is to open up the closed world of a tertiary school assessment to the public, even with regard to quantifiable indicators which are able of bringing the standard of studies in various areas in any tertiary school closer to the interests of students. The necessary prerequisite for achieving higher quality requirements in higher education is to allow the **development of professional growth of teachers** and support human resources in the research & development in higher education institutions.

Higher effectiveness of management in higher education institutions requires new internal management systems based on strategic priorities and professional management of human resources, investments and administrative procedures (in the economic, financial and operating university management). That can be achieved through continuing education of the recent management in higher

education institutions and innovation of the existing management processes and structures. Bringing more efficiency in the administration and management of higher education institutions and support to the principle of quality culture in higher education institutions would lead to stabilisation of human resources and higher motivation of higher education institution graduates for post-graduate studies and their retention in research and development. The **quality of higher education institutions and their assessment** will be ensured in the future by the intended amendment of the higher education act which would introduce prerequisites for institutional assessment and financing of tertiary schools and innovate the assessment criteria of the quality of higher education rendered. They have become a basis for the comprehensive accreditation of higher education institutions.

Higher education institutions should increasingly become important stakeholders in the economy, capable of faster and better reactions to the market requirements and building of **partnerships** exploiting the scientific & technical knowledge. The exchange of research results, intellectual property rights, patents and licences (by e.g. founding enterprises in university campuses or by founding scientific parks) will be supported under *OP Education* through structured partnerships of higher education institutions with the business sector and the production sector, including small and medium enterprises (hereinafter the *SME*). Contacts with the business sector and production will bring in additional finance, for instance, to extend research capacities or to provide re-qualification courses, and would strengthen the influence of university-based research on small and medium enterprises and innovations in the regions. The future development and management of science, technology and innovation issues must be built on good quality human resources capable of transforming research into innovations useful and usable in practice.

#### **4.2.3 Support to Human Resources in Research and Development**

In **research and development**, it is important to focus on improved care for human potential, opening up of higher education institutions to the public and private sectors and reflecting their needs and requirements, and improving international cooperation through involvement in international networks of research and development and scientific mobility. Universities should be capable to change the setting of their research programmes in order to exploit the opportunities offered by new developments in the existing areas and by newly emerging branches of scientific research. That requires focusing less on branches of science and more on areas of research (e.g. green energy, nano-technology), linking them closer to specific or complementary areas (including humanities, social sciences, entrepreneurial and managerial skills) and strengthening the interaction of students, researchers and research teams through more intensive mobility between the different branches, sectors and research institutions.

Research, development and technology innovations cannot be carried out without high quality human resources. Their development requires higher and more efficient investments in the development of human capital in R&D through their continuing education and support to experience sharing within networks. Such investments should then be exploited in programmes transferring new technologies and expertise of excellence between higher education institutions and the business sector where the R&D results would be directly implemented in new technologies and innovations useful in production and provision of services with a high value added. The existence of R&D centres of excellence provides all prerequisites for implementing their outputs in practice and for the business sector to be interested in such outputs.

In line with the draft act on higher education, *OP Education* will support human resources in specialised research and development workplaces which would ensure the transfer of results from science and technology based in higher education institutions to economic practice with the aim of linking public higher education institutions with practice. A specialised workplace can be in particular a research centre of excellence, incubator, technology centre and arts centre.

To make the most capable recent Slovak PhD students and graduates become leaders of research group in higher education institutions, conditions for **retaining young and talented scientists in Slovakia** or for attracting foreign scientists and retaining them in Slovakia are to be created and progressively improved.

#### 4.2.4 Continuing Education as a Part of Life-Long Learning

In order to maintain sustainable economic growth in Slovakia, its economy must be based on the capability to produce products with a high value added. That requires Slovaks to be capable of working with new continually information, produce new knowledge and apply it in practice. To maintain positive results (8.2 % growth of GDP in 2006 and expected 2007 growth of 8 %), it is necessary to raise the level of quality and availability of **LLL and LLG** for those who need to change their qualifications and employers several time during their active lives.

Taking into account the demographic development and the need to ensure sufficient qualified labour force at the productive age and successfully face the ageing of population, continuing education must focus more on continuous acquisition and improvement of key competences and skills. It is important to build an effective information and guidance system regarding education opportunities throughout one's life for anyone and to ensure recognition of the results of informal and non-formal education.

Due to the need to provide a systemic umbrella to the existing subsystems of education, open them to one another and link with one another into functional relations extended by LLG so as to satisfy the real needs of citizens, employers, public administration and education institutions, facilitate the access to education, to acquisition of new qualifications and employment throughout the population's active lives, it is necessary to speedily create an available, modular and market LLL and LLG system.

*OP Education* aims at creating for all population opportunities of access to on-going education, to evaluation of new information and adaptation to the local and regional labour market. Accessibility of effective education throughout a citizen's life is a key to achieving Slovakia's ambition to establish a well-working knowledge-based society, capable of competing with developed European economies.

The proposed objectives of *OP Education* cannot be implemented without facilitating and extending the access to continuing education for everyone throughout one's life. In order to introduce conditions for the population, employers, public administration and educational institutions with the aim of reacting to the changing needs of the labour market, it is necessary to monitor, survey and forecast educational needs. Specific activities are intended to bring the educational opportunities closer to a wide scope of potential candidates, as close to their place as possible by e.g. establishing local centres of education in places which are commonly accessible.

With regard to the approved LLL and LLG strategy (25 April 2007, Government Resolution No. 382/2007), *OP Education* must provide opportunities of on-going education for all population in a knowledge-based society. The main objective of *OP Education* in continuing education is to facilitate access of the population to repeated and flexible acquisition of new qualifications and to deepening of qualifications by means of good quality education acquired – in addition to the formal and non-formal systems of education, also in the informal learning system – with the support of the comprehensive guidance services.

Following up the LLL and LLG Strategy, *OP Education* intends to contribute to its implementation by means of:

- Raising the quality of continuing education;
- Support to the principle of learning regions where regional networks of various institutions design tailored guidance and continuing education services;
- Removing barriers to the entry of providers into various segments of the system of education;



- Designing support instruments of financing in continuing education by pooling the employer, public and employee resources (the so-called multi-source funding of continuing education);
- Creating conditions for the recognition of the results of non-formal education and informal learning;
- Introducing a system of interim monitoring and forecasting of the development of educational needs in order to establish conditions for the citizens, employers, public administration and educational institutions to be able to react to changing needs of the labour market;
- Introducing an information system for LLL and LLG which would make an efficient instrument for free access of the population and institutions to education and guidance and – at the same time – will provide an instrument for its client communication in both ways;
- Supporting the creation of a national system of qualifications and the national qualifications framework;
- Designing and introducing a LLG system on the principle of subsidiarity in the practice of self-governing units and local partnerships and alternative guidance providers;
- Designing and introducing a system of LLG quality assurance.

The analysis of weaknesses shows that the system of education creates an unsatisfactory structure of labour force qualifications and of educational institutions with regard to the needs of a knowledge-based society. The solution of those difficulties is seen in:

- Adapting the supply of continuing education to the labour market needs by creating educational programmes, contents, methods and forms of education which comply with the needs of a knowledge-based economy;
- Enhancing the quality of educational and guidance programmes and continuing education institutions and strengthening the system of quality control;
- Developing human resources in continuing education;
- Establishing partnerships for the development of education at the regional level.

For raising participation of the economically active population in continuing education it is important to **improve the information rate regarding educational opportunities and to develop the LLG system.**

Due to insufficient involvement of employers in continuing education of their own employees, financial mechanisms are to be designed to motivate and stimulate employees to higher participation in continuing education programmes. Slovakia must make use of the potential offered by the automotive industry to perform the most extensive structural changes which would ensure a progressive revival of the mechanic industry and other sectors of national economy.

*OP Education* is a reaction to the need of focusing the content of education on the development of key competences and continuously complementing the qualifications acquired at the previous levels of formal education. The objective is to create an open LLL system based on **recognition of the results of non-formal education and informal learning** in order to acquire partial or full qualifications and their deepening.

The precondition for improving the quality of continuing education lies in **designing and adopting the National Qualifications Framework**, creating a modular structure of the content of education and introduction of credit evaluation of the various modules of educational programmes and certification of trainers and managers in non-formal education.

The system of **funding of non-formal education** will be based on the introduction of funding instruments which take into account the following criteria: the level of involvement of public sources, administrative load of its introduction and implementation, multi-source principle including a share paid by the participant in non-formal education, transparency, controllability and vulnerability to abuse.

#### 4.2.5 Continuing Education of Medical Personnel

Continuing education in the health sector is to be included in *OP Education* because the European Union pays more and more attention and lays more and more stress on life-long learning in medical professions because of its direct and immediate impact on the quality and safety of the health care rendered. The support to human resources in the health sector has a significant impact on exploitation of new state-of-the-art technologies. Good quality human resources in the health sector have a far-reaching effect on every individual and his productivity on the labour market. When modernising the health care and achieving the quality, accessibility and effectiveness objectives, it is necessary to ensure modernisation of all its components: both inputs and processes. In addition to material and technical inputs there also are human inputs. As OP Health would only be financed from the ERDF to support investment activities, “soft” measures are needed (provision of trainings and education, innovation of subjects of studies, etc.).

Education of medical personnel is a specific area in that respect. So as to ensure a close relationship with the needs of medical practice in Slovakia, the continuing education of medical personnel is sponsored by the Ministry of Health of the Slovak Republic (hereinafter the *Health Ministry*). Therefore, the issue of systematic education (also called *continuing* education) and the life-long learning system on its own, need to become the centre of attention when drawing up strategic decisions and programmes. On-going development in the practice and the quality of health care provided require the same development in the quality and in the substance of education with regard to the profession and assurance of permanent education for those who already work in the health sector.

In continuing education of medical personnel, *OP Education* focuses on two specific objectives – **building specialist human resources in health care with regard to restructuring of the health system, introduce innovations and raise the quality in the continuing education system in the health sector**. Therefore, investment is to be made into improving of human resources in health care and establishing such prerequisites in the education system of medical personnel as to allow more flexible reactions to the labour market needs in the health sector.

Information obtained from medical personnel which is available to the Health Ministry reveals that **the element motivating to remain in medical professions** in Slovakia, with regard to the high personality and working strain, *is the support in the fulfilment of the mandatory obligation of continuing and systematic education, improvement of their working conditions and equipment with devices and improved communication, relations and management of activities in the workplace*.

The need to specifically focus on continuing education in the health sector is justified in *OP Education* also by the fact that it is necessary to ensure a well-balanced relationship in medical staff between the acquisition of key competences and the acquisition of specific medical competences of highly professional nature linked to the various medical professions (physician, dentist, nurse, midwife, physiotherapist, radiology assistant, psychologist, etc.) of autonomous nature but the resulting activity should be harmonised into a single whole leading to patient satisfaction and safety in the process of health care provision.

It is thus necessary to support investment in the human capital in health care. In its planned activities, *OP Education* is therefore strategically focused on **re-staffing the health care system with qualified specialists** in order to compensate for their absence in understaffed specialisations; on **raising additional skills of medical personnel with regard to rendering of health care** as a significant motivating instrument aimed at keeping qualified medical labour force within the system and in the provision of health care in Slovakia; in that respect, on **designing and updating of educational programmes and the development of new forms of continuing education in health care**. It is necessary to provide for the education of another group of personnel capacities necessary to saturate the **lack of qualified medical personnel working overtime already** – with regard to the fact that further capacities will have to be trained in order to improve quality of the working environment (regardless whether and when the intended working time directive comes into force).

The support to education of medical personnel by means of defined motivating instruments (providing financial assistance for continuing education, etc.) is – along with all the arguments above – a guarantee of achieving the *OP Education* objective in continuing education in health care. Thus, continuing education of medical personnel is not some additional education for the existing number of personnel but an instrument for **re-staffing** with qualified personnel and **retaining** the qualified medical personnel in the system and in the provision of health care in Slovakia.

#### 4.2.6 Education of Persons with Special Educational Needs

Slovakia's significant priority in respect to access to education is the integration of children from risky and marginalised groups into standard school environment. Every child and every member of a society must have an opportunity to achieve good education corresponding to his potential and have the opportunity to fully develop his potential. To achieve that objective, measures need to be introduced for designing and implementing programmes of continuing education for persons with special educational needs so as to ensure a comprehensive development an individual's personality.

**An analysis of recent situation in the education of persons with special educational needs has revealed the need** to focus on a comprehensive solution of the educational situation of target groups which – first of all – includes facilitation of the access to education at the beginning of the educational path, creation of such school environment, education curricula and methods which would reflect the specific features of the given target groups, as well as enabling access to the acquisition of the necessary knowledge and skills throughout one's life by providing tailored educational programmes of continuing education and LLG.

Such intentions are compliant with the strategic objective of the Working programme of the Commission "Education and Vocational Training 2010" which is "facilitating access of everyone to education and vocational training". In accordance with that objective, all citizens should have equal access to education and vocational training and the needs of vulnerable population groups, in particular disabled persons and persons with learning difficulties, should be taken into account in the education and vocational training content and methods.

The improvement of existing living conditions of persons with special educational needs requires the following steps:

- In educational institutions, establish conditions respecting the specific features of marginalised groups so that their potential as a group can be developed (e.g. pupils with SUEN, from SDE and MRC);
- Facilitate the access to education and involvement of the members of marginalised groups in the mainstream education and standard school environment;
- Ensure improvements of professional competences and of the number of teacher assistants in primary schools and special teachers working at schools, in pedagogical & psychological guidance centres, in special pedagogical guidance centres and children's integration centres;
- Financial support to make education accessible for children from poor families through scholarships and similar instruments.

With regard to the **different needs of diverse groups of persons with special education needs** who face the risk of social exclusion due to non-addressing their specific educational needs and non-provision of adequate education **it is necessary – when selecting the intervention instruments – to take that specific feature into account.**

### ***Focus of the Intervention for Members of the MRC***

In accordance with the *Concept of integrated education of Roma children and youth, including the development of secondary and tertiary education*<sup>97</sup>, it is necessary to:

- Reform the management of educational process in Slovakia so that the local social and cultural conditions can be respected in designing and implementing of the school curriculum;
- Train the teacher as a decisive factor in the strategy implementation with regard to the acquisition of specialised competences, implement the intentions laid down within the context of education needs of specific individuals of a target group;
- Create an attractive educational environment for the target group respecting its social, cultural and language specific circumstances and thus, contribute to its improved school attendance;
- Perform curricular transformation so that schools would be able to create their own curricula with regard to the educational needs of a given group of pupils;
- Modernise strategies of education so that they would respect specific personality, cultural and social features and educational needs of individuals seen as subjects, not as objects of the process of education;
- Change attitudes of the majority to minorities and the other way round by intensive in-school and out-of-school education;
- Ensure adequate conditions for research as a precondition for building an effective system of education.

As for primary and secondary education, it will be necessary to support the integration of pupils from the MRC into the standard teaching process, implement school-based acceleration programmes of upbringing and education, adequate support to services of guidance in upbringing and develop school culture linked with the local community culture. There must be a change in the objectives and content of education from mono-cultural into multi-cultural.

The system of levelling out individual differences between/among pupils will be supported, focus on social and communication skills, preparation and rendering of alternative curricula and individualised approach to pupils. To involve persons from the MRC in the mainstream education, it will be necessary to participate in a successful passage of pupils from the first to the second stage of primary schools, from primary school to secondary school, from secondary school to higher education institution and in particular stress the importance of communication between the teachers and the pupil parents in that process. Participation of the MRC in the teaching process needs to be increased by establishing organisational and material prerequisites for education. Equality of opportunities at the individual level can be achieved also by various motivating and activating measures (like stipend programmes, preparatory and remedial classes, upbringing guidance, including programmes of career guidance).

### ***Focus of the Intervention on Pupils with SEN and Pupils Coming from SDE***

The harmonic development of a child is based on adequate requirements regarding interpersonal relations. Such requirements determine the way of involving a child in school, working process and the society. In the process of upbringing and education, focus should also be made on creative motivation toward experience of success which can engage every child in active self-development toward proper understanding of himself and of the world around.

As pupils are differentiated to various educational programmes of schools (eight-year grammar schools, for instance) by their talents and intellect at an age too young, inclusion of programmes for talented children in the education offered by all types of schools is to be considered. The selection of

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<sup>97</sup> Source: Ministry of Education of the Slovak Republic, 2004.

talented from other pupils leads to an adequately motivating environment for achieving good quality results neither on the part of pupils who do not sufficiently develop their capabilities nor on the part of pedagogical personnel. At the same time, stress is to be laid on widening the supply of available information regarding educational programmes and individual guidance.

**Behavioural disorders** affect school performance of a pupil, his learning results, social relations of the pupil in the school environment and thus, the course of instruction. No matter if the behavioural disorders have been caused primarily by internal or external factors, the reality is that a primary or even a secondary school pupil is a personality under development, with specific features of his age. When upbringing and educating such pupils, this fact needs to be respected and specific course is to be taken, similarly as with mentally disabled children, or with children with hearing or other disabilities. Neglecting special upbringing care and specialised treatment may have a negative effect on further development of the pupil's personality and his adult life.

To have a fully working integration of disabled children among children without disabilities requires wide and early specialised guidance service and direct assistance to families with disabled children. It also is important that healthy children and adults without disabilities learn to live with the disabled ones, consider helping them a matter of course and mainly understand and respect them.

The basic objective of *OP Education* is to realise the following intentions:

- Focus the activities of special primary schools, special classes and schools with individual integration so that the majority of its leavers is prepared to continue their studies in vocational schools or in common secondary schools;
- The various learning programmes, methods and forms as well as teaching strategies are to be developed to as to be as helpful as possible to the educational needs and requirements of disabled children and to be matched with the opportunities offered by the labour market;
- Rationalisation and better management of special schools and social services homes for disabled children;
- Finalise the issue of drawing up and developing textbooks for disabled, so as to fully use such textbooks for disabled pupils in integrated education;
- In special schools and facilities of special pedagogical guidance, establish workplaces focusing on stimulation of sight, hearing, speech, motorics as inevitable preconditions for a successful integration of children in the process of upbringing and education;
- Staff special schools in particular with assistant teachers for serious and combined disabilities and employ individual programmes of upbringing and education;
- It is necessary to create an environment for differentiation of education and vocational training, depending on the interests and capabilities of the disabled pupils, respecting the requirements of pedagogical personnel from practice, providing more room for creative work of teachers and for the decision-making of headmasters and allowing schools establish their own profile, working style and responsibilities for the level of education and vocational training of pupils;
- The vocational training of disabled youth needs to be given more attention, in particular with regard to the labour market; Pupils should be guided to choose such branches of their studies and training which give opportunities of wider-ranging employment, with a focus on pre-selected branches of studies and training, while updating the branches of training and studies with regard to the labour market, with a focus on widening the selection from branches of studies and training, and increasing the share of the disabled in tertiary education;
- Prospectively, in special secondary schools, prepare integrated studies for intact population and disabled pupils, prevent unemployment and – as a part of continuing education – establish in Slovakia centres of rehabilitation by working experience which would organise re-qualification and other courses to acquire additional skills sought for on the labour market; Various sources (labour offices, the persons interested, employer organisations and the state budget) are to be involved in financing of that process;

- An integral part to be covered by special schools is considered to be the education of disabled individuals even in their adult age, which allows extending or widening of education, acquisition of specialisation by means of post-secondary studies, course or re-qualification.

*OP Education* also intends to ensure **raising of professional competences and higher staffing in integration of persons with special educational needs** in the process of upbringing and education and the society, e.g., more staff in community centres, teachers, teacher assistants, guides in the upbringing guidance system, pedagogues, special pedagogues, psychologists, special pedagogues, and managerial, social, mission and other workers. Such integration can be ensured only in close interaction and partner collaboration of all relevant institutions. It is also necessary to establish conditions for continuing education of specialists (including supervision and quality control of their work) who contribute to addressing social, economic, cultural and educational problems of persons from the MRC, address the issues of professional training and methodology guidance of teachers, ensure sufficient information in that area, textbooks, teaching aids and other materials, establish preconditions for specialised education of pedagogical personnel, development pedagogical research in continuing education of persons from the MRC and strengthen the position of teacher assistant.

#### 4.2.7 Bratislava Region

The analytical part suggests that there are prerequisites with regard to quantity and quality in the system of education at the level of secondary, tertiary and continuing education for achieving the strategic objective of the Bratislava region. The role of strategy for the Bratislava region is to ensure competitiveness of the region in the long run, by means of a good quality education system, reflecting the region's needs, stimulating innovative technologies, developing information technologies, transferring technologies, supporting small and medium enterprise oriented toward innovation, and building and developing science & technology parks.

**In the Bratislava region, *OP Education* will focus its priorities at:**

- The development of human resources in research and development ;
- Performing the reconstruction of content in primary and secondary schools;
- Continuing education of pedagogical staff in regard with the school reform.

For removing the key disparities and increasing the support to development factors, **reconstruction of traditional school into a modern one** has been designed **in primary and secondary schools**. In developing education in schools, the objective must be creating an environment for sound competitiveness of schools, differentiation and orientation toward quality and performance. In its region, school must become an open school. It must become a place for education of the young generation, as well as for continuing education; the centre of culture, sports and social life. School must prepare its leaver for the needs of the labour market in a knowledge-based economy and also for his follow-up education in the system of higher and continuing education. With regard to the labour market needs the capacity of schools needs to adapt to recent and prospective trends in the demographic development on the one hand and to expectations from a qualified labour force on the other.

With regard to the ever-growing requirements toward schools, school facilities and teachers it is necessary for the pedagogical personnel to possess adequate knowledge, support and sources for more efficient upbringing and education of pupils. Therefore, it is important to ensure continuing education of pedagogical staff and the development of professional growth of higher education teachers.

Raising competitiveness of the Bratislava region through the development of **tertiary and continuing education** rests in ever-lasting support to tertiary schools in their accommodation to the changing conditions in a knowledge-based society and the labour market, so that the quality of education and the quality of human resources in research and development are raised. The dynamically developing labour market in the Bratislava region requires well educated and flexible labour force that needs permanent education and processing of new information. From that perspective, *OP Education* will

support innovations of the existing and creation of new study programmes or branches, including hands-on bachelor study programmes and continuing education programmes. In higher education, projects will be implemented to create and innovate study programmes, with a stress on the **needs of the labour market and a knowledge-based society**. The intention behind *OP Education* is to support study programmes which would produce mainly graduates from higher education institutions with a high level of practical skills capable of managing new sophisticated technologies, to build over the basic theoretical knowledge in the respective branch and capable of flexible reactions to the changing conditions in the job structure, to new technologies and working environment.

Higher **effectiveness of management of higher education institutions** requires new systems of internal management set up on strategic priorities and professional human resource management, investments and administrative procedures. Bringing more efficiency in higher education institutions administration and management and **support to the principle of quality culture** in higher education institutions would lead to stabilisation of human resources and higher motivation of higher education institution graduates for post-graduate studies and their remaining in research and development.

**Research, development and technology innovations cannot be carried out without high quality human resources.** With regard to high concentration of higher education institutions and research and development capacities (both institutions and human resources) in Bratislava, *OP Education* will focus in the Bratislava region primarily on higher and more effective **investments in continuing education and development of human resources in research and development**.

With regard to the need to ensure sufficiency of qualified human resources for the science and technology system, it will be necessary to **raise the interest of young people in working in research and development**, which means focusing attention on the education and upbringing of potential research and development workers and ensure continuing education for those in research and development. Establishing conditions for the mobility of PhD students and young researchers through support programmes is the basic prerequisite for raising the qualification of young human resources. To raise the interest of young generation to remain working in research and development, it will be necessary to create a system which would make it easier for PhD graduates to get a job in research and development. Another objective in the human resources area is supporting the return of young researchers and research and development staff working abroad.

As the top research can today hardly be pursued without international sharing of experience and researchers it is desirable to more involve **higher education institutions and other research and development organisations in international cooperation and development and in innovation networks**. From the view of better experience sharing, higher involvement will be supported of higher education institutions and other research and development institutions in building structured international cooperation. International cooperation is developed not only in the quality culture assurance but also in research and transfer of new technologies and expertise of excellence between educational and research institutions.

With regard to the restructuring of industrial base in the Bratislava region oriented toward the introduction of innovative technologies into production processes and occurrence of sectors based on state-of-the-art technologies, **the transfer of achieved technical and technological innovations into practice is becoming exceptionally important**. Improved cooperation between the various research and development sectors (state, higher education institutions, business and non-profit sectors) and each of them with the customer practice contributes to an increased utilisation of the results of research and development in the economic and social practice.

In the Bratislava region, the establishment and development of an efficient continuing education system will be supported, aimed at increasing and adaptation of qualifications to the requirements of a knowledge-based society and at facilitating access to efficient life-long learning. The **system of continuing education** in the Bratislava region must react to the existing long-term down-slope of the population curve in the Bratislava region. Permanent development of technologies, manufacturing

processes and technical solutions in production require that the life-long process of education is ensured with a focus on permanent growth of employee expertise, in which schools may and must play a role much more significant than they are playing now. The objective of that change is increasing the employment, increasing the placement opportunities of school leavers/graduates in a new environment where several jobs would disappear but new ones would be created.

*OP Education* also aims at establishing preconditions for the recognition of continuing education results in non-formal education and informal learning and at ensuring a good quality information system for the education beneficiary with LLL and LLG opportunities.

#### **4.2.8 Technical Assistance**

An effective implementation of *OP Education* depends on the capability of the managing institutions to perform their functions in accordance with the ESF rules of management. Successful implementation of *OP Education* carries with it further activities concerning the management and administrative procedures involved in the process. Technical assistance for the *Convergence* objective is a separate priority axis of *OP Education* which is aimed at support to the implementation of priority axes 1, 2 and 3 of *OP Education*. Under the *Regional competitiveness and employment* objective, technical assistance will be co-financed from a separate measure.

Stress is laid on the need of high professionalism in the management, implementation, monitoring, assessment and control. In that process, experience will be used which was acquired in the implementation of the Sectoral Operational Programme Human Resources and the Single Programming Document NUTS 2 Bratislava Objective 3. Yet, implementation of *OP Education* – with regard to the size of its financial allocation – requires involvement of a multiplied number of administrative and implementation capacities and ensuring a multiplied amount of operating, administrative, material and other costs so as to complete and ensure the functioning of the new implementation organisational structure. It is necessary to finalise transformation of the Education Ministry and the intermediary body under the managing authority (IB/MA) and building of the organisation structure under the managing authority (MA) (IB/MA, paying units, control and audit departments, institutions and experts involved in the implementation of technical assistance). In doing so, it should be kept in mind that during the 2007 – 2013 programming period, the Education Ministry will be managing and implementing an operational programme for the first time.

### **4.3 Intervention Scheme**

In accordance with the EU priorities defined in Article 3 of Regulation (EC) No. 1081/2006 of the European Parliament and of the Council of 5 July 2006 on the European Social Fund and repealing Regulation (EC) No. 1784/1999 (hereinafter the *ESF Regulation*) and in accordance with the result of a socio-economic analysis and the above-mentioned thematic focus of the intervention, the following priority axes have been designed to the end of meeting the global objective of *OP Education*:

- 1 Reform of the system of education and vocational training
- 2 Continuing education as an instrument of human resource development
- 3 Support to education of persons with special educational needs
- 4 Recent education for a knowledge-based society for the Bratislava region
- 5 Technical assistance for the *Convergence* objective

**Priority axis 1** focuses on regional and higher education institutions, covering thus primary, secondary and tertiary education. Its objective is to perform the reform of education in primary and secondary schools, support quality raising in higher education and raising the quality of human



resources in research and development. The measures aimed at transformation of traditional school into a modern one are an expression of the basic problem of the Slovak system of education, which is the content of education inadequately linked to the labour market requirements and the resulting low flexibility of labour force. The reconstruction of the content of education is closely linked to the quality, experience and motivation of teachers; therefore, it is inevitable to focus not only on intensifying the system reform but also on enhancing the quality of teacher training. A separate measure focuses on the quality raising in higher education and research & development to the end of achieving permanent adaptation of higher education institutions to the needs of a knowledge-based society.

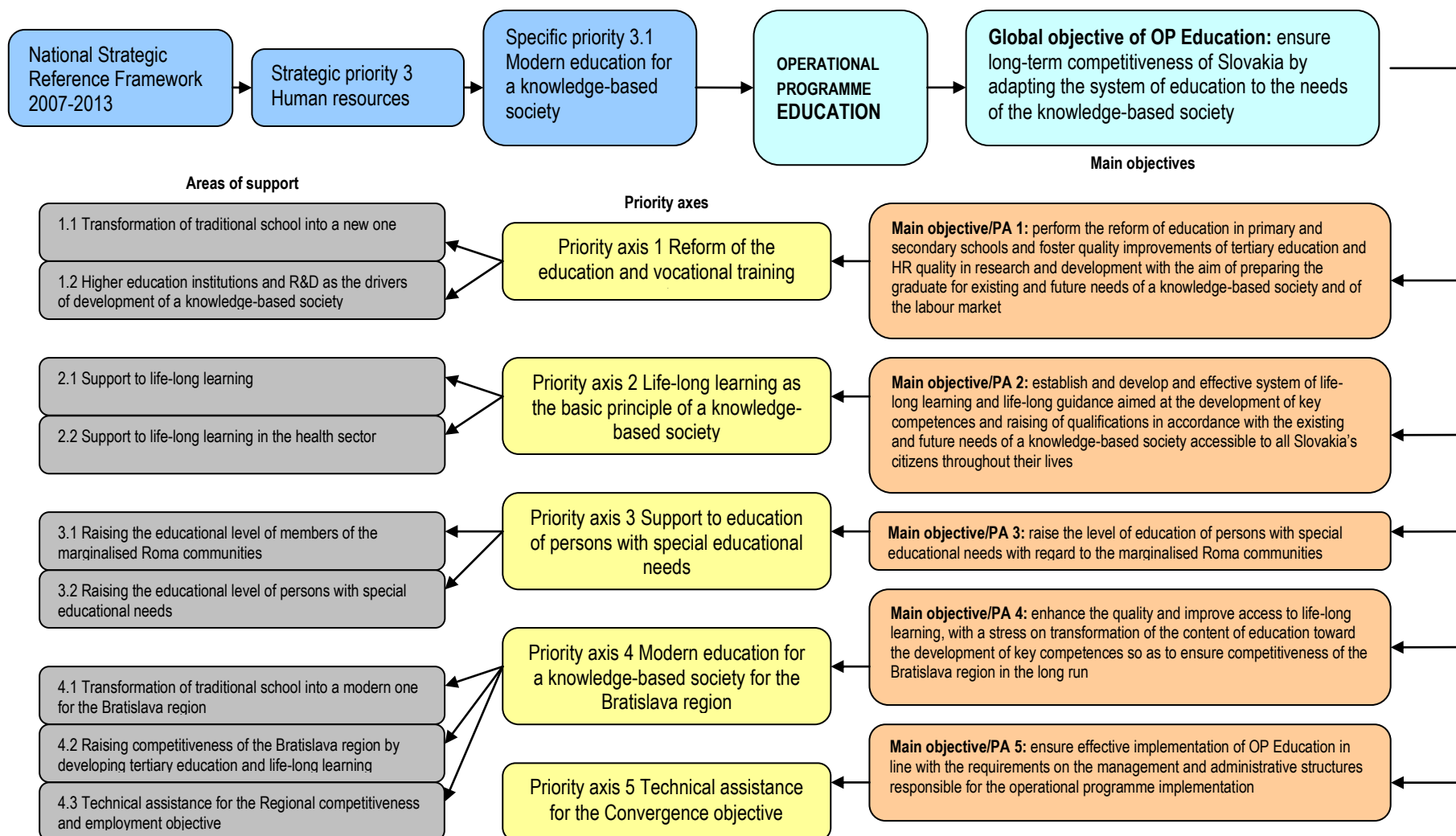
**Priority axis 2** supports the non-formal and informal system of education. The objective of the priority axis is creating and developing effective LLL and LLG systems aimed at the development of key competences and raising of qualification throughout one's life, for all Slovakia's citizens. The objectives of measures aimed at continuing education rest to the on-going negative phenomenon of inadequate number of population involved in continuing education. The objective itself is to support the education of medical personnel with regard to legislative changes and restructuring in the health sector.

**Priority axis 3** is focused on basic, secondary and continuing education of persons with special educational needs and introduces preconditions for continuing education of experts who contribute to addressing social, economic, cultural and educational problems of persons with special educational needs and members of marginalised groups. Measures of the priority axis *Support to education of persons with special educational needs* are intended to support the social inclusion of such persons. Special attention is devoted to the NSRF horizontal priority *MRC*, which has been assigned a separate measure with the aim of raising the level of education of the *MRC* members.

The links between education and the labour market needs, acquisition of basic skills and key competences, enhancing the quality of continuing education and reflecting the needs of a knowledge-based society require a comprehensive and uniform approach throughout Slovakia. To achieve those objectives, a separate **priority axis 4** for the Bratislava region has been designed, with the aim of raising quality and access to continuing education, with a stress on a transformation of the education content, toward the development of key competences, so as to ensure competitiveness of the Bratislava region in the long run. The planned education reform will be supported in the Bratislava region through the measure *Transformation of the traditional school into a modern one for the Bratislava region*. The measure focusing on higher education, research and development and continuing education rests in the support to higher education, support of human resources in research and development and in the development of continuing education.

To accomplish the strategy, it is necessary to provide adequate material and technical support and prepare the human capital for implementing the above objectives. Therefore, *OP Education* includes **priority axis 5** – Technical Assistance for the *Convergence* objective, intended to ensure efficient implementation of *OP Education*, in accordance with the requirements laid on management and administrative structures in charge of implementation of *OP Education*. That objective under the *Regional competitiveness and employment* objective will be implemented by separate measure 4.3 under priority axis 4.

**Chart 2: Diagrammatic Illustration of the ESF Intervention under *OP Education***



## 5 Priority Axes

For the attainment of the global objective of *OP Education*, a strategy was selected, which focuses on three key segments in life-long learning: regional and higher education institutions covered by priority axis 1 and continuing education developed under priority axis 2. *OP Education* intends to provide a systemic umbrella over the existing subsystems of education (formal and non-formal education and informal learning), to ensure mutual recognition of results, to open them up to one another and interconnect into flexible functioning relations supported by life-long guidance so as to fulfil realistic needs of the citizens, employers, public administration and educational institutions; Special attention is devoted to the issue of persons with special educational need under priority axis 3. With regard to the need to perform a reform of the above-mentioned areas also in the territory of the *Regional competitiveness and employment* objective, priority axis 4 has been separately defined. Priority axis 5 provides for effective implementation of *OP Education*.

### 5.1 Priority Axis 1 Reform of the Education and Vocational Training System

**The main objective of priority axis 1** is to “reform education in primary and secondary schools and support quality improvements of higher education and of human resources in research and development, so as to prepare the school leaver or graduate for recent and prospective needs of a knowledge-based society and the labour market”. For achieving that objective, a strategy has been adopted which focuses on two key segments: **regional schools and higher education institutions**. The curricular reconstruction is also closely linked with the adaptation of pedagogical staff and tertiary school teachers.

The main objective is being achieved under two measures:

- 1.1 Transformation of traditional school into a modern one
- 1.2 Higher education institutions and research & development as the driving forces in the development of a knowledge-based society

#### 5.1.1 Measure 1.1 Transformation of Traditional School into a Modern One

**The objective of measure 1.1** is “performing a curricular reconstruction of education in primary and secondary schools and – while applying innovated teaching forms and methods – prepare the school leaver for recent and prospective needs of a knowledge-based society, as well as for his follow-up education in the system of higher education and continuing education”. The activities co-financed under this priority axis will in regional schools concentrate on improvements in the quality of key competences and skills of pupils.

#### Specific Objectives

1. Innovate content and methods, raise the quality of education for the labour market needs in a knowledge-based society;
2. Focus the training and continuing education of pedagogical personnel toward acquiring and developing the competences needed to transform traditional school in a modern one;

3. Improve the quality of school administration and management and stimulate them to more openness to the needs of local communities;
4. Ensure institutional quality of schools and school facilities.

#### **Framework Activities**

- 1.1.1 Support to the reform and development of general and vocational education in primary schools and secondary schools (**specific objective 1**)
- 1.1.2 Support to upbringing and career guidance in basic and secondary schools (**specific objective 1**)
- 1.1.3 Support to teacher training and continuing education of pedagogical staff (**specific objective 2**)
- 1.1.4 Support to the open school system (**specific objective 3**)
- 1.1.5 Support to and development of instruments for the assessment of upbringing & educational activities of schools and school facilities (**specific objective 4**)

**The education content and methods for the labour market needs will be innovated** in general and vocational education in primary and secondary schools. Compliance of the labour market needs with the content of education is also ensured by a support to upbringing and career guidance in primary and secondary schools. Examples of specific activities:

- Curriculum design and implementation in primary and secondary schools developing the key competences of pupils;
- Establishing the conditions for designing and applying the national qualifications system, which would allow acquiring qualifications in accordance with the national and European levels;
- Designing drafts of school curriculum as a model of education content related to the state curriculum and the region's needs;
- Design and utilisation of new learning materials for the process of upbringing and education;
- Support to the design and introduction of non-traditional forms of instruction (e.g. projects, blocks, modules);
- Innovation of pedagogical documents, textbooks, learning texts, learning aids and manuals toward the development and verification of key competences, application of new forms and methods of education toward the labour market needs;
- Introduction of objectives and principles of sustainable development in the education content and implementation of the strategy for informatisation of the regional school system;
- Innovation of education methods with a stress on ICT utilisation in the process of instruction;
- Monitoring of educational needs, projects aimed at a survey of requirements concerning professional skills and structure of education outputs;
- Support to mobility in vocational education and training;
- Programmes of support to international cooperation of secondary schools in preparation of basic pedagogical documents (like recognised certificates);
- Support to preparation and implementation of career guidance;
- Organisation of "open career days" for pupils and parents to the aim of connecting the sector of education with the world of labour and production (enterprises);
- Design and implementation of programmes supporting the acquisition of practical skills and habits in workplaces in cooperation with enterprises and other organisations in practice;

- Cooperation projects between secondary schools and the business sector in innovation and design of new vocational learning texts to the end of preparing the school leaver for the labour market (e.g. visits in schools, excursions in manufacturing enterprises);
- Support of entrepreneurial knowledge, skills and economic thinking (e.g. training firms);
- Support of social, communication and interpersonal skills of pupils;
- Projects aimed at a survey of career guidance needs and career modelling through education.

To ensure the transformation of traditional school into a modern one, it is necessary to **raise the quality in training and continuing education of pedagogical personnel and future teachers**, e.g. by the following activities:

- Support to cooperation of primary, secondary and tertiary schools in the training of future teachers;
- Support of innovative methods in implementing all forms of pedagogical practice;
- Support to mobility teachers of general and specialised subject, including stays in EU schools;
- Innovation of the content, methods and forms of teacher training and continuing education;
- Creating and implementing of professional teacher standards;
- Programmes for the support of international cooperation in education of pedagogical staff;
- Continuing education and support of personality development of pedagogical personnel aimed at the needs of a modern school;
- Support and development of key competences of future teachers and pedagogical staff;
- Projects for raising digital literacy and digital skills under the ECDL programme.

**The quality of school administration and management will be raised and stimulated toward the needs of local communities** by supporting the open school system and **projects for the support of partnership and cooperation of educational institutions** in sharing the best experience, **including international cooperation**. Examples of specific activities:

- Support of school administration, management and marketing development;
- Support of school quality management systems;
- Support of career growth and raising the competence profile of school management and marketing;
- Support of educational activities for the needs of local community;
- Support of educational activities of school management and founders in the open school system on behalf of the local community;
- Projects for the support of partnership and cooperation of educational institutions in sharing their best experience;
- Support of cooperation between schools and local communities, schools councils, organisations of parents, youth and children, civic associations and NGOs;
- Support of cooperation between schools and non-formal education entities.

**Ensuring the institutional quality of schools and school facilities** is to be implemented by supporting and developing tools for the evaluation of educational and upbringing school activities and school facilities. Examples of specific activities:

- Evaluation of the general and vocational education and training system;
- Support of models for evaluation and self-evaluation of school and school facilities work;

- Support of educational activities aimed at creating and implementing evaluation tools of activities in education and upbringing.

### **5.1.2 Measure 1.2 *Higher education institutions and research & development as the driving forces in the development of a knowledge-based society***

**The objective of measure 1.2** is to “support improvements in the quality of education and in the development of human resources in research & development with the aim of achieving permanent adaptation of higher education institutions to the existing and prospective needs of a knowledge-based society.” *OP Education* fulfils the strategic objective of the NSRF by adapting the existing and by introducing new branches of studies, by supporting investment into human resources and cooperation between science & research and the private sector. Scientific education and the transfer of know-how and results of research & development activities will be supported between higher education institutions, research and development institutions and enterprises.

#### **Specific Objectives**

1. Adapt higher education to the needs of a knowledge-based society
2. Support the principle of quality culture in higher education institutions
3. Raise the quality of and develop human resources in research & development
4. Support cooperation between tertiary schools, research & development organisations and the private sector at the national and international levels

#### **Framework Activities:**

- 1.2.1 Development of innovative education forms, rationalising and improving the quality of study programmes of higher education institutions including the support to career guidance (**specific objective 1**)
- 1.2.2 Bringing more efficiency in the administration and management of higher education institutions (**specific objective 2**)
- 1.2.3 Support to the development of human resources in research & development (**specific objective 3**)
- 1.2.4 Support to active cooperation between higher education institutions and the private sector in creating new branches and programmes of studies and in the teaching process (**specific objective 4**)
- 1.2.5 Raising the involvement of higher education institutions and other research & development organisations in international cooperation and development and innovation networks (**specific objective 4**)

**Adaptation of higher education to the needs of a knowledge based society and the labour market** requires capacities to be extended by diversifying higher education, development of innovative education forms, rationalisation and quality raising of study programmes in higher education institutions, including support of career guidance. Examples of specific activities:

- Support of bachelor studies as full-fledged higher education studies in the economic practice and society;
- Wider utilisation of IT and new forms of education, in particular in external studies (virtual universities, distance education etc.);
- Creation and innovation of study programmes with a stress on the needs of the labour market and a knowledge-based society, including hands-on bachelor and continuing education programmes in cooperation with the private sector and organisations representing the business sector, small and medium enterprise;

- Support to raising interest in the studies of mathematics, natural sciences, informatics and other technical study branches;
- Preparation of new study materials and introduction of new methods into teaching of technical study programmes so that they become attractive and interesting for young people;
- Introduction of the prerequisites for designing and applying the national qualifications system, which would allow acquiring qualifications in accordance with the national and European levels;
- Science popularisation programmes;
- Creating new study programmes in a global language, which support international cooperation and mobility of the academic community;
- Projects aimed at surveys of career guidance needs and career modelling through education;
- Monitoring the needs of education;
- Projects aimed at a survey of requirements concerning professional skills the and structure of education outputs;
- Creating tools for monitoring the career development of graduates from higher education institutions;
- Systems of creating new key competences of graduates from various study branches, which will comply with the needs of the various market segments and systems of generic skills<sup>98</sup> support.

Higher education institutions will support **application of the principle of quality culture and bringing efficiency into their administration and management**. Examples of specific activities:

- Building effective administration and management in higher education institutions and support of qualified management by continuing education of the existing management and administrative staff in higher education institutions and innovation of the existing management processes;
- Projects for the professional growth development of higher education teachers aimed at raising the education quality;
- Designing tools for ensuring the quality of higher education by means of other methods, such as evaluation, auditing and benchmarking (of subjects, study programmes or institutions);
- Creating an internal model for quality assurance in higher education institutions;
- Building of administrative capacities for project preparation, management and implementation;
- Support of career growth and raising the competence profile of management and marketing of higher education institutions.

Fulfilling the ambition of creating a knowledge-based society in Slovakia also depends on **raising the quality and developing the human resources in research and development**. Examples of specific activities:

- Programmes for the support to raising the number of PhD students / graduates in higher education institutions;

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<sup>98</sup> Generic skills shall mean skills of general utilisation – e.g. research, communication, managerial or analytical skills, social competences, knowledge of foreign languages, time management, art of speaking, multi-cultural experience, life-long willingness to learn, drawing up of projects, team work, team leadership, etc.

- Projects for raising of digital literacy;
- Education of research and development employees;
- Support of career growth and raising the competence profile of research and development employees;
- Science popularisation programmes;
- Creating a grant scheme for young scientists, PhD students / graduates;
- Supporting mobility between research and development organisations and the business sector.

**Cooperation between higher education institutions, research and development organisations and private sector at national and international levels** will be ensured by active cooperation between higher education institutions and the private sector in creating new study branches and programmes and in teaching process and raising the involvement of higher education institutions and other research and development organisations in international cooperation and innovation and development networks. Examples of specific activities:

- Projects aimed at forecasting of trends regarding the content and type of education, taking into account recent and anticipated requirements of practice, global development trends and prediction signals of science and technologies regarding future development trends and tendencies;
- Programmes for the support of research and transfer of new technology and expertise of excellence between research institutions and the business sector;
- Information activities of research and development institutions aimed at raising the interest of the business sector in the results of research and development;
- Programmes for supporting cooperation between higher education institutions with institutions of the public and private sectors and industry;
- Building of inter-faculty, inter-university, national and international research centres;
- Establishing of common or associated workplaces in research and development with other higher education institutions, institutions and workplaces of research and development and innovation practice;
- Building of research and development and innovation networks;
- Support of mobility between research and development organisations and the business sector;
- Implementing the results of research and development into practice to the end of ensuring the growth of Slovakia's competitiveness;
- Introduction or extension of previously introduced common study programmes of Slovak higher education institutions and prestigious higher education institutions established abroad, including the award of double and triple diplomas;
- Programmes for the support of international cooperation of higher education institutions;
- Raising of international mobility of teachers and students in higher education institutions;
- Programmes for the support of mutual exchange of staff from research and development, research institutes, business entities and universities;
- Support to projects created in cooperation with prestigious higher education institutions established abroad;
- Networking and cross-border cooperation aimed at the exchange of the best experience to the end of implementing research and development results.



## **5.2 Priority axis 2 Continuing Education as an Instrument of Human Resource Development**

**The main objective of priority axis 2** is to “establish and develop an efficient life-long learning and life-long guidance system aimed at the development of key competences and improving and deepening of qualifications in accordance with the existing and prospective needs of a knowledge-based society accessible to all Slovakia’s citizens all their lives long.”

Through activities co-financed under this priority axis, quality of **continuing education** programmes and institutions will be supported, participation of economically active population in continuing education programmes, development of key competences, continuous adding-up to the qualifications of people on the labour market, as well as establishing a compatible and permeable system between the formal, non-formal and informal education sectors.

Specialisation and certification education in **health care** will also be supported, aimed at building of institutions and administrative capacities in the health sector, directly linked to the objectives of measures under OP Health, in particular to the improvement of the level of health care informatisation and information rate of the population.

The main objective is being achieved under two **measures**:

2.1 Support of continuing education

2.2 Support of continuing education in the health sector

### **5.2.1 Measure 2.1 Support of continuing education**

**The objective of Measure 2.1** is to “support the quality improvements in continuing education with a stress on the development of key competences, and deepening and raising of the employee qualifications.”

#### **Specific Objectives**

1. Enhance the quality of continuing education programmes and institutions and strengthen the system of quality control, support innovations in the content, forms and methods
2. Raise the share of economically active population participating in continuing education programmes and raise the information rate regarding opportunities of education throughout one’s life
3. Increase and renew the level of key competences and continuously add up to the qualifications of persons on the labour market in accordance with the existing and prospective needs of a knowledge-based society
4. Establish a compatibility and permeability system between/among the sectors of formal, non-formal and informal education

#### **Framework Activities**

- 2.1.1 Raising the quality of continuing education (**specific objective 1**)
- 2.1.2 Development of human resources in continuing education (**specific objective 1**)
- 2.1.3 Support to learning regions and to creation of networks in continuing education (**specific objective 1**)
- 2.1.4 Support to continuing education in the various sectors (**specific objective 1**)
- 2.1.5 Facilitating access to continuing education (**specific objective 2**)

- 2.1.6 Support to diversification of the forms for financing of continuing education (**specific objective 2**)
- 2.1.7 Development of key competences through continuing education(**specific objective 3**)
- 2.1.8 Improving the permeability between sectors and levels in the formal, non-formal and informal learning (**specific objective 4**)

**The quality of programmes and institutions of continuing education will be raised and the quality control system will be strengthened** by supporting innovations in the content, forms and methods, by developing human resources in continuing education, by supporting the learning regions and by creating networks in continuing education. Examples of specific activities:

- Support of new forms of education (e.g. distance education, e-learning);
- Introduction and support of innovations in continuing education;
- Design and support of an open modular system of continuing education;
- Creating a system for certification of education programmes and institutions of continuing education for ensuring the quality of continuing education;
- Creating a system for the certification of lecturers, tutors and organisational staff;
- Support to implementation of LLL and LLG in various sectors;
- Projects aimed at continuing education of lecturers, tutors and organisational staff;
- Creating and supporting regional networks of various institutions – “learning regions” which produce tailored services and projects of rendering life-long learning and life-long guidance;
- Networking and international cooperation with a focus on sharing the best experience to the end of targeted education and enhancing the region’s competitiveness;
- Supporting the establishment of partnerships of schools, regions, towns, the business sector and the third sector.

**The share of economically active population** participating in continuing education programmes and **the information rate on life-long learning opportunities will be raised** by facilitating the access to continuing education and by supporting the diversification of various forms of continuing education. Examples of specific activities:

- Projects supporting local education, situated as close as possible to the learners, in education centres in commonly accessible places;
- projects for the support of education for active ageing;
- Completing the network of regional youth centres;
- Programmes for improving individual access to education for low-income/low-educated groups (second chance programmes, financial contributions for attendants, education vouchers);
- Support of development of e-learning forms of education;
- Improving the accessibility of distance education;
- Creating a comprehensive information system ensuring access to quality information and advice on education opportunities for everyone, all life long;
- Development of life-long guidance system and forms;
- Building a network of guidance institutions for use of various forms of LLL.
- Creating a functional model for financing the continuing education by combining sources of employers, employees and the public funds;
- Support of cooperation of social partners in enforcing LLL;
- Designing an internet portal for continuing education;

- Introducing financial mechanisms for an individual, supporting involvement in education.

**The level of key competences and continuous replenishment of persons qualification on labour market in compliance with recent and prospective needs of a knowledge-based society will be raised and renewed** in continuing education by means of the following activities, e.g.:

- Extending the offer of continuing education aimed at an acquisition and development of key competences;
- Designing and implementing of programmes of education for employed persons in cooperation with social partners and regional governments;
- Projects for raising digital literacy and digital skills in the ECDL programme;
- Programmes of non-formal education aimed at the development of key competences (in particular social, civic and cultural).

**Compatibility and permeability of the systems of formal, non-formal and in-formal education will be achieved** by means of the following activities, e.g.:

- Measures for ensuring permeability between the systems and levels of formal, non-formal and informal education (procedures and rules in the recognition of the results of education);
- Designing an effective system of education evaluation, in particular in non-formal and informal education;
- Projects aimed at cooperation of institutions of formal and non-formal education in LLL;
- Creating a national qualifications framework, including assurance of recognition of the results achieved in non-formal and informal education;
- The establishment of conditions for designing and applying the national qualifications system is supported, which would allow acquiring qualification in accordance with the national and European levels.

### **5.2.2 Measure 2.2 Support of continuing education in the health sector**

**The objective of measure 2.2** is to “support the education of medical personnel with regard to legislative changes and restructuring in the health sector”. Continuing education of medical personnel is intended to lead to a development of specific medical knowledge and practical skills to perform highly demanding and complex professional, specialised and certified working activities in the health sector as well as to satisfy the emerging requirements of the various Slovakia’s regions and health facilities to replenish the missing human resources.

#### **Specific Objectives**

1. Build specialised human resources in the health sector in relation to the health sector restructuring
2. Introduce innovations and quality improvements in the continuing education system of the health sector

#### **Framework Activities**

- 2.2.1 Re-staff the health system with qualified specialists (**specific objective 1**)
- 2.2.2 Raise additional skills of the medical staff with regard to rendering of the health care (**specific objective 1**)

- 2.2.3 Training activities related to the introduction of new technologies, devices and equipment (**specific objective 1**)
- 2.2.4 Development and updating of educational programmes (**specific objective 2**)
- 2.2.5 Development of new forms of continuing education in the health sector (**specific objective 2**)

Activities under measure 2.2 *Support of continuing education in the health sector* are based on the requirements of the health sector for ensuring the implementation of changes in the education of medical personnel related to Slovakia's accession to the EU and to transform the health sector. All specific activities are to support:

- Improvements in the quality of the health care provided and in the patient's protection in the health care facilities undergoing transformation;
- Safety of the patient in the process of providing health care during the ongoing restructuring of health care facilities;
- Maintaining and improving the quality of the health care provided;
- Transformation in the education of medical personnel compliant with the EU requirements.

Examples of specific activities:

- Support of education right in medical practice, renewal and development of specific competences necessary for the autonomous performance of professional, specialised and certified working activities, development of communication skills, team work (material and technical equipment of medical practice workplaces, design of individual exchange programmes for short-term and medium-term visits of medical personnel who have already acquired their professional qualifications or specialisation qualifications and the need to deepen, renew or extend their qualifications, exchange trainers, lecturers and specialists directly for specific medical specialised activities from abroad;
- Specialisation studies to re-staff qualified medical personnel, specialist development and stabilisation activities, creating personnel reserves and designing strategic plans of human resource development in the health care of self-governing regions;
- Support of education aimed at the training of health managers at various levels (manager for education of medical personnel, manager of health care quality, etc.);
- Support of educational activities oriented toward patient's safety and quality in the process of rendering health care, for instance: Creating and updating standard diagnostic and standard therapeutic procedures in medical practice, design of communication standards, etc.;
- Design and updating of "curricula" in continuing education of medical personnel – i.e. model specialisation, model certification study programmes or, model programmes for continuing education of medical personnel (including the introduction of the credit system in such curricula);
- Support to creating capacities in methodology and inspection system in the specialised component of education in nurses colleges;
- Creating and implementing a model of an equivalency centre of educational programmes for medical personnel within Europe and the so-called third countries and a centre for the data control and storage on qualification continuing education of medical personnel;
- Creating and implementing a model for an evaluation centre for continuing education of medical personnel and information exchange on medical personnel (systematic education, vocational medical practice, integrity, ethics, ...);
- Training activities related to the introduction of new technologies, devices and equipment.

### 5.3 **Priority Axis 3 Support to Education of Persons with Special Education Needs**

The priority axis focuses on persons with special educational needs, addresses the problem of inadequate involvement of such groups in the system of education and threat of their social exclusion. **The main objective of priority axis 3** is “raising the level of education in persons with special educational needs, with regard to marginalised Roma communities.”

So as to **directly address the needs of MRC members**, it was necessary to assign this group of Roma population under separate measure 3.1. Within the financial allocation available and the so-called **"comprehensive approach"** (see below), *OP Education* intends to help as soon as possible changing the models not sustainable in the long run, which persist in those communities and prevent their full integration into the system of education and the society. Without addressing directly the specific educational needs of members of the marginalised Roma communities **through specific measure 3.1** it is impossible to sufficiently fast concentrate the assistance so as to achieve visible progress in the level of education of the marginalised MRC and their placement on the labour market.

To meet the main objective and attain the above-listed strategy intentions in education of the MRC members and other persons with special educational needs, the **following measures** have been defined, in which the following specific instruments will be implemented:

3.1 *Raising the educational level of members of the marginalised Roma communities*

3.2 *Raising the educational level of persons with special educational needs*

#### 5.3.1 **Measure 3.1 Raising the educational level of members of the marginalised Roma communities**

**The objective of measure 3.1** is “raising the educational level of members of the MRC by facilitating their access to formal education and through their continuing education.”

##### **Specific Objectives:**

1. Support social inclusion of members of the MRC by facilitating their access to formal education and to the acquisition of skills necessary on the labour market
2. Continue education of members of the MRC as well as of persons working in the field of their integration into the society

##### **Framework Activities:**

- 3.1.1 Support to the access of members of the MRC to education at all levels of schools (**specific objective 1**)
- 3.1.2 Support to individual approach and development of alternative teaching forms and instruments (**specific objective 1**)
- 3.1.3 Continuing education of the MRC members (**specific objective 2**)
- 3.1.5 Continuing education of persons and support to cooperation of institutions working in the integration of the MRC members into the society (**specific objective 2**)

**Social inclusion of the MRC will be supported by facilitating their access to formal education at all school levels, development of alternative forms and tools of instruction and gaining skills needed on the labour market** by means of the following activities, e.g.:

- Programmes to facilitate the access and successful MRC education at all school levels (primary schools, including zero and preparatory forms, transitive classes, primary schools of arts, secondary schools, universities, higher education institutions);
- Preparatory and remedial courses for MRC students intended to allow them continue their studies at further school levels in the system of formal education;
- Projects aimed at gaining practical skills and on-the-job vocational education and training for the MRC;
- Projects of integration of the MRC members into standard educational process;
- Preparation and creation of pedagogical documentation and textbooks, learning materials, teaching aids and guides so as to allow the MRC members to integrate into the system of education;
- Projects aimed at raising the quality and synergies of the systems of upbringing and career guidance;
- Projects aimed at raising the quality of a system for preventing socio-pathological phenomena in schools and school facilities;
- Design of programmes to develop cooperation between schools, pedagogical and psychological guidance centres, special pedagogical guidance centres, children integration centres, re-education homes, curative and upbringing sanatoria, specialised facilities reporting to the Health Ministry (e.g. children's psychiatric department in hospitals, curative and upbringing facilities) and other professionals;
- Raising the quality of diagnostics of the MRC members and pupils from SDE (prevention against improper inclusion of pre-school age children in special primary schools);
- Support of alternative education forms;
- Projects aimed at teaching the Roma language and literature and the Roma way of life in primary and secondary schools;
- Programmes supporting international cooperation in sharing experience ("best practice") in the process of Roma upbringing and education;
- Education support programmes for pupils with learning and behavioural disorders.

**Continuing education of the MRC members, and of persons working on their integration into the society and support to the cooperation between institutions working in the integration of the MRC members into the society** will be implemented by means of following activities, e.g.:

- Support of communication skills (e.g. non-verbal communication, preparation for selection procedures, presentation skills) and personality development of individuals (e.g. self-confidence, motivation, interpersonal skills);
- Design and implementation of continuing education programmes for the MRC members;
- Projects aimed at comprehensive education and working with whole Roma families;
- Extended supply of available information on educational programmes and individual guidance (e.g. a free telephone line for information and advice in the Roma language);
- Design of awareness-raising materials for the MRC members in the Roma language, in order to motivate them for continuing education, involvement in the working process and active citizenship;

- Implementing programmes for the MRC, which allow completing primary and secondary education and obtaining the respective recognised documents on completion the specific type of studies (second chance programmes);
- Projects for creating working incubators aimed at professions, which are sought for on the labour market;
- Design and implementation of continuing education programmes for community centre workers and state administration employees in education, who work with the MRC members;
- Educational programmes for pedagogical personnel aimed at providing education to the MRC members (e.g. the methodology of Slovak language teaching of pupils not speaking Slovak, forms of work in an intercultural team);
- Projects aimed at innovation of higher education teacher and pedagogical staff training toward acquisition of professional and intercultural competences;
- Education and training of young leaders for the work in Roma communities;
- Networking and support of mutual exchange and cooperation of schools, school facilities and local institutions participating in the upbringing and educational process of the MRC pupils and children from SDE;
- Projects aimed at working with employers directed toward improved integration of the MRC members into employment;
- Projects aimed at improving the work of local partnerships of social inclusion created under the Social Development Fund, education of its members and networking of partner activities.

### **5.3.2 Measure 3.2 *Raising the educational level of persons with special educational needs***

**The objective of measure 3.2** is “raising the educational level of persons with special educational needs by facilitating their access to formal education and through their continuing education and life-long guidance.”

#### **Specific Objectives:**

1. Support social inclusion of persons with special educational needs by facilitating their access to formal education and to acquisition of skills necessary on the labour market
2. Continue education of persons with special educational needs as well as of persons working in the field of their integration into the society

#### **Framework Activities:**

- 3.2.1 Support to the access of persons with special educational needs to education at all school levels (**specific objective 1**)
- 3.2.2 Support to individual approach and development of alternative teaching forms and instruments (**specific objective 1**)
- 3.2.4 Continuing education of persons with special educational needs (**specific objective 2**)
- 3.2.5 Continuing education of persons and support to cooperation of institutions working in the field of integration of persons with special educational needs into the society (**specific objective 2**)

**Social inclusion of persons with special educational needs by facilitating their access to formal education, developing alternative teaching forms and tools and supporting educational programmes for disabled persons and persons with learning difficulties** will be supported by means of the following activities, e.g.:

- Programmes for facilitating the access and successful education of persons with special educational needs at all school levels (primary schools, including zero and preparatory forms, primary schools of arts, secondary schools, universities, higher education institutions);
- Projects aimed at gaining practical skills and on-the-job vocational education and training;
- Projects of integration of the MRC members into the standard process of education;
- Preparation and creation of pedagogical documentation, textbooks, learning materials, teaching aids and manuals so as to allow integration of persons with special educational needs into system of education;
- Projects aimed at raising the quality and synergies of the systems of upbringing and career guidance;
- Projects aimed at raising the quality of a system preventing socio-pathological in schools and school facilities;
- Design of programmes for the development of cooperation between schools, pedagogical and psychological guidance centres, special pedagogical guidance centres, children integration centres, re-education facilities, curative and upbringing sanatoria, specialised facilities reporting to the Health Ministry (e.g. children's psychiatric departments in hospitals, curative and upbringing facilities) and other professionals;
- Projects aimed at support and development of protected workshops;
- Design and implementation of acceleration programmes in upbringing and education for raising school success of pupils and students from SDE at all school levels;
- Support of alternative forms of education;
- Projects aimed at supporting the development of young and talented pupils;
- Programmes of support to international cooperation in experience exchange ("best practice");
- Design and implementation of projects introducing prerequisites for studies of disabled pupils and students;
- Design and implementation of projects for integrating disabled pedagogical and non-pedagogical employees in education;
- Projects aimed at supporting the development of disabled children (creating awareness-raising materials, methodology material for working with children and family);
- Projects aimed at improving the quality of special pedagogy guidance system and integration of disabled children in all school types and levels;
- Education support programmes for pupils with learning and behavioural disorders;
- Projects for supporting disabled persons;
- Supporting programmes aimed at ensuring vocational practice for disabled citizens and citizens with learning disorders in regional enterprises and firms and guidance for employees in the companies providing this vocational practice.

**Continuing education of persons with special educational needs, as well as persons working in the field of their integration into the society and supporting cooperation between institutions working in the integration of persons with special educational needs in the society** will be implemented by means of following activities, e.g.:

- Support of communication skills (e.g. non-verbal communication, preparation for selection procedures, presentation skills) and personality development of individuals (e.g. self-confidence, motivation, interpersonal skills);



- Creating and implementing programmes of continuing education for persons with special educational needs;
- Extending the supply of available information on educational programmes and individual guidance;
- Implementing programmes for persons with special educational needs, which allow finishing primary and secondary education and obtaining the respective recognised documents proving the completion of a specific type of studies (second chance programmes);
- Projects for creating working incubators aimed at professions, which are sought for on the labour market;
- Creating and implementing programmes of continuing education for state administration and local/regional administration employees, who work with persons with special educational needs;
- Educational programmes for pedagogical personnel aimed at providing education for persons with special upbringing and educational needs (e.g. forms of work in integrated classrooms);
- Education and training of tutors pupils from SDE for the second stage of primary schools and vocational schools;
- Projects aimed at innovation in training of tertiary school teachers and pedagogical personnel who work with talented children;
- Projects aimed at working with employers directed toward improved integration of persons with special educational needs into employment;
- Professional help, guidance and support of continuing education training programmes of pedagogical staff, assistants teachers and managerial, pedagogical and non-pedagogical employees of schools and school facilities;
- Support of activities (workshops, lectures, etc.) for primary and secondary school pedagogical staff to develop guidance and education of pupils with SEUN;
- Training of professional workers for individual approach and development of alternative forms of education for persons with SEUN.

#### **5.4 Priority Axis 4 Modern Education for a Knowledge-Based Society for the Bratislava Region**

**The main objective of the priority axis 4** is “enhancing the quality and access to continuing education, with a stress on transformation of the content of education, toward the development of key competences, so as to ensure competitiveness of the Bratislava region in the long run”.

Fulfilling the main objective is being achieved under three **measures**:

- 4.1 Transformation of traditional school into a modern one for the Bratislava region
- 4.2 Improving competitiveness of the Bratislava region through the development of tertiary and continuing education
- 4.3 Technical assistance for the *Regional competitiveness and employment* objective.

##### **5.4.1 Measure 4.1 Transformation of Traditional School into a Modern One for the Bratislava Region**

**The objective of measure 4.1** is “performing a curricular reconstruction of education in primary and secondary schools and – while applying innovated teaching forms and methods – prepare the school leaver for the recent and prospective needs of a knowledge-based society, as well as for his follow-up education in the system of higher education and continuing education”.

### **Specific Objectives**

1. Innovate the content and methods, raise the quality of education for the labour market needs in a knowledge-based society;
2. Guide the training and continuing education of pedagogical personnel toward acquiring and developing the competences needed to transform the traditional school in a modern one;
3. Ensure institutional quality of schools and school facilities.

### **Framework Activities**

- 4.1.1 Support to the reform and development of general and vocational education in primary schools and secondary schools (**specific objective 1**)
- 4.1.2 Support to teacher training and continuing education of pedagogical staff (**specific objective 2**)
- 4.1.3 Support and development of tools for the evaluation of upbringing & educational activities of schools and school facilities (**specific objective 3**)

**The content and methods will be innovated and quality of the outputs of education for the labour market needs in a knowledge-based society will be raised** by supporting the reform and development of general and vocational education in primary and secondary schools. Examples of specific activities:

- Design and implementation of a primary and secondary school curriculum developing the key competences of pupils;
- Transformation of the content of education and methods of teaching foreign languages, mathematics, natural sciences, informatics and other technical branches of studies;
- Innovation of pedagogical documentation, textbooks, learning texts, learning aids and manuals toward the development and verification of key competences, application of new forms and methods of education toward the labour market needs;
- Projects of cooperation between education institutions and the business sector (e.g. in innovation and design of new specialised learning texts in order to prepare the school leaver for the labour market, visits to schools, excursions to manufacturing enterprises);
- Design and implementation of programmes to support the acquisition of practical skills and habits in workplaces in cooperation with enterprises and other organisations in practice;
- Design of draft school curricula as a model of the content of education related to the state curriculum and the region's needs;
- Design and utilisation of new learning materials for the process of upbringing and education;
- Support to drafting and introduction of non-traditional forms of instruction (e.g. projects, blocks, modules);
- The introduction of prerequisites for designing and applying the national qualifications system, which would allow acquiring qualifications in line with the national and European levels;
- Monitoring of educational needs, projects aimed at a survey of requirements concerning professional skills and structure of education outputs;

- Projects supporting the development of branches of studies and training, which are urgently required by the labour market, but the student interest in those branches is minimal;
- Support of institutional development of higher vocational education;
- Programmes supporting international cooperation aimed at unifying (common preparation) of the curriculum, pedagogical documents for the training of school leavers.

**Training and continuing education of pedagogical personnel** shall be oriented toward acquiring and developing the competences needed to transform the traditional school into a modern one; Examples of specific activities:

- Support to the cooperation of primary, secondary and tertiary schools in training teachers and pedagogical personnel;
- Innovation of the content, methods and forms of teacher training (including pedagogical practice);
- Support of key competences of future teachers and pedagogical staff;
- Programmes for the support of international cooperation in education of pedagogical staff;
- Support to the mobility of future teachers of general and vocational subjects and programmes ensuring professional cooperation of pedagogical personnel and experience sharing (including vocational stays in EU school);
- Design of continuing education projects of pedagogical staff according the innovated branches/programmes and modern education trends in the world;
- Projects for raising digital literacy and digital skills in the ECDL programme;
- Training of pedagogical personnel for multicultural education and upbringing and perception of diversity;
- Support of activities (workshops, lectures, etc.) for primary and secondary school pedagogical staff for the development of guidance and education of pupils with SEUN;
- Support of programmes oriented at modern forms and methods of the process of upbringing and education.

**The institutional quality of schools and school facilities will be ensured** by supporting and developing the evaluation tools of educational and upbringing activities of schools and school facilities. Examples of specific activities:

- Projects for the support of partnership and cooperation of educational institutions in sharing their best experience;
- Evaluation of the general and vocational education and training system;
- Support of models for evaluation and self-evaluation of school and school facilities work;
- Support to the development of school administration, management and marketing, and support to school quality management systems;
- Support of educational activities aimed at creating and implementing the tools to evaluate activities in education and upbringing.

#### **5.4.2 Measure 4.2 Raising competitiveness of the Bratislava region through the development of higher and continuing education**

**The objective of measure 4.2** is raising the quality and adapting the content of higher education, supporting research and development and developing an effective system of LLL and LLG in accordance with the existing and prospective needs of a knowledge-based society. The objective

of strengthening the research, development and innovation activities is supporting a well-balanced development and higher competitiveness of the Bratislava region.

### **Specific Objectives**

1. Adapt tertiary education to the needs of a knowledge-based society
2. Raise the quality of and develop human resources in research & development
3. Support the cooperation between higher education institutions, research & development organisations and the private sector at the national and international levels
4. Raise the quality of continuing education programmes and institutions, create a system of compatibility and permeability between formal, non-formal and informal education sectors and raise the share of economically active inhabitants participating on continuing education programmes

### **Framework Activities**

Development of innovative forms of education, rationalisation and raising the quality of tertiary school study programmes including the support of active cooperation between higher education institutions and the private sector when creating new study branches and programmes and in the teaching process, and raising the efficiency of administration and management in higher education institutions (**specific objectives 1, 3**)

Support to the development of human resources in research & development (**specific objective 2**)

Raising the involvement of higher education institutions and other research & development organisations in international cooperation and development and innovation networks (**specific objective 3**)

Raising the quality of continuing education including support to diversification of continuing education funding forms, development of key competences by continuing education and improving the permeability between formal, non-formal and informal education sectors (**specific objective 4**)

**Innovative forms of education will be developed, tertiary school study programmes will be rationalised and improved in quality and active cooperation between higher education institutions and the private sector when creating new study branches and programmes and in the teaching process will be supported and the efficiency of higher school institutions administration and management will be raised** by means of the following activities, e.g.:

- Design and innovation of study programmes with a stress on the labour market needs including hands-on bachelor programmes of studies and continuing education programmes in cooperation with the private sector and organisations representing the business sector;
- Design of tools for monitoring the placement graduates from higher education institutions in practice;
- Design of new study programmes in a global language, which support international cooperation and mobility of the academic community;
- Programmes popularising sciences in the society;
- Support to projects designed in cooperation with higher education institutions of excellence established abroad;
- Introduction of conditions for applying the national qualifications system, which would allow acquiring qualifications in line with the national and European levels;
- Monitoring of educational needs, projects aimed at a survey of requirements concerning professional skills and structure of education outputs;

- Building of efficient administration and management in higher education institutions and support of qualified management by continuing education of the existing management in higher education institutions and innovation of the existing management processes;
- Development projects for professional growth of teachers in higher education institutions aimed at raising the quality of education;
- Design of tools for ensuring the quality of higher education by means of other methods, such as evaluation, auditing and benchmarking (of subjects, study programmes or institutions);

The fulfilment of the ambitions to create a knowledge-based society in Slovakia also depends on strengthening research and development in higher education institutions and particularly on the support to training and involvement of graduates from PhD studies in research and development.

**Quality will be raised and human resources in research and development will be developed** in higher educational institutions and research & development institutions by means of the following activities, e.g.:

- Education of students and employees of higher education institutions active in research and development (PhD students and graduates, teachers in higher education institutions);
- Programmes supporting the increase in the number of PhD students/graduates in higher education institutions;
- Support to mobility between higher education institutions, research and development organisations and the business sector;
- Support to career growth and raising the competence profile of employees, PhD students and graduates in higher education institutions;
- Education of research and development employees (scientific workers);
- Projects for raising digital literacy and digital skills in the ECDL programme.

**Cooperation between higher school institutions, research & development organisations and the private sector on national and international level is to be supported** by involving higher education institutions and other research & development institutions into international cooperation and development & innovation networks. Examples of specific activities:

- Systems of designing new key competences of graduates from various study branches, which will comply with the needs of the various market segments, and systems of support to generic skills;
- Support to projects designed in cooperation with higher education institutions of excellence established abroad;
- Programmes for the support of research and transfer of new technologies and professionalism of excellence between research institutions and the business sector;
- Programmes for the support of cooperation between higher education institutions and institutions of the public and private sectors and industry s as to develop and apply research & development results in sophisticated technologies with a high value added;
- Support to mobility between research and development organisations and the business sector;
- Implementation of the research and development results into practice to the end of ensuring the growth of Slovakia's competitiveness;
- Networking and cross-border cooperation aimed at sharing the best experience to the end of implementing research and development results;
- Building research and development and innovation networks.

**The quality of continuing education programmes and institutions will be raised, the system of compatibility and permeability between formal, non-formal and informal education**

**sectors will be designed, diversification of the forms for financing the continuing education will be supported and the share of economically active population participating programmes will be raised** by means of the following activities, e.g.:

- Support of new forms and innovations in continuing education system (e.g. distance education, e-learning);
- Designing a system for certification of educational programmes and continuing education institutions for lecturers, tutors and organisational employees to ensure the quality of continuing education;
- Support to implementation of LLL and LLG in various sectors;
- Projects aimed at continuing educations of lecturers, tutors and organisational staff;
- Networking and cross-border cooperation with a focus on sharing the best experience to the end of targeted education and raising the region's competitiveness;
- Support to establishing of partnerships between schools, regions, towns, the business sector and the third sector;
- Support and extension of continuing education programmes for medical personnel;
- Improving the accessibility of distance education;
- Creating a comprehensive information system ensuring access to good quality information and advice on educational opportunities for everyone, all life long;
- Creating a functional model of financing in continuing education by combining sources of employers, employees and public funds;
- Extending the supply of continuing education aimed at acquisition and development of key competences;
- Creating a national qualification framework, including ensuring results recognition in non-formal and informal education;
- Establishing the conditions for designing and applying the national qualifications system, which would allow acquiring qualifications in accordance with the national and European levels.

#### **5.4.3 Measure 4.3 *Technical Assistance for the Regional competitiveness and employment objective***

Technical assistance for the *Regional competitiveness and employment* objective is a special measure under priority axis 4 with the aim of supporting the implementation of priority axis 4 of *OP Education*. An effective implementation of the priority axis depends on the capability of the managing institutions to perform their functions in line with the ESF rules of management. Successful implementation carries with it further activities concerning the management and administrative procedures involved in the process. Stress is laid on the need of high professionalism in the management, implementation, monitoring, assessment and control. In that process, experience which will be used was acquired in the implementation of the Sectoral Operational Programme *Human Resources* and the Single Programming Document NUTS 2 Bratislava Objective 3. The activities are the same as in the following priority axis 5.

## 5.5 Priority Axis 5 Technical Assistance for the Convergence Objective

**Ensuring an effective implementation of OP Education** in compliance with the requirements laid on the management and administrative structures responsible for the implementation of OP Education will be aimed at implementation, monitoring, control, evaluation, studies, information and publicity. Examples of specific activities:

- Support to administrative personnel in the process of providing assistance from the ESF – administrative, material and operating costs of the employees in charge;
- Support to implementation, monitoring and evaluation;
- Ensuring quality and continuity of monitoring throughout the programming period;
- Building and raising the quality of financial management including audit and control;
- Organisation of meetings and support to activity of the monitoring committee (hereinafter the MC) and subcommittees;
- Preparing of specific studies, expert opinions, statistics and analyses, analytical support of implementation;
- Evaluation of the impact of programming period 2007 – 2013;
- Ensuring adequate public information on the opportunities of assistance from the ESF and ensuring promotion of the assistance provided;
- Measures aimed at dissemination of information, network building, awareness raising, support to cooperation and experience sharing throughout the Community;
- Sharing of experience from the implementation of assistance;
- Trainings and specialised seminars and experience sharing with regard to assistance from the ESF.

## 5.6 Horizontal Priorities

Based on the expected action of contributions on the territory development and various branches of economic activities, the NSRF strategy defines horizontal priorities (hereinafter the HP) which have a complementary effect the NSRF in four areas: MRC, equality of opportunities, sustainable development and information society. Each of these horizontal priorities is different by its nature and requires individual approach in the implementation process.

The sense of each of the HP is to ensure achieving its defined objective, which relates to various NSRF priorities and cannot be ensured through one OP only, but requires coordinated approach coming across several specific priorities or projects.

Depending on their nature, the horizontal priorities will be applied in the relevant operational programmes as described below.

**Table 34: Horizontal Priorities of the NSRF, their objectives and manner of application**

Horizontal priority	HP objective	HP application
<b>A. Marginalised Roma communities</b>	Raising the employment and level of education of the MRC members and improving their living conditions	Comprehensive approach (integration of projects from several OPs)
<b>B. Equality of opportunities</b>	Ensuring the equality of opportunities for everyone and preventing any forms of discrimination	Principle applied on every project
<b>C. Sustainable development</b>	Ensuring environmental, economic and social sustainability of economical growth	Principle at the level of the NSRF strategic objective
<b>D. Information society</b>	Development of an inclusive information society	Integrated approach (interoperability of information systems in public administration and introduction of e-learning under operation programmes)

### 5.6.1 Marginalised Roma Communities

Regarding the marginalised population groups, the specific MRC issue is addressed specifically. Its intention is to strengthen the cooperation, more efficient coordination of activities and financial sources, directed toward improving the living conditions of the MRC members. The support to the MRC is aimed at four priority areas: education, employment, health, housing and three related areas of problems: poverty, discrimination and gender equality.

Based on the conclusions of the CSF working committee for development of the Roma communities, which is in charge of SF intervention monitoring for addressing the MRC problems and making proposals to raise their effectiveness, it is necessary to raise the effectiveness of interventions from the Structural Funds in solving the MRC issues by a comprehensive approach, which would connect several activities or projects into a general development strategy of a specific location, so that their implementation would follow up one another and contribute to the MRC development in the given area in the long run. Comprehensive approach stresses mutual relationships of activities and active involvement of the local community in project implementation. Applying comprehensive approach in solving the MRC issues is a necessity, as it will ensure a systemic solution of the MRC problems and allow strategic planning and managing the community development and a positive change in the long run.

With regard to scope and difficulty of applying comprehensive approach, selected regions/micro-regions interested in comprehensive approach will be provided assistance in preparing local development strategies of the Roma communities and in preparing project activities under the strategy, so as to ensure complementarity of content and time and the overall synergic effect. Comprehensive approach will be applied mainly in areas with a high MRC concentration.

The MRC HP is projected into various strategic or specific priorities and their objectives through implementation of a large variety of measures aimed at the MRC integration, in particular by improving the infrastructure of Roma settlements, employment, education, health care and social services.

The objective of a comprehensive approach are the settlements listed in the 2004 Socio-graphic Mapping which have declared their interest in solving the issues in a comprehensive



approach and also have demonstrated their eligibility within the meaning of conditions to be specified in the different calls for the submission of the EU grant applications.

Based on the needs of the selected regions/micro-regions and assuming the implementation of comprehensive projects, an indicative allocation has been determined for the implementation of comprehensive projects at the NSRF level of EUR 200 million, which will be funded from indicative allocations at the level of the OP relevant for the implementation of comprehensive projects. During the programming period, this indicative allocation may be modified with regard to interim evaluations of the purpose-bound nature and effectiveness of the adopted comprehensive approach; its reviewing and interim evaluation results will be subject to the National Monitoring Committee meetings.

Comprehensive approach in the implementation of projects approach does not exclude implementation of individual demand projects, which will complement the comprehensive approach.

### **5.6.2 Equality of Opportunities**

Support to fundamental rights, non-discrimination and equality of opportunities is one of the basic principles applied in the EU. Equality of opportunities forms a part of the pillars of the European Employment Strategy and the European framework strategy of non-discrimination and equal opportunities for all, providing a basis of the horizontal priority *Equality of opportunities* to support elimination of discrimination on the grounds of gender, race, ethnical origin, religion, faith, disability, age or sexual orientation.

Particular stress is laid on the principle of gender equality (equal opportunities for women and men), whose fulfilment is one of the basic objectives of the European Community and belongs to the main objectives of the Structural Funds. Under Article 2 of the Treaty of Amsterdam, the Community is in charge of achieving equal standing for both women and men in the society and Article 3 lays down the obligation to eliminate inequality and enforce gender equality in all activities. It is a procedure, in which all conceptual, strategic, decision making and evaluation processes are subordinate to the point of gender equality in all preparation and implementation phases. In the SF context this means that programming, monitoring and evaluation will take in account the benefit to promoting gender equality for all and to supporting a well-balanced representation of women and men.

The HP *Equality of opportunities* will be applied and monitored in all OPs. The HP *Equality of Opportunities* will intervene only in projects with a positive impact on the equality of opportunities. In case of other projects (without an impact on equality of opportunities), this principle will not be applied.

The HP will be also applied by accessibility of physical environment, transport and public services for population with limited mobility and orientation.

A combination of various disadvantaging factors occurs very often, which causes limited access and remaining on the labour market, access to vocational education and other life opportunities. For the above-stated reason, in addition to respecting the principle of equal opportunities in all interventions from the funds, the NSRF specific priorities *Support to the growth of employment and social inclusion* and *Modern education for a knowledge-based society* are also actively aimed at the area of equality of opportunities. Specific priority *Support to the growth of employment and social inclusion* is devoted to equality of opportunities on the labour market and is also aimed at creating equality of opportunities in accessing the labour market and integration of the disadvantaged groups on the labour market, including support to mechanisms to eliminate gender inequality on the labour market. In the specific priority *Modern education for a knowledge-based society*, the equality of opportunities is horizontally supported by specific

activities which create conditions for equal access to formal and non-formal education for everyone, all their lives long. Special attention is devoted to problems of disadvantaged population groups.

### **5.6.3 Sustainable Development**

Sustainable development means that the needs of the recent generation should be satisfied without threatening the ability of the future generations to satisfy their needs. Sustainable development is one of the basic objectives of the EU respected by all EU politics and activities. Sustainable development is aimed at permanent raising of quality of life and wealth of the recent and future generations on the Earth. To this end, it supports dynamic economy with full employment, high standard of upbringing, education, health protection, social and spatial integrity and a high level of environmental protection. Change in the behaviour and attitudes of citizen and politicians on behalf of respect to the principles and goals of sustainable development is a key and a long-term task for the whole society.

Sustainable development, as one of the key NSRF principles, is included in the NSRF strategic objective, which defines respect to sustainable development as one of the key conditions for raising the competitiveness and performance of regions and of the Slovak economy during 2007 – 2013. Fulfilling the long-term NSRF vision, i.e. the process of convergence of Slovakia's economy to the EU 15 average has to be performed under conditions of sustainable development.

The objective of the HP *Sustainable development* is to ensure that the resulting effect of all interventions funded under the NSRF would support sustainable development in all its components, i.e. in environmental, economic and social, in accordance with the objectives and indicators of the Strategy of EU Sustainable Development. As interventions in the above-stated three components are implemented by means of several operational programmes, monitoring and evaluation of attaining the objective of this horizontal priority will be carried out at the NSRF level, through evaluating the NSRF strategic objective which includes the principle of sustainable development.

### **5.6.4 Information Society**

Nowadays, when building a knowledge-based society, a progressive change is seen in the traditional perception with regard to the knowledge triangle (education, research and innovations) which is changing into a quadrangle (the fourth side is added – informatisation). Introduction of ICT and bringing efficiency to processes through their use significantly contributes to a much higher effectiveness and efficiency in the implementation of elements of a knowledge-based society.

The HP objective is to support higher efficiency, transparency and quality in the implementation of the NSRF priorities as a result of ICT implementation and utilisation.

Building of an information society will be supported in NSFR in two ways: in OP *Society informatisation* and through informatisation projects in other OPs. In this context, implementation of HP *Information society* requires integrated approach to project implementation in informatisation under operation programmes outside OP *Society informatisation* based on close collaboration between the MA and IB/MA responsible for these projects and the MA and IB/MA OP *Society informatisation*.

The strategy of OP *Society informatisation* is aimed at creating a technological, applications and process environment for implementing efficient electronic services provided by

the public administration and raising their accessibility through a broadband connection. OP Society informatisation focuses on eGovernment projects including eHealth, eCulture and broadband connection which will create environment of good quality to develop infrastructure and e-services in thematically specific areas falling under the competence of other MA and IB/MA.

At the horizontal level, the development of an information society will be supported through informatisation projects implemented under OPs other than OP *Society informatisation*. In that respect, the HP *Information society* focuses on optimising of specific processes of services provided by central state administration authorities and integrating the technology and applications infrastructure owned by the Ministry of Economy of the Slovak Republic (hereinafter the Economic Ministry), the Environment Ministry, the Labour Ministry, the Education Ministry, the Transport Ministry. Implementation of the HP will support activities in purchasing and operating technology and applications infrastructure, local and specialised networks and the development of electronic services in specific areas. Interventions under the HP will support introduction of eGovernment services, such as i.e. eContent, eLearning, eTransport, eInclusion, eBusiness, eTourism, eSkills, etc. which make part of sectoral strategies of their own operational programmes. Such projects will be funded from their own sources allocated to thematically relevant operation programmes.

## **HP Coordination**

This chapter briefly describes the way of ensuring the coordination in implementing the NSRF horizontal priorities. It follows up the previous chapter, whose subject is a description of the objectives and nature of horizontal priorities. A detailed description of each of the horizontal priorities implementation system is provided in the coordination system for implementation of a horizontal priority, prepared separately for each of the horizontal priorities and approved by the Central Coordination Authority and MA for operational programmes, which will make an annex to the Management System of the Structural Funds and the Cohesion Fund for 2007 – 2013.

**Monitoring each of the HP** is ensured by means of a package of indicators which makes part of the National Indicator System for OP priority axes. The implementation of HP will be specially monitored in annual reports of the operation programmes depending on their nature (in cooperation with HP sponsors) and by the NSRF annual report, which will include monitoring reports prepared by the coordinator of the respective HP defining a regional projection of the activities implemented.

During the programming period, **interim evaluations** will be performed, **focused on the success and efficiency of the selected way for implementing each HP** and on the evaluation of outputs and results of the projects implemented under a HP and fulfilling the HP. When the programming period is closed, the impacts of projects implemented under a HP will be evaluated. All evaluations implemented will be subject to meetings of the National Monitoring Committee and relevant workgroups involved in implementation of a given HP and will be published through channels of the Central Communication Authority which will make them available to the general public.

### **A. Marginalised Roma Communities (MRC)**

By means of the MRC HP, the NSRF intends to create room for an efficient impact of the SF assistance to the solution of the MRC issues. The Deputy Prime Minister for human rights and national minorities is responsible for the MRC HP at the political level. The coordinator of the MRC HP is the Slovak Government's Plenipotentiary for the Roma Communities (SGPRC) who

will establish an HP MRC Coordination Unit<sup>99</sup> for performing activities related to administrative and methodical support for the MRC HP.

An ambition is to use the SF to extend, amend and better combine the programmes already existing at the national level. According to the *National Strategy for integration of economically and socially excluded Roma communities* and inclusion instruments verified by practice, the 2007 – 2013 period can be used for achieving a synergic and sustainable effect. The starting point is the government policy based on the levelling measures, sectoral concepts in education (pre-school education, assistant teachers, support to the Roma language, integrated education), regional development and housing (building rental apartments and infrastructure), health support (medical assistants), community and employment development (community social workers, community centres, social enterprises), and more. Another positive fact is an already built institutional network, either through state institutions (regional SGPRC offices, HTU departments, regional offices of the Slovak National Centre for Human rights, etc.) or the non-governmental and civic sector. This network represents qualified human potential. For the sake of a comprehensive solution and better coordination, particularly at the regional level, the Slovak Government's Plenipotentiary for the Roma Communities prepared in 2006 *Regional concepts for the Roma community development in areas with high density of marginalised groups* (regions Košice, Prešov, Banská Bystrica). Broad partnerships participated in these concepts and were consulted and accepted also at the HRU level.

The tool proposed for ensuring the impact and coordination are the following:

- Comprehensive approach to addressing the MRC issues which is applied to the following OPs: Regional OP, OP Employment and social inclusion, *OP Education*, OP Environment, OP Competitiveness and economical growth and OP Health);
- Individual projects (demand oriented), which may apply to all OPs.

The tasks of the SGPRC and the cooperation with the MA, the scope and specific conditions for implementing the described tools for ensuring the MRC HP within specific operational programmes will be subject to a binding agreement on cooperation between the SGPRC and each MA or IB/MA.

**Comprehensive approach** will be addressed as follows:

- Submission of comprehensive local approach strategies (hereinafter the *CxP*) by municipalities or micro regions (following up the content of regional concepts of socio-economic inclusion of the MRC, whose drafting was inspired by the SGPRC in 2006 in case of the Prešov, Košice and Banská Bystrica regions and requires involvement of a broad partnership in the relevant area);
- Evaluation and approval of local comprehensive approach strategies;
- Preparing projects within the approved local comprehensive approach strategies;
- Approval and implementation of projects under OP;
- Interim monitoring and evaluation of the attainment of local strategies objectives through the relevant projects;
- Evaluation of the contribution of comprehensive projects to fulfilling the horizontal priority.

**Competences of the Office of the Slovak Government's Plenipotentiary for the Roma communities relating to comprehensive approach implementation** result from the authorisation of the Slovak Deputy Prime Minister for a knowledge-based society, European affairs, human rights and minorities, who is regularly informed about the MRC HP coordination by the SGPRC:

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<sup>99</sup> Compliant with the document "Analysis of Administrative Capacities for the 2007 – 2013 Programming Period" adopted by the Slovak Government's Resolution No. 396 of 2 May 2007.

- The SGPRC concludes agreements with the various MAs and IB/MAs on cooperation and coordination in fulfilling the MRC HP, executed by the Head of the Slovak Government's Office as a statutory representative of the Slovak Government's Office;
- Cooperates with the managing authorities in preparing calls for the submission of projects under the CxP;
- Publishes calls for the submission of local CxP strategies;
- Establishes a CxP selection commission and coordinates its activities to the end of approving the local CxP strategies;
- Cooperates with municipalities/micro regions which, based on a successful local CxP, receive/use guidance;
- Cooperates with MA and IB/MA in the selection, evaluation and monitoring of projects submitted under CxP which are clearly identified by an indication right in the grant application form;
- Coordinates the activities of the CxP monitoring group, which is to monitor the comprehensive project implementation on site and to solve any identified implementation issues by direct communication and cooperation with MA of the relevant OPs.
- Cooperates with the MRC workgroup in monitoring and evaluating the SF impact on the MRC during the 2007 – 2013 period.
- Provides for special monitoring and evaluation aimed at the overall fulfilment of the approved local CxP strategies.

#### **MA and IB/MA competences in CxP implementation:**

##### **MA and IB/MA involved in ensuring the CxP:**

- Are members of an inter-agency commission for evaluation and selection of the CxP projects;
- Will earmark an indicative fund allocation intended for implementation of the comprehensive projects under the OP;
- Publish calls for the submission of projects under the CxP, while applying the system of continuous calls, i.e. projects can be submitted anytime during the OP implementation, which will ensure an environment for smooth implementation of all components of a comprehensive project in line with the implementation time schedule of the approved CxP strategy;
- Evaluate and select various projects submitted under the CxP;
- Ensure monitoring and control of successful projects submitted under the CxP;
- Cooperate with the SGPRC in content-oriented and technical support of calls for the submission of CxP projects;
- Regularly provide the SGPRC with the necessary information and the data needed for monitoring and evaluation of the SF impact on the MRC.

The **individual projects** having an impact on the MRC HP will be implemented as follows:

- The applicant clearly identifies in the grant application form that his project is aimed at the MRC;
- The actual impact of the projects on the MRC HP, which the applicant marked as described above, will be considered by the SGPRC in the evaluation of projects aimed at the MRC;
- Projects which the SGPRC considers to be projects with significant impact on the MRC will be awarded extra points (excluding the OPs in which the MRC HP is implemented through a separate measure or group of activities);
- The SGPRC monitors projects aimed at the MRC on a sample defined by the MA or IB/MA.

**Information and publicity**, as an important part of creating atmosphere for cooperation and successful improvement of social standing of the MRC, will be provided for by the SGPRC through the following activities:

- In cooperation with MA and IB/MA, regular information to the Central Coordination Authority and Slovak Deputy Prime Minister for a knowledge-based society, European affairs, human rights and minorities about fulfilling the MRC HP;
- Ensure implementation of the MRC HP communication plan to the end of raising the information rate of the MRC and the general public on support opportunities and the results of MRC HP implementation.

**In order to involve the beneficiaries and other actors** and ensure a broad platform for communication on the implementation of the MRC HP in the NSRF and monitoring and evaluation of the impact of the projects implemented on the MRC, the CSF Working Committee for the Roma community development will continue its operation (under the name Working Committee for the development of the Roma communities whose activities have proven a good example of implementing the SF in programming period 2004 – 2006) in close collaboration with the MRC HP coordinator in the SGPRC.

## **B. Equality of Opportunities**

The Minister of Labour, Social Affairs and Family is the coordinator for implementing the NSRF HP *Equality of opportunities*.

The HP *Equality of opportunities* will be monitored in all OPs within the NSRF.

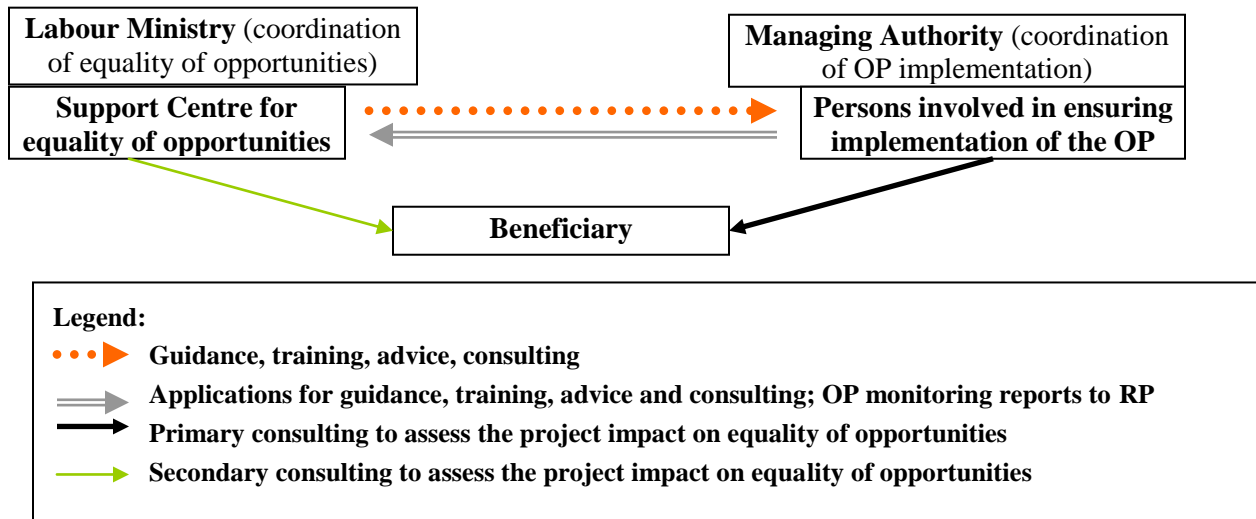
An assessment of the project impact on fulfilling the HP *Equality of opportunities* will be mandatory for all SF and CF applicants and its fulfilling will be monitored in the project application form, in which the applicant indicates whether the project has an impact on equality of opportunities. In case the project does have an impact on equality of opportunities, such impact is considered positive or negative, and its relationship to equality of opportunities will be included in the evaluation criteria. If the project does not have any effect on equality of opportunities, its relationship to equality of opportunities will not be included in the evaluation criteria.

The Labour Ministry will prepare criteria for evaluating the projects in equality of opportunities, and will provide guidance to all MAs in this area and education of their staff. The project indicators of each of such a project will also include indicators for monitoring the impacts on equality of opportunities.

The Labour Ministry will establish a support centre to help to the beneficiaries of assistance in assessing the project impact on equality of opportunities. Focal points (contact persons) will be established in each MA to cooperate with the Labour Ministry support centre, provide guidance to the beneficiaries in determining the project relationship to the HP *Equality of opportunities* and in the project evaluation in the process of project selection and implementation/monitoring.

These activities will be coordinated by the Labour Ministry. The Labour Ministry in cooperation with the Central Coordination Authority will ensure adequate information to the end of raising the positive effect of the supported activities toward equality of opportunities using OP *Technical assistance* and OP *Employment and social inclusion*.

**Figure 1:** Coordination in the implementation of HP *Equality of opportunities*



### C. Sustainable Development (SD)

The Deputy Prime Minister for human rights and national minorities plays the role of coordinator for the SD HP at the political level. The Deputy Prime Minister plays this role concerning sustainable development through the Government Council for Sustainable Development as its chairman. The Slovak Government's Office is the HP coordinator at the working level.

The Slovak Government's Office ensures effective management and implementation of the HP with regard to all Ops and their priority axes, and monitors and evaluates the attainment of the HP objectives also at the NSRF level.

To that end, a workgroup for the SD HP has been established in the Slovak Government's Office, in which all relevant MAs, the Central Coordination Authority and socio-economic partners are represented (representatives of regional and local governments, academic community, research institutions, business and trade unions, interest associations and civic society).

The Government Council for Slovakia's SD is an advisory and coordination authority of the Slovak Government for applying the SD principles. The Council also takes positions to documents submitted by the SD HP Workgroup. Professionals from higher education institutions, science institutions, representatives of regional and local governments, and trade and employer unions, state administration authorities make cooperating and counselling bodies of the Council in considering the solutions of certain SD issues.

The key tools for managing interventions to accomplish the SD HP are the integration tools which result from the conceptual, legal and institutional SD framework:

- Strategic and programming documents, concepts in the SD area;
- SD principles, priorities, objectives and indicators,

**Energy and energy effectiveness** is one of the areas which significantly contribute to the SD which, in addition to OP *Competitiveness and economic growth*, will be horizontally supported also under activities of the Regional Operational Programme and OP *Environment* (in the use of renewable sources), OP *Health*, OP *Research & development*, OP *Bratislava region* and Rural Development Programme financed by the EAFRD. Energy support will be horizontally

coordinated by the Economic Ministry, which is under the Competence Act<sup>100</sup> responsible for energy policy, and ensures and accomplishes tasks resulting for Slovakia from the EU regulations, directives and strategic documents and also shall be obliged to inform the EC on fulfilling those commitments.

Within the meaning of the above-stated, close collaboration will be needed between the Economic Ministry and the MAs of the listed OPs. In cooperation with MAs of the listed Ops, the Economic Ministry will ensure participation of the competent representatives in the evaluation committee for project selection in measures where renewable sources are used or energy efficiency is ensured. In addition to the evaluation of projects, the role of the mentioned officer will be approving the indicators in the proposed project, so that monitoring of the project contribution to ensuring energy efficiency will be possible.

Through IB/MA for OP *Competitiveness and economic growth* (the Slovak Energy Agency), the Economic Ministry will ensure data collection for the energy sector from all MAs, so that its total value for all relevant MAs would be monitored and evaluated centrally by the Economic Ministry.

#### **D. Information Society**

The Deputy Prime Minister for, human rights and national minorities is responsible for coordination of implementation of the HP *Information society* at the political level. The Slovak Government's Office is the HP coordinator at the working level. The Finance Ministry is the central state administration authority in charge of informatisation within the meaning of Act No. 275/2006 on public administration information systems and on the modifications and amendment of certain acts; it is responsible for horizontal management and implementation of all society informatisation projects at conceptual and factual levels.

The Slovak Government's Office ensures an effective management and implementation of the HP with regard to all Ops and their priority axes, and monitors and evaluates the attainment of the HP objectives at the NSRF level. To that end, a workgroup for the HP *Information society* has been established in the Slovak Government's Office, in which all relevant MAs, the Central Coordination Authority and socio-economic partners are represented (representatives from regional and local governments, academic community, research institutions, business and trade unions, interest associations and civic society). Office of the Slovak Government's Plenipotentiary for Informatisation of the Society is being established, which makes part of the workgroup for information society and plays role of an advisor in this group, as indicated in its charter.

The key tools for managing the interventions so as to accomplish HP *Information society* are the integration tools resulting from conceptual, legal and regulatory framework of the society informatisation and for which the Finance Ministry, as the central state administration authority, is responsible within the meaning of the Competence Act and the Act on ISVS:

- Strategic documents, action plans in the area of society informatisation;
- National concept of informatisation in public administration and the resulting development concepts for information systems in the obliged subjects of public administration, which are public administration institutions;
- National projects implemented under OP *Society informatisation*;
- Data standards, technological standards and security standards;
- Methodology instructions, guidance, manuals for applicants or, calls for project submission.

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<sup>100</sup> Act No. 575/2001 on the structure of operation of the government and on the structure of central state administration.



HP *Information society* in the phase of implementation will be based on using integration tools and performed as below:

- In the OP implementation phase, HP *Information society* will be attained by defining a single text (to be consulted with the Finance Ministry) for all MA/IB/MAs, in the beneficiary manual. It will guide the grant applicant to clearly define whether his project is to support the development of an information society and in which way.
- In the implementation stage, HP *Information society* will be further attained through setting of the project evaluation criteria in compliance with HP *Information society* objectives. Each MA/IB/MA will submit a proposal of project evaluation criteria for each HP to the Slovak Government's Office.
- In cooperation with the Finance Ministry, the Slovak Government will consider the proposed project evaluation criteria within the meaning of the above-stated integration tools.

## 5.7 Complementarities and Synergy

### 5.7.1 Complementarities/Synergy of OP *Education* with Other Operational Programmes

#### *Priority Axis 1 Reform of the Education and Vocational Training System*

##### **Regional Operational Programme**

##### Complementarities with priority axis 1 *Development of civic infrastructure facilities*

- Priority axis 1 of the Regional operational programme will exclusively support investments in the technical condition of the building structures used in the process of education, including the procurement of interior equipment and furniture of schools and school facilities. OP *Education* will support activities aimed at the content of the process of education and support to Slovak education reform. Improvements of infrastructure and equipment in schools will be funded via the Regional Operation Programme.

##### **OP *Employment and Social Inclusion***

##### Complementarities with priority axis 1 *Support of employment growth*

- Adaptability of workers and prevention of school leavers/graduates from unemployment is supported also by developing the key competences of pupils and students and by adapting the curriculum to the labour market needs.
- The complementary effect will be seen in the fact that the support to creating jobs through the development of enterprise is also supported by the development of key competences of pupils and students, which also include developing the *sense of initiative, enterprise and management*; school leavers/graduates equipped with such skills are more capable of implementing entrepreneurial activities in reality.

##### **OP *Research and Development***

##### Complementarities with priority axis 1 *Research and development*

- Priority axis *Research and development* and priority axis 1 *Reform of the education and vocational training system* make synergy, in which 2 basic components of research and

development infrastructure (technical and human infrastructure) will be supported. Strengthening the research and development by means of quality equipment (devices, laboratories, ...) in higher education institutions and in research and development institutions co-funded by the ERDF under OP *Research and development* will contribute to professional growth of human resources in research and development I line with the understanding of education of tertiary school students and employees concentrated in research, scientists – employees in research and development workplaces, support to mobility, etc., which will be implemented through the ESF;

- Through the ESF funding, OP *Education* will focus at creating better conditions for PhD students and young scientists by supporting programmes of education and by creating a system that will make it easier for young scientific workers to remain in research and development. Another intention of OP *Education* is to ensure a permanent qualification vocational growth and mobility of research and development staff.
- OP *Research and development* includes in particular support to technical infrastructure of research and development (equipment).
- Support to human resources will be ensured in OP *Research and development* by activities supporting professional return of Slovak scientists working abroad back to Slovakia or by retaining them in Slovakia and by financing the costs for performing research projects in which the researchers may find their professional satisfaction.
- For quality research and development, it is necessary to systematically and continuously renew and modernise technical infrastructure and laboratory equipment. OP *Research and development* expects funding of research centres of excellence, which perform innovative research in a selected area of science or horizontally in several areas of science directed toward new methods and procedures in research linked to doctoral study programmes, which participate in international scientific & technical collaboration with a value added for the European research area. Results from their research and development are projected into education of researchers and thus, the organisations themselves have highly qualified employees.
- Decreasing the extensive fragmentation of workplaces by means of communication and interactions among the individual partners (research & development base, higher education institutions, the economic sector, authorities in charge of legislative framework and regional development) supported by OP *Research and development* particularly in the form of national centres of excellence and branch clusters will allow a better involvement of human resources in research and development funded by OP *Education* into regional networks of research and innovation and into international cooperation.
- Cooperation between research & development institutions and the public and private sectors and industry will create better room for transferring new technologies and development of professionalism of excellence in research & development institutions and within the business sector.

#### Complementarities with priority axis 3 *Infrastructure in higher education institutions*

- There is a clear relationship between raising the quality of education and the conditions in which the process of education takes place. A genuine global quality improvement in the education process is directly linked to investments in the technical condition of objects used in the sector of education. The link has an effect on raising competitiveness of various educational institutions and, as a result, on regions exploiting the synergy effect in higher education.

#### **OP *Competitiveness and economic growth***

Complementarities with priority axis 1 *Support to the competitiveness of enterprises and services in particular through innovations*

- By raising the support to innovations in the business sector, room would be made for exploiting the research & development results in practice and for raising the demand for good quality outputs from research & development which are in direct proportion with the quality of human resources;
- By supporting the building of clusters, networks and incubators for beginner entrepreneurs, exploitation of research & development potential will be ensured for regional development.

**OP Informatisation of Society**

Complementarities with priority axis 1 *Electronisation of the public administration and development of electronic services including informatisation of the health sector*

- Exploitation of the electronic form of public administration requires knowledge how to use the ICT which is developed by OP *Education* by supporting the key competences.

**Priority axis 2 *Continuing Education as an Instrument of Human Resource Development***

**OP Employment and Social Inclusion**

Complementarities with priority axis 1 *Support to employment growth*

- Prevention from unemployment and socio-economic exclusion will be implemented through both operation programmes.
- The complementary effect will be seen in the fact that support to creation of jobs through the development of enterprise is also supported by developing the key competences in continuing education, i.e.: sense of initiative, enterprise and management.

Dividing line from priority axis 1 *Support to employment growth*

- OP *Education* will support the education of employees in organisations directly reporting to the Education Ministry, in regional school offices, primary schools, secondary schools, higher education institutions and continuing education institutions, research and development employees, medical personnel, education directed towards raising the level of education and towards deepening the qualification, in compliance with the labour market needs within the scope of continuing education activities.
- OP *Employment and social inclusion* will support education of unemployed, employees threatened by redundancy and low-qualified employees, as well as education of employees in enterprises contributing to employment, small and medium enterprises, self-employed persons (hereinafter the *SEP*) and public administration.

**OP Health**

Complementarities with priority axis 1 *Modernisation of the health system* and priority axis 2 *Support to health and preventing health risks*

- There is a clear relationship between the equipment in health facilities and the level of knowledge of the medical staff – OP *Health* is aimed particularly at implementing investments plans which bring a number of new technologies; they will result in a necessity to implement and also finance a higher volume of education and training activities under OP *Education*; in the next step, investments in new technologies funded from OP *BI* will be planned and also will potentially attract new medical personnel whose education will have to be funded by OP *Education*.

- Mutual synergy of both OPs will influence effective modernisation of the health sector so as the investments into material and technical equipment would be made in balance with the investments into human capital in the health sector.

Dividing line from priority axis 1 *Modernisation of the health system* and priority axis 2 *Support to health and preventing health risks*

- **OP Education** will support education activities aimed at improving and deepening qualifications and skills of medical personnel linked to restructuring of the health sector and elimination of turnover in the health system; Education activities related to the introduction of new technologies, devices and equipment will also be funded. Education activities will be financed by the ESF; they will apply to the **development of human resources** and investment into the human capital;
- **OP Health** will support investment projects aimed at ensuring **investment and technical needs** and requirements of health care providers, which will be funded by the ERDF.

**OP Informatisation of Society**

Complementarities with priority axis 1 *Electronisation of the public administration and development of electronic services including informatisation of the health sector*

- Exploitation of the electronic form of public administration requires knowledge of the ICT use which OP Education develops as a part of support to key competences; informatisation of the health sector, building of institutions and administrative capacities in the health sector require specialised and certification education in the health sector;
- The accomplishment of the objectives of OP Education is integrated with the capability to use the ICT, which OP Education develops as a part of support to life-long learning.

**Rural Development Programme SR 2007 – 2013**

Complementarities with axis 1: *Raising the competitiveness of agriculture and forestry*

- Measures of the Rural Development Programme aimed at vocational education, information activities and use of guidance services are intended to extend the scope of education and information activities and to disseminate knowledge to all employees in agriculture, food chemistry and forest economy, which is in compliance with OP Education (priority axis 2), intended to support raising the quality of continuing education with a stress on the development of key competences and raising employee qualification.
- The common objective of the Rural Development Programme and OP Education (at different levels, however) is to strengthen Slovakia's competitiveness and employment growth by developing competences, capabilities and skills so that the labour force could react flexibly to new requirements of the labour market required by a knowledge-based society, particularly in compliance with the development of production with a high value added and introduction of new technologies (including ICT).

Dividing line from axis 1: *Raising the competitiveness of agriculture and forestry*

- In the Rural Development Programme, activities are aimed at education, knowledge extension and information activities **for solely for the sectors of agriculture, food chemistry and forestry**, while OP Education is aimed particularly at employees working in education and in research and development, within the meaning of the specified eligible target groups and beneficiaries.
- With regard to the specific nature of the target group, the Rural Development Programme is different from OP Education also by the **thematic focus of education projects**. Support from the European Agricultural Fund for Rural Development (hereinafter the "EAFRD") is intended particularly to acquire, deepen and innovate the knowledge and skills related to company development and competitiveness, the knowledge on agriculture, food chemistry

and forestry as well as for dissemination of information on various EAFRD measures and objectives of the Common Agricultural Policy.

Complementarities with axis 4: *Life quality in rural areas and diversification of rural economy*

- As one may understand from the heading, the Rural Development Programme is mainly devoted to raising the quality and support of human potential as the basic need for raising the quality of life in rural areas. Measures aimed at education, information, acquisition of skills, revival and implementation of local development strategies are complementary with the objective of priority axis 2 in OP *Education* “creating opportunities for all citizens of access to permanent education, to assessment of new information and to adaptation to the local and regional labour market”.
- Both strategic documents (although to different degrees) are intended to solve common general Slovakia’s issues in human resources which are low qualification of labour force (in the EAFRD context, the low level of education in backward rural regions is particularly important), inadequate professionalism and information, inadequate pace of innovation and lack of capacities and funds for retaining qualified professionals. Multifunctional education and information of subjects functions as a complement to economic growth, improvement of social conditions and quality of life of the population in rural areas. Moreover, in both programmes, guidance in continuing education will be supported, as stipulated in the eligible activities.

Dividing line from axis 3: *Quality of life in rural areas and diversification of rural economy*

- In the Rural Development Programme, activities are aimed at the development of education activities and qualifications of **rural population**, which makes a prerequisite for development investments in rural regions and diversification of rural economy into all areas.
- The EAFRD investments are preferably oriented at agriculture and development of non-agricultural activities (e.g. business in services, handicraft manufacture and support of tourism), with an objective of developing **viable countryside and rural employment**. Compared to the above stated, OP *Education* is more generally oriented toward improving of social conditions and quality of life through the opportunity of access to on-going education for all.
- The EAFRD support is aimed at education projects for acquiring, deepening and innovating the knowledge and skills and at dissemination of information on the **individual measures of axis 3 Rural Development Programme under the EAFRD**. These projects will be thematically aimed particularly at: economics of a business entity, introduction of new methods and working instruments and management in the rural space, quality management, innovation in rural areas, introduction of the IT, introduction of the Internet, environmental protection and rural restoration and development. The ESF funding is aimed at raising competences and skills of the population in general.

**OP Fisheries**

Complementarities with axis 2: *Aquiculture, processing and introduction of fisheries products and aquiculture to the market*

- In OP *Fisheries*, support to education activities under **axis 2 OP Fisheries** provides complementary education for beneficiaries in the concerned measures, or improved use of new knowledge and transfer of research results into practise and **strictly applies to the issues of fisheries only** or, courses that bring benefits for practise (such as new technologies of fish farming, fish nutrition, raising hygiene and quality of production, sustainable fisheries and environmentally friendly methods of aquiculture, improved marketing opportunities for the production and information to breeders about recent legislation with regard to aquiculture).

Eligible beneficiaries under OP *Fisheries* are natural persons and legal entities operating in aquiculture and natural persons and legal entities doing business in processing the products of fisheries and aquiculture.

- Continuing education under priority axis 2 OP *Education* is aimed at educating **wide population groups** within the meaning of specified eligible target groups and beneficiaries under the prerequisite that the project briefs under OP *Education* would comply with the various specific objectives of priority axis 2 OP *Education*. That means that they would contribute to participation of economically active population in continuing education programmes, to the development of key competences and to continuous extending and deepening of qualification of persons on the labour market. Eligible beneficiaries under OP *Education* are public and private sector entities (e.g. schools, authorities of state administration and self-governments, non-governmental organisations, professional organisations, chambers, guidance entities, natural persons and legal entities authorised to do business under Article 2 (2) of the Commercial Code, etc.).

### *Priority Axis 3 Support to Education of Persons with Special Educational Needs*

#### **OP *Employment and Social Inclusion***

Complementarities with priority axis 1: *Support to employment growth* and with priority axis 2: *Support to social inclusion*

- Support to employment, social inclusion and equality of opportunities through both OPs creates preconditions for the integration of persons with special educational needs, including the MRC members.

#### Dividing line from priority axis 2 *Support to social inclusion*

- Target group persons with special educational needs, including the MRC members will be supported in OP *Education*. OP *Employment and social inclusion* will support the target group of mothers with children, asylum-seekers, migrants, prisoners in accordance with the social inclusion measures.
- OP *Education* will implement second chance projects as a means of raising the qualification level of employees, persons with special educational needs, including the MRC members. OP *Employment and social inclusion* will implement second chance projects as a means of completion of primary and secondary education within the meaning of the provision of Article 46 (Education and training of job-seekers and persons interested in employment for the labour market) of Act No. 5/2004 Coll. on employment services and on the modification and amendment of certain acts, as amended.

#### **Regional Operational Programme**

Complementarities with priority axis 1 *Development of civic infrastructure facilities*

- Building new social service facilities contributes to a comprehensive support to persons with special educational needs, including the MRC members; reconstruction, extension and modernisation of the existing social service facilities is a key to a comprehensive support to persons with special educational needs including the MRC members;

**OP Bratislava Region**

Complementarities with priority axis 1 *Infrastructure*

- Improvements in the infrastructure and equipment of schools is the key to a comprehensive support to the reform of education in the Bratislava region and its overall quality.

Complementarities with priority axis 2 *Innovations and informatisation*

- By raising the support to innovations in the business sector, room would be made for exploiting the research & development results in practice and for raising the demand for good quality outputs from research & development which are directly proportional to the human resource quality.
- Exploitation of the electronic form of the public administration requires knowing how to use the ICT which is developed by OP *Education* as a part of acquisition of key competences.

**OP Employment and Social Inclusion**

Complementarities with priority axis 3 *Support to growth of employment and social inclusion in the Bratislava region*

- Adaptability of workers and prevention of school leaver/graduate unemployment is supported also by developing the key competences of pupils and students and by adapting the curriculum to the labour market needs. Moreover, the support to employment creates prerequisites for the inclusion of persons with special educational needs in the Bratislava region;
- Support to social inclusion facilitates the inclusion of persons with special education needs in the Bratislava region;
- Attainment of the objectives of a measure aimed at a support of the business environment in the Bratislava region is supported by OP *Education* by developing the key competences of pupils and students which include the development of *sense of initiative, enterprise and management*; the school leavers/graduates equipped with such skills are more capable of performing entrepreneurial activities in practice;

Dividing line from priority axis 3 *Support to the growth of employment and social inclusion in the Bratislava region*

- OP *Education* will support education of employees in organisations directly reporting to the Education Ministry, employees of regional school offices, in primary and secondary schools and higher education institutions, continuing education institutions, research and development, education directed towards raising the educational level and towards deepening the qualification in compliance with the labour market needs by continuing education and the target group of persons with special educational needs. OP *Employment and social inclusion* will support education of employees in enterprises contributing to employability of employees, small and medium enterprises, self-employed persons and public administration employees and the target group of mothers and children, asylum-seekers, migrants, prisoners in accordance with the measures of social inclusion.
- OP *Education* will implement second chance projects as a means of acquiring and raising the qualification level of employees and persons with special educational needs; OP *Employment and social inclusion* will implement second chance projects as a means for completing primary and secondary education within the meaning of the provision of Article 46 (Education and training of job-seekers and persons interested in employment for the labour market) of Act No. 5/2004 Coll. on employment services and on the modification and amendment of certain acts, as amended.

## **OP Research and Development**

### Complementarities with priority axis 1 *Research and development*

- Priority axis *Research and development* and priority axis 4 create a synergy, in which 2 basic components of the research and development infrastructure (technical and human infrastructure) will be supported. Strengthening the research and development by the means of good quality equipment (devices, laboratories, ...) in higher education institutions and in research and development institutions co-funded from the ERDF under OP *Research and development* will contribute to professional growth of human resources in the research and development which is understood as education of students and employees in higher education institutions concentrated in research, scientists – employees in research and development workplaces, support to mobility, etc. which would be implemented through the ESF.
- Through the ESF funding, the OP *Education* will focus on creating better conditions for PhD students and young scientists through a support to programmes of education, and on creating a system that will make it easier for young scientists to stay in research and development. Another intention of OP *Education* is to ensure a permanent qualification vocational growth and mobility of research and development employees.
- OP *Research and development* includes in particular support to technical infrastructure of research and development (equipment). Support to human resources will be ensured by OP *Research and development* by activities supporting professional return of Slovak scientific workers working abroad back to Slovakia or by retaining them in Slovakia and by financing the costs for performing research projects in which the researchers may find their professional satisfaction.
- For a quality research and development, it is necessary to systematically and continuously renew and modernise the technical infrastructure and laboratory equipment. OP *Research and development* expects funding of research centres of excellence, which perform innovative research in a selected area of area or horizontally, in several areas of science directed toward new methods and procedures in research, with regard to doctoral study programmes, which enjoy international scientific & technical collaboration with a value added for the European research area. Results from their research and development are projected into education of researchers and thus, the organisations themselves have highly qualified employees.
- Decreasing the extensive fragmentation of workplaces by means of communication and interactions between/among the individual partners (research & development base, higher education institutions, the economic sector, authorities in charge of legislative framework and regional development) supported through OP *Research and development*, in particular in the form of national centres of excellence and sectoral clusters will allow better involvement of human resources in research & development supported by OP *Education* to regional development and innovation networks and international cooperation;
- Cooperation of research & development institutions with the public and private sectors and industry will establish better room to transferring new technologies and professionalism of excellence in research & development institutions and within the business sector.

## **Rural Development Programme SR 2007 – 2013**

### Complementarities with axis 1: *Raising the competitiveness of agriculture and forestry*

- The measures of Rural Development Programme aimed at vocational education, information activities and use of guidance services are intended to extend the scope of educational and information activities and to disseminate knowledge to all employed in agriculture, food chemistry and forestry, which is in compliance with OP *Education* (priority axis 4), with an objective to support to the creation and development of an efficient continuing education



system and life-long guidance aimed at raising and aimed at increasing and adapting qualifications to the needs of a knowledge-based society and facilitating the access to an effective life-long learning, in addition to the support of research and development.

- The common objective of the Rural Development Programme and OP *Education* (although to different degrees) is to strengthen Slovakia's competitiveness and employment growth by developing competences, capabilities and skills so that the labour force could react flexibly to new requirements on the labour market required by a knowledge-based society, particularly in compliance with the development of production with a high value added and introduction of new technologies (including the ICT).

Dividing line from axis 1: *Raising the competitiveness of agriculture and forestry*

- In the Rural Development Programme, activities are aimed at education, extending of knowledge and information activities **exclusively for entities in agriculture, food chemistry and forestry**, while OP *Education* is aimed particularly at employees working in education and research and development in line with the specified eligible target groups and beneficiaries.
- With regard to the specific nature of the target groups, the Rural Development Programme also differs from OP *Education* by the **thematic focus of educational projects**. The EAFRD support is namely intended mainly to acquire, deepen and innovate the knowledge and skills related to company development and competitiveness, knowledge in agriculture, food chemistry and forestry, as well as dissemination of information on the various EAFRD measures and objectives of the Common Agricultural Policy.

Complementarities with axis 4: *Quality of life in rural areas and diversification of rural economy*

- As one may understand from the heading itself, the Rural Development Programme is mainly devoted to raising quality and support of human potential as a basic precondition for improving the quality of life in rural areas. Measures aimed at education and information and also at acquisition of skills, revival and implementation of local development strategies are complementary with the objective of OP *Education*, priority axis 4 "raising the quality and adapting the content of higher education, support to research and development and developing an effective system of life-long learning and life-long guidance in line with the existing and prospective needs of a knowledge-based society."
- Both strategic documents (although to different degrees) try to solve common general issues of Slovakia in human resources which are low qualification of the labour force (in the EAFRD context, the low level of education in backward rural regions is especially important), inadequate professionalism and information, inadequate pace of innovation and lack of capacities and funds for retaining qualified professionals. Multifunctional education and information of entities is complementary to the economic growth, improvement of social conditions and quality of life of the population in rural areas. Moreover, in both programmes, guidance in continuing education will be supported within the meaning of the defined eligible activities.

Dividing line from axis 3: *Quality of life in rural areas and diversification of rural economy*

- Activities of the Rural Development Programme are aimed at the development of education activities and qualification of **rural population**, which makes a prerequisite for development investments in rural regions and diversification of rural economy into all areas.
- The EAFRD investments are preferably oriented at agriculture and development of non-agricultural activities (e.g. business in services, handicraft manufacture, marketing and support of tourism) with an objective to develop **viable countryside and rural employment**. Unlike the above stated, OP *Education* is more generally oriented at improving social conditions and quality of life through the opportunity of access to on-going education for all.

- The EAFRD support is aimed at education projects intended for the acquisition, deepening and innovation of knowledge and skills and at dissemination of information about **various measures of axis 3 of the Rural Development Programme according to the EAFRD**. Those projects will be thematically aimed particularly at: economics of a business entity, introduction of new methods and working instruments and management in the rural space, quality management, innovation in rural areas, introduction of the IT, introduction of the Internet, environmental protection and rural restoration and development. The ESF funding is aimed at raising the population's competences and skills in general.

### **OP Fisheries**

#### Complementarities with axis 2: *Aquiculture, processing and marketing of fisheries' and aquiculture products*

- Under OP *Fisheries*, support to educational activities under **axis 2** of OP *Fisheries* stands for complementary education for beneficiaries under the measures concerned, or an improved use of new knowledge and transfer of research results into practice and **strictly applies to the issues of fisheries only** or, courses that make benefits for practice (such as new technologies of fish farming, fish nutrition, raising hygiene and quality of production, sustainable fisheries and environmentally friendly methods of aquiculture, improved marketing opportunities for the production and information to breeders about recent legislation with regard to aquiculture). Eligible beneficiaries under OP *Fisheries* are natural persons and legal entities in aquiculture and natural persons and legal entities running business in processing the products of fisheries and aquiculture.
- Continuing education in OP *Education*, priority axis 4, is aimed at education of **wide population groups** within the meaning of specified eligible target groups and beneficiaries under the condition, that the project briefs under OP *Education* will comply with the various specific objectives of OP *Education*, priority axis 4, which means that they will contribute to participation of economically active population on continuing education programmes, to the development of key competences and to continuous replenishment of people's qualifications on the labour market. Eligible beneficiaries under OP *Education* are public and private sector entities (e.g. school, authorities of state administration and self-governments, non-governmental organisations, professional organisations, chambers, guidance entities, natural persons and legal entities authorised to do business under Article 2 (2) of the Commercial Code, etc.).

### **5.7.2 Dividing lines between OP *Employment and social inclusion* and OP *Health***

With regard to similarities in the content of the three operational programmes under the strategic priority of the NSRF *Human resources* (OP *Education*, OP *Employment and social inclusion* and OP *Health*), it was necessary to define the lines separating those programmes from one another.

**Table 35: OP Education and OP Employment and social inclusion**

<b>Operational Programme</b> (Managing Authority)	<b>OP Education</b> (Education Ministry)	<b>OP Employment and Social Inclusion</b> (Labour Ministry)
<b>Thematic areas</b>	Continuing education	In-company training
	Second chance projects as a means of raising the qualification level of employees	Completion of primary and secondary education (second chance) within the meaning of Article 46 of the Act No. 5/2004 Coll. on employment services and on the modification and amendment of certain acts, as amended
<b>Target groups</b>	Pedagogical and non-pedagogical personnel in primary and secondary schools; teachers in higher education institutions, PhD students and graduates; post-graduate students; employees of organizations which are eligible beneficiaries, to the end of raising their level of education; employees in research & development (including the corporate sector and the SAS); persons involved in continuing education activities (including medical personnel)	Unemployed, employees threatened by redundancy and low-qualified employees, employers – enterprises, SME, self-employed, public administration
	Pupils with special educational needs within the meaning of Article 3 (2) of Act No. 29/1984 Coll. on the system of primary and secondary schools, pupils from SDE and MRC members	Marginalised groups, mothers with children, asylum seekers, migrants, prisoners, in accordance with social inclusion measures
<b>Beneficiaries</b>	Organisations reporting directly to the Education Ministry, Health Ministry, regional school offices, primary, secondary and tertiary schools and institutions of continuing education; institutions of the Slovak Academy of Sciences, research and development organization in the business sector; institutions providing post-graduate studies; entities participating in continuing education activities; health care providers; higher territorial units; municipalities and organisations directly reporting to municipalities;	Employers – enterprises, SME, self-employed persons, public administration

	chambers	
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**Table 36: OP Education and OP Health**

<b>Operational Programme</b> (Managing Authority)	<b>OP Education</b> (Education Ministry)	<b>OP Health</b> (Health Ministry)
<b>Thematic areas</b>	Support to continuing education in the health sector	
	Qualification raising projects for medical personnel and support to career growth to the end of their stabilisation. Projects aimed at training activities related to the introduction of new technologies, devices and equipment.	Improvements of technical infrastructure in health care providers to the end of educating the medical personnel Reconstruction and modernisation of buildings and equipment of in-patient and out-patient care providers
<b>Target groups</b>	Medical personnel, employees in health facilities	Health care employees
<b>Beneficiaries</b>	Workers in health care, professional organisations, associations, chambers, educational institutions, state administration at the regional and local levels, budgetary and contributory organisations of the state, health care providers	Higher territorial units, education institutions with educational programmes accredited by the Health Ministry in continuing education of medical personnel, Slovak Medical University, professional organisations in the health sector

### **5.7.3 Linking and Coordination of Activities Funded by the ESF and the ERDF**

With regard to complementary links between specific priorities financed by the ERFD and the ESF, their activities and coordination will be provided for by their managing authorities. Management System of the SF and the CF for 2007 – 2013 (Resolution of Slovak Government No. 833 of 8 October 2006) and the various CCA guidelines define standard procedures and activities binding for all processes of the SF and CF management (e.g. a uniform form for calls, uniform time limits for selection of operations, standardised grant application form and form of contract with beneficiaries, etc.), which creates a platform for an efficient and effective coordination for the implementation of OP processes.

**In order to ensure a synergic effect of activities funded by the ESF and the ERDF, the concerned managing authorities will cooperate more closely in OP implementation.** The harmonisation of project submission will be ensured by mutual matching up of calls with the relevant areas of support when preparing the time schedule of calls for the next year (in compliance with the CCA guideline No. 6/2007). Calls of the various MA will bring information

to the applicants on mutual links between activities. That information will also be published by the CCA information portal together with the time schedule of calls and calls for all OP. Mutual participation of professionals in the process of evaluation and selection of projects/operations and in monitoring of such related projects and mutual participation in monitoring committees will also be ensured. The process of coordination of those activities will be described in detail in the CCA guidelines.

**An important part of the mutual links between activities funded by the ESF and the ERDF** is an opportunity for cross-funding of activities falling under the same areas of intervention by another fund. This opportunity compensates for the OP drawing from a single fund only and improves the links between activities funded by the ESF or the ERDF. Flexibility provided by the regulation **may not question the specific nature and objectives of the ERDF and the ESF**, i.e. flexibility is outlined by the context and content of a specific operation, scope of competence of each of the funds and objectives of the relevant OP and priority axis. The MA is responsible for selection of operations to be classified as falling under cross-funding. In this selection, the MA must get assurance that the operation as a whole is eligible for funding according to areas of intervention of the relevant fund, i.e. the fund by which is the OP financed, and that successful implementation is possible without parts/phases whose content falls under competences of another fund. As the regulation restricts cross-funding to a 10 % limit at the level of a priority axis, the MA is responsible for compliance with the 10 % limit at the level of the concerned priority axis, i.e. for setting the system of control at the level of various projects falling under cross funding in the scope of a relevant priority axis.

In addition to special monitoring in annual OP reports, the CCA will pay adequate attention to complementarities monitoring and evaluation of activities funded by the ESF and the ERDF.

#### **5.7.4 Complementarities with the 7th Framework Programme**

Overlapping of the 7th Framework Programme of the SF Intervention in human resources is the most significant in the following areas:

1. Human resource development in research and development by supporting education and improving systems of education so that they better comply with needs of economy and society;
2. Networking of research institutions, universities, enterprises, other relevant stakeholders and support to the development of clusters;
3. Intensifying and better coordination of European cooperation in research and development, linking national and regional systems to international networks and trends in Europe and worldwide.

While the 7th Framework Programme supports research and development activities of excellence of the best research and development organisations, the ESF supports economic and social cohesion and helps to eliminate disparities between stronger and weaker regions by supporting less developed regions. That means that the ESF focuses particularly on regional needs and target groups in need of the SF intervention in order to catch up with more successful and more developed regions, to the end of raising the competitiveness of regions in the EU. Funds from the 7th Framework Programme will be mostly used by those who have the biggest scientific and research potential and capacities, to the end of competing with the best worldwide. Those programmes are implemented separately and directly through the European Commission (7th Framework Programme) and at the level of national and regional structures (*OP Education*). While the ESF focuses at a support to human resources and the development of educational

systems in less developed regions, the 7th Framework Programme is aimed at researchers with high qualifications who are the top professionals in their area of specialisation, and helps to integrate them into multi-national and global networks.

By its content, *OP Education* is complementary with the 7th Framework Programme in two of its specific programmes.

The specific programme **PEOPLE** is based on Maria Curie events which include initial and continuing education aimed at workers in science and research in all stages of their professional career, which is from basic vocational research training, to continuing education and professional development, and corresponds with the focus of *OP Education* in continuing education of human resources in research and development.

The specific programme **CAPACITIES** is aimed at building of European research infrastructures, support to research helpful to small and medium enterprises, support to regional research groups, creating partnership programmes between research and development institutions in the regions and international cooperation in research and development, and corresponds with the objectives of *OP Education* in the area of support to research and transfer of new technologies and professionalism of excellence between research institutions and the business sector, establishing of associated workplaces in research and development, building of research and development and innovation networks and cross-border cooperation aimed at sharing the best experience in order to implement the research and development results.

## 6 Financial Plan

### 6.1 Annual Commitments by Funds

**Table 37: Financial plan of OP Education – annual commitments by funds for the Convergence objective** (Stated in EUR and in current prices)

	ESF (1)	KF (2)	Total (3) = (1)+(2)
2007	85 335 177,00	0,00	85 335 177,00
2008	83 038 136,00	0,00	83 038 136,00
2009	79 911 044,00	0,00	79 911 044,00
2010	73 721 745,00	0,00	73 721 745,00
2011	79 382 513,00	0,00	79 382 513,00
2012	28 085 685,00	0,00	28 085 685,00
2013	111 025 700,00	0,00	111 025 700,00
<b>Total 2007 - 2013</b>	<b>540 500 000,00</b>	<b>0,00</b>	<b>540 500 000,00</b>

**Table 38: Financial plan of OP Education – annual commitments by funds for the Regional competitiveness and employment objective** (Stated in EUR and in current prices)

	ESF (1)	KF(2)	Total (3) = (1)+(2)
2007	2 394 525,00	0,00	2 394 525,00
2008	2 442 416,00	0,00	2 442 416,00
2009	2 491 264,00	0,00	2 491 264,00
2010	2 541 089,00	0,00	2 541 089,00
2011	2 591 911,00	0,00	2 591 911,00
2012	2 643 749,00	0,00	2 643 749,00
2013	2 696 624,00	0,00	2 696 624,00
<b>Total 2007 - 2013</b>	<b>17 801 578,00</b>	<b>0,00</b>	<b>17 801 578,00</b>

**Financial plan of OP Education – total annual commitments** (Stated in EUR and in current prices)

**Table  
39:**

	ESF (1)	KF (2)	Total (3) = (1)+(2)
2007	87 729 702,00	0,00	87 729 702,00
2008	85 480 552,00	0,00	85 480 552,00
2009	82 402 308,00	0,00	82 402 308,00
2010	76 262 834,00	0,00	76 262 834,00
2011	81 974 424,00	0,00	81 974 424,00
2012	30 729 434,00	0,00	30 729 434,00
2013	113 722 324,00	0,00	113 722 324,00
<b>Total 2007 - 2013</b>	<b>558 301 578,00</b>	<b>0,00</b>	<b>558 301 578,00</b>

## 6.2 Financial Plan by Priority Axes and Sources of Financing

The funds allocated to the different priority axes and measures have been split up on the basis of an analysis of four quotients for calculating the weights:

- A. **Urgency of a need or intensity of a problem** is an expression of the degree to which a given measure is of priority and necessary; the indicator value depends on the importance of the given measure;
- B. **Size of the target group** is an expression of the share which the target group of a framework activity makes in the entire set (population);
- C. **Financial intensity of the activities proposed** is an expression of the financial intensity of a measure per unit of the target group – e.g. costs of transportation, ICT and other material and technical equipment, personnel costs, procurement of services, and the like;
- D. **Expected effect on Slovakia's employment and competitiveness** is an expression of the expected effect of implementation of a given measure on the development of Slovakia's employment and competitiveness taking into account to what extent the activity is compliant with the needs of the EU Lisbon Strategy and of the Slovakia's Competitiveness Strategy by the year 2010.

The calculation of the financing weights has been developed up to the level of measures with regard to the different framework activities or specific objectives. Firstly, weights were attributed to each measure for the different criteria which served as a basis for calculating the total weights of a measure, which is the product of weights of the different criteria A to D. The resulting weight of a measure is based on four selected criteria. In step two, by adding up all respective measures, weights were calculated for the priority axes. In the next step, by the different weights, the funds available were re-distributed to the level of priority axes and measures.

**Table 40: Financial plan of OP Education for the entire programming period, by priority axes and sources of funding for the Convergence objective**  
(Stated in EUR and in current prices)




	EU sources (a)	Slovak public sources (b)	Slovak private sources (indicative) (c)	Total (d) = (a)+(b)+(c)	Intervention rate (a)/(d)	EIB contribution (tentative)	Other sources (tentative)
<b>Priority axis 1</b> Reform of the education and vocational training system Fond: ESF	314 030 294	55 417 111	0	369 447 405	0,85	0	3 758 223
<b>Priority axis 2</b> Continuing education as an instrument of human resource development Fund: ESF	141 464 706	24 964 360	0	166 429 066	0,85	0	5 147 291
<b>Priority axis 3</b> Support to education of persons with special educational needs Fund: ESF	63 385 000	11 185 589	0	74 570 589	0,85	0	1 135 593
<b>Priority axis 5*</b> Technical assistance for the <i>Convergence</i> objective	21 620 000	3 815 295	0	25 435 295	0,85	0	0

Fund: ESF							
<b>Total</b>	<b>540 500 000</b>	<b>95 382 355</b>	<b>0</b>	<b>635 882 355</b>	<b>0,85</b>	<b>0</b>	<b>10 041 107</b>

**Table 41: Financial plan of *OP Education* for the entire programming period, by priority axes and sources of funding for the *Regional competitiveness and employment* objective**

	EU sources (a)	Slovak pubic sources (b)	Slovak private sources (indicativ e) (c)	Total (d) = (a)+(b)+(c)	Interve ntion rate (a)/(d)	EIB contri buti on (tenta tive)	Other sources (tentative)
Priority axis 4** Modern education for a knowledge- based economy for the Bratislava region Fund: ESF	17 801 578	3 141 456	0	20 943 034	0,85	0	318 929
<b>Total</b>	<b>17 801 578</b>	<b>3 141 456</b>	<b>0</b>	<b>20 943 034</b>	<b>0,85</b>	<b>0</b>	<b>318 929</b>

**Table 42: Financial plan of *OP Education* for the entire programming period, by priority axes and sources of total funding**  
(Stated in EUR and in current prices)

	EU sources (a)	Slovak public sources (b)	Slovak private sources (indicativ e) (c)	Total (d) = (a)+(b)+(c)	Interve ntion rate (a)/(d)	EIB contr ibuti on (tenta tive)	Other sources (tentative)
Priority axis 1 Reform of the education and vocational training system Fund: ESF	314 030 29 4	55 417 111	0	369 447 405	0,85	0	3 758 223
Priority axis 2 Continuing education as an instrument of human resource development Fund: ESF	141 464 706	24 964 360	0	166 429 066	0,85	0	5 147 291
Priority axis 3 Support to education of persons with special educational needs Fund: ESF	63 385 000	11 185 589	0	74 570 589	0,85	0	1 135 593
Priority axis 4** Modern education for a knowledge- based economy for the Bratislava region Fund: ESF	17 801 578	3 141 456	0	20 943 034	0,85	0	318 929
Priority axis 5* Technical assistance for the <i>Convergence</i> objective Fund: ESF	21 620 000	3 815 295	0	25 435 295	0,85	0	0
<b>Total</b>	<b>558 301 578</b>	<b>98 523 811</b>	<b>0</b>	<b>656 825 389</b>	<b>0,85</b>	<b>0</b>	<b>10 360 036</b>

Note:

In the event that national co-financing in all priority axes of *OP Education* is made of public sources only, column c will be deleted from the table.

The intervention rate can be rounded up. It will be given exactly in a decision of the European Commission regarding the operational programme.

\* The financial allocation for priority axis 4 also includes a financial allocation for technical assistance intended for the *Regional competitiveness and employment* objective **Technical assistance from the EU sources amounts to EUR 712 063,00 EUR and the Slovak public sources (the state budget) amount to EUR 125 659,00.**

**Innovative financial instruments** will not be used in *OP Education*.

### **6.3 Distribution of the Fund(s) Contributions, by Categories of Assistance from the 2007 – 2013 Structural Funds at the OP Level**

**Tab. 43: Indicative distribution of the Fund(s) contribution, by categories of the “priority topic” dimension for the *Convergence* objective (stated in EUR and in current prices**

Category code	Indicative amount (EUR) within the category
03* Technologies transfer and enhancing of cooperation networks between/among small enterprises (SME), between/among small enterprises and other enterprises and universities, higher education establishments of any kind, regional authorities, research centres and centres of science and technologies ( <i>scientific and technical parks, techno-centres, etc.</i> )	16 171 760
62* Development of life-long learning systems and strategies in firms; training and services for employees to step up their adaptability to change; promoting entrepreneurship and innovation	16 171 760
64* Development of special services in the area of employment, vocational training and support with regard to restructuring of sectors and companies and the development of systems for forecasting economic changes and future requirements with regard to jobs and skills	16 171 760
67* Measures encouraging active ageing and prolonging working life	6 468 884
70* Specific measures for raising participation of migrants in the employment and thus, for strengthening their social integration	3 233 992
71* Pathways to integration and re-entry into employment for disadvantaged people; combating discrimination in accessing and progressing in the labour market and promoting acceptance of diversity at the workplace	48 515 280
72* Proposing, introducing and implementing reforms in the systems of education and vocational training to the end of developing employability while raising the importance of primary and vocational education and training for the labour market and in continuous renewal and the training staff capabilities toward innovation and the knowledge-based economy	205 145 874

73* Measures for raising participation in life-long learning and vocational training by – inter alia – means of measures to achieve a decrease in the number of pupil dropouts, a decrease in the number of subjects in which the pupils are divided by gender, and improved access to primary, vocational and tertiary education and vocational training and their improved quality	142 312 749
74* Human potential development in research and innovation, especially through post-graduate studies and vocational training of researchers and networking of universities, research centres and enterprises	64 687 941
OP total *	518 880 000
86 Preparation, implementation, monitoring and control	18 377 000
86 Evaluation and studies, information and communication	3 243 000
OP total	<b>540 500 000</b>

\* Categories contributing to the achievement of the Lisbon objectives under the Convergence objective and the Regional competitiveness and employment objective (pursuant to Annex 4 VN)

**Table 44: Indicative distribution of the Find(s) contribution, by categories of the “priority topic” dimension for the *Regional competitiveness and employment* objective (stated in EUR and in current prices)**

Category code	Indicative amount (EUR) within the category
03* Technologies transfer and enhancing of cooperation networks between/among small enterprises (SME), between/among small enterprises and other enterprises and universities, higher education establishments of any kind, regional authorities, research centres and centres of science and technologies ( <i>scientific and technical parks, techno-centres, etc.</i> )	786 000
62* Development of life-long learning systems and strategies in firms; training and services for employees to step up their adaptability to change; promoting entrepreneurship and innovation	786 000
64* Development of special services in the area of employment, vocational training and support with regard to restructuring of sectors and companies and the development of systems for forecasting economic changes and future requirements with regard to jobs and skills	786 000
67* Measures encouraging active ageing and prolonging working life	786 000
70* Specific action to increase participation of migrants in employment and thereby strengthen their social integration	0
71* Pathways to integration and re-entry into employment for disadvantaged people; combating discrimination in accessing and progressing in the labour market and promoting acceptance of diversity at the workplace	0

72* Proposing, introducing and implementing reforms in the systems of education and vocational training to the end of developing employability while raising the importance of primary and vocational education and training for the labour market and in continuous renewal and the training staff capabilities toward innovation and the knowledge-based economy	5 931 000
73* Measures for raising participation in life-long learning and vocational training by – inter alia – means of measures to achieve a decrease in the number of pupil dropouts, a decrease in the number of subjects in which the pupils are divided by gender, and improved access to primary, vocational and tertiary education and vocational training and their improved quality	4 872 000
74* Human potential development in research and innovation, especially through post-graduate studies and vocational training of researchers and networking of universities, research centres and enterprises	3 142 515
OP total *	<b>17 089 515</b>
85 Preparation, implementation, monitoring and control	605 254
86 Evaluation and studies, information and communication	106 809
OP total	<b>17 801 578</b>

\* Categories contributing to the achievement of the Lisbon objective under the *Convergence* objective and the *Regional Competitiveness and Employment* objective (pursuant to Annex 4 VN)

**Table 45: Indicative distribution of the Fund(s) contribution into categories of the “priority topic” dimension total (stated in EUR and in current prices)**

Category code	Indicative amount (EUR) within the category
03* Technologies transfer and enhancing of cooperation networks between/among small enterprises (SME), between/among small enterprises and other enterprises and universities, higher education establishments of any kind, regional authorities, research centres and centres of science and technologies ( <i>scientific and technical parks, techno-centres, etc.</i> )	16 957 760
62* Development of life-long learning systems and strategies in firms; training and services for employees to step up their adaptability to change; promoting entrepreneurship and innovation	16 957 760
64* Development of special services in the area of employment, vocational training and support with regard to restructuring of sectors and companies and the development of systems for forecasting economic changes and future requirements with regard to jobs and skills	16 957 760
67* Measures encouraging active ageing and prolonging working life	7 254 884

70* Specific action to increase participation of migrants in employment and thereby strengthen their social integration	3 233 992
71* Pathways to integration and re-entry into employment for disadvantaged people; combating discrimination in accessing and progressing in the labour market and promoting acceptance of diversity at the workplace	48 515 280
72* Proposing, introducing and implementing reforms in the systems of education and vocational training to the end of developing employability while raising the importance of primary and vocational education and training for the labour market and in continuous renewal and the training staff capabilities toward innovation and the knowledge-based economy	211 076 874
73* Measures for raising participation in life-long learning and vocational training by – inter alia – means of measures to achieve a decrease in the number of pupil dropouts, a decrease in the number of subjects in which the pupils are divided by gender, and improved access to primary, vocational and tertiary education and vocational training and their improved quality	147 184 749
74* Human potential development in research and innovation, especially through post-graduate studies and vocational training of researchers and networking of universities, research centres and enterprises	67 830 456
OP total *	535 969 515
86 Preparation, implementation, monitoring and control	18 982 254
86 Evaluation and studies, information and communication	3 349 809
OP total	<b>558 301 578</b>

\* Categories contributing to the achievement of the Lisbon objective under the *Convergence* objective and the *Regional competitiveness and employment* objective (pursuant to Annex 4 VN)

**Table 46: Informative split-up of the fund/funds contribution into categories of the “financial contribution format” dimension for the *Convergence* objective (stated in EUR and in current prices)**

Category code	Indicative amount (EUR) within the category
01	540 500 000
<b>Total</b>	<b>540 500 000</b>

**Table 47: Informative split-up of the fund/funds contribution into categories of the “financial contribution format” dimension for the *Regional competitiveness and employment* objective (stated in EUR and in current prices)**

Category code	Indicative amount (EUR) within the category
00	17 801 578
<b>Total</b>	<b>17 801 578</b>

**Table 48: Informative split-up of the fund/funds contribution into categories of the “financial contribution format” dimension total (stated in EUR and in current prices)**

Category code	Indicative amount (EUR) within the category
00	558 301 578
<b>Total</b>	<b>558 301 578</b>

**Table 49: Informative split-up of the fund/funds contribution into categories of the “supported territory” dimension for the *Convergence* objective (stated in EUR and in current prices)**

Category code	Indicative amount (EUR) within the category
00	540 500 000
<b>Total</b>	<b>540 500 000</b>

**Table 50: Informative split-up of the fund/funds contribution into categories of the “supported territory” dimension for the *Regional competitiveness and employment* objective (stated in EUR and in current prices)**

Category code	Indicative amount (EUR) within the category
00	17 801 578
<b>Total</b>	<b>17 801 578</b>

**Table 51: Informative split-up of the fund/funds contribution into categories of the “supported territory” dimension total (stated in EUR and in current prices)**

Category code	Indicative amount (EUR) within the category
00	558 301 578
<b>Total</b>	<b>558 301 578</b>





## 6.4 Cross-Funding

In accordance with Council Regulation (EC) No. 1083/2006, Article 34 (2), for all priority axes of *OP Education*, complementary **financing of those events is foreseen which fall within the scope of ERDF intervention**, with a restriction of 10 % of the Community funds for each priority axis of *OP Education*.

**Cross-funding will be monitored by a separate information system. Each call will be evaluated separately and entered in the information system, so that the 10 % restriction for each priority axis of *OP Education* is not exceeded.**

Cross-funding shall be a pre-requisite for achieving the objectives of *OP Education*. Cross-funding will support implementation of framework activities along all priority axes. The education reform at all its levels will also be supported by cross-funding.

The cross-funding within *OP Education* will not be duplicate; nor would it overlap with the eligible expenditures under the Regional Operational Programme (reconstruction of buildings – both their interior and exterior), OP Research and development (the research and development infrastructure – equipment and devices for research and development) and OP Health (reconstruction and modernisation of buildings, equipment of providers of in-patient and out-patient care).

Cross-funding within *OP Education* is foreseen for capital expenditures which are not eligible from the ESF (for instance: purchase of furniture and equipment necessary for project implementation – in particular where the beneficiaries cannot exercise the eligible expenditures in the form of depreciation).

Examples of eligible expenditures under cross-funding of *OP Education*:

- Purchase of computer hardware/software (PC, notebooks, printers, servers, software);
- Audio/video equipment (multi-media equipment, copying machines, video cameras, overhead projectors);
- Furniture;
- Machinery, equipment needed for vocational practice in schools;
- Aids for persons with special educational needs (e.g. remedial aids).

## 6.5 State Aid and “de minimis” Schemes

Under *OP Education*, the Education Ministry uses de minimis aid schemes<sup>101</sup> in accordance with Commission (EC) Regulation No. 1998/2006 of 15 December 2006 on the application of Articles 87 and 88 of the Treaty to *de minimis* aid for private sector beneficiaries for all priority axes and measures, except for priority axis 5 and measure 4.3 which relate to technical assistance.

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<sup>101</sup> Regarding the existence of economic and financial crises the measure stated in the Scheme for ad interim provision of aid in the Slovak republic was used.

De minimis aid scheme in accordance with Commission (EC) Regulation No. 1998/2006 of 15 December 2006 on the application of Articles 87 and 88 to *de minimis* aid will be applied to enterprises within the Annex I of Commission (EC) Regulation No. 800/2008 of 6 August 2008 about announcing certain categories compatible with common market according to Article 87 and 88 of EC Treaty. More details concerning the provision of aid under the conditions of de minimis aid in accordance with Commission (EC) Regulation No. 1998/2006 of 15 December 2006 on the application of Articles 87 and 88 to *de minimis* aid are defined in Annex 6 to *OP Education* and in de minimis aid schemes published in the Commercial Journal.

Every financial assistance provided from public sources under *OP Education* must be compliant with the rules for providing state aid valid at the time of its provision. The Member State and in particular the MA shall be fully responsible for the compliance of *OP Education* with EC rules on state aid.

## 6.6 Indicative Regional Allocations

**Table 52: Indicative regional allocations for the *Convergence* objective  
(Stated in EUR and in current prices)**

NUTS 2 region	AMOUNT	%
West Slovakia	179 117 376	34,52
Central Slovakia	157 549 264	30,36
East Slovakia	182 213 360	35,12
<b>TOTAL*</b>	518 880 000	100

\* The amount does not include allocation for priority axis 5 – Technical assistance for the *Convergence* objective

The **indicative** regional allocations for the *Convergence* objective at the NUTS 2 level have been set as an **average of three variants**:

- Even distribution of the allocated amount to all NUTS 2 regions;
- Distribution of the allocated amount by the population number in the different NUTS 2 regions;
- Distribution of the allocated amount by the number of towns and municipalities in the different NUTS 2 regions.

## 7 System of Implementation

Chapter 7 brings a description of the implementation process for *OP Education* compliant with the General Regulation, Commission (EC) Regulation No. 1828/2006 of 8 December 2006 laying down the rules implementing provisions of Council (EC) Regulation No. 1083/2006 laying down general provisions of the European Regional Development Fund, the European Social Fund and the Cohesion Fund and Regulation of the European Parliament and the Council (EC) No. 1080/2006 on the European Regional Development Funds (hereinafter referred to as the *Implementing Regulation*) and compliant with the SF and CF Management System for the 2007 – 2013 programming period.

### 7.1 General Principles in the Process of Implementation

Compliant with Article 11 of the General Regulation, the **partnership principle** will be applied in all implementation phases of *OP Education*. Involvement of the relevant regional, local, urban and other bodies of public administration, economic and social partners, any other suitable entity representing the civic society, partners in the sector of environment, non-governmental organisations and entities responsible for the support of gender equality is expected in the implementation, monitoring and evaluation of *OP Education* and in ensuring publicity. With regard to incremental strategy formation (see section 7.4), the applicable partners will be involved in various programming stages, in particular the regions.

The most representative partners at the national, regional and local levels and in the economic, social, environmental or other sectors will be selected in line with national regulations and practice, taking into account the need to enforce gender equality and to support sustainable development and the non-discrimination principle with regard to the disadvantaged population groups.

**Equality of opportunities** makes one of the basic principles applied in *OP Education*. The right to equal opportunities makes part of universal human rights. Equal opportunities make one of the priorities of the European Employment Strategy.

Article 16 of the ESF Regulation stipulates that Member States shall ensure that – during various stages of implementation of interventions from funds that gender equality is supported and applied. The MA for *OP Education* will undertake suitable actions to prevent any discrimination on the basis of gender, race or ethnic origin, religion or faith, disability or sexual orientation during the various stages of implementation of intervention from funds, in particular while having access to the funds.

Special stress is laid on gender equality. Its application is a guarantee that all measures and operations would openly and actively take into account their effects on the situation of men and women throughout the process – i.e. in planning, implementation, monitoring and evaluation. Such approach requires additional planning, implementation, monitoring and evaluation of specific measures and operations which support the equality and equal opportunities for women to participate and benefit from measures and operations. Moreover, the plans, programmes and

projects must contribute to equal opportunities of genders and must prove to have such impacts prior to, during and upon closing the implementation.

## **7.2 Authorities Involved in the Programme Management and Implementation**

### **7.2.1 Central Coordination Authority**

Following Slovak Government Resolution No. 832 of 8 October 2006, the Regional Development Ministry being the CCA for the operational programmes contained in the NSRF was in charge of the strategic level of the NSRF management system until 30 June 2010. The competences of CCA were performed by the Office of Government of SR from 1 July 2010 to 31 December 2010. From 1 January 2011 the competences of CCA are performed by the Transport Ministry. To that end, the CCA plays in particular the following roles with regard to the management of assistance from the Structural Funds and the Cohesion Fund:

- At the NSRF level, it provides for programming, monitoring, evaluation, publicity, information and education of administrative capacities in those areas;
- Ensures the coordination of management processes and operational programmes implementation in line with the SF and the CF system of management;
- Provides methodology guidance to entities involved in the management and implementation of operational programmes;
- Is responsible for the ITMS development, operation and maintenance;
- Plays the role of managing authority for OP *Technical assistance*.

### **7.2.2 Managing Authority**

Following the Slovak Government Resolution No. 832 of 8 October 2006, the Managing Authority for *OP Education* is the **Education Ministry**, specifically **the Section of EU structural funds in the Education Ministry**.

The MA represents the operating level of the NSRF management system. The managing authority is the authority appointed by the Member State on the basis of Article 59 (1) of the General Regulation which is responsible for the programme management and implementation in line with EU and Slovak regulations. Moreover, the MA is responsible for the coordination with the managing authorities of other operational programmes, so as to prevent overlapping of activities and their duplicate financing within the meaning of the defined separating lines (section 5.7.2). For continuing coordination of implementation, preparation of calls with experts (both internal and external) is used as a tool for the different measures, including representatives of other MAs. With regard to quality and objectiveness of the calls, ex-ante evaluation is used at the level of the different calls.

In managing an operational programme, the MA follows the methodology guidance of the CCA and the methodology guidance of the certifying authority (hereinafter the “CA”) and of the audit authority (hereinafter the “AA”) in the respective areas.

In accordance with Article 60 of the General Regulation, the MA is responsible for the management and implementation of *OP Education*, in particular for:

- Preparing *OP Education* and its programming manual;
- Co-financing of *OP Education* from the state budget;
- Concluding an agreement of full power with the IB/MA and of performing control of the tasks delegated;
- Guidance to the IB/MA and beneficiaries;
- Monitoring and evaluation of *OP Education*;
- Leading of the monitoring committee for *OP Education* and drawing up the annual and final implementation reports, their submission to the monitoring committee and to the EC;
- Publicity regarding EU assistance and information to the public concerning the EU funds in line with Article 69 of the General Regulation;
- Collection and capturing of the data necessary for financial management, monitoring, verification, auditing and evaluation in the electronic format;
- Storage and availability of documents in line with Article 90 of the General Regulation;
- Receiving, selection and approval of projects of beneficiaries in line with the criteria for project evaluation and selection approved by the monitoring committee;
- Concluding grant contracts with the beneficiaries;
- Verification of co-financing of the different projects from the beneficiary's sources and from other sources;
- Verification of the delivery of co-financed products and services and verification of expenditures actually made;
- Ensuring that separate accounting systems are maintained by the beneficiaries and other authorities involved in the implementation;
- Control pursuant to Article 58 of the General Regulation.

In accordance with Article 71 of the General Regulation, the internal structure and delegation of responsibilities of the MA for *OP Education* will be captured in a description of the management and control systems which the Member State is to submit to the EC before submitting the first request for interim payment or within 12 months from the approval of *OP Education* at the latest.

### **7.2.3 Intermediary Body under the Managing Authority**

Within the meaning of Article 59 (2) of the General Regulation, for the fulfilment of certain or all tasks of the managing authority, a Member State may appoint one or several intermediary bodies under the managing authority (hereinafter the *IB/MA*). In accordance with Article 12 of the Implementing Regulation and with the SF and the CF system of management, details shall be laid down in the delegation of full power delegating from the MA to the IB/MA (hereinafter the *full power*).

Even if powers have been delegated from the MA to the IB/MA, the final responsibility for the management of *OP Education* shall remain with the managing authority.

Following the Government Resolution No. 832 of 8 October 2006, the intermediary bodies for *OP Education* are the EU SF Agency in the Education Ministry and the Ministry of Health of the Slovak Republic.

**Table 53: Intermediary Bodies under the Managing Authority**

<b>Name of authority</b>	<b>Priority axis/Measure</b>
Agency of the Ministry of Education, Science, Research and Sport of SR for the Structural Funds of the EU (hereinafter the "Agency")	<p>1 Reform of the education and vocational training system / 1.1 Transformation of traditional school into a modern one, 1.2 Tertiary schools and research &amp; development as the driving forces in the development of a knowledge-based society</p> <p>2 Continuing education as an instrument of human resource development/ 2.1 Support to continuing education</p> <p>3 Support to education of persons with special educational needs /3.1 Raising the educational level of members of the marginalised Roma communities, 3.2 Raising the educational level of persons with special educational needs</p> <p>4 Modern education for the knowledge-based society for the Bratislava region / 4.1 Transformation of the traditional school into a modern one for the Bratislava region, 4.2 Raising competitiveness of the Bratislava regions by developing the tertiary education and life-long learning</p>
Health Ministry	2 Continuing education as an instrument of human resource development/ 2.2 Support to continuing education

**The scope of tasks delegated to the Agency as IB/MA for the priority axes and measures listed in Table 52:**

- Receiving and selection of projects of beneficiaries in accordance with the criteria for project evaluation and selection approved by the monitoring committee;
- Concluding grant contracts with the beneficiaries;
- Verification of co-financing of the different projects from the beneficiary's sources and from other sources;
- Verification that the co-financed products have been supplied and the co-financed services provided and verification that the expenditures have been actually made;
- Ensuring that separate accounting systems are maintained by the beneficiaries and other authorities involved in the implementation;
- Ensuring the data collection and its analysis at the level of projects and measures in monitoring, by means of an indicator system;
- Entering of project data in the ITMS according to the CCA instructions.

The Agency was established as at 1 January 2007. Planning of human resources is based on the draft organisational structure, description of the implementation processes and allocation of funds to *OP Education*. As the time schedule of calls for the various years of the 2007 – 2013 programming period is not known yet, it may be expected that the administrative capacities would later develop according to the situation in place.

The plan to hire administrative capacities is based on the draft organisational structure, description of the implementation processes and allocation of funds to *OP Education* and *OP*

*Research and development.* It is assumed that the Agency would reach its full status of administrative capacities as at 31 December 2009. The capacities are characterised as follows:

- **Managing and control capacities** (staff in the Director General's office, financial management unit, control, unit, legal and HR unit) – 18 persons
- **Implementation capacities** (staff in the section of implementation of *OP Education* and OP Research & development, in the ITSM and technical assistance unit) – 202 persons.

The Agency budget for the years 2007 – 2009 is based in particular on the draft organisational structure and the planned human resources; it foresees certain expenditures from the state budget and technical assistance funds for establishing of the Agency, building of personal capacities to cover selected activities related to the SF implementation and to the start up the process to implement the assistance.

**Scope of the tasks delegated to the Health Ministry as the IB/MA for the priority axis and measure indicated in Table 52:**

- Receiving and selection of projects of beneficiaries in accordance with the criteria for project evaluation and selection approved by the monitoring committee;
- Concluding grant contracts with the beneficiaries;
- Verification of co-financing of the different projects from the beneficiary's sources and from other sources;
- Verification that the co-financed products have been supplied and the co-financed services provided and verification that the expenditures have actually been made;
- Ensuring that separate accounting systems are maintained by the beneficiaries and other authorities involved in the implementation;
- Ensuring the data collection and its analysis of the level of projects and measures in monitoring by means of an indicator system;
- Entering of project data in the ITMS according to the CCA instructions.

#### **7.2.4 Monitoring Committees**

##### **Monitoring Committee for *OP Education***

In accordance with Article 63 of the General Regulation, within three month from the approval of each OP by the European Commission, a monitoring committee (hereinafter the *MC*) for that OP must be established. The role of the monitoring committee is overseeing the effectiveness and quality of the programme implementation.

The tasks and composition of the MC for *OP Education* are detailed in section 7.5.2.

##### **National Monitoring Committee for the NSRF**

The tasks and composition of the NMC are detailed in section 7.5.2.

#### **7.2.5 Commission for a Knowledge-Based Society**

Item B.31 of the Government Resolution No. 832 of 8 October 2006 regarding the document "Update of the National Strategic Reference Framework of the Slovak Republic for the Year



2007 – 2013” charged the Deputy Prime Minister for a knowledge-based society, European issues, human rights and minorities to establish a commission to coordinate and evaluate a knowledge-based economy within the framework of the related operational programmes and priority axes and – in cooperation to the Regional Development Minister – incorporate its powers and responsibilities in the NRSF final version.

The Commission for a knowledge-based society (hereinafter the *Commission*) was established by the Government Resolution No. 1090 of 20 December 2006 as a coordination, advisory and expert body of the Slovak Government in issues concerning the development of a knowledge-based society, including the issues of a knowledge-based society in the relevant operational programmes of the NSRF for the *Convergence* objective and the *Regional competitiveness and employment* objective and the National Strategic Plan of Rural Development.

#### **Responsibilities of the Commission:**

- Prepare recommendations and positions regarding a knowledge-based society for the Slovak Government;
- Coordinate the drawing up of the “knowledge-based society” part for the national annual and final report regarding the NSRF. That part shall include in particular information regarding the achievement of financial and material indicators and indicators for the selected expenditure categories related to the Lisbon Strategy objective in line with Annex IV of the General Regulation;
- Collaborate with the CCA in establishing a national system of indicators for the area of a knowledge-based society;
- In the event that the activities in accomplishing the objectives of a knowledge-based society need coordination, the Commission shall issue guidance for the managing authorities, ministries and other central state administration authorities;
- Draw up an annual report evaluating its activities as at 31 December to be submitted to the Slovak Government;
- Collaborate in the programming and implementation of the innovative financial instrument JEREMIE intended to support the access of small and medium enterprises to funding, in particular of science and research, to support to the accomplishment of the Lisbon Strategy objectives and to support the transfer of technologies and innovations within the SF and the CF operational programmes.

### **7.3 Types of Projects**

The interventions from the European Social Fund will be implemented by two basic instruments:

- National projects;
- Demand-oriented projects.

Both project types will be evaluated against evaluation criteria and selection criteria adopted by the monitoring committee.

The approval process of grant applications consists of three main phases:

1. Formal check
2. Expert evaluation
3. Selection and approval

### National Projects

National projects are implemented at the national level as instruments for implementing the school system reform. They will be large, comprehensive projects ensuing directly from legislation or concept documents.

#### *Single-Source Procurement*

National projects will be contracted directly by the Education Minister with organisations reporting directly to the Education Ministry or to institutions authorised by the Education Ministry. The single-source procurement must be supported by a direct link to legislation – it must be directly ensuing from legislation.

Single-source procurement includes:

- Eligible activities in accordance with *OP Education*;
- Target group;
- Financial allocation;
- Project period (from – till).

They will be in particular multi-objective projects, covering geographically the regions both of the *Convergence* objective and of the *Regional competitiveness and employment* objective.

#### *Restricted Call*

National projects will also be performed by means of the so-called restricted calls for the submission of grant applications, for a restricted group of applicants and an exactly specified scope of activities.

National projects will be employed to finance the following activities, for example:

- Reform of the school system – reconstruction of the content
- Comprehensive continuing education of teachers with regard to the reconstruction of the content
- Drawing up and implementing the National Qualifications Framework.

For the implementation of national projects, the Education Ministry will be responsible in the role of the MA.

The projects covering the entire territory of Slovakia (which means both objectives) will be submitted as mirrors, i.e. separately for the *Convergence* objective and separately for the *Regional competitiveness and employment* objective. Within the meaning of Article 22 of the General Regulation, the **non-transferability of funds** between the two objectives will be ensured as follows:

- Independent calls for the submission of grant applications published separately for the different priority axes, which are structured according to eligible territories at the NUTS 2 level;
- Submission of independent grant applications including independent cost estimates (one project under the *Convergence* objective and one project under the *Regional Competitiveness and Employment* objective);
- Focus of the projects exclusively on target groups and the place of implementation eligible under the respective objective;
- Execution of grant contracts independently for both objectives;

- Drawing of funds in the project implementation phase allocated exclusively from the budget for the respective objective;
- Monitoring of the implementation progress by means of annual reports and final report on implementation at the level of priority axes which are structured in line with the EU objectives;
- During the project implementation, focus of the on-the-spot control on the overlapping of funding for various objectives;
- Strengthened control of proper use of the ESF funding allocated to each of the objectives within the competences of the Monitoring Committee for *OP Education*.

**When the financial allocation for the national project** with mirrored funding – from both objectives – **is divided, the size of the target group** on which the national project focuses (e.g. by the number of teachers in regions of the *Convergence* objective and by the number of teachers in a regions of the *Regional competitiveness and employment* objective) **will be used as a key**. Should the progress of implementation reveal that the subject key is inadequate, the managing authority will decide about its changing or modification.

### **Demand-Oriented Projects**

Demand-oriented projects will be drawn up right in the regions – projects addressing the needs of target groups in a specific region. The beneficiaries will be in particular primary schools, secondary schools, higher education institutions, local governments, higher territorial units, education institutions, employers and other eligible entities. This type of projects has the benefit of being prepared by entities “in the field” that are familiar with the situation in a given region and the projects would thus be tailored for specific target groups.

The demand-oriented projects will be implemented through calls for the submission of grant applications. The calls will be set up to meet the needs of specific regions. This method is applied in the implementation of activities under *OP Education* for which the IB/MA are responsible:

- Agency;
- Ministry of Health of the Slovak Republic.

With regard to the complexity of project preparation, the IB/MA will provide assistance and basic consultancy to such project authors.

## **7.4 Incremental Strategy Formation**

The focal point of the ex-ante evaluation recommendations rests in the introduction of mechanisms of **incremental strategy formation**. Its substance lies in a repeated and interim analysis and evaluation when preparing the various calls, focusing specifically on programming, channels of intervention, financial structure as well as the intervention impacts and variants. The incremental strategy formation (IFS) should consist of the following steps:

- a) Establish an efficient partnership of the MA with the relevant stakeholders involved, including a certain form of participation of the target group representatives;

- b) Participative scoping<sup>102</sup> phase coordinated by the MA in which identification of possible priority areas would be complemented and confirmed, on the basis of pre-agreed criteria including their geographic dimension;
- c) Strategic decision by the MA concerning the selection of priority areas based on outputs from b);
- d) Implementation of short (3 – 6 months) partnership projects procured from a single source for which analyses of needs, key disparities and development factors would be prepared in the priority areas according to pre-defined clear specifications;
- e) Selection of variant instruments (activities) by which the needs would be addressed; modelling and quantification of objectives and determining the financial allocation – performed by the MA. In the event of insufficient external capacities, consultants can be involved in the process or the strategic process as a whole can be transferred to a suitable partner;
- f) Ex-ante evaluation of the effects of the different variants including an empirical verification of the intervention mechanisms in the 2004 – 2006 programming period and/or pilot verification of instruments (3 – 24 months); this can be done by single-source procurement or by a call with sufficiently specific conditions;
- g) Strategic selection of the most beneficial variant by the MA;
- h) Preparation of documentation for the call; in ideal case, in cooperation of the IB/MA and partners, and coordinated by the MA, including model cost estimates, methodologies for the implementation of activities, methodologies of monitoring, etc.

Steps *a* to *c* – to a certain extent – can be considered undertaken in the preparation of *OP Education*; it should however be a continuously repeated process. The calls are prepared in steps *d* to *h*, following the process described. The different calls do not have to be prepared at the same time. When preparing the calls it is necessary to consider the follow-up activities (instruments) implemented by projects of the same call or in several follow-up calls. During implementation of the above step, the MA will identify such instruments and priority areas which may lead to “quick wins” – i.e. high priority areas in which the ESF contribution may lead to a fast and significant mitigation of a disparity.

## 7.5 Monitoring

In accordance with the Management system of the SF and the CF, monitoring is an activity which is systematically devoted to the collection, sorting, aggregation and storage of relevant information for the sake of evaluation and control of the managed processes. The main objective of monitoring is regular following of the objectives of the NSRF, *OP Education* and projects by using indicators.

The monitoring outputs provide inputs for the MA decision-making to improve the implementation of *OP Education*, preparation of annual reports and the final report from the implementation of *OP Education* and a basis for the decision-making of the monitoring committees (in relation to a review of *OP Education*, if any, for instance).

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<sup>102</sup> Participative scoping is a process in which – in active participation of the groups concerned (i.e. partnership members in step *a*) – priority areas are identified on which *OP Education* is to focus.

The monitoring process is based on a structural management model at the level of the NSRF, *OP Education* and projects. Monitoring and evaluation are ensured by all entities participating in the SF and the CF management, within the scope of the defined powers and responsibilities, and by entities drawing financial means from the funds.

### **7.5.1 Entities Involved in Monitoring**

#### *At the NSRF Level*

##### ***National Monitoring Committee***

The NSRF National Monitoring Committee (hereinafter the *NMC*) is chaired by a representative of CCA. The role of the Secretariat is performed by the CCA. The NMC shall approve its own statutes and standing order in its first session.

The NMC gathers for its session at least twice a year. The NMC members shall be the representatives of central state administration authorities, municipalities and self-governing regions and of other socio-economic partners. The Permanent Mission of the Slovak Republic at the EU and the Ministry of Agriculture and Rural Development of the Slovak Republic shall be observers. The EC plays the role of advisor.

#### *At the OP Education Level*

The final responsibility for monitoring of *OP Education* shall rest on the Managing Authority for *OP Education*, specifically the **Department for OP Education of the Section of EU structural funds in the Education Ministry**. The MA shall be responsible for correct, efficient, systematic and timely monitoring.

**System of reporting and monitoring in cases where the responsible body (MA) has delegated the execution of responsibilities to another body (IB/MA) – Article 58 (e) of the General Regulation.**

The IB/MA collaborates in the monitoring by collecting the monitoring reports from beneficiaries at the project level, executes activities resulting from the monitoring plan for the respective year which the IB/MA submits to the MA for approval, collects and aggregates data from monitoring reports at the level of measures. The IB/MA submits quarterly the data processed at the level of measures to the MA in the format of a monitoring report. The IB/MA has the deadline to prepare a monitoring report by the end of the month following the end of a quarter.

The MA shall be obliged to inform the IB/MA of its position concerning the monitoring report submitted by the IB/MA. In the event that the quality of the monitoring report submitted is not adequate, the IB/MA shall be obliged – following a request of the MA – to complete the data regarding the IB/MA monitoring report and submit additional information concerning the monitoring of the respective period.

The MA shall be responsible for collecting and aggregating of the necessary data and information at the level of projects, measures and priority axes, and for their submission to the *OP Education* Monitoring Committee (MC) and afterwards, to the EC in the form of annual and final reports for *OP Education*.

##### ***Monitoring Committee***

The Monitoring Committee (MC) has been established on the basis of Article 64 of the General Regulation. The Monitoring Committee is a body which – within the meaning of the partnership principle and through its members – presents public interest in socio-economic cohesion within Slovakia. The *OP Education* Monitoring Committee provides for supervision over the preparation and the follow-up implementation of *OP Education* and matches the interests of the Education Ministry in the position of the MA with the requirements of the public and private sectors so that Slovakia's regions would develop evenly, in accordance with the EC common policy.

The MC is chaired by the Education Minister as an MA representative. The role of the MC secretariat is played by the Unit for *OP Education*.

The members of the Monitoring Committee are appointed by the Education Minister. Compliant with Article 11 of the General Regulation, the membership in the monitoring committee is based on the principles of partnership and equal opportunities – the MC members are the representatives of the MA and IB/MA, the relevant ministries, higher education institutions, state school administration, regional and local governments, Office of the Slovak Government, Office of the Slovak Government's Plenipotentiary for Roma Communities, ZMOS (Association of Cities and Municipalities of Slovakia), ÚMS (Union of Slovakia's Towns and Cities), Association of Employer Unions and Associations of the Slovak Republic, Confederation of Trade Unions of the Slovak Republic, Republic Union of Employers, Union of Slovakia's Industry, Union of Industrial Research and Development Organisations, Slovak Academy of Sciences, the third sector (non-governmental organisations), Council of Slovakia's Youth and other socio-economic partners whom the content of the operational programme may concern. Representatives of the CCA, CA and AA are members of the MC, too. An EC representative participates in the MC activities in the role of observer and advisor. The monitoring committee's composition may be further reviewed and extended so as to ensure adequate representation and partnership.

The MC shall be convened twice a year for a meeting or more frequently on request of the managing authority or a monitoring committee member if issues are to be discussed for which the approval of the monitoring committee (like a proposal to review the operational programme) is necessary. The competences and activities of the monitoring committee are regulated by its statutes and standing order which the monitoring committee has approved in its first meeting.

### **7.5.2 Roles of the Various Entities in the Monitoring Process**

#### ***Tasks of the Central Coordination Authority in Monitoring:***

- Responsibility for drawing up a national system of indicators for the NSRF in collaboration with the different managing authorities and for its updating, if any;
- Coordination and methodology guidance to managing authorities in monitoring;
- Execution of monitoring at the NSRF level.

#### ***Tasks of the National Monitoring Committee in Monitoring:***

- Monitoring of the NSRF's implementation;
- Approval of changes in the NSRF within its powers;
- Drawing up of summary annual (or final) report for the NSRF;
- Approving of strategic reports prior to their submission to the European Commission;
- Phrasing of recommendations for the operation of OP monitoring committees so as to reach an effective monitoring system for the implementation of cohesion policy in Slovakia;
- Approval of re-distribution of funds between/among operational programmes.

***Tasks of the OP Education Monitoring Committee in Monitoring:***

- Act in accordance with the CCA methodology in monitoring;
- If necessary, submit the CCA proposals for changes or additions to the national system of indicators;
- Responsibility for data collection and analysis at the programme level in monitoring by means of a system of indicators as well as in monitoring at the level of categories of assistance;
- Responsibility for drawing up of annual reports and final report on the OP implementation which are submitted for approval to the given OP's managing authority and afterwards, to the Commission.

***Tasks of the Intermediary Body/MA in Monitoring:***

- Act in accordance with the CCA methodology and the MA guidance on monitoring;
- Perform activities resulting from the monitoring plan for the respective year, which the IB/MA submits to the MA for approval;
- Responsibility for data collection and analysis at the project level, gathering and aggregation of data from monitoring reports from beneficiaries at the level of measures;
- Evaluation of the progress of *OP Education* in monitoring by means of a system of indicators and in monitoring at the level of categories of assistance;
- On a quarterly basis, submit the MA/IB monitoring reports (a breakdown of monitoring data + drawing from the budget), data for annual, final and quarterly reports for the Office of the Slovak Government, CCA and data for evaluation reports (interim, ex-post evaluation).

***Tasks of the MC for OP Education in Monitoring (under Article 65 of the General Regulation):***

- Consider and approve the criteria for selecting the operations financed within six months from the OP approval and approve any revision of those criteria in accordance with the programming needs;
- Periodically review progress made toward achieving the specific targets of *OP Education* on the basis of documents submitted by the MA;
- Examine the results of the intervention execution, particularly the achievement of the objectives set for each priority axis, and interim evaluation referred to in Article 48 of the General Regulation;
- Consider and approve the annual and final reports on intervention implementation referred to in Article 67 of General Regulation;
- Be informed of the annual report or of that part of the report referring to the applicable *OP Education*, and of any relevant comments which the EC may make upon examining that report or relating to that part of the report;
- May propose to the MA any revision or examination of *OP Education* likely to make possible the attainment of the Fund's objectives referred to in Article 3 of the General Regulation or to improve its management, including its financial management;
- Consider and approve any proposal to modify or amend the content of the Commission decision regarding the contribution from the Funds.

***At the Project Level***

The progress in a project implementation is overseen by means of monitoring reports which the beneficiary is obliged to submit to the MA/IB at regular intervals.

### ***Project Monitoring Report***

The objective of a project monitoring report is to follow the course of implementation of an approved project by means of:

- Verbal assessment of the project progress;
- Description of the activities implemented, being implemented and intended;
- Information on the progress of the project monitored by means of indicators;
- Data concerning the fulfilment of the financial plan.

### ***Final Project Monitoring Report***

Along with the last application for payment, upon closing the implementation, the beneficiary shall be obliged to submit the MA/IB the final project monitoring report and the project closure declaration.

In the final project monitoring report, the same information and data is indicated as in the interim project monitoring report but in a summary way, for the entire project period. The beneficiary is obliged to give the actual implementation dates for the various activities within the project, the actually reached values of the output and result indicators.

### ***Follow-up Monitoring Report***

The beneficiary shall be obliged to submit the MA/IB a follow-up monitoring report at least once a calendar year, always at the date of closure of the material implementation of the project.

The project impact report is focused on achieving the impact indicators, newly-created jobs and their structure. Moreover, the beneficiary shall give a verbal account of the benefits of the project implemented.

## **7.5.3 Monitoring Plan**

Monitoring will be governed by the monitoring plan of *OP Education*. The monitoring plan shall be prepared by the MA.

The monitoring plans of *OP Education* include in particular the following data:

- Definition of the data to be collected so as to provide the necessary information on inputs, outputs, outcomes, impacts and the respective indicators at the level of priorities and specific objectives;
- The methods applied for data quantification or estimates generated by surveys must be specified (sample, panel data, database data, control mechanisms, etc.), just as the institutions or authorities responsible for their collection;
- Definitions to be provided to the monitoring committee and the frequency and timing of their transfer (time schedule of monitoring), as well as the definition of the transfer methodology by means of monitoring reports;



- Definition of operational links with the evaluation activities and definition of the type of connection between the managing authority and the European Commission;
- Distribution of powers and responsibilities in the monitoring and collection of information;
- Examples of monitoring tables.

At the level of priority axes and measures, monitoring and data collection will be carried out by the managing authority. The IB/MA will carry out monitoring and data collection at the project level and at the level of measures. Data will be collected from beneficiaries toward IB/MA and MA. The beneficiary will submit biannually monitoring reports in which the activities implemented are to be described in accordance with the time schedule and the progress achieved at the project level expressed in monitoring and financial indicators. On the basis of monitoring reports from the beneficiaries, the IB/MA will submit biannual implementation reports to the MA. Such monitoring reports will include the progress made at the level of measures expressed in monitoring and financial indicators.

Monitoring is the basic instrument for ensuring an efficient setting and later implementation of *OP Education* and of projects implemented within that programme. Monitoring ensures data collection and provides for summary information on the recent status of the implementation process.

The monitoring of implementation of *OP Education* will be carried out at three levels:

- **Financial monitoring** – its role is to collect data and information concerning the funds expended;
- **Material monitoring** – will follow the material focus of projects from the technical, physical and analytical view;
- **Procedural monitoring** – allows real-time following of the progress in the implementation of projects.

Monitoring (and later evaluation) is done in two ways – based on a system of indicators and based on categories of the SF assistance.

#### **7.5.4 Monitoring by Means of a System of Indicators**

The objectives of the NSRF and of the various Ops are defined and afterwards, quantified in the programming process by a system of physical and financial indicators (national system of indicators for the NSRF). The indicators will be binding for all entities and will make part of the ITMS. The accomplishment of the defined indicators is the most significant instrument for monitoring and evaluation of the meeting of Ops' and the NSRF's objectives.

Monitoring shall start at the lowest level – at the level of a project. For monitoring needs, project shall be the basic unit which is analysed by means of the relevant collected data. In the ESF grant contract, the beneficiary undertakes to provide data for project monitoring and reporting purposes. Both physical and financial project indicators obtained from the beneficiary through single monitoring sheets are transferred to the ITMS and aggregated upwards to the level of measures, priority axis, *OP Education* and the NSRF.

The MA for *OP Education* also monitors the **data concerning the structure of the allocation by target groups in line with Annex XXIII of the Implementing Regulation**. It is mainly the following data:

- Number of participants a year;

- Structure of participants by gender;
- Structure of participants according to their position on the labour market;
- Structure of participants by age;
- Structure of participants by vulnerability groups in line with national regulations;
- Structure of participants by the education completed.

In accordance with **Article 66 (2) of the General Regulation**, the MA for *OP Education* and the MC carry out monitoring by making reference to financial indicators and those indicators which are contained in Article 37 (1) © of the General Regulation and are set forth in *OP Education*. If possible by the nature of the assistance, the statistics will be split up according to gender and the size of the beneficiary entities. Information about priority axes and their specific objectives are quantified by means of a restricted number of output and outcome indicators, taking into account the principle of proportionality. The indicators measure progress compared to the initial situation and the attainment of objectives of the priority axes.

#### **7.5.5 Monitoring by Means of Categories of the SF Assistance**

In accordance with Article 37 (d) of the General Regulation and Annex II of the Implementing Regulation, the expenditures from the Funds are seen in the light of the following categories:

- Priority topic;
- Type of financing;
- Type of territory;
- Scope of economic activity;
- Scope of placement of assistance.

*OP Education* shall include an indicative distribution plan of the contributions from the Funds at the programme level within the first three categories. For the “priority topics” category, *OP Education* earmarks an indicative intervention rate from the Funds for those activities which are aimed at the support of competitiveness and job creation, the so-called “Lisbon activities”. During the programme implementation and after its closing, the above-mentioned approach would allow monitoring and evaluating the operational programmes contribution to attain the objectives of the Lisbon Strategy and of the National Reform Programme.

When monitoring by categories of the SF assistance, the following procedure is applied: upon a project approval, the project data is entered in the ITMS and upon the project closing, the actual value achieved in a given category is entered. Through ITMS, the categorisation data from the level of individual projects are aggregated to higher levels of the programme structure and are included in the annual reports.

#### **7.5.6 Monitoring Indicators**

The monitoring system objective is to ensure data collection for future interim, mid-term and ex post evaluations of *OP Education*. The necessary components resulting from the monitoring system needs for *OP Education* is **ensuring the institutional database, personal resources and funds**.

To be able to monitor the programme implementation and evaluate its performance with regard to the adopted objectives, a system of suitable indicators needs to be established. The draft

indicators will be submitted by the MA to the Monitoring Committee for *OP Education* for approval of their final version at the Monitoring Committee's first session.

### ***Creating a System of Indicators for OP Education***

Several institutions reporting to the Education Ministry (Institute of School Information and Prognosis, National Institute for Education, National Vocational Education Institute, Research Institute of Children's Psychology and Psychopathology and others) as well as the Statistical Office of the Slovak Republic or Eurostat and other international institutions are involved in the data collection system. By now, the statistical surveys focused mostly on the collection of data concerning the outputs (or inputs) of the educational process but rather less on the results. A nation-wide collection of impact data is practically non-existent.<sup>103</sup>

In addition to the basic quantitative data regarding the numbers of schools, pupils and students, teachers (collected by Institute of School Information and Prognosis) and regarding the general or sectoral and regional unemployment rate, only little data collected and evaluated on a regular and continuous basis is available as a basis for adopting strategic decisions at the national level.

In general, one may claim that Slovakia **lacks available, adequately specific and relevant data of a result (outcome) nature**. Slovakia lacks internationally comparable data concerning the quality of education in basic schools. Due to insufficient funding, Slovakia participated only partially in the TIMSS (*Third International Mathematics and Science Survey*) research, did not participate in the IALS (*International Adult Literacy Survey*) research and joined the PISA programme with a delay.

The **set of indicators in OP Education** was developed in cooperation with ex-ante valuers of *OP Education* and following consultations with the CCA was prepared the National Cod List of Indicators for the NSRF for the years 2007 – 2013. For indicators of *OP Education*, see Annex 5. Annex 5 of *OP Education* continues the indicative list of indicators contained in Annex 9 of the NSRF "NSRF Indicators" and Annex 13 "Indicators of NSRF Horizontal Priorities". The final list of the NSRF indicators will be prepared after all the OPs have been approved.

With regard to the on-going process of creating the monitoring system and the set of indicators at the national level, as a follow-up to the Council conclusions of 25 May 2007 concerning the *Single framework of indicators and reference values for monitoring progress in the attainment of the Lisbon objectives in education and vocational training*, the following is being finalised:

- A set of indicators for measuring the quality of education,
- Methodology for measuring the success rate in achieving the Lisbon objectives,
- A suitable method for the monitoring and reporting of those objectives, including the institutional and information structures,
- Pilot verification and stimulation of the stakeholders involved in monitoring and reporting.

### **Input Data and Relationship Indicators**

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<sup>103</sup> One of the most important overall objectives of the Structural Funds programming system is the support to a transition from the implementation system of the socio-economic development, primarily input-oriented, to a result-oriented system.

The input data are laid down with regard to the programme objectives. Should the programme indicators have sense, then the data concerning basic values are indispensable. The basic values are primarily taken from official statistics. The MA shall aggregate the data from the level of projects, through measures, up to the level of a priority axis. The IB/MA shall aggregate the data for the MA needs by means of the IB/MA monitoring reports. The IB/MA is supposed to submit the monitoring reports on a quarterly basis and the data acquired will serve as a basis for biannual reports and the final report which are approved by the monitoring committee and afterwards, submitted to the EC by the MA.

The monitoring indicators are based on the needs of monitoring and efficiency assessment of the defined priority axes, measures and projects. The system for measuring the attainment of the overall OP *Education* objectives has been based on the principle of determining indicators which allow monitoring the programme implementation and evaluate its performance with regard to the defined objectives.

The indicators are defined at three levels:

1. **At the level of context** – macro-economic statistical indicators mapping the socio-economic environment (context) in which the interventions operate. They allow analysing the given thematic area and quantify its initial and target situation;
2. **At the programme level** – they allow measuring the expected and actual direct effects of interventions at the levels of programme/priority axis/measure/framework activity/activity co-financed by the SF; according to the EU methodology, they are structured into the following types: output, result (outcome), impact and core:
  - **Output** – indicator linked to an activity measured by physical or monetary units (reported on a biannual basis in beneficiary's monitoring reports);
  - **Result (Outcome)** – indicator expressing the direct, tangible effect of an intervention immediately upon closing of a project implementation. It is measured in physical and financial units (reported upon closing of the project activities implementation in beneficiary's final monitoring report);
  - **Impact** – indicator expressing the long-term effect of an intervention which may occur as late as several years after closing of the project implementation. It is linked to the results of interventions and reaches beyond the framework of immediate benefits (reported 12 months after the closing of a project financing in the beneficiary's follow-up monitoring report);
  - **Core** – indicators requested by the EC which must obligatorily be included in each OP (based on output and result indicators); they will be reported in monitoring reports (the frequency of reporting will depend on the type of indicator);
3. **At the level of priority axes** – they include indicators which quantify the direct and immediate effect of intervention on the beneficiaries and indicators which in turn provide information on the effects of the different measures within a programme.

For operational programme indicators, see Annex 5.

### 7.5.7 System of Monitoring

Monitoring is comprised of regular checks of the intervention realisation – implementation of operations. The introduction of the system for gathering reliable financial and statistical information on implementation of assistance and the selection of monitoring indicators is the responsibility of the MA.

Indicators must relate to specific objectives, they must express the achieved status by means of physical outputs, results and impacts, and must illustrate the development achieved with regard to the financial plan. Indicators must take into account that various regions receive support at different levels and in case of necessity, it must be possible to distinguish the indicators by the type or size of the target group.

The data regarding the implementation of assistance is collected electronically. To that end, the **SF IT monitoring system (ITMS)** has been established. It is a coherent information system. The ITMS is a central information system serving for registration, follow-up processing, export and monitoring of the data regarding the SF and the CF programming, project and financial management, control and audit of the SF and the CF.

The non-public ITMS part is integrated with the ISUF accounting system and through that system, with the State Treasury and the budget information system. Integration of those systems is a key to successful management of the SF and the CF drawing.

The ITMS is used by all MAs and IB/MAs to the same extent. The common monitoring system is to provide for a single and compatible system of monitoring, management and financial management of programmes financed from the SF and the CF. The general initialisation data of the system shall be the responsibility of the CCA and the Finance Ministry and the OP initialisation data shall be the responsibility of the respective managing authority.

The ITMS shall ensure monitoring of the following activities:

- Drawing from the SF;
- Drawing of funds from national co-financing;
- Monitoring, evaluation and control;
- Communication with the EC and provision of data for the EC monitoring table;
- Monitoring of data at the beneficiary's level;
- Links to the relevant systems of state administration;
- Fulfilment of monitoring indicators.

#### **7.5.8 Annual and Final Implementation Report**

Within the meaning of Article 67 of the Council (EC) Regulation No. 1083/2006, the managing authority shall be obliged to submit the EC annual reports for the preceding calendar year always by 30 June of every calendar year. The MA shall be obliged to submit the Commission the final report of the implementation of *OP Education* by 31 May 2017.

The annual report and the final report shall include in particular the following information:

- a) Progress made in the implementation of the operational programme and its priorities with regard to its specific objective, including the values of indicators at the level of priority axes;
- b) Data regarding financial implementation of *OP Education* by priority axes;
  - (i) Costs paid out to the beneficiaries, including payment requests submitted to the managing authorities and corresponding with public financing;
  - (ii) Payments received from the EC;
  - (iii) Expenditures paid out to authorities responsible for the settlement of payments to beneficiaries;
- c) Steps undertaken by the MA or the MC so as to ensure quality and efficiency of implementation;

- i) Monitoring and evaluation data;
- ii) Summary of difficulties linked to the implementation of *OP Education* and the measures taken for their elimination;
- iii) Exploitation of technical assistance;
- d) Data regarding publicity implementation and assurance.

#### 7.5.9 Annual Programme Review/Control

Every year, upon the submission of the annual report, to the end of improving the implementation, in accordance with Article 68 of the General Regulation, the Commission and the managing authority shall review the progress made in the implementation of *OP Education*, the basic results achieved over the preceding year, the financial implementation and other factors (for instance, any aspects of the managing and control system operation mentioned in the annual control report submitted to the audit authorities may be reviewed). Upon that review, the EC may raise objections to the Member State or the MA, of which the monitoring committee shall be informed. The Member State shall inform the EC about measures adopted to eliminate the objections made.

### 7.6 Evaluation

In accordance with the SF and the CF system of management, the evaluation means a process which – in a systemic way – examines the benefits from the implementation of programmes and their compliance with the objectives laid down in the OP and the NSRF, and analyses the implementation processes efficiency and the adequacy of settings of the different programmes and measures, and prepares recommendations for raising their effectiveness.

Within the meaning of Article 47 of the General Regulation, evaluations may be of strategic nature (examination of the development of a programme or of a group of programmes with regard to the Community and national priorities) or of operative nature (to the end of supporting the course of an operational programme). The evaluation is performed before a programming period starts (ex-ante evaluation), during (interim evaluation) and upon completion of the programming period (final evaluation).

Evaluations are carried out within the responsibility of the Member State (CCA, MA) or of the Commission, in accordance with the proportionality principle. The results are published according to the valid rules on access to information.

#### 7.6.1 Entities Involved in the Evaluation

Final responsibility for evaluation of *OP Education* shall rest on the Managing Authority for *OP Education*, specifically the Unit for OPV of the **Department for OP Education** in the **Section of EU structural funds** in the **Education Ministry**. The MA shall be responsible for a correct, efficient, systematic and timely evaluation.

**Evaluation managers** working in the Department for *OP Education* will provide for the **internal evaluation** at the level of each priority axis of *OP Education*. The subject of internal evaluation is

to compare the progress achieved in meeting the output, result and financial indicators at the level of priority axis. Internal evaluation will provide for a link between monitoring and management of *OP Education*, including decisions about implementation or corrections of *OP Education*. The results of internal evaluation will be incorporated in the annual and final implementation reports.

**External (interim) evaluation** will be performed outside the MA structures for *OP Education* by **independent experts** to the end of determining in particular the relevancy and purpose-bound nature of the supported measures with regard to the general objectives set forth by *OP Education* and to the needs identified. Interim evaluation may be of operative or strategic nature (see section 7.6.4).

For performing an interim evaluation, the MA for *OP Education* shall employ external valuers on the basis of a written contract/agreement. In the framework contract, the independent external valuers shall commit themselves to close collaboration with the internal MA capacities (evaluation managers) in the evaluation planning and process execution. The **Monitoring Committee for OP Education** will take an active part in the analysis of the evaluation results and recommendations.

The MA for *OP Education* will draft a plan of strategic external valuations within 12 months from the approval of *OP Education* by the European Commission and submit the draft for approval to the MC for *OP Education*. *OP Education* as a whole will be evaluated **at least once** during the programming period. The period of implementation of *OP Education* under evaluation will not be less than 2 years and not longer than 4 years from the beginning of the programme implementation.

**The MA for OP Education shall perform external evaluation in the following cases:**

1. If – according to the monitoring and internal evaluation findings – the outputs and results achieved differ from expectations by more than 10 %, to the end of performing the necessary corrective measures;
2. If a revision of the operational programme has been proposed;
3. Others.

The external evaluation results will be incorporated in the annual and final implementation reports and will be submitted to the MC for *OP Education*, the CCA, the NMC and the EC in the format of evaluation reports. Moreover, they will be published on the webpage of the MA.

The **IB/MA** cooperates in the evaluation by performing internal evaluation at the level of measures by its own evaluation managers. The IB/MA submits the data processed at the level of measures to the managing authority on a biannual basis in the form of a monitoring report.

### **7.6.2 Roles of the Various Entities in the Evaluation Process**

Under Article 37 (1) (g) of the General Regulation, the operational programmes contain provisions for OP implementation and a description of the monitoring and evaluation systems.

**Tasks of the Central Coordination Authority in Evaluation:**

- Ensure ex-ante evaluation of the main strategic document for the programming period after 2013;
- Ensure interim, thematic evaluation at the central level;

- Coordination and methodology guidance to managing authorities regarding evaluation;

**Tasks of the MC for OP Education in Evaluation:**

- Act in accordance with the CCA methodology regarding evaluation;
- Ensure ex-ante and interim evaluation of OP *Education* and submit the ex-ante evaluation results to the Monitoring Committee for OP *Education* and to the Commission;
- Ensure communication with the EC and inputs for the follow-up evaluation of OP *Education* and a strategic evaluation performed by the EC, if any.

**Tasks of the Intermediary Body/MA in Evaluation:**

- Act in accordance with the CCA methodology and the MA guidance regarding evaluation.

The evaluation shall identify and define generally valid facts and propose possible ways for addressing the findings. While monitoring can be considered a set of immediate information activities, evaluation makes use of selected documents, reports and information for analytical activities.

Evaluation is aimed at improving the management and implementation of operational programmes. It is based on monitoring activities which provide it the necessary information. The evaluation of the assistance provided is performed on the basis of monitoring results.

### **7.6.3 Ex-Ante Evaluation**

The EU Member States must perform ex-ante evaluation. Within the framework of the different objectives of the EU regional policy, the MA for OP *Education* opted for the ex-ante evaluation for the entire OP *Education* for both its objectives (*Convergence* and *Regional competitiveness and employment*) financed from the ESF. The MA for OP *Education* shall be responsible for performing the ex-ante evaluation.

The objective of the ex-ante evaluation is optimising the allocation of budget resources within OP *Education* and raising the quality of programming. The ex-ante evaluation must identify and evaluate the disparities, gaps and development potential, objectives to be achieved, the results expected, the objectives quantified, coherence of the strategy proposed for a region (if applicable), added value of the Community, the scope in which the Community priorities have been taken into account, experience made in the preceding programming period, quality of procedures and obstacles to implementation, monitoring, evaluation and financial management.

For details of the process of ex-ante evaluation of OP *Education*, see Chapter 2.3.

### **7.6.4 Interim Evaluation**

*Legal Basis and Content of Interim Evaluation*

Pursuant to Article 48 (3) of the General Regulation, during the programming period, Member States shall perform evaluations related to the monitoring of operational programmes, in particular if the mentioned monitoring reveals a significant departure from the initially



determined objectives or if a revision of an OP has been proposed pursuant to Article 33. The results are submitted to the MC for *OP Education* and to the EC.

Interim evaluation may be of operative or of strategic nature. **Operative evaluation** (to the end of supporting the progress of *OP Education*) focuses on the macro-economic impact of the SF assistance, justification and consistency of strategies at the national and programming levels, specific topics of major importance and horizontal priorities. Such evaluation may lay down recommendations to review *OP Education* or provide information for strategic reports of the Member State or the EC. **Strategic evaluation** (examination of the development of a programme or of a group of programmes with regard to the Community priority and national priorities) shall focus on the quality and relevance of the objectives quantified, analysis of financial progress, recommendations how to improve the implementation of *OP Education*, ways of achieving certain socio-economic objectives, evaluation of functionality of the administrative structure and of the quality of implementation mechanisms.

Experience from the 2004 – 2006 programming period has shown a need of a stronger link between monitoring and evaluation of *OP Education*. Monitoring will provide operative information (achieved outputs and results, financial absorption, quality of implementation mechanisms) which may provide basis for evaluation when urgent or possible problems occur, for instance. On the other hand, information on certain strategic aspects like socio-economic impact or changes in the Community, on national or regional priorities concerning *OP Education* cannot be provided by the monitoring system but need to be subject to regular evaluation.

#### *Interim Evaluation of OP Education*

Interim evaluation of *OP Education* will be performed and prepared on the basis of internal requirements and needs in the Slovak Republic. That means that – based on urgent or possible problems (or additional information) revealed by the monitoring system – interim evaluation of *OP Education* will be performed. Interim evaluation will also be performed in the event that the socio-economic impact or other strategic aspects have been reviewed.

With regard to the above-mentioned, the MA for *OP Education* shall:

- Ensure a strong link between the monitoring system and the evaluation system;
- Determine the periodicity or regularity of monitoring and evaluation operations;
- Draw up an evaluation plan.

Based on the monitoring outputs, the MA decides if interim evaluation is to be performed at the level of priority axes, measures, framework activities, national projects, etc.

The MA for *OP Education* shall perform interim evaluation in the following cases:

- If the said monitoring has revealed a significant departure from the initially set objectives;
- If a review of the operational programme has been proposed;
- Others.

The reasons for a review of *OP Education* can be as follows:

- Fundamental socio-economic changes;
- Fundamental changes in the Community, in the national or regional priorities;
- Problems/difficulties concerning implementation;

- If monitoring has revealed a significant departure from the initially set objectives (lack of data from the monitoring system, a risk area known beforehand – marginalised Roma communities, etc., for instance).

In all the above cases, a review of *OP Education* must be preceded by an evaluation, i.e. a review of *OP Education* must be based on a regular monitoring process and/or on a regular interim evaluation which would determine specific modifications of *OP Education*.

The results of an interim evaluation shall be submitted to the European Commission only if the proposals for the revision of *OP Education* apply to the following fundamental changes:

- Financial changes – e.g. financial re-allocations between various priority axes requiring approval by the EC;
- Changes in the content – e.g. review of objectives at the OP level or at the level of priority axes;
- Changes in implementation – e.g. introduction of new implementation processes or a fundamental change of the existing ones.

#### *Plan of Evaluation of OP Education*

Pursuant to Article 48 (1) of the General Regulation, within the framework of the *Convergence* objective, the Member State may – in accordance with the principle of proportionality – draw up an evaluation plan laying down tentative evaluation activities which are intended at the various implementation stages. The EC recommends to draw up an evaluation plan at the national level and where suitable (in accordance with the proportionality principle) at the programme level.

The evaluation plan for *OP Education* will be prepared by the MA during the first year of its implementation and will include the following parts:

1. Coordination – this part will include a proposal and explanation of the overall coordination of the interim evaluation process, i.e. the relation to the monitoring system, establishment of an evaluation working group, allocation of human resources, mechanisms of possible review of the evaluation plan, specialised training for evaluators;
2. Specific evaluation activities – that part will include the following items:
  - a) An indicative list of evaluations planned during the programming period;
  - b) Content of every evaluation activity:
    - Strategic or operative evaluation;
    - OP level, OP groups, specific topic, etc.;
    - Possible areas of risks identified due to past experience made in a specific area of assistance;
  - c) Main questions to be answered in the evaluation process;
  - d) Use of the evaluation results (publication and accessibility of the evaluation reports, presentation of the evaluation results, monitoring of how recommendations have been taken into account);
  - e) Indicative time plan;
  - f) External or internal evaluation;
  - g) Financial resources planned for each evaluation;
  - h) Management structure (including the evaluation working group, consultations with social partners, partners at the regional and local levels).

#### *Interim Evaluation Management*

The MA for OP *Education* shall bear the final responsibility for the interim evaluation process, i.e. decide in collaboration with the evaluation working group on the structure and content of the evaluation plan and ensure the administrative basis for its execution.

In the interim evaluation process, the MA for OP *Education* shall:

- Ensure the collection and availability of monitoring indicators;
- Guarantee that the evaluation objectives are respected and the evaluation quality standards are met;
- Ensure financial resources from technical assistance necessary to perform the evaluation;
- Submit the evaluation results to the OP *Education* Monitoring Committee and to the European Commission.

For performing the interim evaluation, the MA for OP *Education* shall employ external evaluators on the basis of a written contract/agreement. The interim evaluation is to be performed by independent evaluators selected by a public procurement procedure. The contract concluded between external evaluators and the MA for OP *Education* is to extend over the entire programming period. The contract shall in no case replace the MA's responsibility for performing the evaluation in the OP implementation.

#### *Principles of Interim Evaluation*

1. Proportionality – the MA shall ensure that the proportionality principle is obeyed in determining the number and the content of the different evaluations while preparing the evaluation plan;
2. Independence – the MA shall ensure that the interim evaluation is performed by experts independent from the managing authority, certifying authority and audit authority;
3. Partnership – the MA shall ensure that the interim evaluation planning, preparation and execution is carried out in cooperation with all relevant partners;
4. Transparency – the managing authority shall ensure that all evaluation reports and interim evaluation results and recommendations are published, e.g., on its web site, in order to trigger a public discussion on the evaluation findings.

### **7.6.5 Ex-Post Evaluation**

Pursuant to Article 49 (3) of the General Regulation, the EC shall perform ex-post evaluation for each objective in close cooperation with the Member State and the managing authority. The objective of ex-post evaluation is to examine the scope in which the resources have been used, how the programming was efficient and effective and what was the socio-economic impact. The evaluation is performed separately for each objective and focuses on drawing up conclusions for the policy of economic and social cohesion. The ex-post evaluation identifies the factors which contributed to the success or failure of the operational programme implementation and identifies well established procedures. The ex-post evaluation must be completed by 31 December 2015.

### **7.6.6 Evaluation Information Sources**

The main source of information on which is evaluation is based is the system of indicators. Indicators are determined at all levels, i.e. at the programme level and for the different priority axes and measures. They reflect the methodology, the list with examples of indicators and categories for the areas of assistance set forth by the Commission, which relate to the specific

nature of assistance, its objectives and the socio-economic, structural and environmental situation of the respective state and its regions.

At the level of measures, such information allows describe how the objectives are achieved (the organisations and structures involved, links to other measures, selection of objectives and instruments depending on the needs and priorities, quality of the services provided, adequacy of the resources mobilised for implementation). Such qualitative information also helps identify the success factors and/or obstacles which result from the assessment of effectiveness, efficiency and relevance of the measure.

Such information helps completing the causality analysis and make it relative within its own context. In addition to indicators, qualitative information must be gathered. It makes part of the “process” evaluation which is especially important in the assessment of the implementation conditions and of the intervention’s political context. Such qualitative information makes an important part of the evaluation job (overviews, interviews, focus groups, etc.).

#### **7.6.7 Availability of the Evaluation Results**

On request, the evaluation results shall be available to the public. Annual reports, the final report and the interim evaluation report must be adopted by the monitoring committee.

The structure of evaluation reports must allow using the evaluation results for the following purposes:

- Information to the managing authority, the monitoring committee and the European Commission of the programme evaluation results;
- Recommendations for the upcoming programming period with regard to the programme management, implementation and monitoring;
- Conclusions and recommendations for the national employment policy;
- Analysis and creation of a pipeline of good examples and experience.

An important element of evaluation is the dissemination of the evaluation results so as to raise the efficiency of the programme itself and to provide for information of the general public regarding the use of the Structural Funds. For the dissemination of results, the managing authority shall be responsible.

### ***7.7 IT Monitoring System for the SF and the CF***

The IT monitoring system for the Structural Funds and the Cohesion Fund is a central information system for data registration, processing, export and monitoring with regard to the programming, project and financial management, control and audit of the Structural Funds and the Cohesion Fund. It consists of two subsystems running in parallel, one for the 2004 – 2006 programming period and another for the 2007 – 2013 programming period. The subsystems for the two programming periods collaborate closely, using a common database with a common registration of objects.

The ITMS is used by all operational programmes to the same extent. The common monitoring system is to ensure a single and compatible system of monitoring, management and financial management of programmes financed from the Structural Funds and the Cohesion Fund.

The system is divided into three main parts:

1. The **non-public ITMS part** ensures the programming, project and financial management, control and audit, is integrated with the ISUF accounting system and through that system, with the State Treasury and the budget information system;
2. The **output part** is to create static and dynamic data exports;
3. The **public ITMS part** provides for the communication with beneficiaries, the SFC2007 information system of the European Commission and monitoring systems of the neighbouring countries for cross-border cooperation programmes.

Following an application, eligible users of the public ITMS part can be all entities which are eligible to submit an application for a contribution from the Funds. Communication of applicants/beneficiaries with the public ITMS part is ensured through SSL protocol. The CCA is to prepare a manual for the beneficiaries for using the public ITMS part. Through the public ITMS part, the applicants/beneficiaries for a contribution from the Funds will be able:

- To electronically submit and receive applications for a contribution from the Funds;
- To get information arranged in a transparent way regarding the state of processes of their projects including payment/cost refund requests;
- Other options (to update the beneficiary data, to receive electronically the applications for payment, to receive electronically the monitoring sheets).

The ITMS and processes of communication with the applicants for a contribution from the Funds at the project level are the following:

- Opening an account, execution of a use agreement between the managing authority and the grant beneficiary, account activation;
- Entering data into electronic forms and its transfer to the public ITMS part, sending a verified paper form by the beneficiary to the administrator and user of the non-public ITMS part;
- Verification of compliance of information in the electronic and paper form by the user of the non-public ITMS part;
- Further application processing upon their checking and correction of inconsistencies, if any, between the electronic and paper forms.

**Tasks of the Central Coordination Authority with regard to the ITMS:**

- Is responsible for the development, operation and maintenance of the system, ensures the operation of all ITMS parts;
- Manages a commission in which each managing authority has its representative and which proposes the development trends, communicates the managing authority's requirements to the CCA, manages and guides the system users according to the CCA instructions and guidance, is responsible for the system initialisation data in cooperation with the Finance Ministry;
- Draws up guidance concerning the ITMS use;
- Maintains initialisation data at the NSRF level updated.

**Tasks of the Managing Authority for OP Education with regard to the ITMS:**

- Maintains the initialisation data of its programme updated;
- Is responsible for entering data regarding the programme, projects and subordinated structures according to the CCA instructions for the ITMS use;
- Is responsible for the allocation of roles to the users according to internal manuals;
- Provides first-level support to users of the public and non-public ITMS part.

**Tasks of the Intermediary Body/MA with regard to the ITMS:**

- Is responsible for entering project data according to the CCA and MA instructions regarding the ITMS use;

- Is responsible for the allocation of roles to the users according to internal manuals;
- Provides first-level support to users of the public and non-public ITMS part.

## **7.8 Electronic Data Exchange with the European Commission**

Within the meaning of the Implementing Regulation, Title 7, Member States shall be obliged to ensure electronic communication with the SFC2007 database of the European Commission.

The following forms of electronic communication are possible:

- SFC2007 web interface;
- Integration of the monitoring systems of Member States with SFC2007.

Slovakia has decided to adopt the second option: ITMS II integration with the SFC2007 system. ITMS II ensures data collection and communication with SFC2007. The SFC2007 web interface can be used by the individual managing authorities but using the ITMS II interface will ensure data integrity in both systems and will save time for data entering. In the event of an ITMS or interface failure, the web interface for data entering in SFC2007 may be used with the approval of the CCA; however, the one who enters the data shall be responsible for matching the data in both systems.

ITMS II and SFC2007 interfaces:

- Import of the breakdown of the SF and the CF amounts allocated to Slovakia by objectives in 2004 constant prices and in current prices;
- Export of the NSRF;
- Export of the OP and priority axes;
- Export of large projects;
- Export of OP *Technical assistance*;
- Import of EC decisions regarding the OP;
- Breakdown of categories of EU Funds;
- Export of expenditure estimates;
- Payment requests to the EC;
- Partial closure declaration;
- Export of the management and control systems description;
- Export of annual reports;
- Export of final reports;
- Export of the final payment;
- Settlement according to the n+2 (n+3) rule;
- Import of non-structured data: NSRF;
- Import of non-structured data: EC decisions regarding the NSRF and OP.

The ITMS II and SFC2007 communication is secured at the system level by means of secured electronic signature, to be issued by ITMS II.

In each Member State, the so-called MS Liaison shall be responsible for the identification of users and client systems within SFC2007. MS Liaison for the ERDF, the ESF and the CF funds in Slovakia shall be a responsible employee of the CCA. All requests for access to the SFC2007 web interface and for access rights changes shall be submitted to the CCA. Upon a check of the requests with regard to their form and content, MS Liaison communicates with the European Commission to create and activate the user account. The access passwords are sent by the EC in two parts; one will go straight to the user, the other to MS Liaison.

## **7.9 Information and Publicity**

Within the meaning of Article 69 of the General Regulation, Member State and the managing authority shall ensure information of citizens and beneficiaries and publicity of the programmes co-financed, so as to underline the Community role and to ensure transparency of the Funds intervention.

For ensuring information and publicity, the managing authority shall draw up Communication Action Plan (hereinafter the “CAP”) for the respective operational programme and submit the plan to the European Commission within four months from the OP approval. When implementing the CAP, the managing authority shall ensure that all information and publicity measures are executed within the meaning of Articles 5 to 7 of the Implementing Regulation.

In line with the Implementing Regulation and the CCA Methodology Guidance No. 9/2007 concerning information and publicity and preparation of the communication plan for the 2007 – 2013 programming period, the CAP structure consists of the following items:

1. Strategy
2. Objectives
3. Target groups
4. Implementation
5. Indicative cost estimate
6. Indicative time schedule
7. Monitoring and evaluation
8. Administrative capacities
9. Conclusions
10. Annexes

### **Tasks of the Central Coordination Authority with regard to information and publicity:**

- Prepare and implement the Communication Plan for the National Strategic Reference Framework including horizontal activities for all operational programmes;
- Coordination and methodology guidance to managing authorities regarding information and publicity;
- Point of contact for the EC and communication networks of the Community; information to managing authorities;

### **Tasks of the Managing Authority for OP *Education* in information and publicity:**

- Draw up a communication plan for OP *Education*;
- While drawing up the communication plan and other information and publicity activities, act in accordance with the CCA methodology;
- Submit the communication plan to the EC within 4 months from the approval of OP *Education*;
- Include the publicity and information area in annual reports and final report on the execution of OP *Education*;
- Inform the monitoring committee of OP *Education* on the progress in the communication plan implementation, on activities carried out and foreseen;
- Ensure compliance with the provisions of Article 8 of the Implementing Regulation by beneficiaries (obligation to inform the public about intervention provided from the Funds) by handling such issues in a contract with the beneficiary.

### **Tasks of the Intermediary Body/MA with regard to information and publicity:**

- Ensure compliance with the provisions of Article 8 of the Implementing Regulation by beneficiaries (obligation to inform the public about intervention provided from the Funds) by handling such issues in a contract with the beneficiary.

**Involvement of other authorities in information and publicity:**

Pursuant to Article 5 (3) of the Implementing Regulation, the following authorities will be involved in ensuring of information and publicity regarding *OP Education*:

- National, regional and local authorities and development agencies;
- Economic and social partners.

## **7.10 Financial Management, Control and Audit**

The financial management system of the SF and the CF includes a complex of following-up and mutually related subsystems and activities ensuring effective financial planning, budgeting, accounting, reporting, payments to beneficiaries, monitoring of financial flows and financial control and audit in the implementation the EC assistance.

All the above-mentioned activities are performed in line with Council (EC, Euratom) Regulation No. 2988/95 of 18 December 1995 on the protection of the European Communities financial interests and the Council (Euratom, EC) Regulation No. 2185/96 of 11 November 1996 concerning on-the-spot checks and inspections carried out by the Commission in order to protect the European Communities' financial interests against fraud and other irregularities. Where appropriate, the managing authority shall ensure compliance of procedures in public contract awarding or of allowances provided with regard to projects supported from the ESF with the provisions of Directives 2004/17/EC<sup>104</sup>, 2004/18/EC<sup>105</sup>, Commission (EC) Regulation No. 1564/2005<sup>106</sup> or principles of the EC Treaty. In addition, Act No. 25/2006 of 14 December 2005 on public procurement and on the modification and amendment of certain acts will be applied.

The following entities are involved in the financial management system of an operational programme:

- Managing authority,
- Intermediary bodies under the managing authority,
- Certification authority,
- Paying unit,
- Audit authority.

The **MA** functions are listed in section 7.2.2.

The **IB/MA** functions are listed in section 7.2.3.

The role of the **certification authority** is played by the Finance Ministry. The CA provides in particular for:

<sup>104</sup> Directive 2004/17/EC of 31 March 2004 on the coordination of contract awarding procedures by entities operating in the sectors of water management, energy, transport and postal services.

<sup>105</sup> Directive 2004/18/EC of 31 March 2004 on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts.

<sup>106</sup> Commission (EC) Regulation No. 1564/2005 of 5 September 2005 laying down standard forms for publishing notices within the public procurement procedures under the European Parliament and Council Directives 2004/17/EC and 2004/18/EC.



- Coordination and methodology guidance with regard to the SF and the CF financial management and coordination of operations of the paying units;
- Drawing up and submission of interim payment and final payment requests to the EC;
- Ex-ante financial control of bulk payment requests of paying units;
- Certification verification at all levels of financial management including the beneficiary, to the end of being assured about the procedures of the managing authorities, intermediary bodies and the paying units;
- Certification of expenditure reports to the EC;
- Receiving of the EU funds to special non-budgetary accounts of the Finance Ministry;
- Transfer of EU funds to the beneficiary via the paying unit;
- Compilation and submission of estimates of expected expenditures for the respective and successive years to the EC, based on MA sources for each year by the end of April;
- Maintaining a list of debtors;
- Drawing up and submission of annual statements of amounts to the EC by 31 March in line with Article 20 (2a-2d) of EC Regulation 1828/2006 i.e. the statement of amounts to 31 December of the previous year that were taken off from the statement of expenditures, were returned and counted off from the statement of amounts, should be returned or are not expected to be returned in division according to priority axes and years in which the requirements for returning the amounts were issued; Financial corrections of EU funds as requested by the EC;
- Refunds of ineligibly used or unused funds to the EC, including interest on late payment;
- Introduction of a unified system of accounting for the CA and paying units (ISUF – Information System for funds Accounting);
- Maintaining of books, reporting and keeping of documents.

The **paying unit** functions shall be ensured by the Education Ministry. For measure 2.2, the paying unit function is provided by the Health Ministry. The paying unit shall ensure in particular:

- Review of the payment requests from beneficiaries submitted to the MA;
- Transfer of the EU and state budget funds for co-financing to the beneficiaries;
- Completion and submission of bulk payment requests and partial expenditure statements to the certification authority;
- Maintaining of books, reporting and keeping of documents;
- Maintaining of partial list of debtors.

The MA function is played by the Unit for **OP Education** in the Section of EU structural funds, **Department for methodics and technical aid** in the Section of EU structural funds, **Department for implementation and control of the projects** in the Section of EU structural funds and **Department of public procurements appraisal and irregularities** in the Section of EU structural funds. The paying unit function is played by the **Department of financing the projects** in the Section of EU structural funds.

Functions of the **audit authority** is played by the Finance Ministry. The main tasks of the audit authority are the following:

- a) Prepare a report on the results of opinion concerning the introduction of systems under Article 71 (2) of the General Regulation;
- b) Ensure that audits are performed to the end of verifying the efficiency of operation of the operational programme management and control system;

- c) Ensure that the audits of operations are performed on a suitable sample to verify the expenditure reported;
- d) Submit the EC within nine months from the approval of OP *Education* an audit strategy concerning entities performing audits under b) and c), the method applied, the method of sampling for auditing operations and a tentative audit plan, in order to ensure that the main entities are subject to audit and that audits are evenly distributed throughout the programming period; Where a common system for several operational programmes is introduced, one audit strategy can be submitted.
- e) By 31 December of each year starting 2008 and ending 2015, be responsible for:
  - i) The submission to the EC of annual control report containing the findings of audits carried out over the preceding period of 12 months ending 30 June of the applicable year, in line with the operational programme audit strategy, and stating the inconsistencies established in the programme management and control systems. The first report to be submitted by 31 December 2008 relates to the period starting 1 January 2007 and ending 30 June 2008. Information concerning audits carried out after 1 July 2015 will be included in the final control report which is to be the basis for the closure statement referred to in item f);
  - ii) Based on the controls and audits carried out under its leadership, issue a position stating if the management and control system works efficiently enough to provide an adequate guarantee that the expenditure statements submitted to the EC are correct and – on the basis thereof – an adequate guarantee that the respective transactions are legal and correct;
  - iii) In cases stipulated in Article 88, submission of a partial closure statement through which the legal nature and correctness of the respective expenditure are assessed. Where a common system is run by several operational programmes, the information contained in (i) may be merged into a single report and position, and the statements issued under (ii) and (iii) may include all the applicable operational programmes;
- e) Not later than 31 March 2017, submission to the EC of the closure statement which gives an assessment of validity of the application for final payment and of the legal nature and correctness of the respective expenditures included in the final statement of expenditures which is accompanied by the final control report.

In the Finance Ministry, the functions are provided by units which are not connected with one another in the organisational structure. The function of certifying authority is played by the **Section of European and International Affairs of the Ministry of Finance SR** which reports to the 1st Deputy Finance Minister. The function of audit authority is played by the **Section of Audit and Control of International Funds in the Finance Ministry** whose general director reports directly to the Finance Minister.

The Finance Ministry in the role of the AA has drafted the *Procedures for Auditing the Structural Funds, the Cohesion Fund and the European Fisheries Fund for Years 2007 – 2013* and, based on that document, will execute agreements with the individual ministries, specifying the subject of auditing activities which are to be provided for by the different independent units in the ministries and the Financial Control Administrations. Those units will carry out auditing activities as bodies acting on behalf of the audit authority and will apply the methodology set forth by the Finance Ministry.

Those units must be independent from the units in charge of any activities related to the management, implementation or monitoring of the Structural Funds, the Cohesion Fund and the

European Fisheries Fund for the years 2007 – 2013 which will be declared in the description of systems concerning in particular the organisation and procedures of the audit authority and all other authorities/bodies performing audit under the former's leadership, as requested by Regulation (EC) No. 1083/2006. Procedures for auditing the Structural Funds, the Cohesion Fund and the European Fisheries Fund for the years 2007 – 2013 will be approved by the Slovak Government by 30 November 2007 at the latest.

#### **7.10.1 System of Financial Flows**

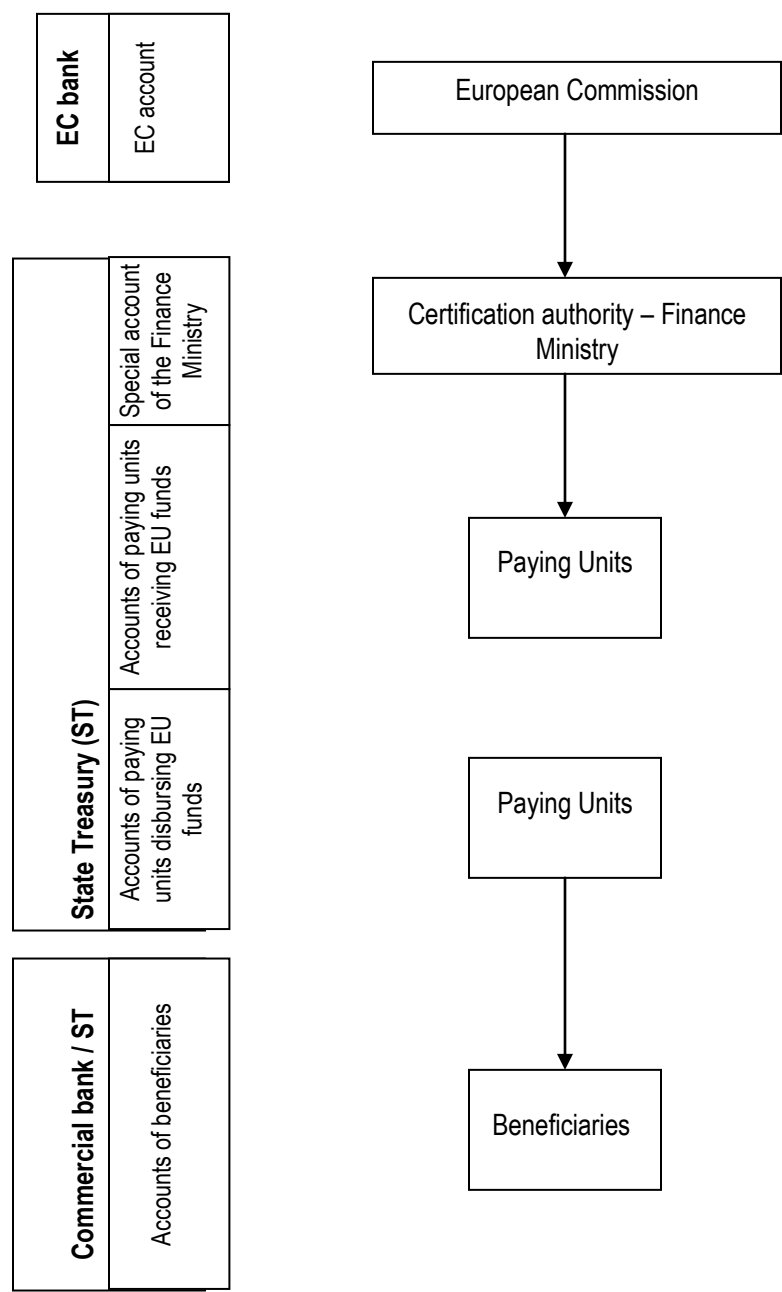
The payments of EU funds are transferred from EC to the particular except-budgetary account of the Finance Ministry in the State Treasury within the commitment agreed by EC. The payments of EU funds to the beneficiaries shall be transferred through the state budget.

The EU funds and state budget funds for co-financing shall be paid out to beneficiaries through the paying unit at the same time, on the basis of a grant contract, at the intervention rate determined for the project.

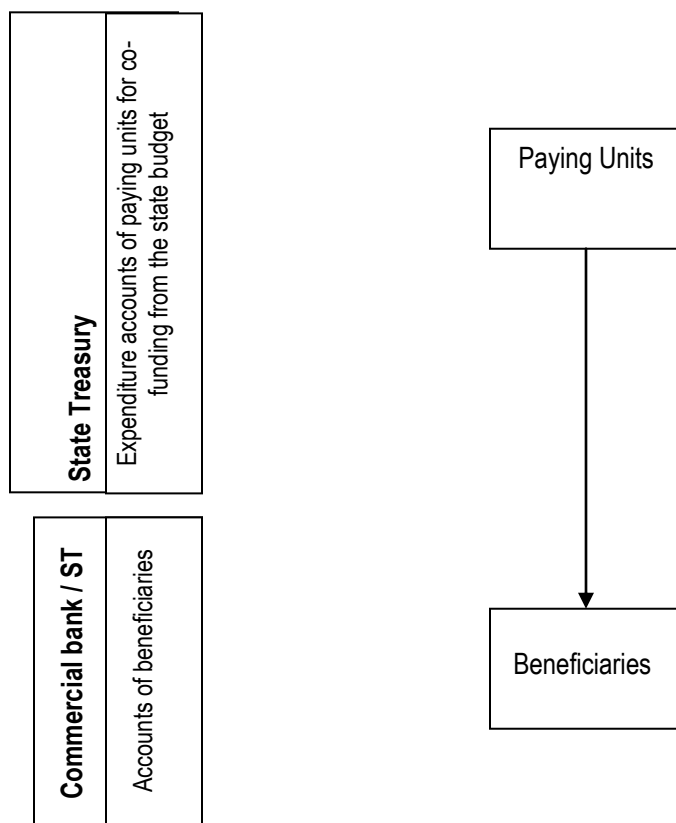
The payments of EU funds and of state budget co-financing to beneficiaries are effectuated by the paying unit, in the amount approved by the CA, following a bulk payment request in case of the refund system. In case of advance payments or pre-funding, the payments to beneficiaries are effectuated by the paying unit, in the amount indicated in the approved advance payment requests or pre-funding, without a prior approval of the certifying authority.

For a detailed description of financial management, see the Financial Management System of the Structural Funds and the Cohesion Fund for the 2007 – 2013 Programming Period adopted by Resolution of the Slovak Government No. 835/2006 of 8 October 2006 which is published on [www.finance.gov.sk](http://www.finance.gov.sk).

Diagram of Financial Flows from the SF and the CF



## Diagram of Financial Flows of National Co-Financing from the State Budget



### 7.10.2 Control

In accordance with Article 70 of the General Regulation, Member States shall be responsible for the control of operational programmes, in particular by means of the following measures:

- Ensuring that the operational programme control systems have been introduced in accordance with Articles 58 to 62 of the General Regulation and that they run efficiently;
- Prevention, identification and correction of inconsistencies and, as the case may be, collection of the amounts which had been paid out ineligibly, along with interests on late payments. They shall inform the Commission of such developments, as well as on the interim progress of administrative and court proceedings.

If amounts paid out to a beneficiary ineligibly cannot be collected, the Member State shall be responsible for the refund of the lost amounts to the general budget of the European Union if it is established that the loss has been incurred due to the Member State's failure.

In accordance with the Financial Management System of the SF and the CF for the 2007 – 2013 Programming Period, the **MA** shall be responsible for the preparation and submission of a report concerning the established inconsistencies to the certification authority not later than 5 business days from their identification.

In the event of findings or a suspicion of inconsistencies at each of the certified levels, the **CA** shall immediately suspend the payments of the EU funds for the respective project, draw up a

report on the inconsistencies identified and inform the Central Contact Unit OLAF and anti-corruption (European Anti-Fraud Office) in Slovakia or also the AA, if the CA has requested that the audit authority perform ex-post financial control. The certification authority shall also ensure coordination of financial flows in the area of inconsistencies; opening of an extra-budget account in the State Treasury to receive the EU funds from beneficiaries due to inconsistencies; refund of the ineligibly used or unused funds to the EC, including interest on late payments, and drawing up and submission to the Central Contract Unit OLAF and anti-corruption in the Slovak Government's Office of baseline information for quarterly statements of inconsistencies (report of refunds for ineligibly used or retained funds, report of ineligibly used or retained funds waiting for recovery and report of ineligibly used or retained funds which are considered bad debts) and statements of identified inconsistencies.

The CA shall use the information from the statements of identified irregularities in the event of irregularities with financial impacts and in the event of system irregularities. In the event of irregularities with financial impacts, the payment request to the EC shall be relatively decreased by the amount equalling to the inconsistency. In the event of system inconsistencies, the effect of the inconsistency will be examined with regard to all projects which may have been affected by the system inconsistency.

The role of the **Central Contact Unit OLAF and anti-corruption** is played by the control and anti-corruption section in the Slovak Government's Office. That body shall be responsible in particular for deciding about control findings as irregularities at the national level and for drawing up quarterly reports on irregularities, on the basis of information provided by the certification authority, and its submission to the European Commission's OLAF by means of the Anti Fraud Information System (AFIS). That report shall be sent in a copy to the CA.

**Refunds** of the EU funds and of co-financing by the state budget which the paying unit provided to the beneficiary shall be made in the following cases:

- The beneficiary failed to draw the provided EU funds and co-financing from the state budget;
- The beneficiary was provided EU funds and co-financing from the state budget due to an erroneous payment;
- The beneficiary has violated the obligations laid down in the grant contract (in particular, violation of financial discipline and occurrence of discrepancies) due to which he is obliged to return the funds extended;
- And others (during the project implementation, the beneficiary has reported income generated by the project, for instance).

In individual cases of refunds, the managing authority/intermediary body sends the beneficiary a refund request within the meaning of the grant contract. The refund is notified by the beneficiary to the respective managing authority/intermediary body with whom the beneficiary has concluded the grant contract.

In the event that during a project implementation a beneficiary reported revenues generated by the project, the pro-rated share of funds from the EU source shall constitute revenues of a special account of the Finance Ministry within the meaning of Article 55 of the General Regulation and such funds may be used for further funding of the programme. The pro-rated share of funds for the state budget source of financing shall be returned by the beneficiary in accordance with Article 7 (1) (m) of Act No. 523/2004 Coll. on budgetary rules in public administration and on the modification and amendment of certain acts, to the paying unit account and the paying unit shall transfer the funds to the state budget revenues.

### 7.10.3 Control of Physical Project Implementation

The obligation to perform the control of physical implementation (hereinafter the *CPPI*) is primarily based on the requirement of Article 60 of the General Regulation and Article 13 of the Implementing Regulation laying down the requirement that the control procedures of the management and control system verifying the supply of goods or products, execution of works and provision of services include a CPPI, i.e. administrative, financial, technical and physical aspects of the project or projects. The control of project physical implementation shall make part of the ex-ante financial control. The ex-ante financial control shall be performed by financial managers at the MA level. Their signatures on a document proving correctness of the control performed is to verify the conformity with generally binding legal and internal regulations.

The verification is to ensure that the expenditures reported are actual (i.e. not only a payment for services provided and products supplied but that the co-financed products have been actually supplied and the co-financed services have been actually provided), that the products or services have been provided in accordance with the approval decision, that the beneficiary's payment request is correct and that the projects and expenditures are in accordance with the Community and national rules. The control of a project physical implementation also includes procedures for preventing double financing of expenditures from other Community programmes or from national programmes in other programming periods.

Upon receiving a payment request from the beneficiary, the MA performs a CPPI. The CPPI consists of ***administrative verification (a)*** – i.e. 100 % control of written documentation and ***verification on the spot (b)*** which is performed in the manner determined by the MA.

Within the meaning of Article 13 of the SF Implementing Regulation, a **verification report on the spot** shall be drawn up for every verification on the spot. The report shall indicate the subject and the result of verification on the spot, i.e. the scope of the works performed, the list of goods supplied and services provided which were subject of the check on the spot, the financial amount controlled, the result of control of posting the supplied goods, performed works and provided services in the beneficiary's books and the measures imposed with regard to the inconsistencies identified. The report of financial operation/project verification on the spot is to be signed by the employee who performed the verification on the spot and by the entity controlled.

In the event that the physical control on the spot fails to cover all operations/transactions but was performed over a sample of selected operations/transactions, the report is to include a list of the controlled operations/works or transactions and a description of the method by which the sample was selected.

If the MA identifies an irregularity in the execution of a verification on the spot, the MA shall be obliged to register the irregularity in the information system and immediately report the same to the respective paying unit within the meaning of a valid guidance or irregularities guidance issued by the Section of European Affairs in the Finance Ministry.

#### **7.10.4 Relationship of the Managing Authority and the Intermediary Body/MA in Financial Management**

##### Control of the Intermediary Body/MA

In accordance with the authority delegating powers and responsibilities from the MA for *OP Education* and the MA for *OP Research and development* to the intermediary body (IB/MA), the managing authority shall carry out the control of accordance of the management and control mechanisms stated in the IB/MA internal procedures manual with the activities carried out in financial management, i.e. administrative verification (at the IB/MA's level) and on-the-spot verification of operations (at the beneficiary's level).

Pursuant to Article 13 of the Implementing Regulation and Article 60 of the General Regulation, the IB/MA shall be obliged to submit the MA a list of verifications carried out on the spot, in which the IB/MA briefly states the control results and the measures adopted with regard to the irregularities established. The list of verifications on the spot carried out by the IB/MA shall be submitted to the MA for each calendar quarter.

##### Methodology Guidance for the IB/MA

The MA shall be obliged to provide methodology guidance to the IB/MA in all areas of financial management. The MA shall issue methodology guidance based on the needs resulting from the financial management nature or at the IB/MA's request.



## Annexes

- Annex 1: A List of Acronyms
- Annex 2: Terminological Vocabulary
- Annex 3: References
- Annex 4: List of Working Group Members for Drawing up the Operational Programme Education
- Annex 5: A List of Indicators on the Programme and Priority Axes Level
- Annex 6: A List of State Aid Schemes
- Annex 7: Recommendation of the European Parliament and Council of 18 December 2006 on key competences for life-long learning (2006/962/EC)
- Annex 8: Final report on ex-ante evaluation of the Operational Programme Education of the 2007 – 2013 NSRF
- Annex 9: Examples of Possible Target Groups