

CZECH REPUBLIC  
MINISTRY OF EDUCATION, YOUTH AND SPORTS

Operational Programme

# EDUCATION FOR COMPETITIVENESS



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## Introduction

Upon accession to the European Union, the Czech Republic has been given the opportunity to use the support provided within the scope of economic and social cohesion policy, the current form of which places a large emphasis on strengthening the competitiveness of the European Union countries and close interconnection with the Lisbon strategy.

In the future, European society, and thus also Czech society, must cope with the dynamically evolving conditions in the global economy and the connected demands on the skills, knowledge and flexibility of each individual. Global competition and the variability of the labour market will force each individual to engage in lifelong learning. Under our conditions, the urgency of these challenges is simultaneously intensified by the fact that the Czech population is experiencing a demographic decrease and the labour market needs to replace the people who are retiring. An inability or lack of readiness to respond efficiently to these conditions may cause serious problems in the areas of labour employment and competitiveness of the Czech Republic, thus simultaneously jeopardizing the pace of economic growth.

The Czech Republic realizes the importance of supporting the development of human potential, which is one of the fundamental factors for sustainable economic growth of the “knowledge” economies of developed countries. In this context, the educational system must be perceived as one of the main pillars of future economic success and social cohesion. The educational system as a whole must be effective enough to increase the population’s education level and to enable the individuals (irrespective of their social conditions, various capabilities and expectations) to obtain and improve their key competences, with the aim of strengthening their adaptability and flexibility on the labour market. Educational institutions must become modern centres of lifelong learning and partner co-operation.

With regard to the facts above, in relation to the strategic objectives of the National Strategic Reference Framework (NSRF – represents the basic programme document of the Czech Republic for using European Union funds in 2007-2013) and with regard to the high degree of complexity of the issue of education, the Czech Republic has prepared a separate “Education for Competitiveness” Operational Programme (hereinafter referred to as “EC OP”). This operational programme focuses on support in areas that will contribute to developing the potential of the Czech Republic’s population and to the creation of suitable conditions for education and learning. EC OP defines the focus and depth of interventions in the area of human resource development by means of education in all of its various forms with an emphasis on a comprehensive system of lifelong learning, on forming a suitable environment for research, development and innovation activities and on the stimulation of co-operation between educational institutions and the research and production spheres.

EC OP is submitted in terms of the Convergence objective, being financed through the European Social Fund. During its creation, all the basic documents specifying the basic priorities in the area of economic and social cohesion (ESC) on European and national levels were reflected. First of all, there are the Community Strategic Cohesion Guidelines<sup>1</sup> (hereinafter referred to as “CSG”), the main principles of which have been simultaneously applied when creating documents on a national level.

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<sup>1</sup> Council Decision dated 6 October 2006 (2006/702/EC) on Community Strategic Cohesion Guidelines.

The basic national document for laying out the EC OP was the Czech Republic National Strategic Reference Framework 2007 – 2013, specifying priority axes and specific objectives. Additional underlying documents included the National Lisbon Programme 2005-2008 – Czech Republic National Reform Programme (hereinafter referred to as “NRP”), National Development Plan 2007-2013 (hereinafter referred to as “NDP”) and Economic Growth Strategy 2005-2013 (hereinafter referred to as “EGS”). Of the materials dealing specifically with human resource development, the most fundamental ones included Human Resources Development Strategy for the Czech Republic (hereinafter referred to as “HRDS”) and the subsequent Human Resources Development Strategy Implementation Programme (hereinafter referred to as “HRDS IP”).

From the perspective of meeting the NSRF objectives, EC OP provides primarily for meeting Strategic objective II – Open flexible and coherent society and, to a certain extent, also Strategic objective I – A competitive Czech economy. The EC OP itself is tied to the implementation of the NRP objective, which is explicitly expressed as a global objective.

In terms of the general financial allocation plan for the Czech Republic for the Convergence objective in 2007 – 2013, 7% of the funds from EU structural funds have been allocated for the Czech Republic, i.e. EUR 1.811 billion. EC OP is an operational programme directly dealing with the issues relating to development of the Czech population’s potential by means of education. Settlement of this issue shall be supported by additional operational programmes as well, particularly Human Resources and Employment OP (hereinafter referred to as “HR&E OP”), which is funded from ESF, focusing primarily on supporting the employment of both employed and unemployed persons by creating jobs, through continued education and social integration of disadvantaged population groups. Investments into people through ESF interventions in the EC OP programme are tied to additional operational programmes, i.e. Research and Development for Innovation OP (hereinafter referred to as “R&DI OP”) and Enterprise and Innovation OP (hereinafter referred to as “E&I OP”), the interventions of which supported from the ERDF create suitable capacities for which the development of human resources and the related appropriate setting of interventions into education are crucial.

In accordance with Council Regulation (EC) No 1083/2006, Art. 11, and in accordance with Council Regulation (EC) No 1081/2006, Art. 5, the partnership principle is applied in the creation of EC OP. In order to prepare and process the operational programme, a broad working party has been set up, consisting of representatives from the Ministry of Education, Youth and Sports (hereinafter referred to as “MEY&S”) as the future Managing Authority, author, ex-ante evaluator, other engaged ministries, educational institutions, regional and local government, business sphere and other social partners (hereinafter referred to as “Working Party”). The Working Party held regular meetings, working versions were submitted for wide opponency proceedings, and two itinerant meetings were included into the works as well. The programme was presented to and discussed with the public at two public hearings as well. The EC OP version being submitted is the result of the above-mentioned creation process.

In order to ensure a logical follow-up, overall synergies and definitions in respect of other operational programmes, consultations with representatives of authors of the other operational programmes took place during the preparation. While R&DI OP supports the creation of infrastructure of the bidding side of research and development, EC OP supports activities resulting in the development of human resources in this area. E&I OP covers the area of intervention in favour of business entities, and EC OP supports the creation of a general framework of further education, which also serves for the development of the business sphere, related educational activities and co-operation of various entities. As compared to HR&E OP, EC OP focuses on improving the initial and further education in order to increase the flexibility and

adaptability of individuals already present on the labour market or about to enter it, while HR&E OP supports labour market development and direct support to further education of the unemployed and persons threatened on the labour market, as well as the employed. It also contains the creation of systems to foresee changes in the labour market and the management of both gradual and sudden changes in employment.

The submitted programme document consists of five chapters. Chapter 1 contains an analysis of the current economic and social situation in the field of human resource development, education and conditions for the further potential enhancement of adaptability, employability and competitiveness of the Czech Republic's population, including identification of weaknesses and strengths, threats and opportunities. Chapter 2 deals with EC OP strategy, including a description of the global strategic objective of EC OP, its specific objectives and the relationship between EC OP and strategic documents of the EU and the Czech Republic. Individual priority axes of the operational programme are described, and methods for solving problematic areas are outlined. Chapter 3 focuses on describing the priority axes and defines their objectives, primarily in relation to analysis of weaknesses and strengths. Assignment of suitable indicators is included as well. Implementation of the programme including control and audit, making payments, financial flow certification, monitoring, electronic information exchange, evaluation and publicity are described in Chapter 4. Chapter 5 defines financial provisions of the operational programme.

The Education for Competitiveness OP has been prepared in accordance with Council Regulation (EC) No 1083/2006 and Council Regulation (EC) No 1081/2006, and is in full compliance with Czech Republic Government Resolution No 175/2006 of 22 February 2006.

EC OP has passed both the internal and external amendment procedure. It was adopted by the Czech Republic Government on 28 June 2006, under Czech Republic Government Resolution No 821 and approved on 15 November 2006 under Czech Republic Government Resolution No 1302.

## **I. Current Economic and Social Analysis in the Area of Education**

This analysis of the social and economic situation in the area of education in the Czech Republic is the basic precondition for defining the strategy and channelling interventions from the European Social Fund into education, and improving human resource competitiveness in 2007-2013. This chapter provides a summary of key factors for the above-mentioned areas, identifying the most serious problems the Czech Republic has been coping with or will have to resolve in the next period. ESF interventions should focus on such indicated areas and offer solutions to improve the situation and eliminate threats to competitiveness, social and economic stability.

### **1.1 Normative Framework of Education in the Czech Republic**

The key legal norms regulating the area of education in the Czech Republic include:

- Act No 561/2004 Coll. (of 24 September 2004), on pre-school, primary, secondary, post-secondary vocational and other education (the School Act), as amended by Act No 383/2005 Coll.
- Act No 563/2004 Coll. (of 24 September 2004), on teachers and amendments to some acts, as amended.
- Act No 552/2005 Coll. amending Act No 111/1998 Coll., on universities and on amendments and supplementations to other acts (the Universities Act), as amended.

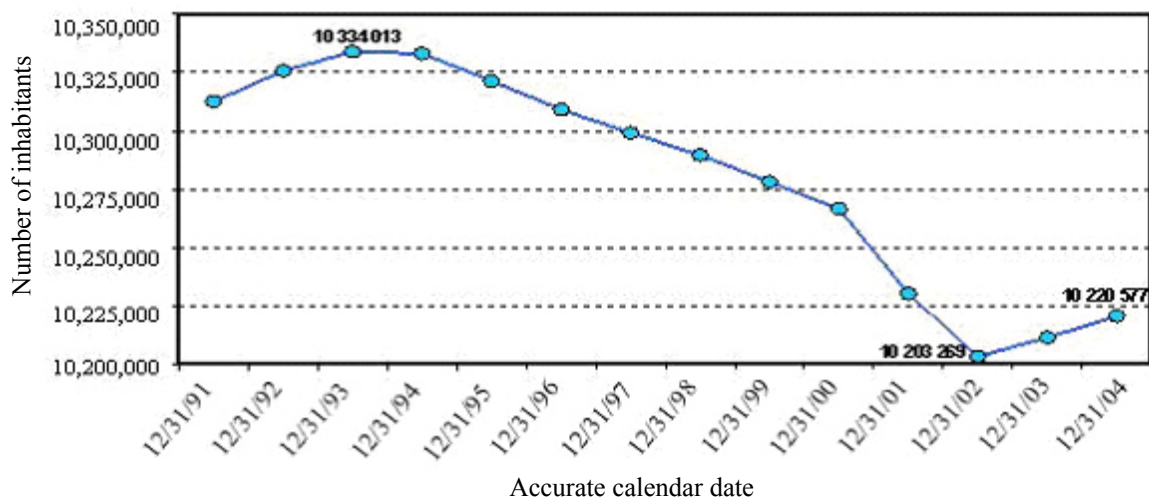
### **1.2 Demographic Population Structure of the Czech Republic in Terms of Education**

#### ***1.2.1 Demographic trend***

The demographic trend significantly affects the dimensioning of the educational system, and subsequently manifests itself in the labour market by labour force supply in a various qualification structure.

In terms of the number of inhabitants, the Czech Republic experienced a continuous decrease from 1994 to 2002; from that point the total population has been growing slightly. The key element in the total increase is primarily the net positive migration, which outweighs the negative natural increase (in spite of its improving structure due to a higher birth rate in recent years).

**Graph 1: Trend in Number of Inhabitants 1991-2004**



Source: NPR for 2007-2013, working version

According to the Czech Statistical Office, the future trend in population will be characterised by an irregularity. A continued decrease that is likely to occur in the number and proportion of children in the population is one of the key features. According to the mean projection, the number of children aged 0-14 should experience a relatively rapid decrease in next several years, from the current 1.6 million to 1.4 million in 2010. This fact entails the risk of smaller choice, e.g. of individuals capable of completing their university studies and subsequently performing professionally demanding professions. Therefore, problems can be foreseen in respect of providing the labour market with a sufficient number of graduated professionals.

### 1.2.1.1 Age structure of population

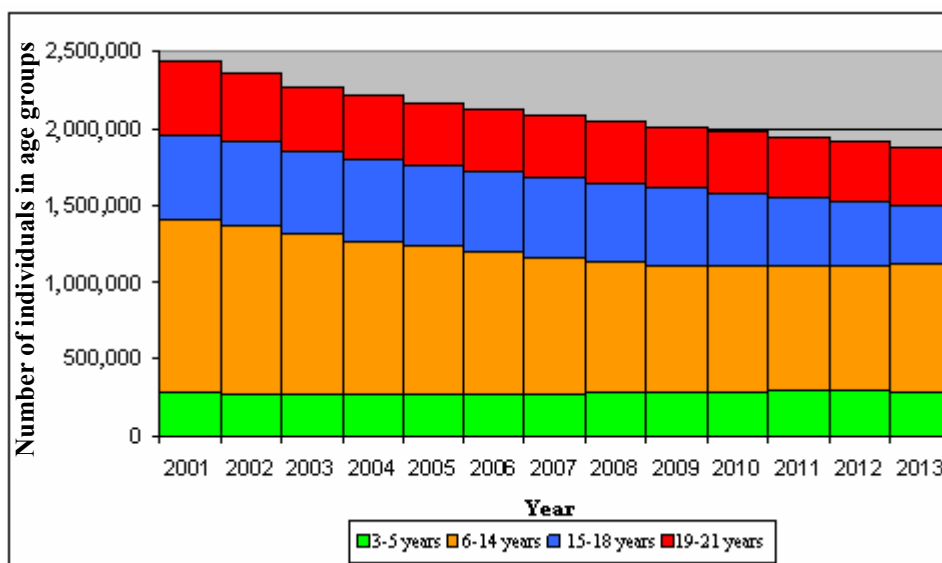
The age structure of the population of the Czech Republic has been subject to significant changes related to a drop in the birth rate and an increase in average life expectancy. The population of the Czech Republic has been ageing, with the children component (0-14 years) significantly decreasing. In the last decade there has been a decrease in the number of children by more than 420 thousand; on the other hand, the 65+ age group has grown in number.

### 1.2.1.2 Age group projection

Graph No 2 shows an obvious trend toward decreasing the total number of individuals in age groups (15-18 and 19-21 years); at primary schools, on the contrary, there will rather be a slight growth in the number of pupils in the time horizon of 2013. The decrease in the number of pupils in the current period applies particularly to primary school capacities and to a smaller extent to secondary schools as well. The institutions of tertiary education<sup>2</sup> will be affected by the unfavourable demographic trend with a certain time delay.

<sup>2</sup> Tertiary education means both post-secondary vocational and higher education.

**Graph 2: Projection of Age Groups Relevant to Initial Education**



Source: Long-term Development Plan for Education and Educational System in the Czech Republic, MEY&S 2005

### 1.2.1.3 Educational structure of the Czech Republic's population

The educational structure of the Czech Republic's population aged 15 and over features a high number of persons with secondary education. Women predominate in the category of persons with secondary education completed by a school-leaving examination, while men prevail in the category of secondary education completed by attaining an apprenticeship certificate. The proportion of persons with primary education (or without education) has been continuously decreasing, and there is an increasing trend in the proportion of people with a higher education. In this category, there is a significant increase in women with higher education (8.2% in 2004 as compared to 5.4% in 1993); this growth trend is significantly smaller in men. In spite of this, the proportion of persons with higher education is still not at the level of EU countries (see Chapter 1.3.4.4).

As to educational structure of the employed, we can see a positive trend relating to growth of the category of persons with secondary education completed by a school-leaving examination and higher education, and, on the contrary, a decreasing number of employed persons with secondary education completed by attaining an apprenticeship certificate and with primary education. These changes are fully associated with the changes in the educational structure of the population, and we can expect this trend to continue in the same direction.

The following table provides an overview of the structure of the Czech Republic's population according to education level and age groups for 2004. The table implies that secondary education completed by attaining an apprenticeship certificate was still the most frequent category (3,319,500), which is also most frequently affected by unemployment, in 2004. Out of the total number of 862,200 persons with higher education, 15,200 are unemployed.



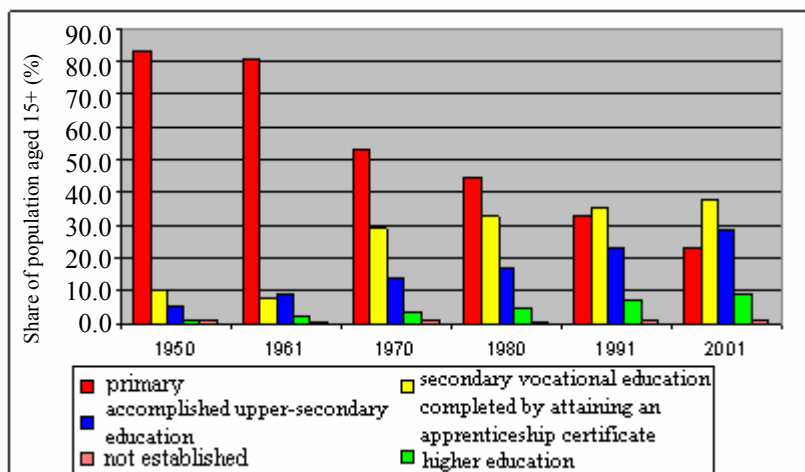
**Table 1: Population and its Structure According to Education and Age Groups in 2004 (in Thousands of Persons)**

Indicator	Population in total	Of which					
		Active		Total	Inactive		
		Employed	Unemployed		Pensioners	Students	Maternity leave
<b>Total</b>	<b>10,211.6</b>	<b>4,706.6</b>	<b>425.9</b>	<b>5,079.1</b>	<b>2,206.3</b>	<b>839.3</b>	<b>173.2</b>
<b>Of which men</b>	<b>4,974.8</b>	<b>2,663.1</b>	<b>201.2</b>	<b>2,110.5</b>	<b>827.4</b>	<b>424.4</b>	<b>0.7</b>
<b>Of which women</b>	<b>5,236.8</b>	<b>2,043.5</b>	<b>224.7</b>	<b>2,968.6</b>	<b>1,378.9</b>	<b>414.9</b>	<b>172.5</b>
<b>Highest education level achieved</b>							
<b>Primary</b>	1,797.6	296.1	104.6	1,396.9	750.8	562.3	9.0
<b>Secondary completed by attaining an apprenticeship certificate</b>	3,319.5	2,039.4	211.0	1,069.2	858.3	24.2	60.5
<b>Secondary completed by a school-leaving examination</b>	2,679.1	1,709.7	95.1	874.3	458.3	235.4	81.3
<b>Higher</b>	862.2	659.7	15.2	187.3	129	16.8	22.4
<b>Without education</b>	12.2	0.8	-	12.1	9.0	0.4	-
<b>Children under 15</b>	1,538.3	-	-	1,538.3	-	-	-
<b>Not identified</b>	2.0	0.9	-	1.0	0.4	0.2	-
<b>Age groups</b>							
<b>0-14</b>	1,538.3	-	-	1,538.3	-	-	-
<b>15-19</b>	667.0	33.3	24.0	603.7	2.0	587.1	0.2
<b>20-24</b>	725.7	362.4	77.3	286.0	5.1	220.9	13.7
<b>25-29</b>	900.0	648.4	63.7	187.9	9.6	29.5	83.0
<b>30-34</b>	794.0	629.2	48.8	116.0	9.8	1.5	57.5
<b>35-39</b>	687.7	586.2	44.6	56.9	12.7	0.2	14.6
<b>40-44</b>	657.1	572.7	41.5	43.0	18.2	-	4.2
<b>45-49</b>	720.2	619.5	41.4	59.3	37.3	-	0.1
<b>50-54</b>	784.7	641.8	51.3	91.6	66.6	0.1	-
<b>55-59</b>	751.9	444.1	28.3	279.5	259.8	-	-
<b>60-64</b>	564.5	117.1	3.7	443.8	434.7	-	-
<b>65 +</b>	1,426.6	52.0	1.3	1,373.3	1,350.5	-	-

Source: adapted according to Czech Statistical Office

It is also interesting to compare the trend in the educational structure of the Czech Republic's population since the 1950s, when relatively significant changes occurred, as documented by the following graph:

**Graph 3: Trend in Educational Structure of the Czech Republic’s Population**



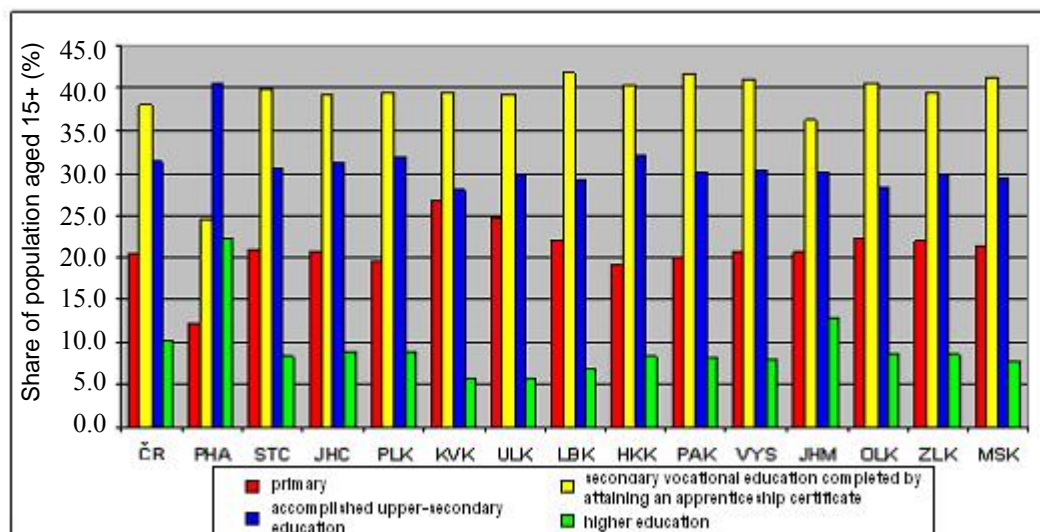
Source: Long-term Development Plan for Education and the Educational System in the Czech Republic, MEY&S 2005, adapted for the needs of EC OP.

The graph as above shows an obvious growth in the significance of secondary and higher education, which reflects the changing structure of the economy and continuous strengthening the importance of knowledge for the labour market. The educational structure is influenced by older age groups containing a large proportion of persons with a lower education level, whilst the number of university graduates did not start increasing until the early 1990s.

**1.2.1.4 Educational structure of population by region**

The proportion of persons according to the highest achieved level of education is one of the basic indicators of the quality of the labour force.

**Graph 4: Educational Structure of Population of the Czech Republic by Region**



Source: LFS (Labour Force Survey), Czech Statistical Office for Q4/2004

Legend: PHA – Prague, STC – Central Bohemia Region, JHC – South Bohemia Region, PLK- Pilsen Region, KVK – Karlovarsko Region, ULK – Ustecko Region, LBK – Liberecko Region, HKK – Kralovehradecko Region, PAK – Pardubicko Region, VYS – Vysocina Region, JHM – South Moravia Region, OLK – Olomouc Region, ZLK – Zlin Region, MSK – Moravia-Silesia Region.

According to LFS, in Q4/2004 approx. 20% of the Czech Republic's population aged 15+ achieved only basic education. From a regional perspective the least favourable situation is in the Karlovarsko and Ustecko regions; in contrast the Prague and Kralovehradecko regions are the best off. Secondary education completed by attaining an apprenticeship certificate in the Czech Republic's population exceeds 30% and shows a minimal variation range (excluding Prague). According to LFS, 10.1% of the population were university graduates, with the highest proportion of university graduates in the said period being in Prague (22.2%); the least favourable situation is in the Karlovarsko and Ustecko regions. The causes must be looked for both in the dominant position of the capital city, Prague, in terms of university capacities and their long traditions, and also in the variety of job opportunities, which is further emphasized by the concentration of public administration authorities and control structures of numerous domestic commercial entities and countless national representations of foreign companies.

#### ***1.2.1.5 Influence of educational structure upon employment and employability***

In terms of employment, the most problematic group includes low-qualified workers and young people without experience, particularly school leavers and youths who have completed their primary school education and for whom it is difficult to employ themselves in the labour market. In June 2006, the proportion of persons under 25 years in the total number of job applicants was 17.2%. The highest-risk group are youths without education or with incomplete education or primary education. The most frequent causes of youth unemployment are primarily: insufficient practical experience, low qualifications, insufficient language knowledge, and incompatibility of the school leavers' qualifications with the requirements for labour force qualifications on the labour market in terms of both structure and content.

Another problematic group is the group of elderly persons, i.e. persons aged 50+. These persons make up 26% of total unemployment and there is an increasing trend in this indicator. Very often, the inadequate education of these persons in relation to dynamically changing conditions on the labour market and missing working skills required for specific jobs are a significant cause of this condition. Moreover, the elderly workers group is the one that takes part the least in further education.

The problematic employability of workers with a low level of education achieved can be documented in the following table.

**Table 2: Unemployment According to Education Level Achieved (Q2/2006)**

Education level	Number	Proportion in %
Without education	853	0.2
Incomplete primary ed.	2,222	0.5
Primary ed.	142,195	<b>31.5</b>
Lower-secondary ed.	392	0.08
Lower secondary vocational ed.	9,697	2.1
Secondary vocational ed. completed by attaining an apprenticeship certificate	177,403	<b>39.3</b>
Secondary and secondary vocational ed. completed by attaining an apprenticeship certificate	4,427	0.9
Accomplished upper-secondary ed.	13,978	3.1
Upper-secondary ed. completed by a school-leaving examination and without attaining an apprenticeship certificate	64,406	<b>14.2</b>
Upper-secondary ed. completed by a school-leaving examination and by attaining an apprenticeship certificate	16,800	3.7
Post-secondary vocational ed.	2,309	0.5
Bachelor's studies	2,036	0.5
Master's studies	13,987	3.1
Doctoral studies	401	0.08
<b>Total</b>	<b>451,106</b>	<b>100.0</b>

Source: *Quarterly Unemployment Statistics, Q2/2006, Ministry of Labour and Social Affairs*

### 1.3 Education System in the Czech Republic

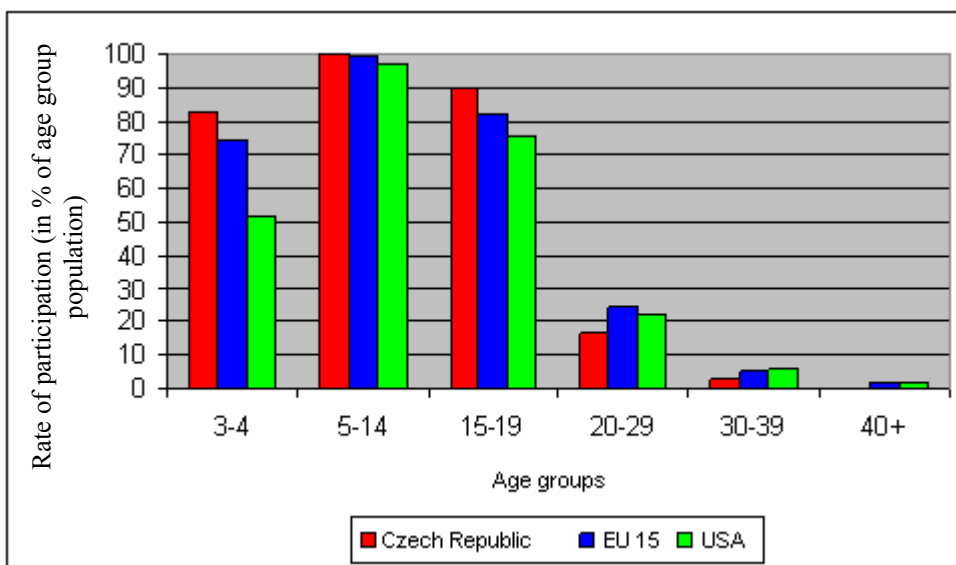
#### 1.3.1 Length of education

Since 1999, the average length of education has increased from 15.5 years to 16.5 years in 2003; however, as compared to average length of education in the EU, the Czech Republic is still lower.

#### 1.3.2 Rate of participation in education

In terms of the rate of participation in education, there is a relatively solid rate (comparable to that of the most advanced OECD countries), particularly in primary and secondary education (practically a 100% rate of participation) for pupils and students aged under 20. However, particularly in the higher age groups and in higher education, there are already remarkable differences between the rate of participation in the Czech Republic, the EU average, and the most advanced OECD countries (see the following graph).

**Graph 5: Rate of Participation in Education (in % of Population of the Relevant Age Group)**

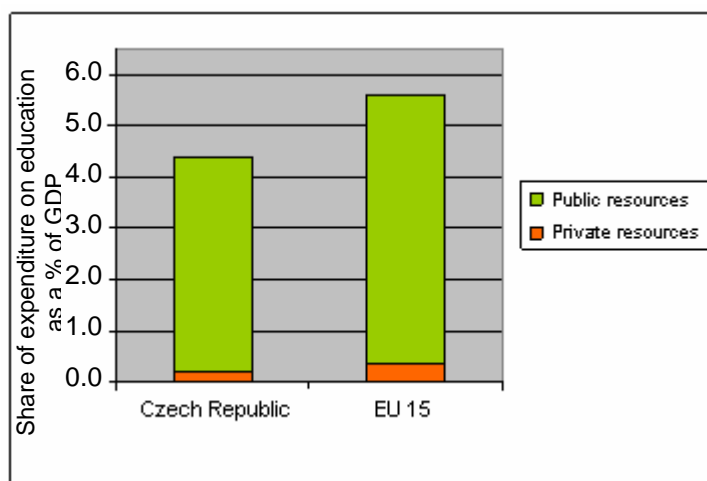


Source: OECD, Education at a Glance, 2005, adapted by DHV CR

### 1.3.3 Expenditure on education

In terms of expenditure on education, the Czech Republic still lags behind the European level – the average of the EU 15 is approx. 5.4% of GDP, while the proportion of resources spent in the Czech Republic is equivalent to 4.4% of GDP.

**Graph 6: Expenditure on Education (as a % of GDP)**



Source: OECD, Education at a Glance, 2005, data for 2002, adapted by DHV CR

### **1.3.4 System of initial education**

#### **1.3.4.1 Primary education**

Access to primary education is universal in the Czech Republic, and the rate of participation in education at primary level is almost 100%. Children officially enter primary education at the age of six, but in fact 24% of the children are seven-years old<sup>3</sup> and 1% of them are five-years old.

The expected number of primary school pupils (including the schools for pupils with special educational needs, which represent approx. 4% of the total) should decrease from 2004/05 to 2013 by approx. 13.6% (by 130,400). There will be a decrease of approximately 3% of pupils at primary level, and almost one quarter of pupils in the lower secondary education. The drop in pupils reflects not only the decreasing number of people in younger age groups of the population, but also the pupils leaving for six-year and eight-year general secondary schools and conservatories, which represent an average level of 10% for the Czech Republic (out of pupils from the 5<sup>th</sup> and 7<sup>th</sup> class of primary school). Their number should decrease gradually from today's approx. 11,900 pupils to approx. 9 thousand pupils in 2013.<sup>4</sup>

In 2004/2005, there were 18.9 pupils per teacher, with women dominating in the teaching staff (over 85%). The total capacity of primary schools reached 1.3 million places in the 2004/2005 school year, and 70.6% of which were utilized during this period. For optimum use (at least 80%) their total capacity would have to be reduced by 23.6%.<sup>5</sup>

In international comparison, at the end of compulsory school attendance pupils achieve average to above-average results in mathematics, above-average results in natural science subjects, and below-average to average results in the level of reading literacy (PISA 2003).

#### **1.3.4.2 Education of individuals with special educational needs**

Individuals whose impairment prevents them from achieving the relevant educational level through standard pedagogical procedures are educated at special schools. At present, the network of special schools and special school facilities (including special and specialized classes at normal schools) is relatively consistent, providing accessibility for most disabled pupils. Disabled pupils are integrated into normal types of schools or into special or specialized classes within normal schools as much as possible.

The number of pupils at special schools has fallen slightly since 1995/96, which was caused on one hand by a drop in the population curve, and on the other hand by an increasing integration of disabled children (regardless of type of impairment) into normal schools.

In 2003/04, 65 thousand pupils attended special schools. The biggest proportion was made up of pupils performing their compulsory school attendance at special schools (9 thousand at special primary schools, 26,500 at special schools, and 5,500 at special-assistance schools, including preparatory levels). In total, 6% of children at the age of compulsory school attendance attend special schools. Over the years, the structure of special school pupils has changed according to the type of impairment as well. First of all, the proportion of mentally disabled pupils has decreased, but on the other hand the proportion of pupils with combined impairment has

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<sup>3</sup> Seven-year old children enter the educational system due to deferred compulsory school attendance.

<sup>4</sup> Long-term Development Plan for Education and the Educational System in the Czech Republic 2005.

<sup>5</sup> Long-term Development Plan for Education and the Educational System in the Czech Republic 2005.

increased. The placement of Roma pupils into special schools remains a relatively frequent phenomenon.

Pupils from socially disadvantaged environments frequently encounter educational problems despite their intellect giving them the conditions for better studying results.

Although the proportion of mentally disabled pupils decreased gradually, it represented 60% of special school pupils and 8% of pupils with combined impairment in the 2003/04 school year.

### ***1.3.4.3 Secondary education***

The low birth-rate in recent years will also affect the number of 15-year olds that will enter secondary schools during the 2007 – 2013 programming period. There will be continued growing interest in secondary education in terms of population age group in regular daily study.

The rate of participation of the youths in secondary education is very high; in 2004/2005 it reached 92.4% of the proportion of 15 – 18 year olds, i.e. 96.5% including extension study. Thus, the target that the EU committed itself to achieve in the Lisbon process agenda by 2010 has already been exceeded.

There is a certain discrepancy between applicants and enrolled pupils for individual types of secondary schools. The interest in secondary education completed by a school-leaving examination has increased, while the interest in secondary education completed by attaining an apprenticeship certificate has decreased significantly.

The need to increase the number of teaching staff increases with the growing number of students attending general secondary schools. It is necessary to balance the men to women ratio in the teaching staffs, where an unreasonable high proportion of women persists. Without growth in the number of teachers, the number of pupils per teacher would increase disproportionately by 2013. However, a general reduction in teaching staff should occur at secondary vocational schools in the given years. The capacity of general secondary schools ranged around almost 89% already in 2003/04, and so it must be increased. A solution would be to use the released capacities of secondary vocational schools, which were used at 76% in 2003/04 and where is a need to reduce their number by approximately 8.8% by 2013, and particularly to use the capacities of apprentice centres, which are used at 70.6% and where the expected reduction of their number should reach almost 21%.

In recent years, the number of secondary professional schools, where it is possible to study a “lyceum” school framework programme, has been increased. These school framework programmes belong to the group of branches providing general vocational training. Lyceum is conceived as vocational study with an increased share of general education as compared to regular studies at secondary vocational school. A lyceum graduate is prepared for tertiary studies in similarly oriented branches and, besides, obtains vocational competences that can be applied to even when he/she directly enters the labour market. The lyceum school framework programme in terms of its content is co-ordinated by the National Institute of Technical and Vocational Education, which processes the curriculum. In the 2005/2006 school year, the education was implemented in the following areas of the lyceum school framework programme:

- Technical
- Economic
- Teaching
- Waldorf

- Medical
- Natural science

**Table 3: Trend in Number of Pupils Studying in Lyceum School Framework Programmes**

Orientation of lyceum school framework programme	Newly enrolled for school year			Total pupils in school year			Graduates (completed course) in school year		
	03/04	04/05	05/06	03/04	04/05	05/06	02/03	03/04	04/05
Technical	1,534	1,822	2,101	3,971	5,135	6,338	249	516	785
Economic	1,118	1,379	1,845	2,913	3,886	5,154	86	369	535
Teaching	410	535	583	942	1,406	1,768	60	58	302
Waldorf	30	31	29	30	60	87	0	0	0
Medical	-	-	539	-	-	539	-	-	0
Natural science	-	-	191	-	-	191	-	-	0
<b>Total</b>	<b>3,092</b>	<b>3,767</b>	<b>5,288</b>	<b>7,856</b>	<b>10,487</b>	<b>14,077</b>	<b>395</b>	<b>943</b>	<b>1,622</b>

Source: NITVE (National Institute for Technical and Vocational Education) 2005, 2006.



**Table 4: Number of Secondary Schools where Teaching is Implemented in a Lyceum School Framework Programme (by Study Orientation)**

Orientation of lyceum school framework programme	Number of schools in 2004/05 school year	Number of schools in 2005/06 school year
Technical	60	66
Economic	40	57
Teaching	18	22
Waldorf	1	1
Medical	-	17
Natural science	-	8
<b>Total</b>	119	171

Source: NITVE.

#### 1.3.4.3.1 Structure of secondary vocational education branches

According to a statistical survey by IIE (Institute for Information on Education), the interest of applicants for vocational studies changed only slightly over the recent 4 years – it has shifted exclusively from technical branches to social sciences, sciences and services unlike the labour market demand. Within the structure of branch groups, between the 2001/02 and 2004/05 school years, the sharpest decrease in the number of applicants occurred in the branches of electrical engineering and telecommunications, food industry, construction industry, gastronomy and hotel business; the biggest drop manifested itself in the field of health service, caused by a change in the preconditions for performance of the profession.

#### 1.3.4.4 *Tertiary education*

##### 1.3.4.4.1 Post-secondary vocational education

The network of post-secondary vocational schools has come into existence in considerably variable manners both as to their number and size, branch structure and regional distribution. In 2004, study programmes within post-secondary vocational studies were taught at 175 post-secondary vocational schools. Most of the post-secondary vocational schools co-exist with secondary vocational schools.

In the structure of study branches of post-secondary vocational schools, economic branches are prevailing, approx. 40%. They are followed by medical branches with approx. 20%, technical ones with approx. 17%, humanities with approx. 15%, agriculture and forestry, ecology and natural conservation with approx. 5%, and arts with approx. 3%. More than 90% of students are educated in economics, humanities, social sciences or teaching. The number of students attending technical post-secondary vocational schools does not even reach 10%.

The regional distribution of post-secondary vocational schools is uneven as well. Post-secondary vocational schools exist primarily in major urban areas – e.g. Prague, Brno, Ostrava and Ceske Budejovice. Conversely, there is no representation of post-secondary vocational education in the

border areas – e.g. in the districts of Sokolov, Cheb and Tachov, or in the districts of Rakovník and Český Krumlov. There is a very weak representation in some districts of South Moravia region (e.g. Znojmo, Breclav).

In comparison with bachelor's studies, which are quite close as to length of studies and often level as well, there are two obvious differences of a formal nature between the study programmes of post-secondary vocational schools and bachelor's study programmes at universities: a school fee (regulated) is paid for the studies even at state post-secondary vocational schools and no academic degree is awarded. Post-secondary vocational schools very often provide study programmes with significantly practical orientations, and it should be noted that they often offer studies in branches that have not been offered by any university so far. The presence of post-secondary vocational schools also plays an indispensable role in places where there is no university or faculty.

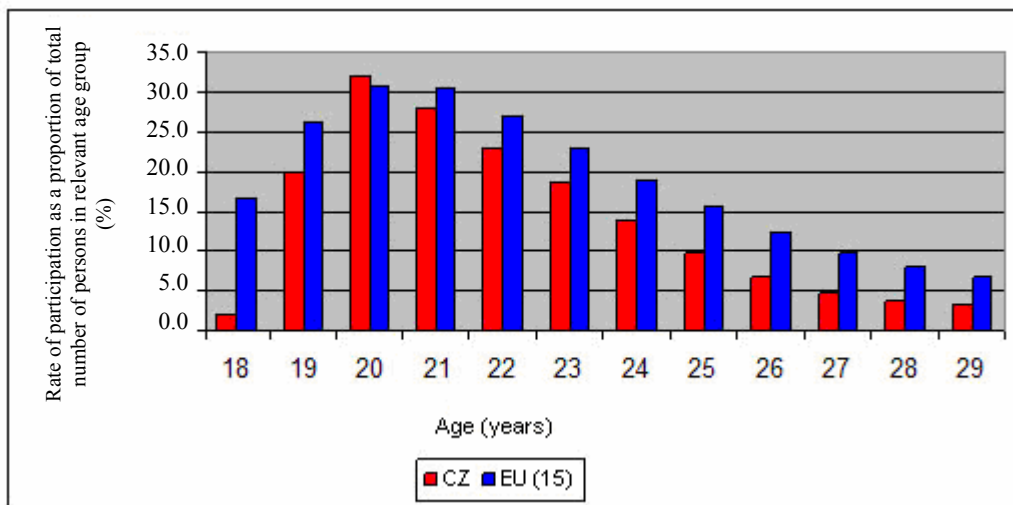
Admission to post-secondary vocational schools is closely connected with the admission procedure to universities, where students often go to after having completed the first year at post-secondary vocational schools. A two-year study has shown a decrease in students between the 1st and the 2nd years ranging around 20%; for three-year study the figure is 30%, and for 3 and a half-year study it is as high as 45%. Post-secondary vocational education is thus often considered "lower-grade" tertiary education. Such a perception can be considered as unreasonable, because it is tertiary education intended particularly for practically oriented applicants. Post-secondary vocational school graduates are prepared for the work performance based on their practical training received in the course of the study; at the same time, they acquire a relatively good knowledge of a foreign language, including the knowledge of expert terminology relating to the studied field. A foreign language goes towards credit points.

#### **1.3.4.4.2 Higher education**

The network of universities has experienced significant changes since 1990. In the 2004/2005 school year there was a total of 25 public universities (117 faculties). Besides public universities, there are two state universities, i.e. The University of Defence in Brno and The Czech Republic Police Academy in Prague. Private universities represent quite a new element in the system – a total of 39 state approvals were awarded for private universities by the end of January 2006.

In terms of the rate of participation in tertiary education, there is an obvious gap between the rate of participation in the Czech Republic and the European average (EU 15), although there are differences in the national classifications of tertiary education.

**Graph 7: Rate of Participation in Tertiary Education**



Source: OECD, *Education at a Glance, 2005* (data for the 2002-2003 school years)

However, the difference in rate of participation of the Czech Republic’s population in higher education as compared to EU countries is much more remarkable than suggested by a simple arithmetic average of the EU 15. In Finland, for instance, the rate of participation in higher education of the population aged 22 reaches 45%, i.e. practically double the percentage as compared to the level in the Czech Republic.

Although the number of students at universities has increased significantly in recent years (the number of university students is more than double the number in 1990), demand for higher education by secondary school leavers has not been saturated yet.

Out of the total number of new applicants for university studies (130,353 applicants), 63% were admitted at universities in the 2004/2005 school year. The biggest demand overhang was in humanities; in technical branches, however, the interest overhang is substantially lower.

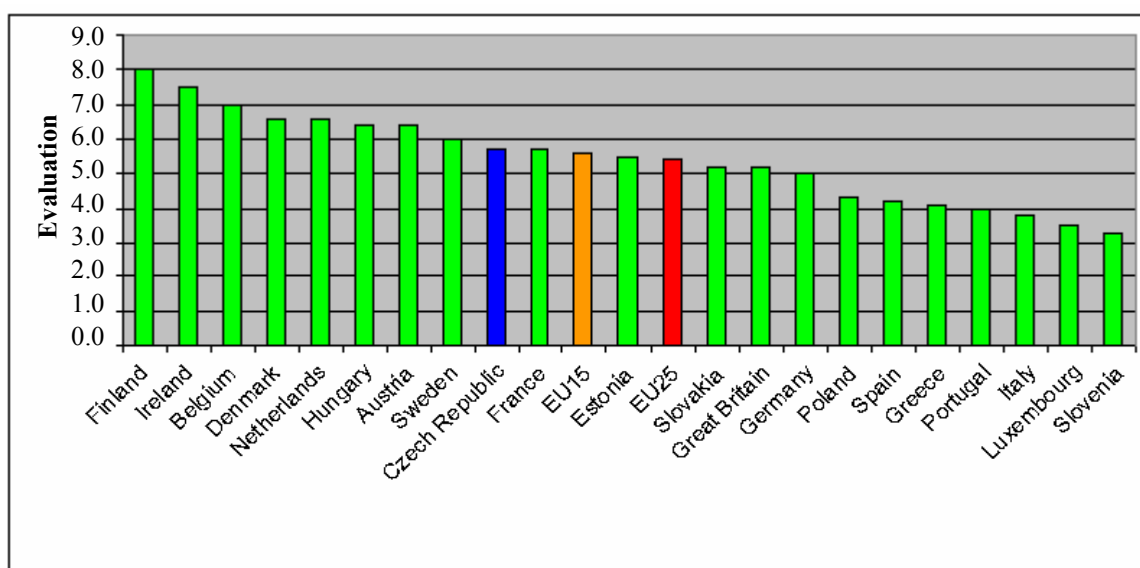
The growth in the number of university students is not accompanied by an adequate increase in university capacities and number of teaching staff (from 1990 to 2002 the number of university teachers increased by only 15%), which results in insufficient individualization of studies and a lack of appropriate distribution of subjects studied. As a consequence, the limited capacity of listed lectures and seminars results in prolonging the overall period of studies.

### Educational activity of universities and its quality

Educational activity together with scientific, research and development activity and activity focused on working together with the economic sphere all form the main activity of universities.

Universities try to adapt their study programme offers to the current needs of the labour market in order to provide the best employability of their graduates in practice. For this purpose, they cooperate with numerous Czech and foreign companies. In spite of this, there are considerable reserves in their mutual co-operation. Some schools perform their own analyses of the employability of their graduates in the labour market and of the educational needs of relevant enterprises in the given region, and at the same time enable the enterprises to participate in the preparation and content orientation of the studies.

**Graph 8: Quality of Higher Education**



Source: *World Competitiveness Yearbook, Lausanne, International Institute for Management Development, 2004*

Note: Evaluation is based on a survey in which the experts questioned answer the following question: “How does the quality of higher education meet the needs of a competitive economy?” Evaluation 0 – the worst, 10 – the best.

In terms of the quality of higher education, the Czech Republic is average for the European Union.

### Number of students at universities

In 2004, there were 282,958 students studying at universities in the Czech Republic, which was 3% higher than in 2003. Most students (68%) study at universities in Prague, Brno and Ostrava (37% of all students studied in Prague, of which almost 70% came from outside of Prague). 92.5% of students studied at public universities, 6.0% at private universities and 1.5% at state universities. 45.8% of students studied bachelor’s programmes, 45.9% studied master’s programmes, and 8.3% studied doctoral programmes. Out of the total number of students at all types of universities in the Czech Republic in 2004, 50.3% were women.<sup>6</sup>

<sup>6</sup> Out of the total number of students in bachelor’s study programmes, 49% were women; 54% of students in master’s study programmes were women, 53% of students in postgraduate master’s programmes were women, and 40% of students in doctoral study programmes were women.

**Table 5: Trend in the Number of Students at Universities in 1996/1997-2004/2005**

Year	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05
Students in total	166,123	177,723	187,148	198,961	209,298	223,008	248,756	274,192	282,958

Source: Annual Report on the State of the Higher Education for 2004

In 2004, 93.8% of students were Czech nationals. 6.2% of students studying in the Czech Republic were foreigners, of which the most were from Slovakia (66% of foreigners), and there were students also from Russia, Ukraine and Great Britain. Foreigners definitely give preference to studying at public universities (93.6% of foreigners).

The highest interest (in absolute numbers) is in studying teaching, technical subjects and economic sciences, into which the highest number of students was admitted as well.<sup>7</sup>

### Academic university staff

There are currently about 13,800 academic employees working at universities. The age structure is still unsatisfactory. The average age of newly appointed professors is still over 50. The current qualification structure of academic university staff, particularly at new universities, is not evaluated as being sufficient; there are significant problems primarily in the lack of habilitated staff and their unsatisfactory age structure at the prevailing majority of universities. The lack of high quality teachers affects the quality of education, research and other creative activities of the university.

#### 1.3.5 Further education

Further education represents a very variable part of the educational system; the target groups feature absolutely different characteristics (as to age, position on labour market, profession, and motivation for further education). It may take place both in purely educational institutions (both public and private) and within entities having education as only one of their economic activities – public benefit associations, civic associations, non-profit organizations, business self-governments (chambers of commerce), and numerous private companies. The expenditure on further education may be paid from private resources on one hand, but on the other hand they may be of a public nature. All of this makes the system of further education difficult to analyse (sufficiently detailed statistical data are missing).

The Czech Republic has not set yet an overall further education framework that would open further education to all applicants and support a higher participation of the population in further education and, at the same time, enable a transparent evaluation of the outputs of such an educational process. Both interest education and informal education have to be included into this framework as well. A comparison of indicators of adult education in this country and abroad,

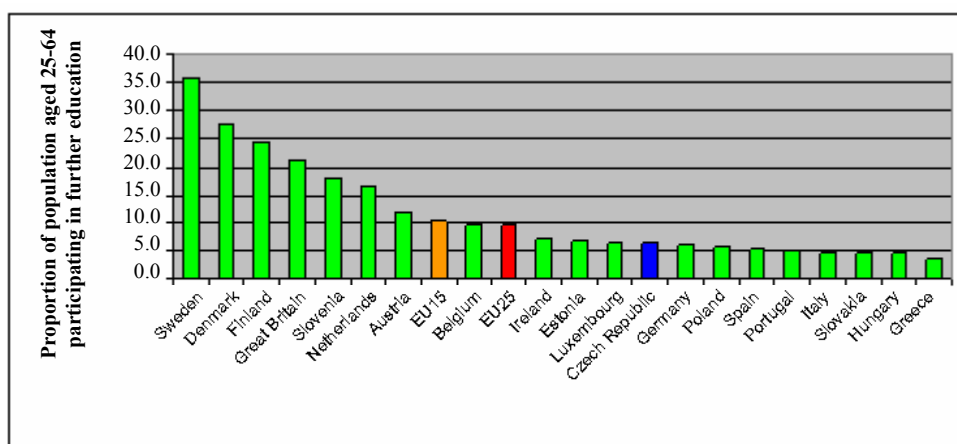
<sup>7</sup> The highest success in admission procedure is reported by technical branches (76.1%), agricultural and veterinary branches (59.4%) and natural sciences (54%). The success level in admission procedure apparently relates to failure during studies as well, but the failure reflects the intensity of studies too. Out of approx. 29 thous. students who did not complete university in 2003/04, there are most of them – 41.7% in technical branches, 16.4% in economic sciences, and almost 11% in natural sciences and disciplines.

particularly in the European Union countries, clearly shows that in this country adult education is developing much more slowly and only enables the achievement of a formal level of education to a small extent.

### 1.3.5.1 Participation of adult population in further education

According to the Lisbon strategy, the individual member states should adopt measures to ensure that the participation of persons aged 25-64 in education reaches at least 12.5% by 2010. This corresponds to a 0.5% annual growth (however, the current growth rate is 0.1-0.2%).

**Graph 9: Participation of Adult Population in Further Education (2004)**



Source: EUROSTAT – New Cronos, structural indicators, 2005

In 2004, this criterion was met by only 6 European Union countries. The Czech Republic with its share of 6.3% of adults participating in further education ranks among the “worse” EU members, lagging behind even some new EU members (Estonia). The causes may be seen both in the insufficient supply of further education and in insufficient support from public resources. Another cause may be the concept of lifelong learning and motivation for further education being so far only accepted to a small degree (both on the employers’ part and on the part of the Czech Republic’s inhabitants).

The system of further education in the Czech Republic is joined primarily by secondary school graduates and people with a higher level of education, i.e. people achieving a high level of qualification. Therefore, the differences in the level of education of individual population groups deepen.

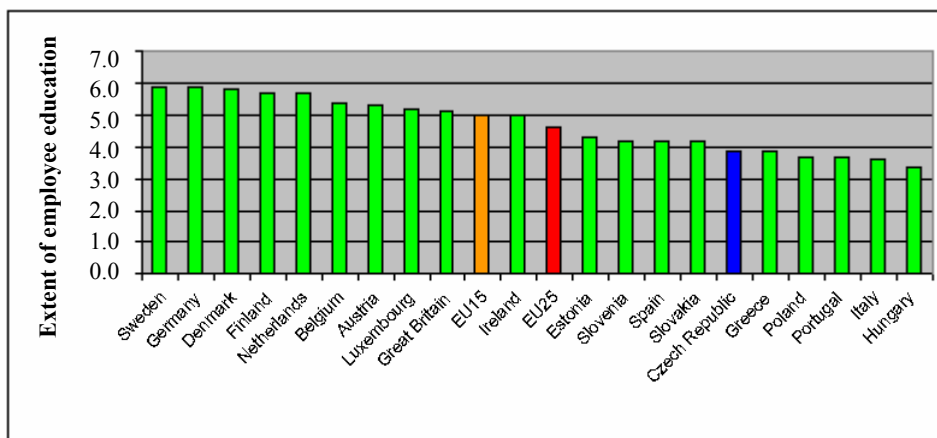
### 1.3.5.2 Education of employees

The highest rate of participation in further education in terms of the Czech Republic’s population is reported by the group of employees. The further education of employees is ensured by their employers. Within this group, the workers from small and medium-sized enterprises engage the least in further education. The highest proportion is taken by foreign companies’ personnel.

In an international comparison, the Czech Republic is one of the countries with the least favourable values, whilst employees’ education is rated as better even in some new EU member states (such as Slovakia, Slovenia and Estonia).

The relatively poor results show insufficient education of employees in enterprises, which increases fluctuation of employees and threatens the companies' competitiveness, and thus the competitiveness of the national economy as well.

**Graph 10: Extent of Employee Education (2004)**



Source: World Economic Forum – The Global Competitiveness Report 2004-2005

Note: The extent of employee education is based on international research, with respondents (companies) answering the following question: “What emphasis is placed on employee education?” 1 – large emphasis, 7 – I place no emphasis.

Only about one quarter of Czech enterprises consider education as a priority element of their personnel policy, and human resource development as a part of their development strategy. In most departments there are no comprehensive methods of staff education. On average, expenditure of the Czech enterprises and other organizations on employee education does not even reach a half of analogical expenditure made in West European companies.

Only approximately every twentieth applicant takes part in re-qualification training for job candidates. Although the proportion of people in older age groups of the population has been growing due to the population trend in this country, there is no apparent development of their education.

This adverse development may have a strong effect on slowing economic growth and living standards, and is in sharp contradiction to the general trends that will increasingly affect the Czech Republic in the future (e.g. internationalisation, informatisation, and an ageing population).

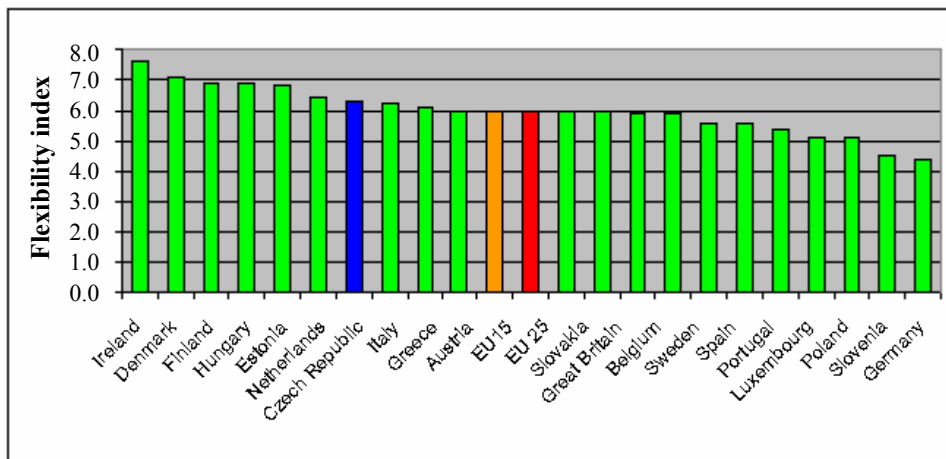
For the greater part, further education is missing the appropriate legal framework to regulate the competences and responsibilities of stakeholders (i.e. the state, employers, trade unions, local government, and professional associations), the rules of financing the main components of further education, financial and non-financial development of further education, and the mechanisms assuring the quality, accreditation and certification of further education. The newly adopted act on recognizing the results of further education (2006) is only the first step in this respect. Informal education, which takes place outside of the formal educational system and does not result in integrated school education, has also to be included into further education.

## 1.4 Education and Competitiveness

### 1.4.1 Flexibility of the population

The flexibility of the Czech Republic’s population has shown relatively stable growth since 2003, and the country has gone from low down the league table of countries being compared up to one of the leading positions.

**Graph 11: Flexibility of the Population**



Source: *World Competitiveness Yearbook, Lausanne, International Institute for Management Development, 2004*

Note: Evaluation of the population’s flexibility is based on scoring performed by individual members of an international expert panel, who assign scores according to whether the degree of flexibility is low (0) or high (10).

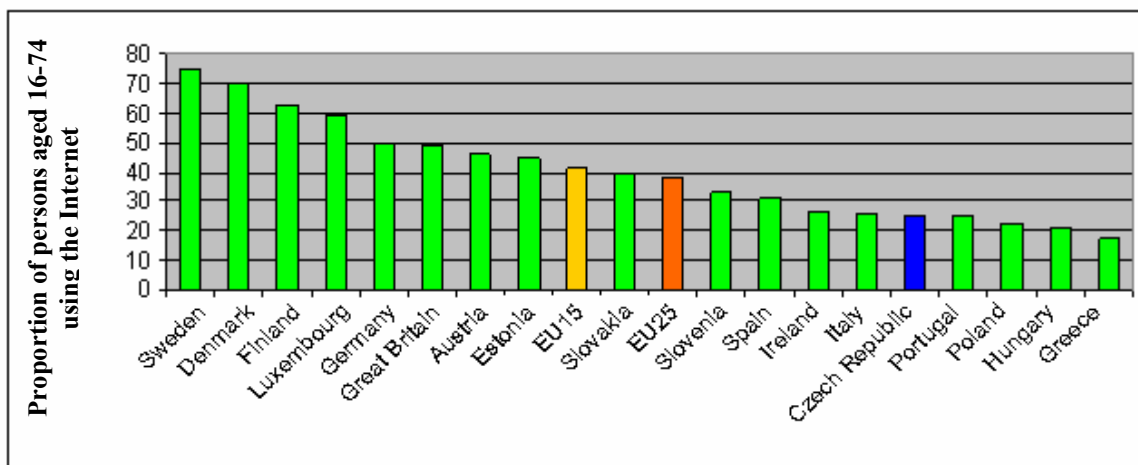
The graph above shows a low flexibility in France and Germany, where regulatory labour market mechanisms are strongly applied; on the other hand, in Ireland, Denmark, Finland, and also the Czech Republic, there is a marked influence by the quality of higher education and, undoubtedly, other evaluated factors as well.

### 1.4.2 Computer literacy and use of ICT

Traditional forms of literacy (reading, mathematical, scientific, ability to solve problems) are also joined by computer literacy, which is closely linked to the use of information and communication technologies. For this, it is necessary to ensure non-discriminatory access for the population to computer technology and opportunities to learn to use it in order to reduce the handicap represented by an absence or lack of information literacy in respect of employability.



**Graph 12: Use of the Internet**



Source: EUROSTAT- New Cronos, status effective as of 15 September 2005

In the Czech Republic, the proportion of persons using the Internet increased by 5% in 2005 as compared to 2004; in spite of this, the rate of Internet use is one of the lowest in the EU. The Internet use rate depends on numerous factors, of which the most significant ones include households being equipped with PCs, use of the Internet at work, technical infrastructure facilitating an Internet connection, and the existence of a competitive environment among providers, which is a guarantee of sufficiently low prices acceptable by users. Internet use also shows a close link with the educational and age structure of the population.

About 95% of schools have an Internet connection, of which 82% have a permanent connection, but only one third of schools are connected via a broadband connection. We achieve the European average in the number of all computers per 100 pupils, but roughly one third of the computers are obsolete; at schools there are 4.8 computers manufactured after 2001 per 100 pupils. ICT utilisation in education as such is still very low; the ability of teachers to use the Internet in preparation for lessons and during lessons is considered problematic. According to the Long-term Development Plan for Education and the Educational System of the Czech Republic 2005, the qualified estimation of the number of teachers using ICT in education and preparation for it is approximately 30%.

At the European Union level, the statistics on the extent of ICT skills among the public at large are collected by Eurostat. Specifically, it deals with concepts of digital literacy<sup>8</sup> and e-skills in this area (Eurostat 2006). The results presented in spring 2006 show that ICT skills are generally more frequent in younger people as compared to elderly ones, and in people with a higher level education as compared to those who achieved a lower level of education. According to the Eurostat report (2006), elderly persons and persons with a lower level of education more frequently reported that they did not work with the Internet regularly; the same applies to the answer “I have never used a PC”.

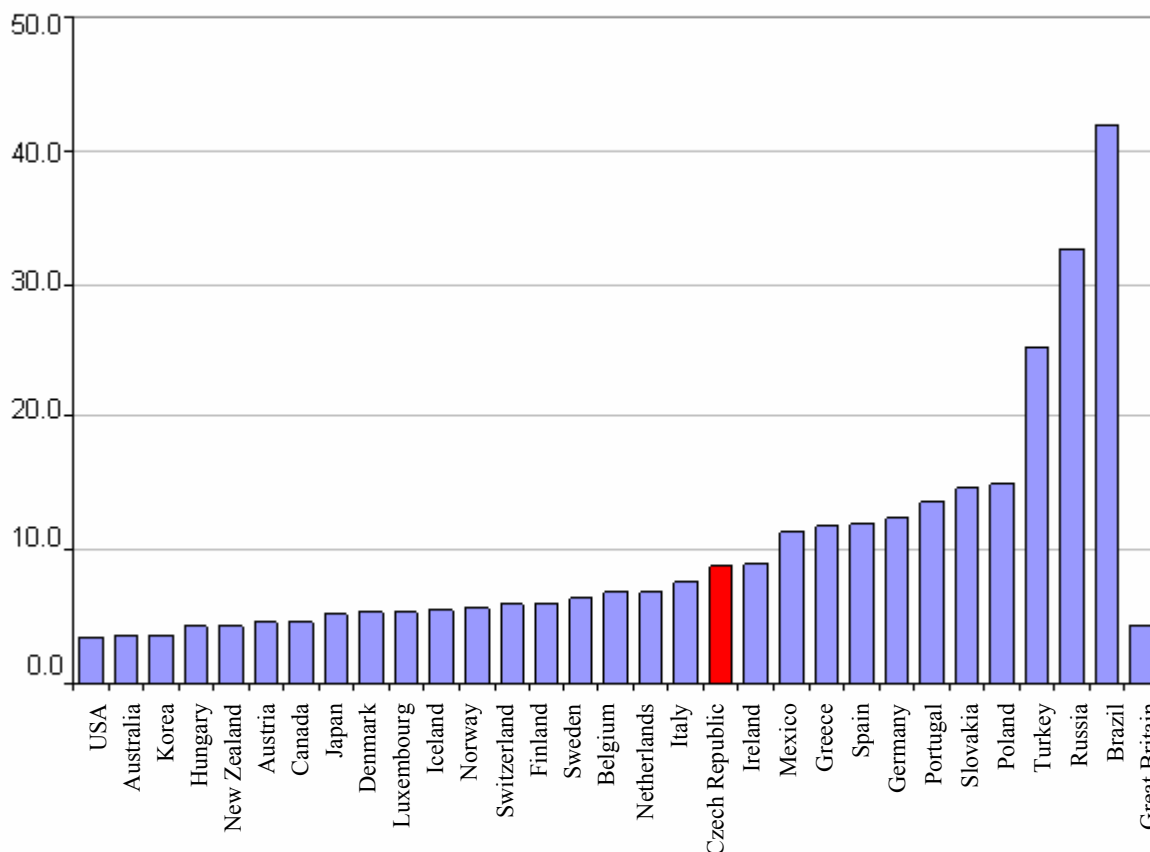
<sup>8</sup> Digital literacy relates to a critical approach to using ICT for work, communication and leisure. It comprises primarily the following aspects: use of computers for searching, creating, saving, accessing and exchanging information, and communication via the Internet.

Although the said finding is no surprise, it is worth mentioning that the situation in the Czech Republic is “above average” in this respect, i.e. there is a higher proportion of persons characterized above in this country as compared to the average of the EU countries. Moreover, according to Eurostat (2006) the Czech Republic is still below the average as to proportion of persons using a computer at work.

The view of the Czech Republic in an international comparison as to differences in PC availability at home according to socio-economic position suggests that in this respect there are relatively significant differences in the country. According to the findings of the OECD (2005), differences in PC availability at schools are smaller.

In terms of OECD statistics disclosed annually in the publication Education at a Glance, attention is devoted to access for pupils and teachers to computers at school. The proportion of computers available to pupils is monitored (IIE 2006).

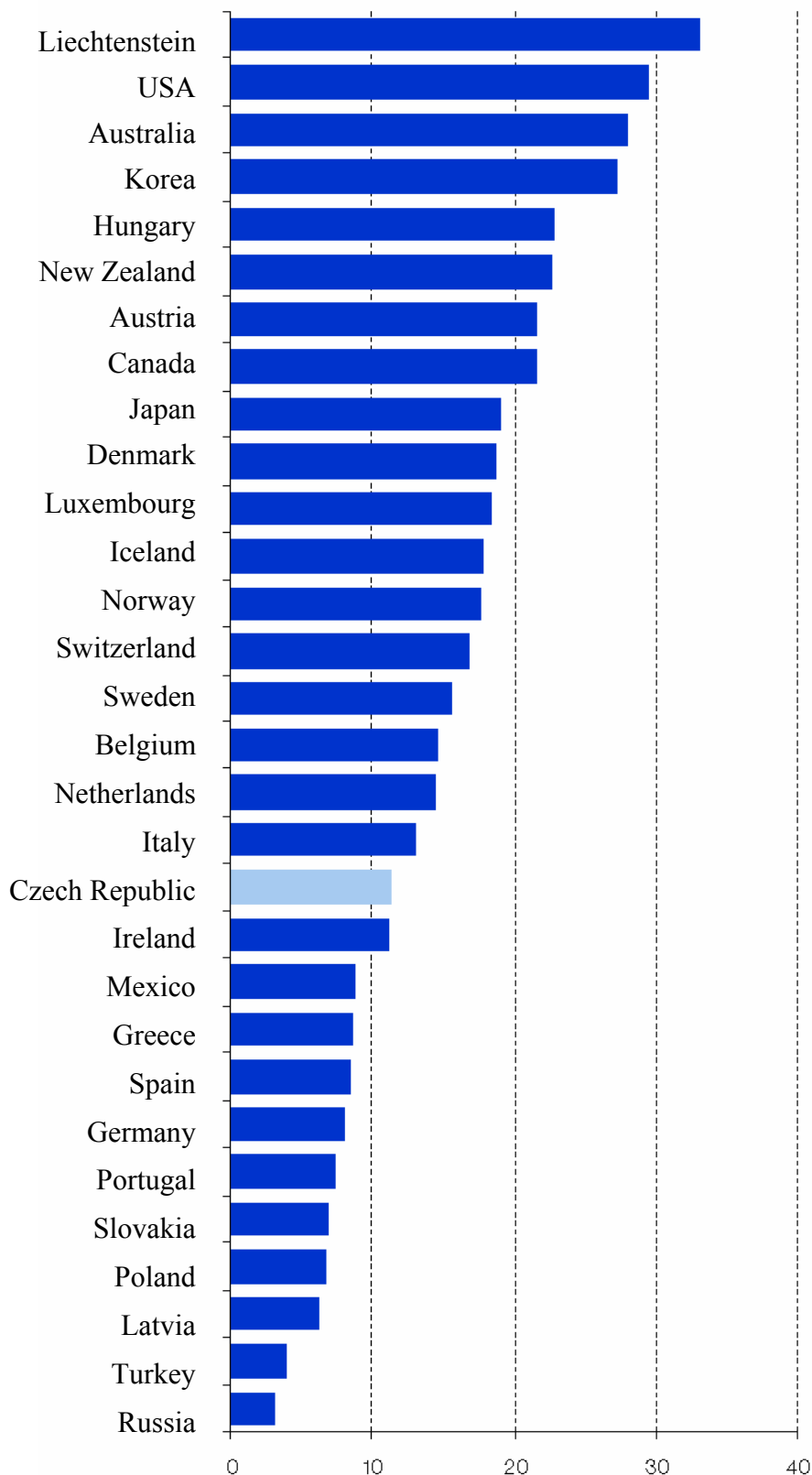
**Graph 13: Number of Students per Computer (2003) (Adapted according to Education at a Glance 2006)**



Countries are listed in ascending order.  
 1. Return is too low to ensure comparability of results.  
 Source: OECD PISA 2003 database, Table D5.1.

As to the proportion of computers used by pupils, according to the OECD report the Czech Republic is approximately average (12). In addition, data on the number of pupils per computer are available.

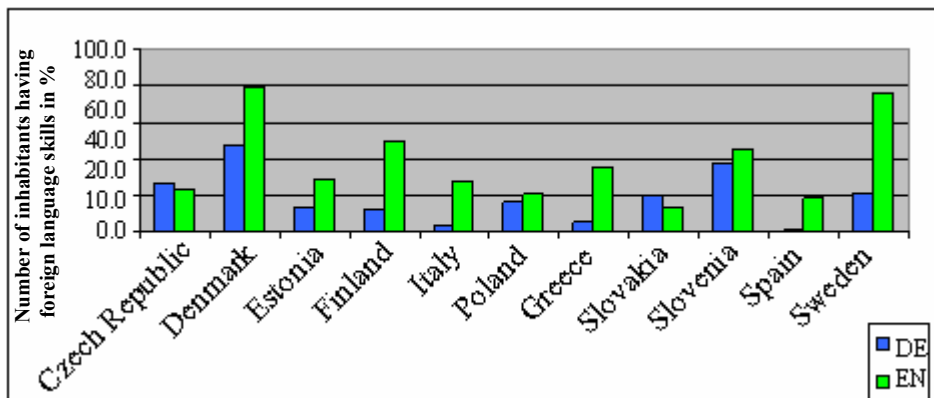
**Graph 14: Number of Computers per 100 Students (2003) (Taken from Czech Statistical Office 2006)**



\* Students in age category of 15 years.  
 Source: OECD (2006) *Are students ready for a technology-rich world?*  
 Results from PISA 2003

### 1.4.3 Language skills

**Graph 15: Trend in Percentage of Population Speaking a Foreign Language (English and German)**



Source: *Languages in Europe 2005*, available online at: [http://www.europa.eu.int/comm/education/policies/lang/languages/index\\_en.html](http://www.europa.eu.int/comm/education/policies/lang/languages/index_en.html)

As compared to other EU member states, the Czech Republic has a low proportion of its population that speaks English (although it is considered the most useful language<sup>9</sup>). Other language skills are not sufficiently widespread in the Czech Republic either. Approximately 67% of the population speaks at least one foreign language (excluding Slovakian).

The main barriers to language education are a lack of quality tutors and obsolete teaching methods failing to develop all aspects of language education.

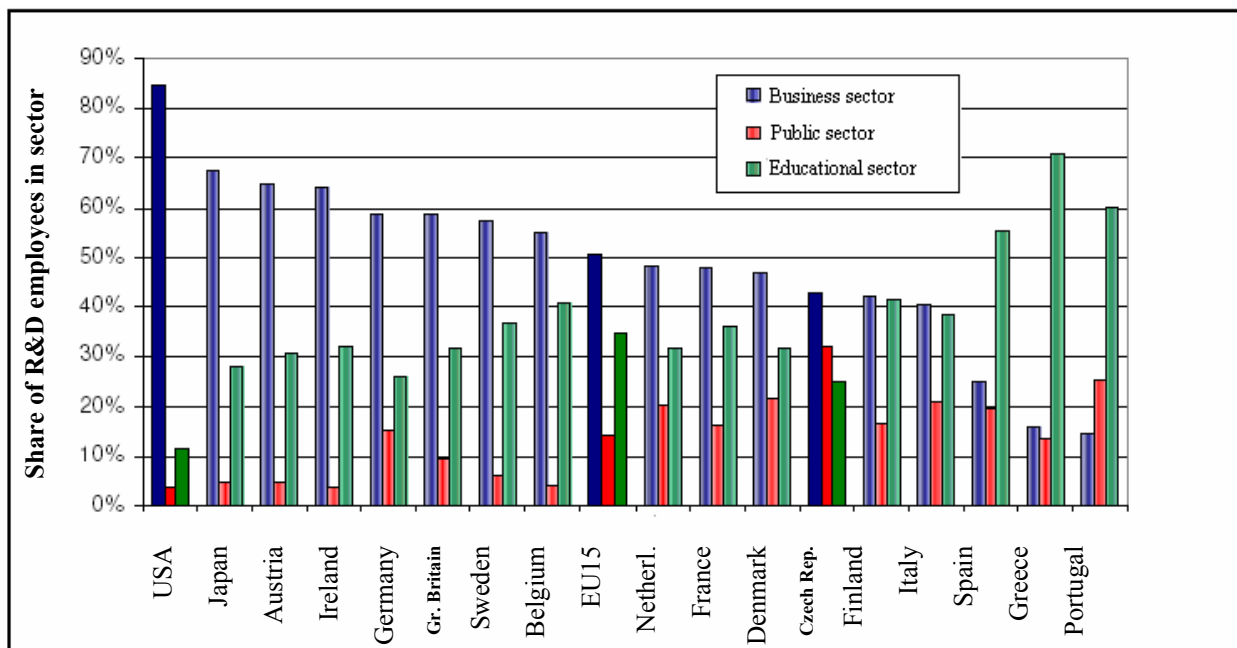
### 1.4.4 Human resources in research and development

The standing of research and development in the structure of the Czech Republic’s economy as yet is weak – in 2003 the Czech Republic spent approximately 1.3% of GDP on research and development, while the advanced countries spend 2 – 3% of GDP on research and development, primarily for the sake of maintaining their competitiveness.

The Czech Republic lags behind both in terms of amount of funds and in terms of quantity and quality of research and development poles and their staff.

<sup>9</sup> [http://www.europa.eu.int/comm/education/policies/lang/languages/index\\_en.html](http://www.europa.eu.int/comm/education/policies/lang/languages/index_en.html)

**Graph 16: Share of R&D Employees in the Educational, Public and Business Spheres**



Study – Use of research and development for support of a knowledge economy in the Czech Republic, TC AV 2005

Research and development institutions are unevenly distributed in the Czech Republic – they follow the economic, educational and population centres of the Czech Republic. This territorial differentiation is subsequently also reflected in a regional differentiation of employment in research and development. In 2004, the most research and development employees were concentrated in Prague (41%), followed by the regions of South Moravia, Central Bohemia and Moravia-Silesia. The least research and development employees, on the other hand, were reported in the Karlovarsko and Vysocina regions (particularly due to the small number of universities in those regions).<sup>10</sup>

As at 31 December 2004, a total of 60,148 individuals worked in research and development, of which 20,823 were women. Having recalculated this number to full-time employment, a total of 28,765 recalculated persons worked in R&D, of which 30.6% were women. The biggest proportion was made up of researchers (56.7%), of which approximately 25% were women.<sup>11</sup> In 2004, the highest number of researchers (recalculated persons) was employed in scientific research projects in the business sector (approx. 43%), followed by the public sector (approx. 32%), which is unparalleled in international comparison. Educational institutions (post-secondary vocational schools and universities) employed 26.2% of persons in the same period. Co-operation among research and development institutions (public, educational, and private) is at an insufficient level – the necessary networking and information transfer are missing.

The highest number of research employees performs their activities in the area of technical sciences (43.5%), followed by natural sciences with 29.6%, medical sciences with 8.1%, agricultural sciences, social sciences, and humanities.

<sup>10</sup> Study – Use of research and development for support of a knowledge economy in the Czech Republic, TC AV 2005

<sup>11</sup> Technical employees represented 32.8% of recalculated persons in R&D, and other employees made up approximately 10.5% of the recalculated employment.

As to the achieved level of education of the researchers, 33.5% had a doctoral education (Ph.D). The woman to man ratio with this education is approx. 1 to 3. The representation of young researchers (25-34 years) in the total number of researchers with a doctoral education appears to be comparatively insufficient – only approximately 20%. Therefore, there is no intergenerational transfer of know-how; this applies to both the transfer of already achieved knowledge from older generations to younger ones and the transfer of innovative approaches and foreign contacts from the younger to the older generations of researchers.

83% of persons that had achieved a PhD degree are active in governmental research or institutions of post-secondary vocational or higher education. Only 16.8% of them are active within the business sector, which shows the low interconnection between research and development at universities and the commercial sphere.

The highest representation of persons with a doctoral education is reported in natural sciences, followed by technical sciences.

The generally low share of research employees per 1,000 employees (half the number when compared to the EU) is caused, among other things, by insufficient support of research institutions in the Czech Republic, and insufficient financial remuneration, which results in a “brain-drain” to foreign countries. This unfavourable situation is simultaneously influenced by the demographic trend of the age structure of the population. The high average age of researchers with significant representation in the age category of 50-60 years<sup>12</sup> is a very serious problem. Out of the total number of 517 principal investigators of research projects (hereinafter referred to as “Investigators”) only 8.3% (43 principal investigators) and 18% (93 principal investigators) were younger than 46 and 51 years, respectively in 2004. Compared to this, almost 41% of principal investigators were over 60. There are several causes of the given situation. The main causes can be seen both in insufficient financial remuneration of young research employees and in the rigid structure of R&D institutions, which prevents the career growth of young people. The established practice when the investigators – seniors formally sign research projects without being their actual investigators is also a significant reality. Thus, a part of prospective young R&D employees either prefers better facilities and financial conditions for scientific work abroad or leaves research and development for other areas of the national economy.

A relatively significant part of research employees (both school leavers and more experienced scientific workers) have reserves in competences that are absolutely crucial for current research and development, i.e. team work, project management, and business basics. This is reflected in an inadequate demand from commercial entities showing very loose links of R&D institutions with the commercial sector and an insufficiently developed transfer of results of the research and development activity towards its further utilisation.<sup>13</sup>

Although the language competences of research employees are at a relatively good level, their quality needs to further be improved, particularly by means of mobility programmes<sup>14</sup> on an international scale, in order to support the diffusion of innovation and transfer of know-how from abroad.

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<sup>12</sup> Analysis of the state of research and development in the Czech Republic and comparisons with other countries in 2005.

<sup>13</sup> Study – Use of research and development for support of a knowledge economy in the Czech Republic, TC AV 2005.

<sup>14</sup> E.g. Erasmus / Socrates.

#### ***1.4.5 Supply by educational institutions and demands of labour market***

The very substance of the educational system, which apart from the production of a qualified labour force to meet the needs of employers fulfils other functions as well (e.g. socialization, social, cultural, and other ones), implies that it is not possible to achieve absolute harmony between the supply by educational institutions and the rapidly changing needs of employers. However, from the perspective of effective human resource management and support of competitiveness of the economy it is highly desirable for the education system in all its stages including the system of further education to be capable of responding flexibly and effectively to needs of the economy and to trends in the labour market. Research<sup>15</sup> carried out in the past several years suggests that, both in terms of quality and quantity, the educational system is not able for the time being to respond to the labour market's needs – the employers repeatedly point out difficulties in the recruitment of labour force for certain types of employment.

With respect to quality the greatest reservations of employers persist in language skills, IT skills and further “soft-skills” – e.g. the ability to work in a team, to solve problems, leadership and creative capabilities and communication with people. Lack of a qualified labour force is felt the most in qualified workers' professions (primarily in engineering and construction), but the lack of qualified staff is also increasingly being felt in technical branches (e.g. in IT, electrical engineering, and mechanical engineering).

#### **1.5 Experience from the Previous Period**

The evaluation of the previous 2004-2006 programming period is based on available underlying documents, i.e. particularly on detailed monthly information regarding the trend in drawing resources from EU Structural Funds, and also on annual and semi-annual reports of the Human Resource Development Operational Programme (HRD OP).

##### ***Focus of the projects***

The first projects within HRD OP were not approved until the very end of 2004 (Measure 3.1). The sharp commencement of project collection, evaluation and selection did not occur until 2005 (see Annex No 2).

The most project applications were submitted within the scope of grant schemes (approx. 3,000), while the biggest demand was reported within the scope of Measure 4.1 (Increased adaptability of employers and employees to changes in economic and technological conditions, competitiveness support). An additional attractive measure for application came in the form of Strengthening the active employment policy (1.1) and Development of further vocational education (Measure 3.3).

The highest overhang of demand (submitted requests) with regard to the number of approved projects was reported for Measure 4.2 (Specific education), where only each eighth project succeeded. However, the situation was not better in the other measures either – Strengthening the active employment policy (approx. 6 times more requests submitted than approved projects). For Measure 4.1, the overhang was six times higher as well. Development of further vocational

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<sup>15</sup> Identification of shortage of qualifications in the labour market, NOET & NTF 2003; Needs of employers and readiness of school leavers to enter the labour market – 2004, NITVE 2004; Employability of school leavers in the labour market, NITVE 2006, etc.

education (Measure 3.3) and Integration of specific population endangered by social exclusion (overhang was five times higher).<sup>16</sup>

### ***Trend in drawing on SF according to individual measures***

Due to late calls to submit projects, the drawing of funds was shifted, and at the end of 2005 there were still about 30% of the allocation for 2004-2006 available within the scope of HRD OP.

The results of drawing on funds were influenced by several factors, particularly by:

- late start of calls to submit projects;
- insufficient information for final recipients;
- administrative severity of project implementation;
- insufficient experience in formulating and submitting projects – requests for subsidy to investigate projects funded from ESF.

### ***Evaluation of set-up of the HRD OP implementation system (2004-2006)***

The most serious system deficiencies in the 2004-2006 programming period include, in particular: insufficient administrative capacity, errors in IS Benefit, information transfer within the implementation structure given by its complexity, and changes in conditions for applicants. The project preparation by applicants was further complicated by ambiguous interpretation of public support and unclear set-up of the partnership principle, including the settlement of financial fulfilment between final recipients and partners. The whole process of project evaluation was often affected by different evaluation from various evaluators, which resulted in additional processing of an independent expert report, which again resulted in delayed approval of requests for aid.

## **1.6 SWOT Analysis**

In accordance with the provisions of Article 36, paragraph 1, section a) of Proposal for a Council Regulation laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund, the OP contains an analysis of strengths and weaknesses in the area of education. Although only an analysis of strengths and weaknesses is required, opportunities and threats are briefly commented on as well. The SWOT analysis is focused on both the characteristics of the population's education and the structure and functioning of the educational system, including the overlap into research and development activities.

From the perspective of the characteristics of the level of education of the population, first of all the above-average proportion of inhabitants with completed secondary education and the relatively low proportion of persons with only primary education (compared to the EU) may be considered as strengths. Strength of the educational system of the Czech Republic consists in a dense network of educational institutions in the primary and secondary school system, the capacities of which can be very appropriately and effectively used for the area of further education.

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<sup>16</sup> Note: The overhang may be caused by missing evaluation, and thus by non-approval of projects. Some projects may not have been approved or evaluated due to failure to meet formal pertinences of the request.



Weaknesses of the Czech Republic’s population are: low ability to work with information and master information and communication technologies, insufficient knowledge of foreign languages, low motivation to get involved in further education, and low share of the population with completed tertiary education. The prevailing focus of the educational system on transferring the large amount of knowledge and the associated insufficient emphasis placed on the development of key competences of the individual can be considered as weaknesses at the system level. Furthermore, there is an insufficient link between educational institutions of the tertiary system, research poles and the public and private sectors, a limited ability of educational institutions to respond to the current needs of employers, and an insufficiently developed further education system and its relating information and consultancy services.

The main opportunities for the development of education and competitiveness of the Czech Republic include growth of university capacities (spaces, equipment, and the number and structures of teaching staff), number of students in tertiary education institutions, primarily in practice-oriented and short-term study programmes. Creation of a system of lifelong learning making use of the existing capacities of educational institutions of all levels also represents a large opportunity.

The most significant threat is represented by the adverse demographic trend in the population. The benefit of education for competitiveness is also endangered by a continued insufficient link of the educational system and employers’ demands and, last but not least, by stagnation of interest in further education by employers and individuals. The main strengths and weaknesses, opportunities and threats are listed below:

**Table 6: SWOT Analysis**

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• Very significant participation of relevant population group in secondary education, which already today exceeds the Lisbon targets of the EU in education</li> <li>• Low proportion of people with only primary education</li> <li>• Prolongation of average length of education up to the level of the EU-15</li> <li>• Sufficiently dense network of educational institutions and scope of capacities of primary and secondary schools, and possible utilisation of these capacities for the area of further education.</li> <li>• Decreasing share of uncertified teaching staff</li> <li>• Equal access for men and women to education at all levels and forms</li> </ul>	<ul style="list-style-type: none"> <li>• Socio-cultural barriers in access to the Internet, low ability of the population to work with information and manage information and communication technologies, and insufficient use of ICT at schools for educational and teaching purposes</li> <li>• Low level of foreign language skills (particularly English) in all forms (written, spoken and read) by population of the Czech Republic</li> <li>• Limited ability of educational institutions to respond in time to the current needs of employers</li> <li>• Insufficient emphasis on development of key competences in tuition at all levels of the educational system</li> <li>• Focus of educational system on rendering a too large volume of knowledge and its insufficient practical orientation</li> <li>• Low degree of individualisation at all education levels</li> <li>• A constantly low degree of internationalisation in education at all school levels</li> <li>• Insufficient support of motivation for enterprise and insufficient development of competences necessary for entrepreneurial activity</li> </ul>

	<ul style="list-style-type: none"> <li>• Low proportion of the Czech Republic’s population with completed tertiary education compared to the EU-15 countries</li> <li>• Low efficiency of doctoral programmes manifested in long duration of studies and high percentage of incompleteness</li> <li>• Relatively high dropout in first years of study, particularly at technical universities</li> <li>• Low mobility of students on both national and international level</li> <li>• Unclear and indistinct position of post-secondary vocational schools, poor cohesion and permeability of tertiary education</li> <li>• Insufficient number of employees in R&amp;D and low motivation for involvement in work in this area</li> <li>• Insufficient link between tertiary system educational institutions, research poles and public and private sectors</li> <li>• Limited capacity of tertiary education institutions</li> <li>• High average age of academic university staff</li> </ul>
	<ul style="list-style-type: none"> <li>• Insufficient participation of population in further education and low willingness of the population to be educated further</li> <li>• Non-existence of a comprehensive system to recognize the benefits of informal education for competence development</li> <li>• Non-existence of information and consultancy services in adult education</li> <li>• Insufficient offer of short-term school framework programmes in further education, distance education and new forms of education</li> </ul>

Opportunities	Threats
<ul style="list-style-type: none"> <li>• Increase in expenditure on education both from public and private resources, to the average of advanced countries as a minimum</li> <li>• Increase in openness and permeability of educational system, adaptation of educational paths to individual needs, systematic development of talents</li> <li>• Improvement of infrastructure for development of human resources (school system, enterprising)</li> <li>• Implementation of a system of lifelong learning of citizens, including its information and consultancy support, and improvement of tools motivating citizens to get involved in further education</li> <li>• Utilisation of capacities of the existing infrastructure of school facilities for further education</li> <li>• Opening the school system to co-operation with the public and entrepreneurial sphere</li> <li>• Development of quality and offer of technical and natural science education and its</li> </ul>	<ul style="list-style-type: none"> <li>• Ageing population and inability to supply the necessary labour force using appropriate immigration policy</li> <li>• Failure to meet the intentions of curriculum reform based on concept of two-stage curriculum (general framework programmes – school framework programmes) due to lack of interest or insufficient readiness of teaching staff</li> <li>• Persisting unreadiness of teaching staff to the diversity of population with the consequence of further discrimination of threatened groups, e.g. members of Roma communities, and intensification of their illiteracy</li> <li>• Drift of high-quality teachers into other branches with better remuneration and low appeal of the teaching branch (partly due to low salaries)</li> <li>• Intensifying lack of interest of young people in studying technical education branches</li> <li>• Continuance of insufficient co-operation between universities, scientific institutions and the business sector</li> <li>• Departure of talented scientific staff abroad with potential danger to development of R&amp;D capacities in the Czech Republic</li> <li>• Lack of high-quality professionally-oriented school framework programmes at the tertiary level</li> </ul>

<p>diversification</p> <ul style="list-style-type: none"> <li>• Significant improvement of quality and efficiency of language education</li> <li>• Increase in share of students studying in tertiary education, primarily at its lower level, focusing on older population groups</li> <li>• Support of professionalisation of teaching staff through their further education</li> <li>• Traditionally strong share of informal educational institutions in the education of children and youth beyond school</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of population's interest in further education</li> <li>• Lack of interest on the part of enterprises in providing further education to their employees</li> <li>• Non-existence of a comprehensive system of lifelong learning (particularly as to cohesion of initial and further education), absence of legal framework</li> <li>• Inability of teaching staff to adapt themselves to the needs of adults' education</li> <li>• Missing information about educational offer for further education and consultancy regarding the suitability of its further utilisation for professional career</li> <li>• Inadequate information about trends in labour market needs</li> </ul>
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## II Strategy of Education for Competitiveness Operational Programme

The Lisbon strategy sets forth the objective that will make the EU countries the most dynamic and the most competitive unit in the world, based on a knowledge economy. A unit that is able to achieve economic growth with more and better jobs while maintaining social cohesion. With the aim of achieving this objective, the representatives of EU countries have undertaken to support a radical transformation of economic systems with appropriate emphasis on modernization of social security as well as systems of education. Within the last mentioned area, i.e. the area of educational system modernization, an action area of “Investing more into human capital by means of improved education and skills acquisition” has been defined, which is focused on young people and their knowledge of knowledge economy. The EU also places emphasis on lifelong learning and its effect on and cohesion with the labour market and with the social security system as well. In spite of all the emphasis placed by the EU on the issue of educational systems, specific responsibility for implementation of relevant reforms rests with the member states themselves.

From the perspective of long-term competitiveness it is essential for the Czech Republic to systematically develop a qualified, adaptable and mobile labour force. Placement on the labour market depends primarily on the level of education, qualification and readiness to get further educated and re-trained. By means of EC OP, the level of education will increase through setting up a modern, high-quality and flexible educational and vocational training system, which is a necessary pre-condition for further growth. A knowledge economy requires its labour force to have not only professional qualifications in the given field but also, in particular, extensive language skills, an ability to work with information and master information and communication technologies and their utilisation at an adequate level. Building a further education strategy with emphasis on adapting the programmes to the needs of the middle-aged and older generations will become ever more important in the future, as a consequence of the ageing population, and thus of the prolongation of active life. In terms of the implementation of EC OP, the stage of development of individual regions and the need for support in the given area of education will be taken into account.

In order to ensure a uniform framework of ESF national system activities in terms of education, a combination of funds from the Convergence Objective and Regional Competitiveness and Employment Objective is to be applied. These will primarily concern activities related to forming the education system itself where the outcomes of these activities affect the institutions regardless of their regional location. A proportion of activities funded by the Regional Competitiveness and Employment Objective is provided under a separate priority axis.

### 1. Global Objective and Specific Objectives of Education for Competitiveness OP

#### *Global objective*

The global objective of EC OP 2007 – 2013 is **development of an educational society in order to strengthen the Czech Republic’s competitiveness by modernizing the systems of initial, tertiary and further education, integrating them into a comprehensive system of lifelong learning, and improving conditions in research and development.**

Such a defined global objective ensures a significant part of the NSRF Strategic Objective of Open, Flexible and Coherent Society and a Competitive Czech Economy. It is currently in full compliance with the third guideline of the Community Strategic Cohesion Guidelines (CSG) –

More and Better Jobs, and with the Economic Growth Strategy of the Czech Republic. At the same time the global objective of EC OP corresponds with the general framework of NRP reform steps for education.

### ***Specific objectives***

Specific objectives represent the paths leading to the global objective fulfilment.

The specific objectives of EC OP are as follows:

1. Development and quality improvement of initial education with emphasis on improvement of key competences of school leavers to increase their employability in the labour market and motivation for further education.
2. Innovation of tertiary education system so as to ensure a link to research and development activity, to increase the flexibility and creativity of graduates employable in a knowledge economy, to make the research and development conditions more attractive, and to create a comprehensive and effective system to support the innovation process as a whole.
3. Strengthening the adaptability and flexibility of human resources as the basic factor of the economy's competitiveness and sustainable development of the Czech Republic through the further education system development.

The specific objectives fall within the priority axis of the NSRF – Open, Flexible and Coherent Society and a Competitive Czech Economy. All the specific objectives form a consistent whole in terms of the content proposal and focus of EC OP priority axes.

## **2. Identification of Priority Axes of Education for Competitiveness OP**

Based on the definition of key moments in the area of education, which are described in the analytical chapter and in SWOT analysis and, based on the above-mentioned strategic materials defining the strategic directions, four priority axes were identified (including technical assistance) for support from the European Social Fund through EC OP. The priority axes are complementary and fully correspond with the ESF priorities in the 2007 – 2013 programming period.

### **Priority axis 1 – Initial education<sup>17</sup>**

This priority axis is focused on supporting the first specific objective of EC OP, which deals with the development and quality improvement of the system of initial education. The priority axis is focused on setting up the initial education system itself so that equal access is accepted with emphasis placed on the support of key skills, ensuring the quality of education of teaching staff and taking consideration of each person's individual talents to increase the employability of school leavers in the labour market and, at the same time, to achieve a positive approach to further education.

This priority axis will primarily be implemented by getting the curriculum reform completed and detailing and providing the comprehensive methodological support for the creation and

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<sup>17</sup> For the purpose of this priority, the initial education shall mean basic and secondary education.

implementation of school framework programmes and their innovations with necessary emphasis placed in particular on the development of key competences of pupils. A room will be provided for the implementation of retrospective corrections and innovations of individual steps of the curriculum reform based on monitoring, evaluation, self-evaluation by schools and quality-assuring tools. Among other things, a significant role will be played by school networking and support for the partnership and co-operation of schools, school facilities and other institutions with special regard to the labour market as well as community development. Integration of Czech schools and school facilities into international projects will be supported as well.

Within this priority axis, equal opportunities for all persons entering the educational system, and the creation of individual school framework programmes with an emphasis placed on the Roma ethnic issue will specifically be supported. Emphasis will also be placed, in particular, on the support of pupils with special educational needs and on the creation of optimum conditions for pupils with extraordinary talents. Attention will be paid to various aspects of education for sustainable development, particularly to the prevention of racism and xenophobia and to the support of multicultural and environmental training and education. Increased attention will be devoted to the education of foreigners living in the Czech Republic. Furthermore, the system of assistance services will be supported and enhanced with emphasis on the prevention of early school leavers, including the support of “a safety net” for fast return into the system of initial education. The system will also be extended to the area of interest education and informal education. Attention will also be devoted to the development of career consultancy.

Last but not least, the creation of a motivating system of further education for teaching and non-teaching staff of schools and school facilities will be significantly supported, along with the systematic support of this education with emphasis placed on both professional competences and competences leading to the improvement of management abilities necessary for the further development of schools and school facilities.

## **Priority axis 2 – Tertiary education, research and development**

This priority axis fulfils the second specific objective of EC OP and is focused on the modernisation of tertiary education, including making the system of post-secondary vocational education more attractive. Meeting the objectives of this priority axis will result in increased flexibility and creativity of school leavers employable in a knowledge economy. The priority axis is further focused on developing and making the research and development more attractive, and supporting the partnership and networks.

In the area of post-secondary vocational education, the significance of post-secondary vocational schools will be strengthened, the position thereof in the educational system will be specified, and the connection between post-secondary vocational schools and higher education system will be defined. In the area of higher education, emphasis will be placed on such an offer of study programmes (especially at the level of bachelor’s studies) that will reflect the labour market trends and knowledge economy requirements (including training for enterprising) as much as possible. Emphasis will also be placed on the development and realization of students’ potential and on the preparation of young people for the labour market, ensuring their employability and motivation for professional growth in the long-term. The master’s, and follow-up doctoral study programmes, in particular, should prepare high-quality graduates with emphasis on their potential activity in research and development work. Support will be given to activities aimed at the extension of teaching modules, which will focus on non-traditional students, i.e. older, already employed students, etc. Emphasis will be placed on making the environment for the people involved in research and development more attractive, and attention will also be paid to

increasing the attractiveness of and promoting the research and development on the level of the entire educational system. Attention will be paid to the support of partnership and to the creation of networks between educational and research and development institutions and other institutions in public and private sectors.

### **Priority axis 3 – Further education**

This priority axis will meet the third specific objective of EC OP, which is aimed at strengthening the adaptability and flexibility of human resources for increased economic competitiveness and sustainable development of the Czech Republic through the system of further education. The key activity within Priority axis 3 is to create a system and institutional framework for providing the further education, including verification and recognition of its results and its supporting information and consultancy system. The intent is to perceive further education as an integrated – but at the same time, open system, where the competences and responsibilities of individual institutions are defined and a national policy of further education is created.

Another objective of the priority axis will be the system support to the Czech Republic's population in mastering general skills, with emphasis on language skills, utilisation of information technologies and support for enterprising.

Apart from the system support, the interventions within this priority axis will also be focused on supporting the offer of further education and strengthening the schools and school facilities in the “further education market”. Mechanisms enabling the collection and dissemination of information on further education and interaction between the supply and demand sides in this area, including consultancy services will be created. Institutions engaged in providing further education will be supported, namely in the area of programmes of further education to be prepared, including the creation of educational materials, and in the education of their staff providing further education. Within this priority axis, interventions focused on improving the availability and quality of the offer of further education provided by public or non-profit sector institutions will be supported as well.

The intervention will be focused on supporting the offer of further education in the area of interest education; attention will be paid to supporting the informal education and competences obtained from it.

### **Priority axis 4 – National system activities**

The objective of this priority axis is to implement national system activities related to all material priorities across the entire territory of the Czech Republic, including the capital of Prague. It concerns a specific multi-objective priority axis created in order to support and finance activities fostering the creation of the system at the level of primary, tertiary and further education.

### **Priority axis 5 – Technical assistance**

The objective of this priority axis is to support effective management and implementation of Education for Competitiveness OP. Within this priority axis, the activities supporting management, implementation, checking, monitoring, evaluation and publicity of EC OP will primarily be funded.

## **Horizontal themes of EC OP**

### ***Equal opportunities***

The principle of equal opportunities was respected in all priority axes when compiling the EC OP. Projects will be assessed from the perspective of ensuring equal access to the opportunities offered. The target solution is to support projects that will help remove barriers preventing from the participation of target groups in projects that are related to discrimination based on sex, racial and ethnic origin, disability, age, religion, sexual orientation, and socio-economic environment.

When applying the principle of equal opportunities, special attention will be paid to women. In present, the position of women in the labour market is usually characterized by lower wages, a low number of women in management positions, and a continued feminisation of certain branches.

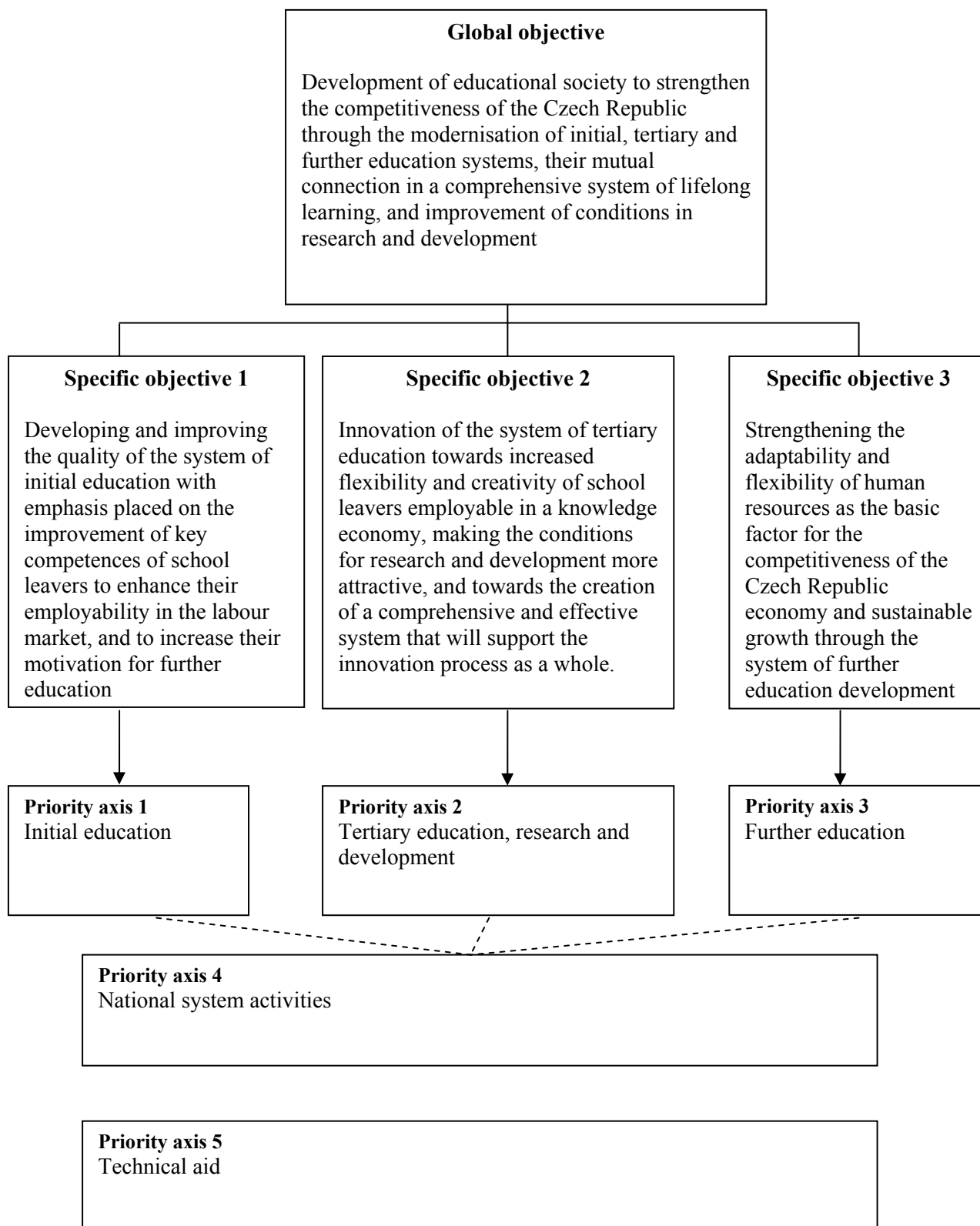
Projects will be assessed from the perspective of offered opportunities and accompanying measures that will help the target groups remove all barriers preventing from the participation in the projects.

### ***Sustainable development***

The principles of sustainable development have to be taken into account across the society's life, in the area of economy, environment, transport, tourism, the population's health, education, employment, and social integration. The principles of sustainable development will be enforced in EC OP through the integration of environmental education in the creation of new school framework programmes for both students and teachers and through the education for development and use of modern and environmentally friendly technologies.



**Chart 1: Objectives and Priority Axes of Education for Competitiveness OP**



### **3. Consistency of Education for Competitiveness OP with Strategic Documents**

The strategy of the Education for Competitiveness Operational Programme is in full compliance with the basic strategic documents of the Czech Republic. EC OP fully reflects the National Strategic Reference Framework 2007 – 2013 (hereinafter referred to as “NSRF”), and is based on the National Lisbon Programme 2005 – 2008, on the National Reform Programme of the Czech Republic (hereinafter referred to as “NRP”), on the Economic Growth Strategy (hereinafter referred to as “EGS”), and on the National Innovation Policy (hereinafter referred to as “NIP”) as well. At the same time, EC OP supports the main lines of the National Education Development Programme in the Czech Republic (the “White Paper”) and areas defined in the Long-term Development Plan for Education and the Educational System 2002, and particularly 2005. Last but not least, EC OP reflects the conclusions and recommendations of strategic documents laying down the policy in the area of human resource development, which include the Human Resources Development Strategy for the Czech Republic 2003 and the associated HRD Strategy Implementation Programme from 2005.

EC OP further respects the Cohesion Policy for support of growth and employment: Community Strategic Cohesion Guidelines<sup>18</sup> (hereinafter referred to as “CSG”), Communication from the Commission to the Council and the European Parliament – Integrated Guidelines for Growth and Jobs, and Regulation on the European Social Fund.

#### ***Consistency of Education for Competitiveness OP with the Community Strategic Cohesion Guidelines***

EC OP develops primarily two CSGs: Encouraging innovation, entrepreneurship and the growth of the knowledge economy by research and innovation capacities, including new information and communication technologies, and Creating more and better jobs by attracting more people into employment or entrepreneurial activity, improving adaptability of workers and enterprises and increasing investment in human capital.

It also indirectly supports the first CSG: Making Europe and its regions more attractive places in which to invest and work by encouraging environmental education within the curriculum reform and education of workers engaged in the area of environment and sustainable technologies.

The CSG: Creating more and better jobs supports human capital and its further development through priority activities in terms of policies of the EU member states, which focus on integrating people in employment and retaining in employment, improving adaptability of workers and enterprises and improving investment in human capital through better education and qualification. This CSG further specifies the general priorities (support of a coherent and comprehensive lifelong learning strategy is mentioned specifically) that are necessary for the knowledge economy, including support for establishing partnerships among regions and cities in terms of education and vocational training. There is also mentioned the support in terms of developing and implementing educational and vocational training systems and strengthening the relations among universities, research and technological poles and enterprises.

The CSG – Improving knowledge and innovation: Path to growth calls the EU member states to strengthen the building of capacities in R&D, including research infrastructure and human capital

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<sup>18</sup> Communication from the Commission COM (2005) 299. Cohesion Policy in Support of Growth and Jobs: Community Strategic Guidelines, 2007-2013, Brussels, 5 July 2005.

in areas with considerable growth potential and, at the same time, to strengthen co-operation among enterprises and public/university institutions through support for the creation of regional and supraregional networks of excellence.

From the perspective of compliance of the Education for Competitiveness OP strategy with the Community Strategic Guidelines we can say that the operational programme fully complies with CSG.

**Table 7: EC OP Strategy and CSG Links**

Community Strategic Guidelines	Priority axes of Education for Competitiveness Operational Programme		
	Priority axis 1	Priority axis 2	Priority axis 3
<b>Making Europe and its regions more attractive places in which to invest and work – Guideline 4.1</b>			
Strengthening the co-ordination between environmental protection and growth	★	★	★
<b>Improving knowledge and innovation: Path to Growth – Guideline 4.2</b>			
To increase and improve investments into research and technological development		★	
To facilitate innovations and encourage entrepreneurship	★	★	★
To support an information society for all	★	★	★★
<b>Creating more and better jobs – Guideline 4.3</b>			
To attract more people into employment, to ensure that they retain in employment, and to modernize social protection systems			★
To increase the adaptability of employees and enterprises and the flexibility of labour markets			★★
To increase investment in human capital through better education and qualifications	★	★★	★★
Administrative capacity			★

Notes: ★★ significant link  
★ medium link  
no link or indirectly mediated influence

### ***Consistency of Education for Competitiveness OP with the National Strategic Reference Framework***

Open, Flexible and Coherent Society is one of the strategic objectives of NSRF, which focuses on the quality of social life of Czech Republic inhabitants and on an increase in employment. This strategic objective is implemented by the priority axis Development of a Modern and Competitive Society, which focuses on the activation of human potential of the Czech Republic by developing and motivating lifelong learning in response to trends initiated by the development of knowledge economy, which take place within Europe, and also to needs to increase society's adaptability and flexibility in respect of processes taking place in the globalised world, with emphasis on language skills and IT competences as well. Further, it focuses on increasing the qualifications and adaptability of human resources, and thus also employment and employability, in accordance with the development needs of the economy and labour market. This is closely related to promoting education for enterprising and measures aimed at an inclusive and flexible

labour market with qualified, flexible and healthy labour force. EC OP is also linked to the Competitive Czech Economy strategic objective. As to the link of EC OP priorities and the NSRF priority axes, the operational programme draws particularly on the priority axes Development of a Modern and Competitive Society, and Strengthening the Competitiveness of the Czech Economy. Implications of EC OP can also be found in the priority axes Environment and Availability and Balanced and Harmonic Development of the Czech Republic's Territory.

From the perspective of compliance of the Education for Competitiveness OP strategy with the National Strategic Reference Framework we can say that the operational programme fully complies with NSRF.

**Table 8: EC OP Strategy and NSRF Links**

National Strategic Reference Framework	Priority axes of Education for Competitiveness Operational Programme		
	Priority axis 1	Priority axis 2	Priority axis 3
<b>Strengthening the competitiveness of the Czech economy</b>			
Competitive business sector		★	★★
Support of R&D and innovation capacities		★★	
Development of sustainable tourism			★
<b>Development of a modern and competitive society</b>			
Education	★★★	★★★	★★★
Increasing the employment rate and employability	★	★	★★
Strengthening social cohesion	★		★
Development of an information society	★	★	★
<b>Environment and accessibility</b>			
Protection and improvement of environmental quality	★	★	★
<b>Balanced and harmonic development of the Czech Republic's territory</b>			
Balanced development of regions	★		★

Notes:      ★★      *significant link*  
                  ★        *medium link*  
                             *no link or indirectly mediated influence*

### ***Consistency of Education for Competitiveness OP with the National Reform Programme***

In response to the Lisbon Strategy, the NRP defines a separate priority of education in the employment section, listing specific priority measures, which among other things emphasise the necessity to make curriculum reforms, develop tertiary education and key competences, build the concept of lifelong learning, improve the link of the systems of initial and further education, support the development of further education in companies and the co-operation between employers and educational institutions and vocational professional institutions. Last but not least, NRP defines an environment that stimulates research, development and innovation as the priority in microeconomics, and sets forth specific measures in R&D aimed at achieving the objective; in addition, a measure emphasizing the necessity of effective use of ICT is defined.

From the perspective of compliance of the Education for Competitiveness OP strategy with the National Reform Programme, we can say that the proposed operational programme fully complies with NRP.

**Table 9: Consistency of EC OP with NRP**

National Reform Programme 2005-2008	Priority axes of Education for Competitiveness Operational Programme		
	Priority axis 1	Priority axis 2	Priority axis 3
<b>Entrepreneurial environment – priority measure</b>			
To simplify entry into enterprising	★	★	★★★★
<b>Research and development, innovation – priority measure</b>			
To increase the intensity of use of intellectual property protection tools by scientific research institutions and enterprises		★★	
<b>Sustainable use of resources – priority measures</b>			
To support environmentally friendly technologies	★	★	★
<b>Modernization and development of transport and ICT networks</b>			
To support the development and selective use of ICT	★	★★	★
<b>Integration into labour market – priority measure</b>			
To reduce the unemployment of young people aged under 25	★	★★★	★
To increase the participation of older persons in the labour market			★★★
To simplify the entry of foreigners onto the labour market	★	★	★★
<b>Education – priority measure</b>			
To implement the curriculum reform	★★★★		
To extend the access to post-secondary vocational and higher education		★★★★	
To support the co-operation between employers, employees and educational and vocational professional institutions	★★	★★★★	★★★★
To improve the interconnection of systems of initial and further education	★★	★★★★	★★★★
To support the permeability between individual levels of tertiary education		★★★★	
To increase information education	★★★★	★★★★	★★★★

Notes: ★★ significant link  
 ★ medium link  
 no link, or indirectly mediated influence

**Consistency of Education for Competitiveness OP with the National Education Development Programme in the Czech Republic**

The National Education Development Programme in the Czech Republic formulates thought bases, general intentions and development programmes that should be authoritative for the development of the educational system in the Czech Republic. The National Education Development Programme defines 6 basic strategic lines that should contribute to the fulfilment of continuous strategic objectives.

From the perspective of compliance of the EC OP strategy with the National Education Development Programme in the Czech Republic we can say that the operational programme fully complies with the latter.

**Table 10: Consistency of EC OP and the Czech Republic National Education Development Programme**

Czech Republic National Education Development Programme	Priority axes of Education for Competitiveness Operational Programme		
	Priority axis 1	Priority axis 2	Priority axis 3
<b>Implementation of lifelong learning for all</b>			
To secure the availability of education and permeability of the educational system at all levels	☆☆☆	☆☆☆	☆☆☆
To support individualisation and differentiation of the educational process at all levels of the educational system	☆☆☆	☆☆☆	☆☆
To support education of disadvantaged individuals	☆☆☆	☆☆	☆☆
To enable 50% of the relevant population year group to access tertiary education		☆☆☆	☆☆
To support development of distance education		☆☆☆	☆☆☆
To process and establish a system of financial and non-financial incentives for development of adult education			☆☆☆
<b>Adaptation of educational and study programmes to the needs of life in a knowledge society</b>			
To draw up a State School Framework Programme for Children and Youth aged 3-19	☆☆☆	☆	
To support implementation of a new concept of the State School Framework Programme particularly in priority areas (languages, ICT, environmental education, key competences, support materials)	☆☆☆	☆☆☆	☆☆
To connect study programmes in the tertiary sector with scientific, research and development or other creative activity both in schools and outside schools		☆☆☆	
To utilise international co-operation in the creation of study programmes and development of mobility of teaching and academic university staffs and students	☆☆	☆☆	☆☆
<b>Monitoring and evaluation of quality and efficiency in education</b>			
To finish building up the evaluation and information systems of the regional school system	☆☆☆		
To create a system of diagnostic evaluation of pupils and extend the existing consultancy system	☆☆☆		

Czech Republic National Education Development Programme	Priority axes of Education for Competitiveness Operational Programme		
	Priority axis 1	Priority axis 2	Priority axis 3
To finish building up the tertiary education evaluation system		☆☆☆	
To prepare and implement mechanisms assuring the quality of further education			☆☆☆
<b>Support of internal transformation and openness of educational institutions</b>			
To establish the School Development Programme and continue the activity of the University Development Fund		☆☆	
To build infrastructure to support the work of schools	☆	☆	
To extend the functions of primary and secondary schools	☆☆		
To enhance the role of cultural educational institutions and civic associations in education and training	☆☆		☆
To strengthen the role of tertiary education institutions in regional development		☆☆	
<b>Transformation of the professional perspective role of teaching and academic university staffs</b>			
To define and increase the qualification level in all categories of teaching staff	☆☆☆	☆☆☆	☆
To increase the quality of preparatory education of teaching staff		☆☆☆	
To finish building up a further education system for teaching staff	☆☆☆	☆☆☆	☆
To increase the scientific and pedagogical level of teaching and academic university staffs in the tertiary sector of the educational system		☆☆☆	
<b>Transition from centralized management to responsible co-decision-making</b>			
To make use of indirect management tools, particularly innovative and development programmes	☆	☆	☆
To develop an information and knowledge basis for the managerial sphere and educational practice		☆	
To take care of human resources in the system of management of the educational system	☆☆	☆☆	☆
To create a legal framework for adult education			☆☆☆

Notes:      ☆☆☆    significant link  
                  ☆☆☆    medium link  
                  ☆        no link, or indirectly mediated influence

### ***Consistency of Education for Competitiveness OP with the 2005 Long-term Development Plan for Education and the Educational System***

The 2005 Long-term Development Plan for Education and the Educational System formulated by the Ministry of Education, Youth and Sports is targeted at progress and development in specific components of individual areas. The 2005 Long-term Development Plan for Education and the Educational System identifies six strategic directions, which (unlike the 2002 Long-term Development Plan for Education and the Educational System) place more emphasis on ensuring equal opportunities for education. EC OP supports the implementation and fulfilment of all six strategic directions, which include quality improvement and modernisation of education (curriculum reform), quality assurance, monitoring and evaluation of education, ensuring equal opportunities in education, development of an integrated consultancy system in the school system, an increase in the professional skills and social position of teaching staff, and support of further education.

The aim of MEY&S is to create a competitive, richly diversified system that will develop the potential of people for the labour market and will provide for their employability.

From the perspective of compliance of the Education for Competitiveness OP strategy with the Long-term Development Plan for Education and the Educational System we can say that the operational programme fully complies with it.

### ***Consistency of Education for Competitiveness OP with the Czech Republic Economic Growth Strategy***

The objective of the Economic Growth Strategy is to bring the Czech Republic significantly closer to the economic level of more economically developed countries of the European Union, while respecting the principles of sustainable development, an increasing standard of living and a high level of employment. Five priority lines are defined by this Economic Growth Strategy plan. EC OP significantly supports the 4th priority line, i.e. Human Resource Development and Employment, and partially supports the 5th priority line, i.e. Research, Development and Innovation. EC OP particularly supports the draft of Economic Growth Strategy for simplifying the access to post-secondary vocational and higher education and increasing the quality of the primary and secondary school system. EC OP further supports the involvement of disadvantaged pupils, extension of the offer of further education with emphasis on language knowledge and ICT. In the area of research and development, EC OP supports the education of research and development employees in the field of intellectual property protection and an increase in the level of graduates from scientific and technical study programmes at universities in respect of intellectual property protection and its economic utilisation. In addition, EC OP supports the motivation to graduate from natural science study programmes at universities; and, last but not least, it promotes the priority of the Czech Republic Economic Growth Strategy, which addresses the issue of school framework programmes for research and development employees and R&D managers.

From the perspective of compliance of the Education for Competitiveness OP strategy with the Czech Republic Economic Growth Strategy we can say that the operational programme fully complies with it.



### ***Consistency of Education for Competitiveness OP with the Czech Republic National Innovation Policy for 2005 – 2013***

One of the objectives of the National Innovation Policy is to provide human resources for innovations, particularly for innovation processes in the necessary structure at all levels. EC OP is focused on removing the unsatisfactory structure of university graduates, motivating for graduation from scientific and technical study programmes, creating new school framework programmes oriented to research and development workers and managers, and removing obstacles in the mobility of human resources for innovation processes.

From the perspective of compliance of the Education for Competitiveness OP strategy with the Czech Republic National Innovation Policy we can say that the operational programme fully complies with it.

### ***Consistency of the Education for Competitiveness OP with the Human Resources Development Strategy for the Czech Republic***

The Human Resources Development Strategy for the Czech Republic (hereinafter referred to as “HRDS”) defines 5 objectives that should contribute to increasing the competitiveness of the Czech Republic in the global market by taking care of human resource development and the development of education as a whole, i.e. education that in all areas, sectors and phases prepares economically active citizens for work and life in an information and knowledge society. The first objective of HRDS is to establish lifelong learning as normal practice. The second objective is to prepare the human resources of the Czech Republic for the challenges brought by information and knowledge society, global economy, the necessity of sustainable development, and EU membership. The third objective is to increase the international competitiveness of the Czech economy and its attractiveness to investors. The fourth objective is to increase the employment of labour force and to positively influence the employment. The last objective is to improve the utilisation of limited resources and mobilisation of the necessary means for development of human resources.

From the perspective of compliance of the Education for Competitiveness OP strategy with the Human Resources Development Strategy for the Czech Republic we can say that the operational programme fully complies with it.

## **4. Link of Education for Competitiveness OP to other operational programmes**

EC OP and the other operational programmes complement one another. These are, in particular:

- The Research and Development for Innovation OP (R&DI OP) which comprises the Research and Development Capacity Development priority axis focused on promoting the research and development capacities, poles of excellence and supporting the R&D for innovations in non-industrial branches. The programme also comprises the priority axis “Development of capacities for the co-operation of public and private sectors in research and development”, which is to support permanent and effective co-operation between these two environments, and the priority axis “Reinforcement of university capacities in tertiary education”. R&DI OP will be financed from ERDF, with MEY&S being its managing authority. The synergy effects of both programmes will be achieved by combining “soft” financial funds from ESF intended for human resources in the area of tertiary education and research and development, and “hard” ERDF funds supporting investments so that both types of projects can be combined appropriately.

- The Enterprise and Innovation OP (E&I OP) which is focused on improving the conditions for enterprise and innovation support. The programme will be financed from ERDF, and the Ministry of Industry and Trade will be its managing authority. EC OP will create space for more effective education of employees in companies by setting up a system framework of further education and developing the offer of further education. Direct implementation of the programmes of further education will be supported in HR&E OP. Likewise, co-operation between entrepreneurial entities and educational institutions (particularly universities) and research organisations will be supported in EC OP.
- Human Resources and Employment OP (HR&E OP), which is primarily focused on promoting an active employment policy and improving the access to work, on the permanent integration of persons seeking jobs into the labour market, and unemployment prevention. Therefore, HR&E OP is primarily focused on the unemployed and persons threatened with loss of employment. HR&E OP further deals with the area of social integration of equal opportunities. Modernisation of public administration is a separate area of HR&E OP. HR&E OP also addresses the creation of systems to foresee changes in the labour market and cope with both progressive and sudden changes in employment, and supports activities aimed at increasing employability and obtaining, enhancing and improving the capacity for performance of occupation. The programme will be financed from ESF, and the Ministry of Labour and Social Affairs will be its managing authority. The synergy effect of both programmes will be given by the link between the quality of the educational system and graduates from this system and harmonisation of the needs and requirements of the labour market. Besides, EC OP will pay attention to individuals with special educational needs, with emphasis on their future employability in the labour market.
- Environment OP (E OP), which is focused on improving the quality of the environment as a necessary precondition for the attractiveness and competitiveness of the country and its regions using innovative effects of environmental policy for sustainable development. The programme will be financed from the ERDF and the Cohesion Fund (CF), with the Ministry of the Environment being its managing authority. The synergy effects of both programmes will be achieved by combining the non-investment support of environmental education and training within the scope of the newly created school framework programmes from EC OP and investment support for the development of infrastructure for environmental education, consultancy and enlightenment from E OP.
- Prague Adaptability OP (PA OP) is focused on supporting the development of a knowledge economy, promoting the entry into the labour market, and modernisation of initial education within the territory of the capital city of Prague. The programme is co-financed from ESF, with Prague Municipal Council being its managing authority. Within the scope of PA OP, mirror projects will be implemented for individual projects of EC OP, the author of which will be MEY&S. PA OP will build on the results of national system projects implemented within the scope of EC OP.

The set of the above-mentioned inter-linked OPs is an important element in fulfilling the targets of the Lisbon strategy, consisting in strengthening the role of knowledge economy in stimulating employment growth and competitiveness of EU member states, and creating a system to stimulate research, development and innovations. The synergy effect is further emphasized in the environment of individual regional operational programmes, which are linked to the system of sector OPs, focusing their subsidy entitlements on solving problems that are related to a specific region of the Czech Republic. Thereby they support the use of the given territory's potential and

contribute to its balanced development. The global objective of ROP is to accelerate the development of the Czech Republic's regions, increase their competitiveness and attractiveness for investments, and to improve the quality of life of the population, while respecting a balanced and sustainable development of regions based on utilisation of their potential. EC OP supports the development of the further education system and its concept, including the support of innovative approaches and inter-connection of research and development with what happens in practice. In this respect, synergy effects take place with ROP support focused on increasing the region's prosperity by creating an environment for the development of small and medium-sized enterprises. Last but not least, EC OP also supports the modernisation and improvement of conditions for the population living in cities and in the countryside, relating to the quality of education (including the availability of further education) and leisure-time activities that contribute to increasing the attractiveness of these territories for economic development.

7 regional OPs financed from ERDF are being prepared in individual NUTS 2 regions for the 2007-2013 programming period. These programmes, on a bigger or smaller scale, provide space for building the capacities of educational facilities in regions. The managing authority responsible for proper implementation of the regional operational programme is the Regional Council of the relevant cohesion region.

Within the EC OP no specific actions completing the Fishing Operation Programme (co-financed from the European Fishing Fund) and the 2007 – 2013 Rural Development Programme of the Czech Republic (co-financed from the European Agricultural Fund for Rural Development) are defined.

## **5. Impacts of Education for Competitiveness OP**

Fulfilment of the programme's specific objectives will be implemented while respecting joint horizontal principles.

### ***Horizontal themes***

Education for Competitiveness OP covers two main horizontal themes:

- Equal opportunities
- Sustainable development.

Horizontal themes with their cross-sectional nature have an impact on all areas supported by structural funds. For EC OP, these horizontal themes represent tools by means of which global and specific objectives are integrated across the spectrum of three vertical priorities of the programme. Horizontal themes will be respected when selecting projects, and their fulfilment will be monitored in the project implementation phase and subject to audit at the place of implementation. Their effects on the situation in the area of education, science and research will be evaluated within the scope of the evaluation system of the Education for Competitiveness OP.

### ***Equal opportunities***

The objective of the general principle of equal opportunities is to combat discrimination of an individual based on nationality, sex, race, ethnic origin, religion, belief, disability, age or sexual orientation. Special emphasis is placed on equal opportunities for women and men.

Equal access to education is a basic precondition for an effective educational system. Within the scope of EC OP, the creation of equal opportunities to involve all groups of the population into the educational process as well as tools facilitating that participation will be supported. Increased attention will be paid to the active involvement of disadvantaged group members with special educational needs or other impairments that complicate their engagement in the regular system of education.

### ***Sustainable development***

The individual dimensions of sustainable development, which have to be addressed in relation to structural funds, are as follows:

- Water, air and soil pollution, and noise pollution;
- Consumption of resources, alternative resources and their utilisation;
- Waste and its reduction;
- Biological diversity and landscape utilisation;
- Environmental awareness.

Sustainable development has become a key aspect of the social and economic development of society and, analogically, a key aspect of the education. In this connection, nowadays, we talk about the education for sustainable development, which is not only a partial current educational need but also a long-term integrating principle within the entire education system, i.e. initial and further education, formal, non-formal and informal education.

Within the scope of EC OP, horizontal priority will particularly be implemented through the following:

- Support of curriculum reform and implementation of cross-sectional themes into school framework programmes;
- Support of new contents of education, such as sustainable development and development of study programmes and educational modules focused on sustainable development;
- Support of co-operation between schools and educational institutions in the area of sustainable development at a local level.

It can further be assumed that the implementation of activities in terms of EC OP will have no negative impact on the environment. On the contrary, one of the tasks is to stress the importance of environmental education and training, and to place emphasis on environmentally friendly technologies in terms of the creation of school framework programmes with potential accent put on regional specifics. In this respect, a positive impact on the environment can be expected prospectively.

## **6. Ex-ante evaluation results**

Ex-ante evaluation of programme documents is an integral part of their preparation according to the requirements of the European Union. Ex-ante evaluation of the Education for Competitiveness Operational Programme was prepared in compliance with the suggested European Union requirement as well. The author is the Centre of Regional Sciences and Public

Administration of the Faculty of Economics and Public Administration, University of Economics, Prague.

In compliance with the regulations and rules for performance of ex-ante evaluation of programme documents, two basic principles were primarily applied upon implementation and processing of the evaluation:

- 1) The principle of continuity, i.e. the evaluators continuously evaluated individual parts of the document being prepared and took their particular standpoints to those parts. Within these standpoints they reported primarily their recommendations regarding additions, amendments or modifications to the document being prepared. The standpoints were in the form of both written materials and oral comments.
- 2) The principle of co-operation, i.e. the evaluators' activity was not performed separately from the activities of the programme document authors themselves; on the contrary, both groups of experts worked in close coordination, e.g. in terms of working groups, individual personal communication between individual team members, or via electronic communication.
- 3) Principle of active assistance – the evaluation team formulated numerous recommendations and alternatives concerning the analytical part, strategy and indicators.

Due to the application of the above-mentioned principles it was possible to prepare the programme document – the Education for Competitiveness Operational Programme – in a form that in essence reflects the ideas of the evaluation team regarding its contents.

The evaluation team considers the significant application of the partnership principle, i.e. intensive involvement of partners, including regions, in the creation of EC OP as a strength of the hitherto EC OP creation process.

The evaluation team is to confirm that the programme document contains all the relevant parts required by the European Commission.

### **Standpoint of evaluators to the main attributes of the programme document**

#### *Assessment of general consistency of the document*

The Education for Competitiveness Operational Programme is primarily focused on the improvement of quality of the educational system and wider application of the lifelong learning concept in the Czech Republic. The evaluation team is to confirm that the data regarding the quality of the Czech educational system are applied in the analytical part of EC OP to the extent given by the availability of such information, which has created more difficult conditions for formulating the strategic section of EC OP.

The strategic part and definition of priority axes of EC OP reflect the real needs of the Czech Republic in the area of education, which can be financed from ESF. The evaluation team considers the fact that the submitted version of the strategic part has resulted from discussions of the working party comprised of representatives of all significant partners as being positive.

The evaluation team recognizes the agreement on distribution of competences in the area of further education between the Ministry of Labour and Social Affairs as the managing authority of HR&E OP and the MEY&S as the managing authority of EC OP. This agreement has influenced the formation of EC OP strategy in Priority axis 3: Further education. The stated solution means a division of supply and demand in the area of further education between EC OP and HR&E OP, which will require a close inter-connection and co-ordination of the support provided through them. EC OP is focused on dealing with the expected demand in the labour market; thus, it primarily concerns a reflection of long-term trends and their manifestation in the initial education

system. Nevertheless, through the third priority axis, it also attempts to solve the problems related to the current situation in the labour market in terms of developing the relevant offer of further education. The evaluation team recommends that indirect links with the labour market should be emphasized in EC OP.

*Assessment of compliance of the submitted programme document with relevant documents on supra-national and national levels*

During its evaluation, the evaluation team identified no discrepancies in relation to supra-national documents outlining the directions of further development of the European Union or the drawing on and utilisation of finances from structural funds.

The submitted Education for Competitiveness Operational Programme is in compliance with the Lisbon Strategy and its follow-up documents, particularly the National Lisbon Programme 2005-2008 – the Czech Republic National Reform Programme. It is also in compliance with the strategic documents of the economic and social cohesion policy, at the European level with the Community Strategic Guidelines (CSG), and at the national level with the Czech Republic National Strategic Reference Framework 2007 – 2013. Successful implementation of the contents of EC OP will undoubtedly contribute to meeting the objectives of the above-mentioned documents.

EC OP is becoming the implementation tool for other national long-term concepts and strategies as well, such as the Czech Republic Long-term Development Plan for Education and the Educational System of the Czech Republic. EC OP also contains a basic description of links to other operational programmes (particularly with emphasis placed on HR&E OP and R&DI OP). A detailed description should be integral part of the EC OP Implementation document and relevant methodologies.

*Setting-up of indicators*

The evaluation team is to confirm that the setting-up of indicators reflects the focus of individual priority axes and areas of intervention.. The evaluation team believes that particularly in the case of context indicators it would be appropriate to limit their number, and recommends that for some indicators their real quantification should be considered. The EC OP indicators must be quantified.

*Financial plan*

The distribution of drawing on financial funds in individual years is characterized by their gradual growth. The evaluation team respects the wide consensus achieved in respect of the distribution of financial funds among individual priority axes of EC OP.

*Implementation*

Based on Czech Republic Government Resolution No 175/2006, the Ministry of Education, Youth and Sports has been appointed to act as managing authority of EC OP, and the EU Affairs Department (O 60) has been commissioned to perform the relevant functions. Implementation of the programme document is set up according to valid rules and regulations, with further details to be specified in the EC OP Implementation Document.

The evaluation team considers it necessary to specify the information regarding the implementation system in the EC OP Implementation Document (particularly for specific entities that are to participate in management and implementation of EC OP, to specify their roles and mutual relations).

### *Conclusion*

Setting up the implementation system and establishing the system's co-operation links with key partner OPs (particularly HR&E OP and R&DI OP) will be crucial for the successful implementation of EC OP.

The evaluation team is to confirm that the EC OP set in this manner will contribute to meeting the objectives of the economic and social cohesion policy expressed by means of CSG and NSRF of the Czech Republic 2007-2013.

## **7. Environmental Impacts of EC OP**

EC OP is neutral from the point of direct environmental impacts. With regard to its nature (soft support forms), it will be of no impact upon physical aspects of the environment, Natura 2000 localities, etc.

EC OP contributes to extending awareness of the need to respect the sustainable development principles in the Czech population. Within the scope of EC OP, environmental education will be supported and become a systemic part of the lifelong learning concept through all forms of education.

## **8. Application of Partnership Principle**

The partnership principle was applied during the preparation of EC OP in accordance with the Proposal for a General Regulation. A large working party was established for the purpose of preparation and processing of EC OP. The party consisted of representatives of respective public administration bodies and economic and social partners (hereinafter referred to as "Working Party").

Besides the Managing Authority, the Working Party also comprised representatives of organisations directly managed by MEY&S, educational institutions, other departments, all regions<sup>19</sup> and the relevant economic and social entities (such as the Chamber of Commerce, and the Czech Republic Union of Industry and Transport). DHV CR, spol. s r.o. was the author of EC OP based on results of tender.

The Working Party participated in the creation of EC OP, holding regular discussions, making comments and suggestions to working papers of the document, and checked and approved the outputs by the author of the Operational Programme.

Individual versions of EC OP were simultaneously discussed at working forums (itinerant meetings), participated in by representatives of MEY&S, other departments, representatives of organizations directly managed by MEY&S, representatives of regions, representatives of the Czech Republic Office of Government, Czech Republic Union of Industry and Transport, and CzechInvest.

The programme was further presented to and discussed with the public (both expert and layman) at public hearings.

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<sup>19</sup> On NUTS II level.

The presented Education for Competitiveness OP has resulted from discussions within the Working Party and working forums.

The principle of partnership will also be applied during the implementation, monitoring and evaluation of the Education for Competitiveness OP.



### **III Priority Axes and Indicators**

Interventions will be implemented through EC OP in 4 priority axes, which are further broken down into 11 areas of intervention. Technical assistance forms a separate priority axis.

Overview of priority axes and areas of intervention:

Priority axis No 1: Initial education

Areas of intervention:

- 1.1 Improving quality in education
- 1.2 Equal opportunities for children, pupils, including pupils with special educational needs
- 1.3 Further education of employees of schools and school facilities

Priority axis No 2: Tertiary education, research and development

Areas of intervention:

- 2.1 System framework of tertiary education and development of human resources in research and development
- 2.2 Tertiary professional education
- 2.3 Higher education
- 2.4 Human resources in research and development
- 2.5 Partnerships and networks

Priority axis No 3: Further education

Areas of intervention:

- 3.1 System framework of further education
- 3.2 Individual further education
- 3.3 Support of further education offer

Priority axis No 4: National system activities

Priority axis No 5: Technical assistance

- 5.1 Programme management, auditing, monitoring and evaluation
- 5.2 Programme awareness and publicity
- 5.3 Absorption capacity of entities implementing the programme

## **Priority axis 1 – Initial Education**

### **1. Description of initial state**

Since the early 1990s, there have been numerous partial steps taken, the aim of which was to transform the so far centralized and directionally managed system of primary and secondary education. One of the preconditions of this decentralisation was gradual delegation of management to lower levels and differentiation of the roles of individual players in education. The most significant milestone then was the new School Act No 561/2004 Coll., which will enable the implementation of deeper changes in the objectives and contents of education.

Strategic documents of the National Education Development Programme (2001) and the Czech Republic Long-term Development Plan For Education and the Educational System (2002 and 2005) were formulated. Their objectives and intentions are fulfilled primarily by the preparation of legal regulations, concepts and methodologies for changes resulting from strategic directions. The curriculum reform has been brought the farthest at the level of pre-school education (nursery schools), and the process of its implementation is taking place at the level of primary education. The main objective of the reform is a qualitative change in tuition and approach to pupils; it proves true, however, that the key factor for a further successful advancement in the implementation of the curriculum reform, the fulfilment of its objectives and, finally, the actual improvement in quality of initial education is the further education of teaching staff.

The development since the 1990s has been characterized by an increased supply of secondary vocational education and the formation of new branches, as well as changes in distribution of the number of students in individual branches. The number of schools that diversify their offer by getting themselves involved in various educational projects implemented in co-operation with foreign schools with the same or similar focus has been increasing; numerous schools count on this activity in their conceptual schemes.

Numerous steps have been taken to integrate individuals from socially disadvantaged environments. Preparatory classes of primary schools are being set up, and the function of teacher's assistant has been established. An Early Care Concept has been defined aimed at children from socio-culturally disadvantaged environments with low cultural and social status (and their families), in particular, for the period between the moment a child is three years old and entering mandatory school attendance. The Concept's Objective is to ensure system changes in initial and further education of teaching staff who work in pre-school education, focused on development of competences for education of children from socially disadvantaged environments. Another objective is to improve conditions for education of these children in pre-school education, including implementation programmes focused on pilot screening of early care projects. Projects integrating disabled pupils into regular schools are being supported. A positive development has been observed primarily in special schools (schools established for pupils with special educational needs).

In spite of the efforts made to place emphasis on individualisation and differentiation of education, most children with special educational needs achieve insufficient education and low qualifications or even no qualifications, which is also one of the causes of social exclusion. This applies to members of Roma community to a large extent. A gradual growth in the number of

pupils – foreigners – is another significant fact<sup>20</sup>. This fact is related to the need to focus on specific needs of this group of pupils, particularly their language needs, which make up one of key factors for the integration of foreigners, which further determines their full integration into the educational system and further involvement in society and employability in the labour market.

In spite of the indisputable advancement in educational methods at primary and secondary schools, there are still areas where a further advancement is necessary in order to achieve an overall improvement of the education system. The key factor in this respect is full implementation of the curriculum reform, the meeting of all its objectives and their inter-connection, with support for innovation of school framework programmes, and finally the actual improvement in the quality of initial education.

Certain problems persist in the Czech Republic regarding initial education, one of which is the existing tendency to render large amounts of knowledge at the expense of developing key competences. The language education that is still insufficient and the absence of preparation for enterprising represent specific problems.

A new significance also lies in the orientation of tuition towards urgent themes of the contemporary world that is presented in the curriculum reform by including cross-sectional themes into School Framework Programmes, and emphasised in the integrated form of the Education Strategy for Sustainable Development.

Therefore, the low level of individual approach to pupils is a weakness of the Czech schooling system; this applies to all pupils, including the extraordinarily talented and disadvantaged ones. Therefore, there is a growing need for an open concept of school framework programmes that would ensure equal access and maximum opportunity for all, and thus at the same time there is an increasing need for the corresponding further education of teaching staff. A wider application of the function of teacher's assistant is another area for improvement here.

Schools show insufficient consistency in dealing with how to enable all pupils to develop their potential to its maximum. There are big shortcomings in the area of evaluation and self-evaluation of schools, where the support of the system is still weak, and also in the evaluation of the entire system. The growth in managerial skills of headmasters and also the increased quality of school inspections have an indisputable effect on improving the organization of schools' operations.

The further education of teaching staff is the basic factor for achieving the objectives of the curriculum reform and improving the situation in the above-mentioned problematic areas. The proportion of teachers who fully meet the specified conditions of professional and educational competence is growing<sup>21</sup> at schools. However, the qualification demands continue growing, and thus more attention has to be paid to the professional preparation of staff at schools and education facilities, including development of competences of teaching staff for teaching children with specific educational needs, in particular children from socially disadvantaged environments from the moment the child is three years old until entering primary school.

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<sup>20</sup> As at 30 September 2004, there were 12,113 foreigners attending primary schools and 4,332 foreigners attending secondary schools.

<sup>21</sup> 1999/2000 school year – 65.2% of fully qualified teachers, 2003/2004 – 76.8% fully qualified.

Other existing problems of initial education include insufficiencies in and regional differentiations of modern teaching aids and textbooks for improving the efficiency of tuition. Computer technology is used insufficiently in tuition itself. Despite certain advancement, the involvement of Czech schools in international projects remains unsatisfactory. The reason can be observed in a language barrier, low competence or inadequate equipment of the schools.

The persisting problem of the Czech Republic is the insufficient inter-connection of labour market requirements and the existing offer of education both in terms of structure and, particularly, in terms of content. Last but not least, a limiting factor is the amount of expenditure on education, which is below the average as compared with other advanced European countries.

In the area of non-formal education, educational modules must be created so as to be recognizable as a part of further education. It will be a problem to improve the quality of the education system for employees of non-state, non-profit organizations and leisure-time and youth centres and their tutors. Education for project management in the non-profit sector will have to be supported. Activisation programmes, a consultancy system and information systems concerning the existing opportunities for non-formal education will have to be created at local, regional and national levels.

## 2. Global Objective and Specific Objectives

**The global objective of the priority axis is the development and quality improvement of the system of initial education with emphasis on improving the key competences of school leavers in order to enhance their employability in the labour market and to increase their motivation for further education.**

Specific objectives:

- Quality improvement in initial education;
- Improvement of equal opportunities for children, pupils, including pupils with special educational needs;
- Improvement of competences of teaching and non-teaching staff of schools and school facilities.

## 3. Strategy

The SWOT analysis of the current economic and social situation in the area of education has pointed out shortcomings in the area of initial education, which determine the performance and achieved quality level. Leaving these shortcomings without a further systematic solution could mean relatively serious problems in the following years. The indicated weaknesses include primarily an insufficient inter-connection between school framework programmes and labour market needs, a low level of foreign language skills and a low computer literacy, including the skills to work with information. Another serious problem also rests with insufficiently mastered key competences, a low level of entrepreneurial skill development, and insufficient individualisation of school framework programmes at secondary and primary schools.

Priority axis 1 will be implemented through three complementary areas of intervention. The educational environment and its individual elements will be encouraged so as to be stimulating and motivating and so that the preconditions set in this way should be activating for a continual

process of quality improvement of education. Attention will be paid to both the system environment and the activity of individual schools and school facilities, their co-operation and the support of partner entities.

Implementation of the curriculum reform is decisive for developing the new quality level in initial education. So far, it has been met only in a certain part of schools because system support was provided only in a pilot dimension. In the following stage, all good experience gained and the acquired knowledge and skills of individual teachers, headmasters, entire schools, or their groups and other players must be utilised in order to extend the positive impact of the curriculum reform and its effect on tuition to a much higher number of schools and into the whole system of initial education. One of the key parts of the reform covers the support of teachers, who themselves must take over responsibility for the successful transformation of the teaching environment and climate at their schools. Adequate conditions and motivation must be created for this. Successful continuance of the curriculum reform is also conditioned by an extension of activities in the creation of a comprehensive system of support, monitoring, evaluation and consultancy. The improved quality of the educational system must also enable all pupils to achieve results that correspond to their intellectual capabilities. Therefore, special attention will be paid to all who need to be given additional support or receive an individual approach in order to apply their abilities; the principle of equal opportunities will be taken into account as well. The first area will support the improvement of quality in education and be primarily focused on getting the curriculum reform completed, and on finishing and providing comprehensive methodological support for the creation and implementation of school framework programmes and their innovation with emphasis on the development of pupils' key competences and their subsequent implementation. In terms of the curriculum reform focused on the own initiative of schools to find new paths to tuition with emphasis placed on acquiring skills and knowledge, the transformation of forms and content of the tuition to develop the individual potential of pupils and students aimed at building a basis for their lifelong learning, harmonic development of their personalities and specific employability in the labour market will be promoted. Skills will be strengthened primarily in the area of dynamic development of the pupils' personalities as compared to static learning of large amounts of facts. The support will also focus on the area of developing creativity, problem solving, information searching and working with information, and using new technologies in education, language education and new contents of education such as multicultural education, sustainable development, healthy lifestyle, enterprising, and European integration. In order to implement these activities and areas, the education of teaching staff corresponding to these objectives must also be supported. At the school level, the involvement of schools in international projects and partner co-operation will be supported as well.

Activities of individual schools will be supported by improving the quality of the entire system functioning. This particularly means further development of an information and evaluation environment that will provide feedback for the implementation of curriculum reform – by means of support for monitoring, evaluation, self-evaluation of schools and quality management systems. Attention will be paid to improving the quality of school inspections as well. These tools will be integrated into the whole system. While spreading the examples of good practice, great attention will be paid to the support of co-operation between schools, their networking, further partnership with other entities both in the educational area and in the job market and sustainable development at a local level. The whole area of career consultancy and information activity in terms of labour market needs aimed at an efficient selection of educational path and professional orientation will be supported. Further, the area of interest education will be supported. Primarily a variety of activities will be supported, including leisure-time activities, focusing on the prevention of leaving education prematurely without completing the relevant level of education,

which is a precondition for education at the next level, or education that results in a qualification applicable in the labour market.

Ensuring equal opportunities for education for everyone is a significant priority axis of the education system regardless of the type of disadvantage, e.g. disability, economic, social, ethnic, based on gender or citizenship, etc. Support will be directed towards an improvement of the approach to talented pupils and students as well. Creation of conditions for integration of persons with special educational needs into the standard educational stream is very important as well, together with ensuring the necessary special educational and psychological support services. Therefore, activities allowing for an individual approach depending on the actual needs of pupils are supported through the second area of intervention, including the creation of individual school framework programmes and the creation of a motivational educational environment and support mechanisms. Simultaneously, activities focused on the creation of modified educational programmes for teaching children with a social disadvantage in pre-schools in accordance with the school framework programme adjusted to special needs and capabilities of children are to be fostered. Other supported activities concern creation of optimal conditions for developing the child's personality, for learning and communication with others and help them to gain the highest possible independence. Special attention will be devoted to the prevention of racism and xenophobia, and to the support of multicultural education and training with an emphasis on the issue of the Roma ethnic group. Greater attention will be paid to the education of foreigners living in the territory of the Czech Republic, also in a form of their pre-school preparation (particularly in respect of language). At the same time, the area of equal opportunities will be supported by ensuring the necessary activities connected with the early care of children with socio-cultural disadvantage in order to eliminate any barriers preventing them from the entry and integration into the education system.

This area will also support vocational training of teaching staff, which is connected with an increasing need of individual approach towards education and with the introduction of new forms of group and independent work of pupils.

A significant activity for meeting the principle of equal opportunities is the development of a consultancy and assistance service system (including education of assistants) and the creation of a safety net, which will facilitate a return of early school leavers to the education system. In the case of consultancy centres, emphasis will also be put on the question of a change of approach in terms of concept and understanding of the role of the consultancy centres.

All the steps above are conditioned by changes in the position and role of teaching staff, increasing their professionalism and social position, among other things through their systematic further education. The curriculum reform cannot be implemented separately from the development of human resources in the entire educational system. With regard to continuously increasing requirements for a knowledge society, the further education of both teaching and non-teaching staff at schools and educational facilities, including extension of the forms of this education, is supported within the third area of intervention. If the teaching staffs are to develop new key competences and skills in pupils, they must master them themselves (e.g. IT competences, foreign languages, etc.) and manage the pedagogical procedures to transmit and develop such competences and skills in the pupils. The teaching staff must also handle the methods of pedagogical projecting (creation of school framework programmes) and the basic issues concerning the possibilities of the school leavers in the labour market; many of them must also be able to master career consultancy skills. Therefore, the area of intervention will particularly be focused on the creation of a motivational system of further education for teaching and non-teaching staff at schools and school facilities and on the subsequent systematic

promotion of this education with emphasis placed on both expert competences and competences leading to the improvement of managerial skills necessary for the further development of schools and school facilities. Here, the emphasis will be placed on strengthening the knowledge in the area of control and management, project, financial and human resource management as well as on acquiring language and ICT skills. In this respect, great emphasis will be placed on the preparation and education of headmasters of schools and school facilities, and on the development of departmental human resource policy in terms of human resource development and systematic preparation of appropriate staff for demanding management and methodological functions at the school level and development of school framework programmes for managerial staff at schools and school facilities.

#### **4. Principal Areas of Intervention**

##### **4.1 Quality improvement in education**

Supported activities:

- Creation of conditions for comprehensive methodological support to enable the creation of school framework programmes and their innovation, including consultancy and advisory activities in the creation of methodological tools and documents for the curriculum reform.
- Implementation of new curriculum documents in the schools' running and educational and information support for the curriculum reform focusing on teachers and parents of pupils as a whole.
- Implementation of teaching methods, organisational forms and teaching activities, including creation of modular teaching programmes with emphasis on inter-subject links, which lead to the development of key competences.
- Implementation of teaching methods, organisational forms and teaching activities that increase the quality of foreign language education (including e-learning).
- Extension of tuition in foreign languages at secondary schools.
- Creation of conditions for long-term hosting of fully qualified foreign language teachers from EU countries.
- Improvement of conditions for utilising ICT for pupils and teachers, including outside of classes.
- Use of ICT in general educational and vocational subjects.
- Development of social partnerships of schools and school facilities and networking – partnership, co-operation and exchange of experiences between schools and school facilities and between schools, school facilities and other players in the field of education.
- Co-operation between initial education institutions and labour market players (including foreign ones) with potential application of innovative forms of co-operation (e.g. internships of students/teachers with the employers).
- Co-operation between initial education institutions and partners in the development of municipalities and regions, with potential application of innovative forms of co-operation (e.g. involvement of schools in community development).
- Creation of an information and communication system in initial education and development of portal services.

- Development of career consultancy both at schools and system level, including search for pupils threatened by a wrong choice or premature departure from the education system, and educational and information activities directed at pupils and parents focusing on rationalisation of choice of further educational path.
- Creation and implementation of certified quality management systems and school evaluation and self-evaluation methods.
- Creation of conditions for increasing the quality of school inspection work linked with implementation of the curriculum reform and innovation of school framework programmes.
- Support of information centres at schools, including marketing support.
- Development of entrepreneurial knowledge, abilities and skills of students in initial education (primary schools, secondary schools, apprentice centres).
- Development of knowledge, abilities and skills of pupils and students in initial education for sustainable development.

#### **4.2 Equal opportunities for children, pupils including pupils with special educational needs**

Supported activities:

- Application and improvement of organisational forms and tuition and teaching methods supporting an equal approach to education, including the creation of individual school framework programmes, use of ICT and e-learning applications.
- Increasing the competences of teaching staff to eliminate barriers preventing equal access for all individuals to education.
- Development of consultancy, elaboration and extension of offer of assistance, special pedagogical and psychological services for students with special educational needs.
- Building a “safety net” for persons threatened by premature leaving the education system and those who wish to return to the system.
- Building a system of minimum guaranteed care to be provided for children with a socio-cultural disadvantage in time.
- Prevention of racism and xenophobia by promoting the multicultural training and education.
- Education of foreigners (particularly language education) living in the Czech Republic.
- Support of non-formal education and the competences gained from it, improvement of the education system for staff from non-profit organizations and leisure-time centres, creation of educational modules recognizable as a part of further education.

#### **4.3 Further education of employees at schools and school facilities**

Supported activities:

- Creation of a further education system for the teaching staff of schools and school facilities, and development of the teachers’ competences.



- Further education of the teaching staff at schools and school facilities, including implementation of vocational practice and international internships of the teaching staff with emphasis on implementation of the curriculum reform, language education and use of ICT in tuition, including the mastering of additional modern pedagogical methods connected with a systematic enhancement of the quality and efficiency of education.
- Methodological support of foreign language education, including consultancy and advisory activities, and the creation of methodological tools and documents within the scope of the further education of teaching staff at schools and school facilities.
- International certification of foreign language teachers.
- Increasing the competences of managerial staff at schools and school facilities in the area of management and human resource policy.
- Consultancy and information system for further education – portal service.
- Increasing the availability, quality and attractiveness of the further education offer for school employees.
- Proposal for a career growth system for teaching staff linked to their further education and the introduction of comprehensive approaches to the management and development of teaching staff in the school system (development, motivation, remuneration, evaluation, communication, etc.).

## 5. Categories of Area of Intervention

Code	Priority theme
72	Design, introduction and implementation of reforms in education and training systems in order to develop employability, improving the labour market relevance of initial and vocational education and training, updating skills of training personnel with a view to innovation and a knowledge based economy.
81	Mechanisms for improving good policy and programme design, monitoring and evaluation at national, regional and local level.

## 6. Beneficiaries

- Central public administration bodies;
- Directly controlled organizations under central public administration bodies;
- Regions;
- City, Town and Village Councils;
- Schools and school facilities;
- Non-state, non-profit organizations;
- Professional organizations of employers;
- Professional organizations of trade unions, employees, employers and industries;

- Employers;
- Organizations operating in education and career consultancy;
- Other organizations active in the area of leisure-time of children and youth.

The beneficiaries must have a legal capacity or must be an organizational element of the state.

## **7. Flexibility**

Within the scope of this priority axis, at the level of individual projects, the necessary accompanying activities and costs of an investment nature that are otherwise qualified as being justified for funding from the ERDF will be able to be funded from the ESF, i.e. up to an amount of 10% of the project's costs ("cross-funding" according to Council Regulation (EC) No 1083/2006, Art. 34).

About 11% of all activities under the areas of intervention mentioned above represent activities of the national system nature, which are necessary to be implemented across the entire Czech Republic (including the capital of Prague). To express the financial proportion of these activities (or proportions of the Convergence Objective and Regional Competitiveness and Employment Objective), the multi-objective Priority axis 4 is to be applied.

## **Priority axis 2 – Tertiary Education, Research and Development**

### **1. Description of initial state**

The scope and significance of the tertiary education system has grown rapidly as a result of continuously increasing requirements for the population's education, which naturally changes the system's function and mission as well. The former model with the element of strictly selective preparation available to a limited number of applicants has been overcome, and the tertiary education has become a matter available to a far higher number of people with broadly diversified abilities, motivations, expectations, etc. This shift also brings about the necessity to adapt the education to the needs of a large part of the population, including those with average talents. At the same time, however, the potential of talented individuals must not be wasted, and thus the education must be offered to a much wider spectrum of various social applications. Significant decision-making regarding development of the country's potential in the area of research, development and innovation takes place within the scope of the entire system. These very diverse demands can only be met by a system that is sufficiently inter-connected with research and, at the same time, richly diversified and permeable. The increased system diversification automatically also brings greater demands on the widely conceived vocational level and performance of teaching (academic) employees, but also employees active in research and development. Such a system places new requirements on the level of management, information and consultancy support, along with quality management as well.

It is obvious that the tertiary education system in the Czech Republic has not been sufficiently diversified so far (primarily in terms of its form) to provide adequate education to all applicants for study in accordance with their preconditions. Primarily, the area of lower tertiary education (ISCED 5b, study at post-secondary vocational schools and bachelor's study programmes), which normally focuses primarily on the current needs of labour market, is insufficiently developed. It is equally necessary to emphasize the fact that in many areas the existing system of tertiary education insufficiently reflects the requirements of the employer sphere both as to structure of the graduates' competences and their quality. For instance, the number and quality of graduates from technical and natural science branches remains insufficient. A burning problem is also the insufficient direct relation between teaching performance of the employees and their activity in research and development and their co-operation with commercial partners.

It also becomes apparent that the system is not set up in a sufficiently appropriate manner so as to motivate the individual to operate and remain in the area of research and development activities, and get more involved in resulting innovative activities. With regard to intensive internationalisation and globalisation, the tertiary education and R&D system faces the necessity of improving the quality and increasing the attractiveness of the environment for both domestic and foreign employees in order to make use of human resource potential in areas that have a substantial effect on building a knowledge society.

Last but not least, the link between tertiary education institutions and research and development institutions on one hand and the manufacturing and service sector on the other hand proves to be insufficient. A more intensive stimulation for partnership and an intensive mutually beneficial co-operation between the above-mentioned entities are missing. As a consequence, transmission of the knowledge and results of research and development from educational and research institutions towards their effective utilisation in practice is limited. For the time being, the tertiary education, research and development, and manufacturing and service sectors form no

comprehensive and efficient system that would use various forms to support the formation and transmission of innovative solutions.

## 2. Global Objective and Specific Objectives

**The global objective of this priority axis is innovation of the tertiary education system towards cohesion with research and development activity, increased flexibility and creativity of graduates employable in a knowledge economy, and creation of a comprehensive and effective system to support the innovation process as a whole.**

Specific objectives:

- Creation of a system and institutional framework for tertiary education and human resource development in research and development activity.
- Improving the quality of education at post-secondary vocational schools.
- Improving the quality and intensifying the diversification of universities with emphasis on the requirements of a knowledge economy.
- Improving the quality of human resources for research and development, including the improvement of vocational training and conditions of employees and use of appropriate motivational and promotional tools.
- Strengthening the relationships between tertiary education institutions, research institutions and the private sector and public administration entities (including promotional activities).

## 3. Strategy

The SWOT analysis of the current economic and social situation in the area of tertiary education has pointed out some shortcomings, which determine the performance and quality level of education and R&D. The indicated weaknesses include primarily the ambiguous and indistinctive position of post-secondary vocational schools in the educational system and their insufficient inter-connection with the higher education system. Another weakness is the inappropriate structure of students in higher-education study programmes and also the high failure rate in the first years of higher-education study, particularly in technical subjects. Another significant fact is also the existence of regions of the Czech Republic with a lower number of people with completed higher education, which results in a significant inequality of opportunities in the labour market. There is also a similar situation from the perspective of youth interest in education in the tertiary sector. Therefore, the settlement of regional disparities will be one of the most important objectives of this priority axis. The degree of co-operation between educational institutions and research organisations and private and public sectors is insufficient as well. The number of graduates from doctoral study programmes has so far been very low as well. In research and development, the sufficient capacities and necessary motivating stimuli have not been created for potential applicants to operate in this area, which immediately affects the innovation activities of the Czech Republic.

Priority axis 2, which is implemented through four complementary areas of intervention and one cross-sectional area of intervention, responds to the conclusions of the SWOT analysis. Each of the complementary area of intervention focuses on a separate area, while the cross-sectional area of intervention covers systematic measures. Two areas of intervention (2.2 and 2.3) are focused on individual parts of tertiary education, and directed to the modernisation of post-secondary vocational and higher education systems. Area of intervention 2.4 is focused on improving the

quality and enhancing the attractiveness of conditions for research and development, while area of intervention 2.5 is focused on establishing the mutual relationships between individual entities – educational and research & development institutions, and public and private sectors.

The area of intervention focused on modernisation and enhancing the attractiveness of the post-secondary vocational education system is concentrated on the possibility of absorbing a higher number of applicants and responding efficiently to dynamic changes in the labour market and the changing requirements of employers. Equally, support will be given to activities aimed at the extension of teaching modules that will focus on non-traditional students – older, already employed persons, etc. The intention is to achieve a higher share of students at post-secondary vocational schools, who will find quality jobs in the labour market. By increasing the quality and attractiveness of school framework programmes, the post-secondary vocational education should become an alternative to bachelor's study programmes, thus contributing to a larger diversification of the tertiary education system.

The area of intervention focused on the modernisation and development of higher education will place main emphasis on the fact that the universities should offer study programmes, particularly at the bachelor's level, that will reflect as much as possible the expected situation in the future labour market. However, the emphasis on improving the quality of higher-education study programmes will be placed at all levels. With regard to bachelor's study programmes, the primary objective is both their increased focus on labour market requirements and the opportunity to continue in follow-up master's study programmes. The master's programmes, however, should be selective and prepare graduates for professional positions and activity in research and development. Systematic preparation in research will be intensified in terms of doctoral study programmes.

The area of intervention focused on increasing the attractiveness of and improving the conditions for research and development will be included, particularly at universities, but also at other institutions engaged in research and development. Individual activities should ensure that individuals with the preconditions for operating in research are sufficiently motivated, do not leave research activity and have adequate conditions for their performance. At the same time, the concentration of research and development capacities in regions outside of the capital city of Prague must be increased as well.

A condition for the education system to respond in a sufficiently flexible manner to labour market requirements and the challenges of technological development and a knowledge society is the intensive partnership of various entities in as wide a spectrum of activities as possible. For this reason, Priority axis 2 covers an area of intervention that is focused on implementing the joint projects, creating partnerships and co-operation in networks between educational and research & development institutions and public and private sectors. Another objective is to support effective transmission of knowledge, results of research and development and innovative solutions from educational institutions to the entrepreneurial sphere by means of partnership and joint activities.

#### **4. Principal Areas of Intervention**

##### **4.1 System framework of tertiary education and development of human resources in research and development**

Supported activities:

Within the scope of this area of intervention, the projects that are of a cross-sectional nature and the impact of which is related to the implementation of areas falling within more than one area of intervention of this priority axis will be supported. An indicative list of areas to which the implemented activities will apply is shown below:

- Proposal and implementation of an optimum system of tertiary education financing.
- Innovation of the management system for tertiary education institutions and R&D institutions.
- Proposal and implementation of project management support system in tertiary education institutions and research & development institutions.
- Proposal and implementation of support system for enterprising and an entrepreneurial approach and innovative solutions in tertiary education institutions and in research & development.
- Proposal and implementation of a comprehensive quality evaluation system of tertiary education and research & development.
- Proposal and implementation of a system of effective support for technical and natural science branches, including vocational and research activity of the youth.

##### **4.2 Post-secondary vocational education**

Supported activities:

- Innovation of school framework programmes.
- Creation and modernisation of combined and distance forms of study.
- Creation and modernisation of programmes responding to labour market demand.
- Extension of tuition in foreign languages.
- Extension of education for enterprising.
- Involvement of partners in the creation of school framework programmes.
- Support of practical training and internships of post-secondary vocational school students with employers.

- Creation, introduction and implementation of quality evaluation systems.
- Innovation of systems for monitoring labour market needs.
- Further education of teachers, management and administrative staff at post-secondary vocational schools.
- Support of co-operation with universities.
- Support of co-operation with foreign educational institutions, preparation of involvement of both individuals and teams in international projects and networks.
- Support of co-operation of post-secondary vocational schools with primary and secondary schools with the aim of motivating for study of technical and natural sciences branches.

### **4.3 Higher education**

Supported activities:

- Support for the formation of quality teams.
- Innovation of study programmes.
- Extension of the higher education offer with special emphasis on technical branches.
- Introduction and modernisation of combined and distance forms of study.
- Implementation of programmes responding to labour market needs.
- Extension of tuition in foreign languages.
- Extension of education for enterprising and innovations.
- Involvement of regional partners in the creation of study programmes.
- Further education of academic, management and administrative staff.
- Support of practical training and internships of university students with employers.
- Strengthening the role of universities in research activities.
- Motivating pupils for preparation for study of technical and natural science branches through the co-operation of universities with primary and secondary schools.
- Introduction and implementation of quality evaluation systems.
- Development of information and consultancy services with regard to educational opportunities at individual universities and employability of their graduates in the labour market.

#### 4.4 Human resources in research and development

Supported activities:

- Support for the creation of quality research and development teams.
- Further education of research and development employees.
- Improving the working conditions in research and development.
- Support of employee mobility between research & development poles and the entrepreneurial sector.
- Support for involvement of individuals and teams in international projects and networks.
- Activities aimed at utilisation and popularisation of research and development and its results.

#### 4.5 Partnerships and networks

Supported activities:

- Preparation of formation and functioning of technological platforms, technologically oriented clusters, etc., including preparation of human resources.
- Internships of students, teachers and scientific staff in private and public sectors.
- Co-operation between tertiary education institutions and private and public sectors in the creation and implementation of study programmes, including information exchange tools between education providers and employers.
- Formation and support of contact points in tertiary education institutions and research & development institutions intended for the public and for the entrepreneurial sector.
- Support of co-operation with foreign educational institutions, preparation of involvement of both individuals and teams in international projects and networks.

### 5. Categories of Areas of Intervention

Code	Priority theme
72	Design, introduction and implementation of reforms in education and training systems in order to develop employability, improving the labour market relevance of initial and vocational education and training, updating skills of training personnel with a view to innovation and a knowledge based economy.
74	Developing human potential in the field of research and innovation, in particular through post-graduate studies and training of researchers, and networking activities between universities, research centres and enterprises.
81	Mechanisms for improving good policy and programme design, monitoring and evaluation at national, regional and local level.



## 6. Beneficiaries

- Universities (all types);
- Post-secondary vocational schools;
- Science and research institutions;
- Development and innovation poles;
- Central public administration bodies;
- Directly controlled organizations under central public administration bodies;
- Regions;
- City, town and village councils;
- Schools and school facilities;
- Health care facilities;
- Non-state, non-profit organizations;
- Professional organizations of employers;
- Professional organizations of trade unions, employees, employers and industries;
- Organizations operating in education and career consultancy.

The beneficiaries must have a legal capacity or must be an organizational element of the state.

## 7. Flexibility

Within the scope of this priority axis, at the level of individual projects the necessary costs of an investment nature that are otherwise qualified as being justified for funding from the ERDF will be able to be funded from the ESF, i.e. up to an amount of 10% of the project's costs ("cross-funding" according to Council Regulation (EC) No 1083/2006, Art. 34).

9% of all activities under the areas of intervention mentioned above represent activities of the national system nature, which are necessary to be implemented across the entire Czech Republic (including the capital of Prague). To express the financial proportion of these activities (or proportions of the Convergence Objective and Regional Competitiveness and Employment Objective), the multi-objective Priority axis 4 is to be applied.

### **Priority axis 3 – Further Education**

#### **1. Description of initial state**

An open economy is distinguished by a highly competitive environment, which is manifested in the labour market as well. The requirements made by the labour market, which gives priority to a flexible and adaptable labour force, are increasingly demanding, and it becomes apparent that having successfully completed even a desired branch within the initial education is far from being sufficient for employability, but, on the contrary, it is necessary to follow the development trends and to educate oneself and extend and increase or even change qualifications through the whole professional life.

Despite the increasing number of people in further education, the need to strengthen the position of further education is becoming increasingly urgent. The highest participation rate in further education in terms of the Czech Republic's population is observed in the group of employees; in spite of this, further education is still not a standard element in the entrepreneurial sector. In an international comparison, the Czech Republic is one of the countries with the least favourable results. Further education in the Czech Republic also took place in the form of re-training for the unemployed or job applicants. In such a case and at such a time, however, it is a solution of an already arisen problem rather than prevention of employment loss. There was, however, no systematic solution covering further education focused on the possibilities of professional growth and increase in the qualifications and adaptability of the Czech Republic's population in order to maintain their attractiveness in the labour market.

The insufficient conceptual approach to this issue is a big problem in further education in the Czech Republic. So far, the system outputs have been ensured through a large number of individual institutions offering school framework programmes, and the further education market is thus determined primarily by a supply that is not sufficient and does not deal with the long-term or strategic needs of the country. There is no systematic or institutional framework for further education, and the situation is quite unclear in terms of the offer of educational possibilities and capacities. This is manifested, among other things, by the fact that the existing further education programmes are not suitably linked with the system of initial and tertiary education. Conditions for the functioning and utilisation of possibilities provided by Act No 179/2006 Coll., on verification and recognition of results of further education must be prepared. When applying this act, it will be possible to build a transparent and objective system for evaluation of competences obtained outside of the formal education system, i.e. competences obtained through non-formal and informal education. Within the scope of this act, demand for further education must be stimulated to its maximum, i.e. by means of direct tools and recognizing educational results as well. However, intervention must take place on the supply side too, which will result in increasing the quality of the further education offer as to its scope and focus as well as manner of informing.

A sensitive question is also the issue of acceptance of further education as a priority in terms of internal policy of the entrepreneurial sector. The number of participants in further education has been continuously growing, but the total percentage of the population involved in further education activities is still very low (5.9%) and insufficient in comparison with the EU countries, or more specifically with the EU-15 (11.9%). Thus, the proportion of the population participating in further education in the Czech Republic is one of the lowest in the EU, and the demand for further education opportunities is generally very poor. At the same time, there is practically no

motivation or activation framework to stimulate the individuals towards their further professional and personal development.

## 2. Global objective and specific objectives

**The global objective is the strengthening of adaptability and flexibility of human resources as the basic factor of the Czech Republic economy's competitiveness and sustainable growth by means of the further education system.**

Specific objectives:

- Completion of a comprehensive concept and systematic and institutional framework for further education and ensuring its inter-connection with initial education.
- Facilitation of individual access for the Czech Republic's population to further education and an increase in their motivation for life-long learning.
- Intensification of further education offer and information system regarding the further education offer.

## 3. Strategy

The SWOT analysis of the current economic and social situation in the area of further education has pointed out the shortcomings that apply to the further education system. The key problem in this area is an insufficiently developed further education system, the competences of individual institutions have not been clearly set, and the overall development of the system has been stagnating. Further education is targeted at an increase of employment and employability by creating of educational institution programmes, which will be implemented in a close co-operation with employers and social partners acting in the labour market. The Ministry of Labour and Social Affairs will be a significant partner in building up the further education system through HR&E OP, where the area of further education is supported with primary focus on increasing the employability and acquiring and intensifying the competences for performance of the respective profession.<sup>22</sup>

A functional system of further education is an important tool for each individual, by means of which they can add the necessary knowledge and skills at a time when the requirements for a qualified labour force are developing dynamically. For this reason, Priority axis 3 Further Education has been proposed, which will be implemented through three complementary areas of intervention.

The key activity within the scope of Priority axis 3 is the creation of a systematic and institutional framework for the provision of further education. The intention is that further education should be perceived as a complex, but at the same time an open system, where the competences and responsibilities of individual institutions are defined and a national policy of further education is created. A linked objective is the interconnection of the initial and further education systems, and the creation of a comprehensive system of life-long learning. Last but not least, the system of human resource evaluation and management will be strengthened, and also the creation of conditions, structures and processes will be supported for the recognition of results of further

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<sup>22</sup> Except for further education provided according to school legal regulations at schools and school facilities.

education and competences acquired outside of the formal education system, i.e. competences acquired by means of non-formal education or informal learning.

At the same time, the access to further education must be improved, not only by forming a system but also by direct support and motivation of the population for further education, thus strengthening the support provided to individuals. With regard to the needs of the rapidly changing labour market and the new needs of modern society, further education will be developed through the promotion and implementation of national programmes, which will focus on strengthening and developing general competences such as language skills, or mastering information technologies. Nevertheless, emphasis will be placed on strengthening a competitive and educated society and an information society for all. The link and connection between further education and initial education will be strengthened as well.

Within the scope of the priority, the support focused on opening the “further education market” by creating mechanisms to enable the extension of the further education offer, including the creation of conditions facilitating mutual interaction between supply and demand in this area, will be provided. Higher awareness of further education opportunities and the utilisation of further education will be achieved by building support systems, i.e. consultancy, information, activation and other services, which will be established in relation to target groups across Priority axis 3. The activities will have a regional impact (in order to be easily accessible for each individual interested in further education and able to reflect regional specifics). At the same time, however, they will be connected to the national system of further education and its consultancy services as well.

Preparation of further education school framework programmes, and vocational training teachers and tutors will be supported within the scope of educational institutions.

The Ministry of Labour and Social Affairs will be a significant partner in the implementation of school framework programmes for the identified target groups through HR&E OP, where the area of further education is supported with primary focus placed on increasing the employability and acquiring and intensifying the competences for performance of the respective profession.

#### **4. Principal areas of intervention**

##### **4.1 System framework of further education**

Supported activities:

- Creation of a comprehensive further education system in the Czech Republic.
- Creation of support systems for further education at a national level (e.g. consultancy, information and monitoring systems).
- Creation of mechanisms that will lead to the interconnection of the initial and further education systems.
- Finishing the building up and implementation of a quality evaluation system for the further education being provided.
- Development and use of a national system of qualifications.

- Development and creation of a system to recognize the results of previous learning.
- Building and implementation of support systems at regional and national levels, above all in the form of activation programmes, consultancy, and information systems on the existing possibilities of non-formal education.
- Verification and recognition of the results of further education at national and regional levels in the school system.
- Analysis of further education (except for further vocational education) at a national or a regional level, as appropriate, and in an international context.

#### **4.2 Individual further education**

Supported activities:

- Support of citizens' education in the area of both general and professional competences.
- Creation of educational modules focusing on support of general competences (language skills, IT, support of entrepreneurial skills).
- National and regional support programmes to stimulate demand for individual education by individuals and provision of information and consultancy services.

#### **4.3 Support of further education supply**

Supported activities:

- Support of cohesion between further education and initial education during the creation of educational modules.
- Support of education supply in the area of further education – development of framework programmes for adult education at schools and other educational institutions
- Education of teachers, tutors, management staff and organisational personnel at schools and other educational institutions of further education
- Development of networks and partnerships of entities in the area of further education and consultancy
- Consultancy in the introduction of modern and innovative educational technologies and methods (for organisations operating in specialized and further education).

## 5. Categories of Areas of Intervention

Code	Priority theme
62	Development of lifelong learning systems and a lifelong learning strategy in firms; training and services for employees to increase their adaptability to changes; promoting entrepreneurship and innovation.
71	Implementation of education system reforms, with an emphasis on improving capacity in relation to attainment of a knowledge economy, adaptation of education to the needs of the labour market, and mastering of current skills of teachers and other staff at schools.
72	Design, introduction and implementation of reforms in education and training systems in order to develop employability, improving the labour market relevance of initial and vocational education and training, updating skills of training personnel with a view to innovation and a knowledge based economy.
73	Measures to increase participation in education and training throughout the life-cycle, including through action to achieve a reduction in early school leaving, gender-based segregation of subjects and increased access to and quality of initial vocational and tertiary education and training.

## 6. Beneficiaries

- Central public administration bodies;
- Directly controlled organizations under central public administration bodies;
- Regions;
- Schools and school facilities;
- Non-state, non-profit organizations;
- Employees, professional organisations of employers and employees, entrepreneurs;
- Organizations operating in education and career consultancy;
- City, town and village councils;
- Czech Republic residents.

## **7. Flexibility**

Within the scope of this priority axis, at the level of individual projects it will be possible to use ESF to finance the necessary accompanying activities and investment costs that are otherwise qualified as being justified for funding from ERDF, i.e. up to an amount of 10%.

20% of all activities under the areas of intervention mentioned above represent activities of the national system nature, which are necessary to be implemented across the entire Czech Republic (including the capital of Prague). To express the financial proportion of these activities (or proportions of the Convergence Objective and Regional Competitiveness and Employment Objective), the multi-objective Priority axis 4 is to be applied.

#### **Priority axis 4 – National system activities**

Under priority axes 1, 2 and 3 and their areas of intervention, activities have been defined, results of which form a part of the educational system regardless of the location of the institutions, to which the results are related to (i.e. national system activities). A combination of funds from the Convergence Objective and Regional Competitiveness and Employment Objective is to be used. In terms of these projects, the MEY&S will act as the beneficiary.

The priority axis 4 expresses the financial proportion of both Objectives of the above-mentioned type of activities. The actual description of activities to be implemented is provided under the description of priority axes 1, 2 and 3.



## **Priority axis 5 – Technical Assistance**

### **1. Description of Initial State**

Technical assistance is anchored in the Proposal for Council Regulation on ERDF, ESF and CF, Article 44, according to which preparatory, administrative, monitoring, evaluating, information and auditing activities within the scope of operational programmes can be financed from the Structural Funds on a cross-sectional basis. The absorption capacity of entities for drawing finances from the structural funds is included in the technical assistance as well. It is assumed that the cross-funding method will not be used to implement activities in this priority axis.

### **2. Global and Specific Objectives**

**The global objective of the priority axis is to achieve successful implementation of the programme by ensuring all the necessary activities performed within the scope of its implementation structures and by strengthening the absorption capacity of entities drawing on funds.**

Specific objectives:

- To ensure effective management, audit, monitoring and evaluation of the programme, including sufficient administrative capacity of the implementation structure entities.
- To provide for monitoring and evaluation of the programme's progress and its wide publicity.
- To increase the absorption capacity of entities for obtaining resources from structural funds.

### **3. Strategy**

Within this priority axis, support will be provided to the managing authority and other implementation structures of the EC OP in direct connection with the implementation of all the other priority axes of the programme. It is, therefore, a cross-sectional priority axis. The administrative capacity of the managing authority will be strengthened in relation to all necessary activities (e.g. management, audit, monitoring and evaluation), and sufficient skills and expert knowledge will be ensured continuously for the staff of the implementation authorities. Further, the priority axis will primarily focus on ensuring the implementation and administration of the programme – in terms of technical activities and also the activities of specific implementation authorities.

Ensuring sufficiently wide and high-quality publicity is one of the key aspects of successful implementation of the operational programme. The dissemination of information on the programme's possibilities and results to potential authors of projects and towards the wider public will be another part of this priority axis.

Last but not least, it is essential for the managing authority to obtain the necessary information and feedback through processing various studies and analyses relating to the progress of the programme implementation process. These studies supported within the scope of the priority axis will be aimed at helping improve the quality of management and the progress of programme implementation.

Absorption capacity will also be supported within the scope of the priority axis. Absorption capacity refers to the ability of regional players to create and present quality projects for their subsequent submission to the EC OP.

#### **4. Principal Areas of Intervention**

##### **4.1 Programme management, audit, monitoring and evaluation**

Supported activities:

- Creation of implementation documents of the programme.
- Strengthening the administrative capacity of the managing authority in relation to all necessary activities and ensuring its continuous activity (e.g. management, audit, monitoring).
- Ensuring the activity of other implementation structure entities (e.g. the Monitoring Committee – support of MC secretariat, processing of draft reports etc., selection boards).
- Assistance in selection of projects, contracting, monitoring and evaluating within the scope of the programme in a uniform and comprehensive manner.
- Ensuring the technical administration and implementation of the programme (e.g. operation, maintenance and development of a monitoring and information system).
- Development of necessary skills and professional knowledge for management and administration of the programme (e.g. training sessions and seminars for staff of implementation bodies).
- Passing on and exchanging experience with EU member states (e.g. conferences, seminars, and workshops).
- Research studies and investigations focusing on further development of the programme.
- Preparation of underlying studies and documents for the next programming period 2014-2020, including ex-ante evaluation.
- Audit and inspection of projects implemented on-site.
- Processing of evaluations and monitoring studies according to the requirements of the Regulation.

## 4.2 Programme information and publicity

Supported activities<sup>23</sup>:

- Dissemination of information on the programme and successful projects to the wider public (e.g. newspapers, websites, TV, brochures, press-trips).
- Dissemination of information on the programme and successful projects to potential authors of projects (e.g. seminars, workshops, informative events).
- Mediation of experience of individual players involved in implementation of the programme (e.g. organisation of seminars and workshops in order to exchange experience between beneficiaries, partners and the public).
- Creation and administration of websites for the programme – comprehensive provision of information (e.g. about EC OP, other OPs, etc.).
- Publishing activity (e.g. information brochures, bulletin with updated information on ESF/SF).
- Processing of continuous thematic studies and analyses in relation to implementation of the programme.

## 4.3 Increase in absorption capacity of entities implementing the programme

Supported activities:

- Creation and preparation of projects for submission to the EC OP.
- Provision of information, consultancy and advisory services to potential applicants for ESF support, e.g. in the area of processing applications and attachments.

## 5. Categories of Areas of Intervention

Code	Priority theme
81	Mechanisms for improving good policy and programme design, monitoring and evaluation at national, regional and local level.
85	Preparation, implementation, monitoring and inspection.
86	Evaluation and studies, information and communication.

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<sup>23</sup> Activities relating to information and publicity will be implemented on the basis of the EC OP Communication Plan.

## 6. Beneficiaries

- Managing Authority;
- Intermediate Body;

## 7. Flexibility

Within the scope of Priority axis 4, the ESF financial sources will be used where, at the project level, it will be possible to finance from the ESF the necessary accompanying activities and “investment” costs that are otherwise qualified as costs being justified for funding from the ERDF, i.e. up to an amount of 10%.

This priority axis, likewise the priority axis 4, is a multi-objective axis, i.e. a combination of funds from Convergence Objective and Regional Competitiveness and Employment Objective is to be used.

## 8. Co-ordination with Interventions of Other Programmes

Technical assistance can be used within the scope of each operational programme. EC OP technical assistance is intended exclusively for the needs of this operational programme.

## Indicators for Monitoring and Evaluation

### Properties and characteristics of indicator system

The EC OP indicator system is created for the purpose of supporting effective management of distribution of the operational programme’s financial resources. The main users are the programme managers (including monitoring committee members), co-ordinators of programme activities, monitoring and evaluating staff, the European Commission, the national co-ordinating body and other social and economic partners.

The basic structure of the indicator system is derived from the three levels of its utilisation:

- *Use for characteristics of socio-economic environment* in which the objectives are implemented (this task is fulfilled by the category of context indicators, the selection of which is based primarily on the results of the initial socio-economic analysis);
- *Use for monitoring functions*, where the main role is played by the output indicators used to monitor the activities implemented through individual areas of intervention and the results indicators for those areas of intervention where the consequences of implemented interventions upon behaviour, capacity or efficiency of SF beneficiaries can continuously be evaluated;
- *Use for evaluation functions* that covers all indicators from which success of the programme can be deduced, and which enable to determine, in quantified form, how the specified programme objectives have been met. The most important evaluation tools are the impact indicators, which are used for the evaluation of a longer period of time and which can become a basis for the adoption of strategic decisions.

The indicator types used in the EC OP are as follows:

- **Source indicators:** they inform about financial resources allocated for each level of intervention, i.e. pre-allocated/pre-budgeted resources for intervention/programme;
- **Financial indicators:** these are used for periodical monitoring of trends in obligations and payments designated from the funds for individual operations and for their measurement or programming in relation to justified costs;
- **Output indicators:** they characterize the activity and provide information on outputs of the individual operations within the scope of the operational programme; they express numbers of persons, organisations and projects that were supported using the given budget;
- **Results indicators:** these relate to immediate – direct and instantaneous benefit of the operational programme; for instance, they ensure information on changes in behaviour, production capacity changes or production trends of aid beneficiaries; the indicators are expressed as a number of successfully trained persons and newly created products (e.g. educational modules);
- **Impact indicators:** they inform on consequences beyond the framework of instantaneous effects. Impact indicators are used to measure the meeting of decisive objectives of the operational programme. This group of indicators is also important for the adoption of strategic decisions (e.g. revisions to the operational programme);
- **Context indicators:** they characterize the socio-economic environment in which the programme activities are implemented and in which the objectives of the operational programme are met.

## System of monitoring indicators

## Indicators of social and economic

Type	Priority/Area	Indicator	Definition	Unit of Measurement	Baseline data (2004)	Target value	Source	Monitoring frequency
Context	Expenditure indicators	Expenditure on education	<i>Proposal for inclusion in the National Indicator Code List, NSRF global objective</i> Relationship between gross domestic expenditure on education and GDP generated, in current prices, in the Czech Republic in the given year	%	4.4	NA	Institute for Information on Education (IIE) Eurostat (2005)	Annually
		Share of total expenditure on education by level of education	<i>06.38.00 Lisbon, OECD</i> A share of total public expenditure on education by level of education	%	X	NA	Institute for Information on Education (IIE)	Annually
		- primary		%	43.1	NA	(IIE 2005)	Annually
		- secondary		%	29.4	NA	(IIE 2005)	Annually
		- tertiary		%	27.5	NA	(IIE 2005)	Annually
		Expenditure on education of a pupil/student from public budgets in total	<i>Proposal for inclusion in National Indicator Code List</i> Expenditure on education of a pupil/student from public budgets in total and by level of education	%	50,280	NA	Institute for Information on Education (IIE)	Annually
		- primary		%	40,571	NA	Institute for Information on Education (IIE)	Annually
		- secondary		%	44,972	NA	Institute for Information on Education (IIE)	Annually
		- tertiary		%	81,956	NA	Institute for Information on Education (IIE)	Annually

Type	Priority/Area	Indicator	Definition	Unit of Measurement	Baseline data (2004)	Target value	Source	Monitoring frequency
	Indicators of the state of economy and unemployment	<b>Index of competitiveness</b>	<i>Proposal for inclusion in National Indicator Code List</i>  Position of the Czech Republic in a set of 104 countries. Competitiveness is evaluated by a total of several tens of criteria. Summary index of competitiveness growth is counted using three component indexes: level of public institutions, macroeconomic level, and technological level of the economy.	Order	40	NA	GCR <sup>24</sup>	Annually
		<b>Long-term unemployment rate</b>	<i>07.27.00 Lisbon NSRF SO 2</i> A proportion of long-term unemployed (12 and more months) on a total number of economically active persons aged 15 – 64	%	4.2	NA	Czech Statistical Office (2005)  Eurostat	Annually
		<b>Unemployment rate for persons with primary education</b>	<i>Proposal for inclusion in National Indicator Code List</i>  A proportion of unemployed persons with primary education on a total number of economically active persons aged 15-64	%	19.4	NA	MLSA  Czech Statistical Office	Annually
		<b>Unemployment rate of population aged 15-64</b>	<i>07.22.00 Lisbon NSRF GO</i> Number of employed in 15-64 age group as a share of population aged 15-64	%	64.8	NA	Czech Statistical Office (2005)	Annually
		<b>Employment in qualification-demanding jobs as a share of total employment</b>	<i>06.37.00</i> Number of persons employed in 1 <sup>st</sup> -3 <sup>rd</sup> KZAM (Employment Classification) class as a share of total number of employed persons	%	37.5	NA	Czech Statistical Office	Annually

<sup>24</sup> Global Competitiveness Report drawn up for the World Economic Forum.

Type	Priority/Area	Indicator	Definition	Unit of Measurement	Baseline data (2004)	Target value	Source	Monitoring frequency
		<b>Structure of population by level of education</b>	06.39.10, 06.39.20, 06.39.30 A proportion of persons within the individual educational levels of a total population over 15 (%)	%	x	NA	Czech Statistical Office	Annually
		Primary		%	21,9	NA	Czech Statistical Office	Annually
		Secondary		%	69,8	NA	Czech Statistical Office	Annually
		Higher		%	8,3	NA	Czech Statistical Office	Annually
		<b>Proportion of persons with tertiary education (in the 25-64 age group)</b>	<i>Proposal for inclusion in National Indicator Code List, NSRF global objective</i> Number of persons with tertiary education in the 25-64 age group as a percentage of total number of inhabitants in the age group	%	13	NA	Czech Statistical Office	Annually
		<b>Average length of formal education in total</b>	<i>Proposal for inclusion in National Indicator Code List</i> Expected length of formal education for a 5 year-old child	Years	17	NA	Institute for Information on Education (IIE) OECD (2003)	3 years
		<b>Number of pupils per teacher</b>	<i>Proposal for inclusion in National Indicator Code List</i> Number of pupils per work load of a teacher (without educators)	Persons	14.4	NA	Institute for Information on Education (IIE)	Annually

\* The question is whether or not to replace the Structure of the population according to education by the proportion of persons with tertiary education



## Programme indicators

Type	Objective/ Priority	Indicator	Definition	Unit of Measurement	Baseline data (2004)	Target value	Source	Monitoring frequency
Impact	Global objective	<b>Youth Education Rate (in the 25-34 age group)</b>	<i>06.36.00 Lisbon NSRF GO</i> Proportion of people with secondary and advanced education in the 25-34 age group	%	94.0	95	Czech Statistical Office OECD	Annually
		<b>Proportion of natural science and technical students within tertiary education</b>	<i>Proposal for inclusion in National Indicator Code List, NSRF SO 2</i> Proportion of KKOV 11 to 39 or ISCED 421 to 582 groups of students of a total number of students within tertiary education	%	30.4	36	Czech Statistical Office	Annually
		<b>Youth Long-term Unemployment Rate</b>	<i>07.30.00 NSRF SC 2</i> Proportion of long-term unemployed on the total number of unemployed aged 15-24	%	21.9	reduction by 7%	MLSA Czech Statistical Office	Annually
		<b>Proportion of unemployed graduates by level of education</b>	<i>Proposal for inclusion in National Indicator Code List</i> Proportion of unemployed who completed full-time study within the last year of the total number of unemployed by level of education	%	X	X	MLSA	Annually
		Primary		%	2.9	Reduction by 7%	MLSA	Annually
		Secondary vocational schools with apprentice certificate		%	20.9	Reduction by 7%	MLSA	Annually
		Secondary vocational schools completed by a school-leaving examination		%	19.1	Reduction by 7%	MLSA	Annually

		General secondary schools		%	5.3	Reduction by 7%	MLSA	Annually
		Advanced vocational schools		%	13.3	Reduction by 7%	MLSA	Annually
		Tertiary professional schools		%	9.4	Reduction by 7%	MLSA	Annually
		Universities		%	5.8	Reduction by 7%	MLSA	Annually
<b>Results</b>	<b>Priority pivotal point 1,2,3</b>	<b>Application of graduates by the type of completed education</b> – graduates in total, of which: <ul style="list-style-type: none"> <li>- continuing their studies</li> <li>- entering into employment or employed (except for the field of R&amp;D)</li> <li>- entering into employment or employees in the field of R&amp;D</li> <li>- starting their own business</li> <li>- registered as unemployed</li> <li>- others</li> </ul>	<i>Proposal for adjustment of the National Indicator Code List</i>  (06.04.00, 06.05.00, 06.08.00 to 06.15.00, 06.20.00 to 06.23.00, 06.28.00 to 06.31.00)	Evaluation study				Twice per programming period
		Application of persons having completed their initial or further education, 6 months after successful completion of the relevant type of education. Application will be ascertained by means of an evaluation study on a specified sample of graduates from initial or further education supported within the scope of the EC OP.						

	Priority axis 1	<p><i>Proposal for inclusion in National Indicator Code List</i></p> <p>Results of the Czech Republic in international comparative studies, e.g. PISA, OECD, primarily in terms of study results, evaluation of education climate and socio-economic background, of which particularly the influence of family background on the results of the pupils and students. Depending on the methodology of the study, this is the order within the monitored set of countries or any other summary evaluation of the Czech Republic.</p>	<p><b>Position of the Czech Republic in the set of countries</b></p>	Evaluation study			Twice per programming period
		<p><b>Position of the Czech Republic v in terms of level of education</b></p>					
	Priority axis 2	<p><i>Proposal for inclusion in National Indicator Code List</i></p> <p>Proportion of graduates of advanced secondary education in the 19 age group</p>	%	87	increase by 3% points	Institute for Information on Education (IIE) OECD	Annually
		<p><b>Proportion of graduates of advanced secondary education</b></p>					
Priority axis 2	<p><b>Increase in number of researchers</b></p>	<p><i>14.04.00 NSRF SO 2</i></p> <p>Increase in number of equivalent to full-time jobs devoted to R&amp;D activities</p>	%	-	increase by 20%	Czech Statistical Office, OECD	Twice per programming period
	<p><b>Proportion of students in tertiary education</b></p>	<p><i>Proposal for inclusion in National Indicator Code List, NSRR SC 2, OECD</i></p> <p>Proportion of students in tertiary education aged 19-22 of the total number of people of the same age</p>	%	45	55	Czech Statistical Office, OECD	Annually

		<p><b>Quality of tertiary education</b></p>	<p><i>Proposal for inclusion in National Indicator Code List</i></p> <p>Based on objective internationally valid investigations using a uniform methodology, e.g. in International Institute for Management Development investigation in the form of a questionnaire for a sample of 4 thousand respondents</p>	Position in the set of countries	Evaluation study		IMD (International Institute for Management Development)	Twice per programming period
	Priority axis 3	<p><b>Proportion of population aged 25-64 participating in further education (Life-long learning)</b></p>	<p><i>06.41.00 NSRF SO 2</i></p> <p><i>Necessary adjustment in the National Indicator Code List, adjusted in NSRF</i></p> <p>Proportion of persons aged 25-64 participating in education and vocational preparation (in the past 4 weeks prior to the survey)</p>	%	5.6%	6.2%*	Czech Statistical Office	Annually

\* Average value for the programming period

## Priority axis 1

* Average value for the programming period	Support areas	Indicator	Definition	Unit of Measurement	Baseline data (2004)	Target value	Source	Monitoring frequency
	Results	OP 1.1, 1.2, 1.3	<b>Proportion of new or innovated programmes of initial education</b>	<i>Proposal for inclusion in National Indicator Code List</i> Number of new or innovated school educational programmes created under ESF support to all programmes of initial education at primary and secondary schools	%	0	100%	EC OP monitoring system
OP 1.1, 1.2, 1.3		<b>Number of supported providers of services as a percentage of total number of providers of services</b>	<i>Proposal for inclusion in National Indicator Code List</i> Number of supported providers of services to the total number of providers of services	%	0	75%	EC OP monitoring system	3 years after completion of the project
OP 1.2		<b>Rate of premature termination of education</b>	<i>06.42.00 Lisbon (must be adjusted in the National Indicator Code List)</i> Proportion of persons aged 18-24 with ISCED 2 education or lower who are not involved in the educational process to the total number of population of the given age group	%	6.4 (2005)	6.0	EC OP monitoring system	3 years after completion of the project

<b>Outputs</b>	OP 1.1, 1.2, 1.3	<b>Number of supported organisations</b>	<i>Proposal for inclusion in National Indicator Code List</i>  Number of organizations being beneficiaries or project partners, i.e. a number of organizations that have received financial resources from the EC OP pursuant to a decision on provision of a subsidy or pursuant to a contract or that have participated in the project as partners, i.e. they have a partnership contract signed with the project carrier and have been indicated as partners in the project application as well.	Number	0	3,000	EC OP monitoring system	Annually
		<b>Number of projects</b>	<i>06.01.00 CORE 36</i> Number of supported projects focusing on lifelong learning in Priority axis 1	Number	0	363	EC OP monitoring system	Annually
		Individual and system		Number	0	350	EC OP monitoring system	Annually
		Global grants		Number	0	13	EC OP monitoring system	Annually
		Projects under global grants		Number	0	2 000	EC OP monitoring system	Annually

## Priority axis 2

Type	Support areas	Indicator	Definition	Unit of Measurement	Baseline data (2004)	Target value	Source	Monitoring frequency
Results	OP 2.2, 2.3	Share of innovated implemented accredited study branches	<i>Proposal for inclusion in National Indicator Code List</i>  Number of accredited study branches innovated within the scope of supported projects as a percentage of the total number of study branches at universities and advanced vocational schools	%	0	80%	EC OP monitoring system	3 years after completion of the project
	OP 2.2	Share of successfully trained and supported persons at advanced vocational schools	<i>Proposal for inclusion in National Indicator Code List</i>  Number of persons having completed the relevant educational program as a percentage of the total number of supported persons.	%	0	82%	EC OP monitoring system	3 years after completion of the project
	OP 2.3	Share of successfully trained and supported persons at universities	<i>Proposal for inclusion in National Indicator Code List</i>  Number of persons having completed the relevant educational program as a percentage of the total number of supported persons.	%	0	85%	EC OP monitoring system	3 years after completion of the project
	OP 2.4	Share of successfully trained and supported persons in R&D	<i>Proposal for inclusion in National Indicator Code List</i>  Number of persons having completed the relevant educational program as a percentage of the total number of supported persons.	%	0	85%	EC OP monitoring system	3 years after completion of the project

	<b>OP 2.5</b>	<b>Number of new study programmes prepared in co-operation with the business sector in tertiary education</b>	<i>Proposal for inclusion in National Indicator Code List</i> Number of new study programmes that have been newly accredited.	Number	0	15	EC OP monitoring system	3 years after completion of the project
<b>Outputs</b>	<b>OP 2.1 to 2.5</b>	<b>Number of supported organisations in total</b>	<i>Proposal for inclusion in National Indicator Code List</i> Number of organisations that have received direct aid, i.e. that have a contract with MA for the granting of financial resources from the EC OP, or that have participated in the project as partners, i.e. they have a partnership contract signed with the project carrier and have been indicated as partners in the project application as well.	Number	0	150	EC OP monitoring system	Annually
		<b>Number of projects</b>	<i>06.01.00 CORE 36</i> Number of supported projects focusing on lifelong learning in Priority Axis 2	Number	0	1,000	EC OP monitoring system	Annually
		System and individual		Number	0	1,000	EC OP monitoring system	Annually
		<b>Number of supported persons</b>	<i>06.02.00 CORE 37 NSRR SC 2</i> Reformulation needed under the National Indicator Code List Number of persons directly supported as the target groups of the implemented projects	Number	0	322,000	EC OP monitoring system	Annually
		Students	Number of supported students at universities and tertiary vocational schools	Number	0	300,000	EC OP monitoring system	Annually
		Researchers	Number of supported persons employed in research organizations	Number	0	8, 000	EC OP monitoring system	Annually



Education for Competitiveness Operational Programme

	Providers of services	Number of supported teaching staff, academic staff and other employees at tertiary vocational schools and universities	Number	0	14,000	EC OP monitoring system	Annually
	<b>Number of supported partnerships</b>	<i>Proposal for inclusion in National Indicator Code List</i> Number of partnerships between educational, research, entrepreneurial and labour market institutions within the scope of partnerships and networks in tertiary education	Number	0	250	EC OP monitoring system	Annually

## Priority axis 3

Support areas	Indicator	Definition	Unit of Measurement	Baseline data (2004)	Target value	Source	Monitoring frequency
Results	OP 3.2	<b>Number of participants in individual further education events as a percentage of the total number of inhabitants aged 25-64</b>	<i>Proposal for inclusion in National Indicator Code List</i> Total number of participants in individual further education events as a percentage of the economically active population aged 25-64 in the area of intervention 3.2	%	0	30%	EC OP monitoring system 3 years after completion of the project
	OP 3.3	<b>Number of products</b>	<i>Proposal for inclusion in National Indicator Code List</i> Number of new educational modules, study materials and teaching aids	%	0	2,300	EC OP monitoring system 3 years after completion of the project
Outputs	OP 3.1 to 3.3	<b>Number of supported organisations in total</b>	<i>Proposal for inclusion in National Indicator Code List</i> Number of organisations that have received direct aid, i.e. have a contract with MA for the granting of financial resources from the EC OP, or that have participated in the project as partners, i.e. they have a partnership contract signed with the project carrier and have been indicated as partners in the project application as well.	Number	0	400	EC OP monitoring system Annually
		<b>Number of projects</b>	<i>06.01.00 CORE 36</i> Number of supported projects focusing on lifelong learning in Priority axis 3	Number	0	430	EC OP monitoring system Annually
		System and individual		Number	0	4	EC OP monitoring system Annually
		Global grants		Number	0	13	EC OP monitoring system Annually

		Projects under global grants		Number	0	330	EC OP monitoring system	Annually
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#### **IV. Implementation of Education for Competitiveness OP**

In accordance with the Council Regulation (EC) No 1083/2006, Article 59, this chapter describes the implementation framework of the programme, the structure of the institutions and bodies, and the procedures and measures for physical and financial management of the EC OP for the territory of the Czech Republic included within the scope of the “Convergence” objective.

The description of programme management and inspection also reflects the relevant legal norms of the Czech Republic, resolution of the Czech Government, and methodological instructions of the National Coordinating Body and the Payment Authority and Certifying Body (PAC) for the receipt of financial resources from Structural Funds (SF) and Cohesion Fund (CF) of the European Union for the 2007 – 2013 programming period.

#### **Managing and Implementing Authorities of the Operational Programme**

In the sense of Articles 59 and 60 of Council Regulation (EC) No 1083/2006, the individual authorities/entities of the operational programme’s implementation structure are set forth below. The settings are performed in a spirit of simplicity, transparency and direct legal ties. The principle of separation of activities among the authorities was respected in accordance with Articles 59 to 63 of Council Regulation (EC) No 1083/2006.

In accordance with the content definition of the EC OP, the programme management will be ensured by the following authorities:

In accordance with Czech Republic Government Resolution No 198/2006, the Ministry of Regional Development has been authorized to act as the coordination and methodological body of the Cohesion Policy National Framework.

In accordance with Article 59 paragraph 1a of Council Regulation (EC) No 1083/2006 and Czech Republic Government Resolution No 175/2006, the Ministry of Education, Youth and Sports has been authorized to act as the Managing Authority of the Education for Competitiveness OP.

In accordance with Article 59 paragraph 1b of Council Regulation No 1083/2006 and Czech Republic Government Resolution No 198/2006, the Ministry of Finance (MF) of the Czech Republic has been authorized to act as a sole Payment Authority and Certifying Body for implementation of the aid from structural funds (SF) and the Cohesion Fund (CF).

In accordance with Article 59 paragraph 1c of Council Regulation No 1083/2006 (except as already set forth by effective legislation of the EU and the Czech Republic), the Ministry of Finance – Central Harmonization Unit for Financial Audit has been authorized, upon Czech Republic Government Resolution No 198/2006, to act as the external Audit Body for the implementation of aid from Structural Funds (SF) and the Cohesion Fund (CF).

In accordance with Article 63 of Council Regulation (EC) No 1083/2006, the Monitoring Committee shall be formed no later than 3 months after the decision by the European Commission to provide the funds for the EC OP. The Monitoring Committee shall be established on the principle of partnership and equal opportunities (for more information refer to the ‘Monitoring of the operational programme and electronic information exchange’ chapter).

### ***Managing Authority***

The EC OP Managing Authority (MA) is fully responsible for the proper and effective management of the programme and implementation of aid in accordance with European Union regulations and national standards.

Based on Czech Republic Government Resolution No 175/2006, the Ministry of Education, Youth and Sports, EU Affairs Department (O 60) has been authorized to act as the EC OP Managing Authority.

The EC OP Managing Authority, according to Art. 60 of Council Regulation (EC) No 1083/2006, shall, in particular:

- a) ensure that the operations for financing are selected on the basis of criteria for EC OP and remain in accordance with the applicable regulations of the Community and national legislation throughout the entire period of implementation;
- b) verify the supply of co-financed products and services, the actual expenditure made on operations as reported by the beneficiaries and their compliance with the Community regulations and national legislation; on-site verification regarding individual operations may be performed on the basis of a sample in compliance with the implementation rules adopted by the Commission using the procedure according to Art. 103 paragraph 3 of general regulation;
- c) ensure the existence of a system for recording and retaining electronic accounting records for each operation within the scope of the operational programme and collection of data on the implementation necessary for financial management, monitoring, verification, audit and evaluation;
- d) ensure that the beneficiaries and other entities involved in performing the operations maintain either a separate accounting system or use a corresponding accounting code for all transactions relating to operations, without prejudice to the Accounting Act No 563/1991 Coll.;
- e) ensure that the evaluation of operational programmes according to Art. 48 paragraph 3 of the Council Regulation No 1083/2006 is performed in accordance with Article 47;
- f) specify procedures to ensure that all documents relating to expenditure and audits necessary for ensuring the adequate aid for audit with focus on financial flows are kept in accordance with the requirements of Article 90;
- g) ensure that the certifying body obtains, for certification purposes, all necessary information on procedures and verifications performed in connection with expenditure;
- h) manage the work of the monitoring committee, and provide the same with documents enabling the committee to monitor the quality of implementation of the operational programme with regard to its specific objectives;
- i) prepare annual and final reports on implementation, and submit them to the Commission after approval by the monitoring committee;
- j) ensure compliance with the requirements for information and publicity as set forth in Article 69 of the Council Regulation No 1083/2006.

The EC OP Managing Authority shall perform the following tasks:

- create and maintain an efficient and effective internal Management and control system for the operational programme;
- coordinate the implementation bodies during selection of projects in accordance with criteria and in accordance with national legislation and the EU legislation throughout the implementation period;
- approve individual projects and global grants submitted by implementation bodies, and participate in approving individual grant projects;
- ensure a verification whether the co-financed products and services have been supplied and provided and whether the applied recognizable expenditure has really been spent and are in compliance with the EU and national legislations; it may further carry out physical verification for any selected sample of individual operations/projects in accordance with the applicable methodology of the Commission;
- ensures the retaining of accounting documents for each individual operation of the given operational programme in electronic form, and provide for archiving the data relating to financial management, monitoring, evaluation, publicity, discrepancies, controls and audits;
- ensure that the beneficiary and other entities included in the implementation use a separate accounting system or an adequate accounting code for all transactions relating to operations/projects without breaching national accounting regulations;
- ensure the evaluation of the operational programme according to Art. 48 paragraph 3 and in accordance with Article 47 of Council Regulation (EC) No 1083/2006 (it shall create, fulfil and evaluate the fulfilment of the evaluation plan);
- ensure procedures for the retaining of documents related to specific expenditure and payments made within the scope of the given support and required as a sufficient aid for the auditing and retaining these documents in accordance with the requirements of Article 90;
- ensure that the information is submitted to the Payment Authority and Certifying Body, i.e. the information relating to selection procedures and project financing for certification purposes;
- ensure the function and activity of the Monitoring Committee – providing of information to MC in order to verify the quality of implementation of the operational programme and monitoring of the fulfilment of specific objectives;
- ensure the preparation of annual and final reports for the European Commission;
- ensure that the data are administered in the electronic monitoring system, and the interconnection with the national monitoring system of structural funds (MSSF) and other information systems (such as ISPROFIN, etc.);
- settle any discrepancies resulting from implementation of the operational programme together with all relevant partners;

- manage that the publicity is ensured in accordance with the rules (it shall create, fulfil and evaluate the fulfilment of a communication action plan);
- ensure and submit documents for the purpose of control at all levels and for the requirements of internal and external audit (for their analytical and reporting activity);
- ensure remedial measures if any deficiency occurs (e.g. as found at controls and audits);
- provide for compliance of its activities with the National Coordinating Body's requirements.

All bodies participating in the implementation of the EC OP are obliged to report any suspected irregularities found to the Managing Authority. The EC OP Managing Authority is methodologically supported by the NSRF coordinator, who issues instructions and recommendations aimed at efficient achievement of all the tasks required.

### ***Intermediate Bodies***

The role of intermediate body of the EC OP has been commissioned to a department of MEY&S. Later on, it is expected to assign these activities to a directly controlled body of MEY&S that is to be set up for this purpose. A part of the implementation (in Priority axis 1 and Priority axis 3) will be ensured by means of global grants for regions. The regions will also act as the intermediate bodies.

The Intermediate Body is an entity to which the Managing Authority delegates the performance of some of its activities. The scope of delegated activities is specified in a form of written agreement between the Managing Authority and the Intermediate Body. The Intermediate Bodies prove the readiness to meet the tasks that have been delegated to them and the administrative capacity to ensure the latter. Such delegation does not affect the general responsibility of the Managing Authority for the implementation of the EC OP.

### ***Payment Authority and Certifying Body***

The National Fund Department of the Ministry of Finance has been authorized to act as the Payment Authority and Certifying Body of the Education for Competitiveness OP by a decision from the Minister of Finance issued on the basis of the Czech Republic Government Resolution No 198/2006 of 22 February 2006.

The tasks of the Payment Authority and Certifying Body are specified in Council Regulation (EC) No 1083/2006 and in the Methodology of financial flows and control of programmes co-financed from structural funds, Cohesion Fund and European Fisheries Fund, for the programming period 2007-2013 effective as of 1 January 2007.

### ***Audit Body***

The Audit Body is established in the sense of Art. 59 of Council Regulation (EC) No 1083/2006. The Ministry of Finance has been authorized to act as the Audit Body by Government Resolution No 198/2006 of 22 February 2006. The Managing Authority shall be responsible for ensuring conditions for performing audit and controls at all implementation levels, and ensuring that the

audit reports are submitted to the central audit body, at all implementation levels. A uniform approach to audit at all implementation levels and the reporting of audit findings facilitate risk management at the Managing Authority level.

### ***Internal Audit***

This level of audit is ensured by the unit of the Ministry of Education, Youth and Sports commissioned to perform internal audit according to Act No 320/2001 Coll. The main task of the internal audit is, in particular, to review the activities of the managing and control system of the operational programme.

Reports on internal audits made at individual implementation levels are submitted to the relevant chief public administration body, the National Coordinating Body, the Monitoring Committee, and to the Managing Authority.

The internal audit also fulfils the role of the intermediate entity for the Audit Body and ensures entering the data on irregularities in AFCOS.

### ***External Audit***

These are audits performed by authorised entities beyond the implementation structure of the operational programme and beyond the competence of the internal audit. The external audit can be performed by Central Audit Bodies, i.e. for instance the Central Harmonization Unit, the Supreme Audit Office, the EU bodies (the European Commission, the European Court of Auditors, OLAF), etc. In accordance with Czech Republic Government Resolution No 198 of 22 February 2006, the Ministry of Finance has been authorized to act as the audit body (in terms of an entity outside the implementation structure). The Minister for Finance has decided to entrust this function to the Central Harmonization Unit for Financial Control, which is functionally independent of the Managing Authority and the Payment Authority and Certifying Body.

Reports on external audits made at individual implementation levels are submitted to the European Commission, the relevant chief public administration body, the National Coordinating Body, the Monitoring Committee, and to the Managing Authority.

In accordance with the requirements of Article 62 of Council Regulation (EC) No 1083/2006 and in accordance with Czech regulations, the audit body shall perform the following activities, in particular:

- ensure an audit of readiness for the managing and control system of the programme;
- prior to submission of the request for the first payment, however, no later than 12 months after approval of the programme, it shall present the European Commission with a report assessing the setup of the OP management and control systems, including an opinion on their compliance with the relevant provisions of Community regulations;
- within 9 months of approval of the Operational Programme, it shall present the European Commission with an audit strategy, including the entities that are to perform the audits (it shall update this strategy including the audit plan annually, and check its fulfilment quarterly);
- be responsible for conducting audits in public administration with the aim of verifying the effective functioning of the programme's management and control system;



- every year it shall present the European Commission with an updated audit strategy, a sample selection method for operation audits and orientation audit planning ensuring that the audits are conducted for the main entities and evenly distributed throughout the entire programming period;
- every year it shall present the European Commission with a consolidated plan for the auditing of resources granted from EU funds;
- conduct quarterly checks of the implementation of the consolidated audit plan, and provide information on such implementation to the Payment Authority and Certifying Body;
- be responsible for conducting public administration audits on a suitable sample of operations to verify the expenditure reported by the European Commission;
- be responsible for the methodological management of other auditing entities involved in audits related to the public administration of the Operational Programme, and supervise the quality of public administration auditing conducted by other auditing entities for projects co-financed from SF;
- participate in creating and updating the methodological guidelines for auditing the public administration of resources from the Operational Programme;
- every year, from 2008 to 2015, it shall present the European Commission with an annual inspection report containing its findings from audits conducted during the previous year in accordance with the Operational Programme's audit strategy, along with deficiencies identified in the programme's management and control systems. Information concerning audits conducted after 1 June 2015 and in 2016 shall be included in the final inspection report, which is the basis for the declaration on conclusion;
- every year it shall issue an opinion to the European Commission on whether the functioning of the management and control system provides a reasonable guarantee that the statements of expenditure submitted to the Commission are correct and that the related transactions are proper and legal;
- present a declaration on partial conclusion, assessing the legality and regularity of the concerned expenditure in accordance with Article 88 of Council Regulation (EC) No 1083/2006;
- by 31 March 2017 it shall present the European Commission with a declaration on conclusion, assessing the validity of the request for the final payment and the legality and regularity of the related transactions included in the final statement of expenditure;
- conduct analyses of reported irregularities in order to draw up a declaration on conclusion or a declaration on partial conclusion;
- draw up an annual report on the results of financial checks under the Operational Programme for the Czech Government;
- participate in audit missions of the European Commission to review the aspects of the managing and control system that resulted from the annual inspection report;

- co-operate with the European Commission in the coordination of audit plans and auditor methods, and exchange the results of conducted audits with it;
- ensure that internationally acknowledged auditing standards are taken into consideration during auditing activities;
- assume the responsibility for ensuring the above-mentioned activities; it may delegate the selected activities to other audit bodies, however, its own responsibility for them remains untouched. Only one level of authorization is permitted for the performance of the above-mentioned activities.

### **Financial Department and its link to the Payment Authority and Certifying Body**

Under order of the Minister of Education, Youth and Sports No 12 of 11 July 2006, a unit was appointed to ensure the activities of the Financial Department in order to meet the condition of separation of payment functions, the EC OP Managing Authority, the Intermediate Body and the unit for control of individual samples of operations and projects.

The Financial Department shall primarily perform the activities arising out of the Methodology for financial flows:

- within 15 working days from receipt of application for payment from the MA or IB, as appropriate, it shall ensure the transfer of funds to beneficiaries from SB funds for pre-financing of the expenditure that should be covered by funds from the EU budget, and from the SB funds intended for national funding;
- keep accurate and complete records on resource transfers made from SB funds to beneficiaries;
- communicate to the MA the requested data on made transfers of resources to the beneficiaries according to its records (particularly the data on the beneficiary, the amount of funds transferred, and the date of payment to the beneficiary) in electronic form via the monitoring system;
- when conducting individual activities connected with the transfer of resources to beneficiaries, it shall proceed in accordance with internal written working procedures (manuals);

### **Monitoring of the Operational Programme**

Monitoring within the scope of the EC OP is set up in compliance with Articles 62 to 67 of Council Regulation (EC) No 1083/2006.

Monitoring is a basic instrument in achieving efficient implementation of programmes and projects. This activity methodologically regulates and systematically deals with the collection, sorting, aggregating and saving of relevant information for the needs of management, evaluation, control and feedback of the implementation structure. It draws attention to areas that are working well and to those requiring remedial actions.

Keeping the European Commission and the National Coordinating Body informed about the progress achieved in the process of implementation of the operational programme is an important function of monitoring. Insufficiently effective monitoring may result in sanctions from the National Coordinating Body and, particularly, from the European Commission bodies.

Under the decision of the Czech Republic Government No 198/2006, a central monitoring system shall be set up to collect the programme and project implementation data. The Managing Authority of EC OP shall be responsible for the functioning of the relevant part of the electronic monitoring system for collection of the necessary financial and statistical data from the level of projects. Beneficiaries of the aid shall provide the project implementation data within the scope and in the form required by the Managing Authority.

### **Role of the EC OP monitoring**

Thus, monitoring of the operational programme is the basic instrument for determining the implementation status of:

- Operational programme;
- Individual supported projects.

Monitoring has several levels that reflect the structure of programmes co-financed from the Structural Funds and the Cohesion Fund in the following hierarchy: NRP/NSRF – operational programme – priority – area of intervention – project. In this context, monitoring of the EC OP shall fulfil the following key tasks:

- ensuring the data collection;
- submitting the summary information on the current status of the implementation.

Monitoring tasks cover three significant areas of implementation of the operational programme:

- financial monitoring;
- material monitoring;
- procedural monitoring.

Financial monitoring collects data and information concerning financial expenditure.

Material monitoring refers to the physical orientation of projects (of any type) and is further subdivided into technical monitoring (monitoring of deviations in technical preconditions for the implementation of action, project, programme), physical monitoring (monitoring of compliance of reality with the presented action plan, project, programme), and analytical monitoring (monitoring the development of system links in the life cycle of the programme and its projects; for example, it supports the consolidation and simplification of terminology, process classification, links in cascade mode, etc.). Material monitoring should provide indicator values, the collection of which is performed within the projects.

Procedural monitoring enables the real-time monitoring of the progress in the implementation of projects.

The Managing Authority holds the overall responsibility for the monitoring of the EC OP. The Managing Authority is particularly responsible for correct, efficient, systematic and timely monitoring, for the data entered into the monitoring system, and for informing the National Coordinating Body and the European Commission. The Intermediate Body and the Payment Authority are addressed in the area of monitoring on a regular basis, or at random, if necessary; these bodies pass and provide the information required by the EC OP Managing Authority or the National Coordinating Body, as applicable (a request by the National Coordinating Body shall always be passed through the EC OP Managing Authority). The data are transmitted automatically and thus automatically available for each party concerned.

### **Monitoring Committee**

A Monitoring Committee for the Education for Competitiveness OP (MC) shall be set up in accordance with Article 63 of Council Regulation (EC) No 1083/2006 under the proposal of the Operational Programme's Managing Authority within three months from approval of the operational programme.

The number of members of the Monitoring Committee and its competences are stipulated in its Status and Rules of Procedure. The composition of the Monitoring Committee shall be based on the partnership principle and on the principle of equal opportunities in accordance with Article 64 of Council Regulation (EC) No 1083/2006. (The composition shall be based of a balanced representation of women and men, and organisations promoting equal opportunities shall be represented.) The Monitoring Committee shall include the representatives of:

- National Coordinating Body;
- Partner ministries;
- Regions;
- Social partners;
- Non-state, non-profit organizations;
- European Commission institutions (DG Employment, etc.)
- Other relevant partners.

The Monitoring Committee shall be presided over by a representative of the Managing Authority appointed by the Minister for Education, Youth and Sports. The EC OP Managing Authority shall ensure the function of the Monitoring Committee's secretariat. Members of the Monitoring Committee shall be appointed by the Minister for Education, Youth and Sports based on proposals by the individual bodies and partners as above.

In accordance with Article 65 of Council Regulation (EC) No 1083/2006, the Monitoring Committee shall fulfil the following tasks:

- review and approve the criteria for the selection of projects, i.e. within six months from approval of the EC OP; and approve the revisions to selection criteria in accordance with the operational programme's needs;
- evaluate the progress in achieving the specific operational programme objectives based on documents presented by the Managing Authority of the Education for Competitiveness OP;
- review results of the implementation, achievement of the objectives specified for priority axes and implementation of evaluation;
- approve the presented annual report and final report prepared in full compliance with Article 67 of Council Regulation (EC) No 1083/2006;
- accept the annual inspection report concerning the implementation of the EC OP;
- propose revising the operational programme to the Managing Authority with a view to achieving its objectives set up in accordance with Council Regulation (EC) No 1083/2006 and with a view to the need of improving its management, including financial management, and approve any changes to the programme (e.g. re-allocation, etc.);
- propose responses by the Education for Competitiveness OP to recommendations of the European Commission or the National Coordinating Body and the Payment Authority and Certifying Body that concern the fulfilment of the programme.

### **Monitoring Reports**

Monitoring reports shall be drawn up in accordance with Council Regulation (EC) No 1083/2006. The Managing Authority shall draw up the following:

- Annual reports;
- Final report;
- Materials for reports at national level and for standardized monitoring (standard monitoring table, etc.);
- Materials for strategic reporting.

### **Annual and Final Reports**

The Managing Authority shall always submit the annual reports to the European Commission for the previous calendar year as at 30 June. The annual reports shall be prepared starting from 2008. The Managing Authority shall submit the final EC OP implementation report to the European Commission by 31 March 2017.

Prior to the above-mentioned submission, the annual and final reports shall be approved by the EC OP Monitoring Committee. Within ten days from receipt of the report, the European

Commission shall inform the Managing Authority about the acceptability of the report. The European Commission shall issue its overall standpoint on the submitted annual reports within two months and on the submitted final report within five months from submission by the member state. If no reply is received within this period of time, the reports shall be deemed approved.

The task of the annual and final reports is to sum up and provide relevant information concerning the progress made in implementation of the operational programme. Both types of reports shall include the following, as a minimum:

- progress achieved in implementation of the EC OP and its priorities in relation to their specific, verifiable objectives at the level of priority axes within the intentions of Article 36 paragraph 1c of Council Regulation (EC) No 1083/2006, expressed by means of the set measurable indicators;
- progress made in fulfilling the EC OP in relation to the objectives and priorities of the National Development Plan and the National Strategic Reference Framework (both documents drawn up for the 2007-2013 programming period);
- progress made in financial implementation of the EC OP at a detailed level for each priority axis, particularly the beneficiaries' drawing status and their requirements for payments from the Managing Authority, contribution from public budgets, total payments received from the European Commission, and quantification of financial indicators;
- for information, an indicative breakdown of allocated financial resources of the operational programme by category will be presented in accordance with the requirements of Article 104 paragraph 3 of Council Regulation (EC) No 1083/2006;
- procedures of the Managing Authority and the Monitoring Committee to ensure the quality of implementation of the EC OP, such as monitoring and evaluation measures (including the related data collection), summary of significant issues relating to the implementation, utilisation of technical assistance, etc.;
- description of steps and measures taken in the area of information and publicity (at all levels) concerning the EC OP (particularly information relating to the Communication Plan, its progressive fulfilment, revisions and other adjustments and continuous development);
- information on any significant problems relating to the fulfilment of legal requirements of the Community and the Czech Republic identified within the implementation of the EC OP, including specification of measures regarding the manner in which such individual problems were settled;
- centrally binding data within the scope specified by the methodology of NDPS management and monitoring.

### **Materials for reports at national level – Standardized monitoring**

The materials for reports at national level (Czech Republic National Development Plan 2007-2013 / National Strategic Reference Framework 2007-2013 / National Lisbon Programme / other relevant documents and strategies) and documents for standardized monitoring (standard

monitoring table) shall be created depending on the current need as set forth by the National Coordinating Body or the European Commission, as applicable. The EC OP Managing Authority shall respond flexibly to the above need, and provide the relevant materials to the extent needed.

### **Materials for strategic reporting**

The materials for strategic reporting shall be submitted to the National Coordinating Body according to the needs defined by the Body and in accordance with the fulfilment of relevant tasks resulting from the conditions specified in Article 29 of Council Regulation (EC) No 1083/2006.

### **Electronic monitoring system and electronic data exchange**

The electronic monitoring system serves for monitoring the progress of implementation of an estimate for the further development of both basic elements, i.e.:

- Programme;
- Projects.

The Managing Authority shall be responsible for the administration of the relevant part of the electronic monitoring system. Besides, the Managing Authority shall provide current information on the status of the programme and projects, i.e. it shall inform the National Coordinating Body and the European Commission about individual implementation steps throughout the course of the programme and individual projects.

The electronic monitoring system shall provide data-integrated outputs for the operational programmes, which are required by the European Commission and the Czech Republic through the National Coordinating Body in accordance with the Resolution of the Czech Republic Government No 198/2006, in accordance with Articles 4 and 7 of the Council Decision 1999/468/EC, and in accordance with Council Regulation (EC) No 1083/2006, and which are further required by the National Coordinating Body (specified in the Methodology of management and monitoring) and the Payment Authority and Certifying Body.

The monitoring system shall ensure the monitoring of the following activities:

- drawdown of resources from the relevant European funds;
- drawdown of resources within national co-financing;
- monitoring, evaluation, and control activities;
- communication with the European Commission – SFC dbf, other dbf;
- provision of data for the Commission's standard monitoring table;
- monitoring of information at the level of the beneficiary;
- connections to the relevant systems of state and public administration;

- fulfilment of monitoring indicators (the meeting of set objectives).

## **Evaluation**

The EC OP evaluation shall be performed in accordance with the obligations stipulated in Articles 47 to 49 of Council Regulation (EC) No 1083/2006, in accordance with the methodological instructions of the European Commission, and in accordance with the methodological instructions of the National Coordinating Body. Evaluation shall be the responsibility of the EC OP Managing Authority that will directly ensure the evaluation (implementation of transparent external evaluation is recommended). The evaluations to be conducted shall be aimed at:

- increasing the quality and efficiency of co-financing granted from the Structural Funds and the Cohesion Fund, and its consistency with the objectives of the European Union and the Czech Republic;
- improving the strategy and enhancing the efficiency of implementation of the operational programme, i.e. improvement of outputs, results and impacts;
- investigating the specific structural issues of the Czech Republic and sustainable development in relation to the subject matter of the EC OP.

## **Evaluation duties**

Evaluation duties of the EC OP shall, in particular, include the following:

- drawing-up, implementing, updating and evaluating of the evaluation plan (linked to the evaluation plan for the Czech Republic prepared by the National Coordinating Body);
- ensuring all principal evaluations according to the specification given in the text below (ex-ante, ad-hoc, on-going, strategic evaluation);
- providing resources for evaluating and using the data and information from the monitoring system (according to specification for specific evaluation implemented by the National Coordinating Body);
- active mutual co-operation with evaluators and evaluation team at national level (National Coordinating Body), at various implementation levels of the Education for Competitiveness OP, and at various levels of implementation of Structural Funds and the Cohesion Fund in the Czech Republic;
- obligation to publish evaluation results.



## **Evaluation Plan**

The first step to implementation of the evaluation is the drawing up of an evaluation plan. The evaluation plan shall be drawn up for the whole programming period; it shall be updated every year and broken down in detail for the nearest next calendar year. The evaluation plan shall contain the following:

- specification of the management structure responsible for evaluation;
- indicative timetable for the evaluation activities;
- planned financial resources;
- mechanism of potential evaluation plan revision.

The annual specification of the operational programme's evaluation plan should contain the following physical revisions:

- specification of contents of individual activities and their detailed breakdown at the project level;
- planned financial resources (with reserve for ad hoc evaluation, etc.);
- indicative (monthly) schedule of evaluation activities.

The EC OP evaluation plan, including related annual updates and evaluation of its fulfilment, shall be duly discussed by the Working Party for Evaluation of the EC OP and by the Working Party for Evaluation of the National Coordinating Body, and approved by the EC OP Monitoring Committee.

## **Types of Evaluations**

The following evaluations shall be conducted by the Managing Authority for the purposes of the EC OP:

- ex-ante evaluation;
- on-going evaluation;
- ad-hoc evaluation;

Besides the stated activities, the parts of the EC OP shall be evaluated within the evaluations conducted by the National Coordinating Body (in accordance with the National Coordinating Body's evaluation plan) and the European Commission (in accordance with the evaluation plan of the European Commission and in accordance with Article 47 of Council Regulation (EC) No 1083/2006). The EC OP shall provide full co-ordination in the implementation of such evaluations.

### ***Ex-ante Evaluation***

Ex-ante evaluation shall be implemented according to Article 47 of Council Regulation (EC) No 1083/2006 for the purpose of improving the operational programme being prepared. The aim of this evaluation is to optimise the manner in which the EC OP resources are used and to improve the overall quality of the programming. Within the scope of ex-ante evaluation, the following shall be identified and evaluated:

Generally, the objective has the following aspects:

- evaluation of whether the operational programme is a suitable means to solve the problems that the sector faces and whether it is a step forward in the sense of “qualitative” change to the socio-economic situation in the Czech Republic and its regions;
- evaluation of whether the plan or programme has well-defined, consistent and balanced strategic axes, priorities and objectives, whether it reflects a qualified opinion as to whether the objectives are relevant and their achievement is realistic, whether it contributes to meeting the objectives of the Economic and Social Cohesion Policy, and whether it is in accordance with national policy objectives of the Czech Republic;
- contribution to quantification of objectives and creation of a basis for monitoring and future evaluation activities;
- assessment of potential impacts of the programme on the socio-economic environment of the Czech Republic in a broader context;
- preliminary evaluation should analyse the adequacy of the implementation and monitoring system and facilitate the preparation of procedures and criteria for the selection of projects;
- support in the process of negotiations with the Commission regarding the final form of the EC OP;
- processing of auxiliary inputs – partial analyses, studies and sets of proposals and recommendations for the intention of the EC OP.

### ***On-going Evaluation***

On-going evaluation activities represent the planned framework for evaluation of the EC OP. All evaluations to be implemented according to the plan shall be made within this group. Generally, activities focusing on implementation elements and elements of a conceptual nature connected with the intention of the operational programme can be included into the area of on-going evaluation.

Individual areas of on-going evaluation activities shall be stated in the evaluation plan, including a specification of related indicative financial ranges.

The ensuring of evaluations of a strategic nature in 2009 and 2012 shall form a part of the category of on-going evaluations. The aim of these strategic evaluations is to ensure underlying documents for the National Coordinating Body to meet the conditions of strategic reporting in accordance with Article 29 of Council Regulation (EC) No 1083/2006.

### ***Ad-hoc Evaluation***

Ad-hoc evaluation activities shall be carried out on the basis of needs that arise during implementation of the EC OP. These are studies implemented beyond the planned framework specified by the EC OP evaluation plan; a separate item within the evaluation plan necessary for reservation of allocated resources shall be created only for ad-hoc evaluations.

Ad-hoc evaluations shall be implemented in accordance with the valid methodology set forth for evaluation at the national level and at the European Union levels. The possible reserved financial resources for ad-hoc evaluations, including an indicative list of areas and intentions, shall be specified within the evaluation plan.

### ***Managing Authority***

The EC OP Managing Authority shall be responsible for due and efficient evaluations. The individual component tasks shall be as follows:

- processing the specifications for selection of external contractor;
- awarding tenders for implementation of evaluation projects;
- creating optimal conditions for implementation of evaluation projects, their coordination using expert groups;
- evaluating the fulfilment of the evaluation plan;
- submitting the results of fulfilment of the evaluation plan to the Monitoring Committee and the Monitoring Committee of NPR/NSRF (through the NSRF evaluation unit);
- developing the evaluation capacity for the operational programme;
- presenting the results of evaluation activities to entities with decision-making powers in the implementation of aid from the EC OP in time;
- wide publicity of results of the evaluation activities, and spreading the experience obtained by evaluation;
- commenting on materials submitted within the co-operation with other evaluation workplaces, including NSRF.

### ***Working Party for Evaluation of the Education for Competitiveness OP***

The role of the consulting and coordinating body for the general evaluation activities of the operational programme, such as drawing up of the evaluation plan, evaluation capacity development activities, and the use of results of evaluations and their submission to the monitoring committee of the operational programme shall be fulfilled by the Working Party for valuation of the operational programme.

The Managing Authority shall appoint members of the Working Party. The members of the Working Party shall be the representatives of the following units:

- Managing Authority;
- Intermediate Body;
- National Coordinating Body.

The Working Party for Evaluation of the EC OP shall discuss the following:

- preparation of evaluation plan;
- evaluation plan updates for the next year;
- progress in implementation of the plan;
- development of evaluation capacity;
- evaluation of fulfilment of the plan;
- draft reports for the EC OP Monitoring Committee.

### **System of Financial Control**

The Ministry of Finance, as the central administrative authority for financial control in accordance with the relevant provisions of Act No 2/1969 Coll., on the establishment of ministries and other central authorities of state administration of the Czech Republic, as amended, shall methodically manage, coordinate and be responsible for financial control under the Operational Programme. The basic starting point for the issuing of component methodological guidelines, consulted with the competent bodies of the European Commission, shall be the current Czech and Community legislation in force.

In the control system, the internal control system and the system for control in public administration shall clearly be separated from the internal audit system and audit in public administration.

The financial control system shall include:

1. control in public administration performed as a part of financial management;
2. audit in public administration;
3. internal control system, and
4. central harmonization of the systems specified in points 1-3.

### ***Controls in Public Administration***

#### Controls in public administration (primary system)

The Managing Authority (hereinafter referred to as “MA”) shall be responsible for the management and implementation of the Operational Programme in accordance with the principle of due financial management. Therefore, it shall ensure that operations are selected for financing in accordance with the criteria for the Operational Programme and that they comply with the relevant Community and national regulations throughout the implementation period. The Managing Authority shall be responsible for checking the physical implementation by verifying the delivery of co-financed products and services and actual expenditure on operations as reported by the beneficiaries. The Managing Authority shall be responsible for the existence of a system to register and store accounting records in electronic form for each operation and for the collection of data required for auditing. The Managing Authority’s task is also to ensure that the procedures and all documents concerning expenditure and audits of the Operational Programme are available to the European Commission and the Court of Auditors for a period of three years from the conclusion of the Operational Programme.

For this purpose, the MA shall perform administrative verification in connection with each request for payment and on-site controls of individual operations. The above-mentioned controls may be performed on the basis of a selected set of operations in accordance with the binding EC regulations.

#### ***Audit in public administration (secondary and central systems)***

Auditing in public administration at all levels of implementation of Operational Programme financial resources in accordance with Act No 320/2001 Coll., on financial control in public administration and amending certain laws, as amended, and in accordance with directly applicable Community law, shall be the responsibility of the AB (audit body). Within the secondary system, it shall verify the effectiveness of the financial management and control system, and subsequently test the appropriateness of risk transactions in accordance with the acceptable risk level for the area of the primary system. Within the central system, the Audit Body (hereinafter referred to as “AB”) shall verify and evaluate the adequacy and effectiveness of functioning of the primary and the secondary system, and perform an audit on operation samples based on residual risk.

The AB shall be responsible for ensuring the above-mentioned activities, and may delegate selected activities to other audit entities; however, its responsibility for them shall remain untouched. If the responsibility is delegated to the MEY&S, the function of the audit entity shall be performed by the Internal Audit and Control Department of MEY&S. The ‘audit entity’ shall mean an entity commissioned by the Audit Body to ensure the activities according to Article 62 paragraph 1 (a) or (b) or both (a) and (b) of Council Regulation (EC) No 1083/2006 and Article 61 paragraph 1 (a) or (b) or both (a) and (b) of Council Regulation (EC) No 1198/2006.

### ***Internal Control System***

All bodies taking part in the implementation of the operational programme shall have the necessary management and control system in place, which will be in accordance with the national legislation and able to identify any administrative, systematic or intentional mistakes in a timely manner and create conditions to prevent the occurrence of mistakes.

### **Managing Control**

The managing control shall be ensured by responsible managers and forms a part of the internal management of all entities involved in the implementation of the operational programme, in the preparation of operations before they are approved, in the on-going monitoring of executed operations until their final settlement and accounting, and subsequent verification of selected operations within the evaluation of the achieved results and correctness of the financial management.

Taking into consideration the principles of an effective and efficient management and control system during the implementation of the programme, it shall be ensured that:

- a) all entities involved in the management and control of the programme have clearly set specific functions, both within the whole implementation system and within each entity separately;
- b) the principle of the separation of payment, management and control functions between the individual entities involved in the implementation of the programme and within the entities themselves is respected;
- c) clear procedures are set to ensure the correctness and eligibility of expenditure reported within the programme;
- d) reliable accounting systems, monitoring systems and financial reporting systems are established;
- e) a system is implemented for submitting the reports on the implementation of the programme and projects and on monitoring
- f) measures are adopted for audits of the way the management and control system functions;
- g) systems are established and procedures to provide the documentation required for auditing (an audit trail);
- h) procedures are set for reporting and monitoring irregularities and for the recovery of amounts paid without authorization
- i) the system of double independent control and double signature upon approval of individual documents and making of payments is observed consistently;
- j) information systems can be used safely;
- k) any potential conflict of interest is prevented consistently.
- l) the employees are substitutable in all functions.

For each level of programme management and implementation an internal control system manual shall be drawn up in form of controlled documentation, which will contain a detailed description of workflow procedures for the activities to be carried out.

If the persons ensuring on-going and subsequent control detect, during their performance, any uneconomic, ineffective or inexpedient spending of resources from the EU budget in conflict with legislation, they shall report such a finding in writing to the head of the relevant institution, MA and AB. The head of the relevant institution shall be obliged to take measures to remedy any detected deficiencies, and take measures to ensure due performance of such control.

### Internal Audit

The Internal Audit Department will be functionally independent and organizationally separate from the managing and executive structures and will be subordinate to the competent head of the public administration authority.

The internal audit shall be established at individual implementation levels in accordance with Act No 320/2001 Coll., on financial control in public administration.

Internal Audit Departments will check the internal control system at regular intervals. Their activities will include examinations of the fulfilment of basic requirements placed on the internal control system. A significant element will also be the presentation of recommendations to improve the quality of the internal control system, to prevent or reduce risks, to adopt measures to rectify ascertained deficiencies, and consulting.

Reports of internal audits regularly conducted at individual levels of implementation will be presented to the competent head of the public administration authority. Reports of internal audits at intermediate bodies will be presented to the Managing Authority's Internal Audit Department. A uniform approach to auditing at all levels of implementation and the reporting of audit findings will be the basis for risk management at the level of the Managing Authority.

### ***Controls by the Supreme Audit Office***

The Supreme Audit Office is authorized to carry out independent inspections in accordance with the relevant provisions of Act No 166/1993 Coll., on the Supreme Audit Office, as amended.

### ***Auditing Carried Out by Bodies of the European Commission and the European Court of Auditors***

The European Commission will make sure, in accordance with Article 72 paragraph 1 of Council Regulation (EC) No 1083/2006, that managing and control systems have been established and work efficiently within the given operational programme. This audit will be conducted by the European Commission based on annual inspection reports, the annual standpoint of the audit body, and its own audits.

The European Court of Auditors, which is competent to conduct autonomous, independent checks within the scope of its activities.

### ***Irregularities***

All bodies contributing to the implementation of the Operational Programme are obliged to report any suspicions of irregularities to the Managing Authority. The Managing Authority shall investigate these suspicions, and those to be found as being justified shall be passed on to the materially competent authorities for the commencement of administrative or judicial procedure. The reports of inspection bodies shall always be considered as justified. At the same time, the Managing Authority shall have these justified suspicions reported to entities involved in the external level of reporting by the fifteenth day of the following month.

### **Financial Flows**

The resources provided by the European Commission to finance the European Social Fund programmes are administered by the Ministry of Finance. The European Commission shall send these resources to the account of the Payment Authority and Certifying Body.

Financial flows of the EC OP shall be ensured via the national budget of the Czech Republic. The resources shall be pre-financed to beneficiaries, based on their submitted applications, from the national budget, and a non-returnable financial relief (subsidy) will be provided to them. Beneficiaries' applications shall be submitted solely in CZK. After the summary application is received, the Payment Authority and Certifying Body shall release the resources from the European Social Fund to the national budget heading that provided for pre-financing of the resources.

Payments to beneficiaries shall be made in form of ex-post payments (reimbursement to beneficiaries of expenditure already made) or in form of ex-ante payments (i.e. in form of an advance payment made in favour of the beneficiary from the national budget for the implementation of the project). Decisions on the form of aid payments made to beneficiaries under individual operations of the EC OP shall fully be in the competence of the relevant administrator of the budget heading.

The mechanism of the entire financial flow system can be characterized as follows:

1. Based on expenditure reported, the beneficiary shall issue an application for reimbursement from the national budget (corresponding to the European and the national share); the application shall be presented to the Managing Authority or to the Intermediate Body for review and approval;
2. The Managing Authority shall approve the beneficiary's application and instruct the financial department to make the payment to the beneficiary's account;
3. The financial department of the relevant budget chapter shall make the payment from the national budget to the beneficiary's account;
4. The Managing Authority, based on payments from the national budget, shall issue a summary application for the payment of ESF resources from the PAC account to the relevant national budget heading;



5. The PAC shall review the submitted summary application, make its clearance (the decisive date for determining the exchange rate for the conversion of funds from CZK to EUR is the date of clearance by the PAC) and subsequent payment of the resources from the European Social Fund to the relevant national budget heading;
6. After certification, the PAC shall request the European Commission for the addition of resources to its account;
7. The European Commission shall approve the application and send the resources to the PAC's account.

### **Information and Publicity**

In accordance with Article 69 of Council Regulation (EC) No 1083/2006, the Managing Authority shall assume the responsibility for publicity, i.e. in accordance with the implementation rules as laid down in Articles 2 to 11 of Council Regulation (EC) No 1828/2006. In the area of publicity it shall proceed as follows:

- Within four months of approval of the EC OP, the Managing Authority will prepare and submit to the Monitoring Committee and the European Commission for approval a Communication Plan (CoP) for the given programming period or a specification of the Communication Plan for individual years, including the connected methodology to ensure publicity and awareness (this will form a part of the CoP).
- In accordance with Article 3 of Council Regulation (EC) No 1828/2006, progress in implementation of the Communication Plan will be reported in the EC OP Annual Report, which will be submitted and approved by the Monitoring Committee and the European Commission;
- Fulfilment, efficiency, objectivity, effectiveness and relevance of the Communication Plan of the Operational Programme will be evaluated (external interim evaluation);
- The results of evaluation will be indicated in accordance with Article 3 paragraph 2 of Council Regulation (EC) No 1828/2006 in the Annual Report for 2010 and in the EC OP Final Report, which will be submitted for information to the Monitoring Committee and the European Commission (results of the evaluation will not be approved by the Monitoring Committee or the European Commission, but will be submitted for information purposes only in accordance with the rules of evaluation).

Publicity and awareness tasks are transmitted to the following levels within the scope of the EC OP:

- Managing Authority;
- Intermediate Body;
- Beneficiaries.

### *Managing Authority*

The Managing Authority is responsible for conducting the communication, including the related creation and fulfilment of the Communication Plan. Within the scope of the EC OP Managing Authority, the contact person responsible for carrying out the communication, informative and promotional measures of the operational programme is the information officer whose main function will include the following:

- Preparation and coordination of communication strategy;
- Application of measures resulting from Council Regulation (EC) No 1083/2006 and No 1828/2006;
- To act as a contact person for the National Coordinating Body, Intermediate Body and beneficiary at the EC OP level;
- To act as a contact person for media at the EC OP level;
- Responsibility for transparency of performed informative and promotional measures in cooperation with other entities contributing to implementation of the operational programme;
- Creation of a uniform visual form of the informative and promotional measures relating to aid from the EC OP;
- Implementation of informative and promotional measures at central level;
- Responsibility for support and aid to entities implementing the informative and promotional measures of the EC OP at lower level;
- Preparation of Annual and Final Reports on the implementation of informative and promotional measures submitted to the EC OP Monitoring Committee and other relevant documents;
- Continuously informing the EC OP Monitoring Committee, the National Coordinating Body and the European Commission on the implementation of informative and promotional measures;
- Informing the EC OP Monitoring Committee of the activity and results of meetings;
- Evaluation of implemented informative and promotional measures;
- Responsibility for effective distribution of financial resources intended for the implementation of informative and promotional measures.

Implementation of communication measures at the programme level will be paid for from the technical assistance resources of the EC OP. Implementation of communication measures at the project level will be paid for from resources of the project itself.

In accordance with Articles 4 and 5 of Council Regulation (EC) No 1828/2006, the Managing Authority is obliged to ensure awareness and publicity for the potential beneficiaries in the following areas:

- Conditions for the beneficiary to obtain resources from the OP while respecting the principle of equal opportunities;
- Description of procedures for selection of projects, including the set dates and periods;
- Selection criteria and evaluation of funded operations;
- Contacts at national, regional or local levels, where the applicants/potential applicants may obtain information about the EC OP.

In accordance with Articles 6 and 7 of Council Regulation (EC) No 1828/2006, the Managing Authority is obliged to ensure information and publicity for the wider public as follows:

- It shall inform of the main activities and start of the operational programme (even in the case of the Communication Plan not being approved yet);
- It shall inform of results of the EC OP, including the main projects (once a year as a minimum);
- It shall publish a list of beneficiaries, names of operations and amounts allocated for individual operations (in this activity it also proceeds in accordance with Council Regulation (EC) No 45/2001).

#### *Intermediate Body*

The Intermediate Body is entrusted by the Managing Authority with the implementation of information and publicity measures at the level of individual EC OP areas of intervention falling under its competence. Depending on the nature of the area of intervention, the Intermediate Body may implement them either by itself or in mutual co-operation, or in co-operation with the Managing Authority. The information and publicity measures implemented by the Intermediate Body shall be specified in contracts on delegation of activities and powers or in other methodological documents of the Operational Programme.

The Intermediate Body is obliged to appoint a responsible contact person to co-operate with the EC OP Managing Authority during the implementation of information and publicity measures.

#### *Beneficiaries*

The beneficiaries shall ensure information and publicity elements in accordance with Articles 8 and 9 of Council Regulation (EC) No 1828/2006. The responsibility shall be implemented under the conditions specified below:

- The beneficiaries shall comply with the methodological instructions to ensure information and publicity at individual levels of the Operational Programme;
- The beneficiaries of resources within the scope of global grants shall be responsible for the implementation of information and publicity measures at the project level in accordance with the methodology.

## V. Financial Conditions of the Education for Competitiveness OP

The system of financial flows is described in detail in the Methodology of Financial Flows and Control of programmes co-financed from Structural Funds, the Cohesion Fund and the European Fisheries Fund for the 2007-2013 Programming Period, as published by the Ministry of Finance. The Ministry of Finance shall manage the resources provided by the European Commission for funding the programmes under the Structural Funds and Cohesion Fund.

The European Commission shall send resources from the Structural Funds and the Cohesion Fund to the account of the Payment Authority and Certifying Body. Within the Payment Authority and Certifying Body, the financial resources from the Structural Funds and the Cohesion Fund shall methodically be controlled by the Unit of Methodology of Financial Management and Payments, which will also make transfers of resources from the Structural Funds and the Cohesion Fund to the national budget (individual national budget headings). Beneficiaries' applications shall be submitted solely in CZK. After the summary application is received, the Payment Authority and Certifying Body shall release the resources from the Structural Funds and Cohesion Fund to the national budget heading that provided for pre-financing the resources from the Structural Funds and Cohesion Fund.

System of SF/CF financial flows:

Payments to beneficiaries shall be made in form of ex-post payments (the reimbursement to beneficiaries of expenditure already made) or in form of ex-ante payments. Decisions on the form of payments to be made to the beneficiaries of assistance under individual operational programmes shall fully be within the competence of the relevant administrator of the budget heading.

1. Based on expenditure incurred<sup>25</sup>, the beneficiary shall issue an application for reimbursement from the national budget (corresponding to the European and the national share); the application shall be presented to the Managing Authority or the Intermediate Body for review and approval;
2. The Managing Authority shall approve the beneficiary's application and instruct the financial department to make the payment to the beneficiary's account;
3. The financial department of the relevant budget heading shall make the payment from the national budget to the beneficiary's account;
4. The Managing Authority, based on payments made from the national budget, shall issue a summary application for the payment of resources from Structural Funds and the Cohesion Fund from the PAC account to the relevant national budget heading;
5. The PAC shall review the submitted summary application, make its clearance (the decisive date for determining the exchange rate for the conversion of funds from CZK to

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<sup>25</sup> In cases where beneficiaries receive ex-ante payments, the beneficiary shall present an overview of incurred expenditure from provided national budget resources as part of its application for reimbursement from the national budget resources

EUR is the date of clearance by the PAC) and subsequent payment of the resources from the Structural Funds and the Cohesion Fund to the relevant national budget heading;

6. After certification, the PAC shall request the European Commission for the addition of resources to its account;

The European Commission shall approve the application and send the resources to the PAC's account.

The EC OP financial plan shall be based on the financial plan of allocation for the Czech Republic for the Convergence objective in the 2007-2013 programming period, and reflect the financial framework of NSRF, which determines the distribution of resources from Structural Funds and the Cohesion Fund to individual operational programmes. Within the framework of the general financial plan, 7% of the resources for the Convergence objective from EU Structural Funds, i.e. € 1.8118 billion, have been allocated to the EC OP. The implementation of the EC OP will be supported from the ESF.

The Education for Competitiveness Operational Programme meets the “mono-fund” requirement and is financed from the European Social Fund. Minor investments into infrastructure to be necessary for the implementation of individual EC OP operations, will be financed by means of a 10% flexibility instrument in accordance with Article 34 (2) of the General Regulation.

Indicative distribution of financial resources into individual priorities of the programme shall be in compliance with:

- experience from the current programming period;
- estimation of absorption capacity of individual priorities.

No large projects, i.e. projects over EUR 50 million, will be implemented within the Education for Competitiveness Operational Programme.

The co-financing rate from the ESF will reach up to 85% of the total eligible public expenditure; the remaining 15% of the financial resources will be paid from national resources. The financial source to cover the indicated part of the co-financing will be, in particular, the budgetary heading of the MEY&S, including global grants for regions.

Detailed financial planning of the EC OP is specified in the following tables:

1. Table 9: Indicative Financial Table for EC OP (EU Contribution) by Year
2. Table 10: Indicative Financial Table for EC OP by Priority;

## **Public aid**

Under the EC OP, it will be applied through a block exception arising out of the ban on public aid for education in accordance with the Commission Regulation No 68/2001 and de minimis support in accordance with Commission Regulation No 69/2001.

**Table 11: EC OP Financial Table by Year and Funds (in €)**

	<b>ESF Convergence Objective</b>	<b>ESF Competitiveness Objective</b>	<b>Total</b>
	<b>1</b>	<b>2</b>	<b>3=1+2</b>
2007	224,801,428	2,269,083	227,070,511
2008	235,859,105	2,314,466	238,173,571
2009	246,965,120	2,360,754	249,325,874
2010	258,590,464	2,407,969	260,998,433
2011	270,221,113	2,456,130	272,677,243
2012	281,809,486	2,505,251	284,314,737
2013	293,599,056	2,555,356	296,154,412
<b>Total 2007-2013</b>	<b>1,811,845,772</b>	<b>16,869,009</b>	<b>1,828,714,781</b>

**Table 12: EC OP Financial Table by Priority Axis (in €)**

Priority No	Priority name	Fund/rate of co-financing related to	Community Contribution	National resources	Indicatory split of national resources		Total resources	Rate of co-financing
					National public resources	National private resources		
					a	b(=c+d)		
1	Initial education	ESF/public/Convergence	612,077,738	108,013,719	108,013,719		720,091,457	85%
2	Tertiary education, research and development	ESF/public/Convergence	626,536,268	110,565,224	110,565,224		737,101,492	85%
3	Further education	ESF/public/Convergence	289,895,324	51,157,998	51,157,998		341,053,322	85%
4a	National system activities	ESF/public/Convergence	210,862,611	37,211,049	37,211,049		248,073,660	85%
4b	National system activities	ESF/public/RCE	16,220,201	2,862,388	2,862,388		19,082,589	85%
5a	Technical assistance	ESF/public/Convergence	72,473,831	12,789,500	12,789,500		85,263,331	85%
5b	Technical assistance	ESF/public/RCE	648,808	114,496	114,496		763,304	85%
<b>Total</b>			<b>1,828,714,781</b>	<b>322,714,374</b>	<b>322,714,374</b>		<b>2,151,429,155</b>	<b>85%</b>
<b>Out of which: Convergence Objective</b>			<b>1,811,845,772</b>	<b>319,737,490</b>	<b>319,737,490</b>		<b>2,131,583,262</b>	<b>85.0%</b>
<b>Regional Competitiveness and Employment Objective</b>			<b>16,869,009</b>	<b>2,976,884</b>	<b>2,976,884</b>		<b>19,845,893</b>	<b>85.0%</b>

**Table 13: Overview of Community Contribution Distribution by Categories under OP**

Theme 1 Priority theme		Theme 2 Form of financing		Theme 3 Territory	
Code	Sum **	Code	Sum **	Code	Sum **
62	91,435,740	1	1, 828,714,781	1	1,280,100,347
71	73,148,592			5	548,617,434
72	1,098,326,095				
73	54,861,444				
74	298,811,994				
81	157,269,471				
85	43,889,156				
86	10,972,289				

\*\*Estimated amount of Community contribution per every category



**Annex 1 – Abbreviations Used**

CR	Czech Republic
CZSO	Czech Statistical Office
EAPG	Economically Active Population Group
EIB	European Investment Bank
EC	European Communities
Commission	European Commission
ERDF	European Regional Development Fund
ESF	European Social Fund
EU	European Union
EUR	Euro
CF	Cohesion Fund
GG	Global Grants
GDP	Gross Domestic Product
ESC	Economic and Social Cohesion
ICT	Information and Communication Technology
ISCED	International Standard Classification of Education
IP	Individual Project
MF	Ministry of Finance
MRD	Ministry of Regional Development
MIT	Ministry of Industry and Trade
MLSA	Ministry of Labour and Social Affairs
SME	Small and Medium-sized Enterprises
MEY&S	Ministry of Education, Youth and Sports
MC	Monitoring Committee
MH	Ministry of Health
ME	Ministry of the Environment
NC	National Coordinating Body
NNO	Non-state Non-profit Organization
NRP	National Lisbon Programme 2005-2008 (Czech Republic National Reform Programme)
NDP	Czech Republic National Development Plan 2007-2013
NSRF	Czech Republic National Strategic Reference Framework 2007-2013
NUTS	Nomenclature of Territorial Units for Statistics
HR&E OP	Human Resources and Employment Operational Programme
HRD OP	Human Resource Development Operational Programme
OP	Operational Programme
E&I OP	Enterprise and Innovation Operational Programme
HR&E OP	Human Resources and Employment Operational Programme
EC OP	Education for Competitiveness Operational Programme

R&DI OP	Research and Development for Innovation Operational Programme
PAC	Payment Authority and Certifying Body
PA	Payment Authority
MA	Managing Authority
SF	Structural Funds
SP	Standard Project
NP	National Project
EGS	Economic Growth Strategy
SVS	Secondary Vocational School
SATC	Secondary Apprentice Training Centre
CSG	Community Strategic Guidelines
HRDS	Human Resource Development Strategy for the Czech Republic
SS	Secondary School
R&D	Research and Development
U	University
IB	Intermediate Body

**Annex 2 – Evaluation of Experience from the Previous Programming Period****Table 14: Numbers of Submitted and Approved Projects by Individual HRD OP Measure**

No	SP/NP Measure	Number of announced calls for 2004 and 2005	Number of submitted applications	Number of approved projects	Number of projects with a concluded contract
1.1	Strengthening the active employment policy	9	22	17	15
1.2	Modernisation of public employment services	1	3	-	-
2.1	Integration of specific population groups threatened by social exclusion	3	189	18	18
2.2	Equal opportunities for men and women in the labour market	-	-	-	-
3.1	Improvement of education quality at schools and school facilities and development of support systems in education	1	14	12	11
3.2	Support of tertiary education, research and development	-	-	-	-
3.3	Development of further vocational education	3	5	0	-
4.1	Increase in adaptability of employers and employees to changes in economic and technological conditions, support of competitiveness	13	1	-	-
4.2	Specific education	1	5	4	4
5.1	Support of management, implementation, monitoring and control of HRD OP	1	31	30	30
5.2	Other eligible activities	1	34	31	31
<b>GRANT SCHEMES</b>					
1.1	Strengthening the active employment policy	29	661	170	110
2.1	Integration of specific population groups threatened by social exclusion	5	385	87	81
2.2	Equal opportunities for men and women in the labour market	1	75	27	27
2.3	Strengthening the capacity of social service providers	2	465	105	105
3.1	Improvement of education quality at schools and school facilities and development of support systems in education	1	248	90	89

No	SP/NP Measure	Number of announced calls for 2004 and 2005	Number of submitted applications	Number of approved projects	Number of projects with a concluded contract
3.2	Support of tertiary education, research and development	2	343	54	454
3.3	Development of further vocational education	21	612	113	76
4.1	Increase in adaptability of employers and employees to changes in economic and technological conditions, support of competitiveness	29	921	250	128
4.2	Specific education	4	235	91	91
Total for HRD OP			4,078	1,099	870

Source: Detailed monthly information on trend in drawdown of resources from EU Structural Funds, RPS 2005

**Table 15: Overview of Drawdown of Financial Resources from HRD OP by Measure – System and National Projects**

(Sub)measure SP/NP		Allocated amount of resources for 2004-2006 (millions of CZK)	Total amount of required resources for measure based on accepted project applications (in CZK mill.)	Amount of resources from allocation for 2004-2006 approved projects/grant projects (in CZK mill.)	Resources from 2004-2006 allocation covered by contract (in CZK mill.)	Expenditure made from 2004-2006 allocation (in CZK mill.)	Resources drawn from 2004-2006 allocation (in CZK mill.)
No	Name						
1.1	Strengthening the active employment policy	2,742.8	1,124.1	890.7	1,023.9	15.0	5.1
1.2	Modernisation of public employment services	536.4	79.7	-	-	-	-
2.1	Integration of specific population groups threatened by social exclusion	1,021.3	340.3	340.3	761.0	5.9	3.9
3.1	Improvement of education quality at schools and school facilities and development of support systems in education	1,750.7	713.3	640.6	844.9	129.4	104.6
3.3	Development of further vocational education	1,108.8	423.2	0.0	160.5	3.2	2.0
4.1	Increase in adaptability of employers and employees to changes in economic and technological conditions, support of competitiveness	933.7	23.2	-	290.1	4.3	3.7
4.2	Specific education	680.8	134.7	114.8	328.8	8.7	3.1
5.1	Support of management, implementation, monitoring and control of HRD OP	219.8	150.4	107.8	109.8	9.7	8.3
5.2	Other eligible activities	266.5	189.7	143.9	145.2	19.2	19.2

Source: Detailed monthly information on trend in drawdown of resources from EU Structural Funds, RPS 2005

**Table 16: Overview of Drawdown of Financial Resources from HRD OP by Measure – Grant Schemes**

1.1	Strengthening the active employment policy	2,742.8	2,412.0	562.2	The contract amounts are included in the measure above	Expenditure included in the measure above	-
2.1	Integration of specific population groups threatened by social exclusion	1,021.3	1,838.0	521.2	The contract amounts are included in the measure above	Expenditure included in the measure above	-
2.2	Equal opportunities for men and women on the labour market	243.2	410.80	139.3	127.1	-	-
3	Strengthening the capacity of social service providers	101.9	226.1	66.0	64.6	3.6	2.3
1	Improvement of education quality at schools and school facilities and development of support systems in education	1,750.7	860.4	346.4	The contract amounts are included in the measure above	Expenditure included in the measure above	-
3.2	Support of tertiary education, research and development	583.6	1,307.0	214.4	192.1	1.6	1.6
3.3	Development of further vocational education	1,108.8	1,392.9	267.0	The contract amounts are included in the measure above	Expenditure included in the measure above	-
4.1	Increase in adaptability of employers and employees to changes in economic and technological conditions, support of competitiveness	1,108.8	1,392.9	267.0	The contract amounts are included in the measure above	Expenditure included in the measure above	-
4.2	Specific education	933.7	2,314.1	557.3	The contract amounts are included in the measure above	-	-
Total for HRD OP		10,189.5	14,815.2	5,074.3	4,048.0	161.03	153.8

Source: Detailed monthly information on trend in drawdown of resources from EU Structural Funds, RPS, status as of 2006

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## Annex 4 – Explanation of Terms Used

The aim of this overview is not to create explicit definitions of terms (a number of terms do not have a single generally accepted definition), but to explain their content in the context of the Education for Competitiveness OP. The terms have been divided into thematic blocks solely for ease of orientation.

### Area of education:

Lifelong learning	The term is used in the sense of the Memorandum on Lifelong Learning issued by the European Commission in November 2000. The EU defines lifelong learning as a term comprising “all purposeful formalised and non-formalised activities relating to learning that are implemented continuously in order to achieve improvement of knowledge, skills and professional preconditions”
Further education	An educational process focusing on provision of education after completion of a certain school education stage; after completion of initial education or education drawing on work experience or education for obtaining or improving competences in non-formal educational programmes. <i>In this document, the term “further education” also covers the specialisation education of medical staff according to Act No 95/04 Coll. and Act No 96/04 Coll., see specialisation education.</i>
Formal education	This is implemented at educational institutions the function, objective, contents, resources and evaluation methods of which are defined and determined in legislation. A school is such a typical educational institution.
Informal education	Process of obtaining knowledge, and mastering of skills and standpoints from everyday experience, from the environment and contacts. Unlike formal education or non-formal education, informal education is non-organized, non-systematic and institutionally non-coordinated.
Key competences	Summary of knowledge, skills, capabilities, standpoints and values important for the personal development and application of each member of society. In the General Educational Programme for primary education, the key competences are defined at the level that should be achieved by all pupils at the end of primary education; the following are considered to be the key ones in the primary education stage: competence to learn, competence to solve problems, communication competence, social and personal competence, civil competence, working competence
Competences	a) An aggregate of powers and responsibilities entrusted to a certain job position or body  b) Ability to perform a certain function or set of functions and to achieve a certain performance level in it. Competences comprehended in such a way also include the willingness to accept decision-making risk, personal initiative, volitive attributes, motivation, etc.
Concept of early care for children from socio-cultural disadvantaged environments	A concept approved on 11 May 2005 under the Czech Republic Government Resolution No 564 regulates the necessity to implement programmes of initial and further education of teaching staff of pre-school education and further implements programmes and measures focused on the increase of the number of children from low cultural and social status family environment (socio-culturally disadvantaged environment) in pre-school education.
Curriculum	Contents of school education

Curriculum reform	Reform of the course of study and its contents and of the forms of education (creation and gradual introduction of the concept of a two-level curriculum model – general educational programmes and follow-up school educational programmes; ensuring the education of teachers and managers in the school system as a precondition for implementation of this reform)
Qualification	Set of abilities (knowledge, skills, habits, experience) necessary for obtaining an officially confirmed qualification (mostly acknowledged by the state) for performance of a certain activity (profession, function)
Non-formal education	Non-formal education is carried out beyond the formal education system and does not result in any comprehensive school education. These are organized upbringing educational activities beyond the scope of the established official school system, which offer candidates intentional development of life experience, skills and standpoints based on a comprehensive system of values. These activities are usually voluntary. The organizers are children and youth associations and other non-state, non-profit organisations, leisure time centres, educational agencies, foundations, clubs, cultural facilities, etc.
Organizations engaged in education and career consultancy	These organizations include, for instance, schools and educational establishments; professional organizations of employers; union, employee, employer and industry organizations; employers; facilities for further education of teaching staff, universities, etc.
Initial education	This comprises all formal education within the scope of the educational system taking place before first entry onto the labour market. Note: within the EC OP, the term ‘initial education’ means separately defined primary and secondary education; tertiary education is defined by a separate priority axis.
Human resource development	Lifelong education and learning (both formal and non-formal), including learning from practice (informal), oriented primarily towards better labour application, increase in competences and efficiency of individuals and teams; this term comprises a wide range of activities, opportunities and stimuli in the educational system, economic practice, public administration and other sectors. There is no accurate and scientifically recognized definition available; HRD is used very liberally in practice.
Specialization education	Preparation for performance of the profession of a medical worker, by the completion of which a specialized competence for performance of the profession is obtained.
Tertiary education	Post-secondary vocational and higher education
Pupils with special educational needs	According to the Act No 561/2004 Coll. on pre-school, primary, secondary and post-secondary vocational and other education (School Act), section 16 stipulates that a child or pupil with special educational needs means an individual with health impairment, health disadvantage or social disadvantage
Employability	a) The active participation of the population capable of work in economic activity, and the population capable of work is within the age range in which economic activity is performed. Employment policy focuses on achieving equilibrium between labour force supply and demand, aims at productive use of labour force resources and at ensuring the citizens’ rights to employment. The European employment strategy has set 4 pillars as follows: employability, enterprising, adaptability and equal opportunities.  b) The ability to be employed. An aggregate of competences in specific

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areas, knowledge and skills giving the chance to be successful on the labour market. It also comprises the will connected with persistence, entrepreneurship and desire to succeed, faith in one's own capabilities, and the awareness of the necessity of progressive and responsible approaches in employment.

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### **Research and development:**

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Applied research	Experimental or theoretical work carried out in order to obtain new knowledge focusing on future use in practice
Industrial research	A part of applied research, the results of which are used, through development, in new products, technologies and services intended for business
Innovation	The renewal and expansion of a range of products and services and the related markets, the creation of new methods of production, supply, and distribution, the implementation of changes in management, labour organization, working conditions, and skills of the workforce.
Development	The systematic creative use of research knowledge or other suggestions to produce new or improved materials, products or equipment, or to introduce new or improved technology, systems and services, including the acquisition and testing of prototypes, semi-operational or demonstration equipment
Research and development	Systematic creative work to obtain and/or use new knowledge
Research employees	Research employees form the most important group of R&D employees, dealing with the conception or creation of new knowledge, products, processes, methods and systems, or they manage such projects
Basic research	Experimental or theoretical work carried out to obtain knowledge about the basis or essence of observed phenomena, explanations of their causes and possible impacts of the application of the knowledge obtained
Research and development employees	The term 'R&D employees' includes the research employees who carry out R&D directly, and also auxiliary, technical, administrative and other employees at R&D workplaces. 'R&D employees' also include employees procuring direct services relating to research and development activities, such as R&D managers, administrative officers, secretaries, etc.

### **Management:**

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Global grant	Global grant represents a simplified form of project submission, where the actual rules for further provision of resources are simpler for the beneficiary. The beneficiaries are responsible to the Intermediate Body (global grant administrator) for observing all the conditions and rules of the global grant and the connected legislation. Global grants encompass numerous events (projects within the global grant), and the global grant itself is a project. Global grants can be used to provide support primarily to business entities, but also to public administration bodies and non-profit organisations.
Beneficiary	A Beneficiary is a public or private entity that obtains financial

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	resources from the Structural Funds or Cohesion Fund based on a submitted project application for aid by means of the OP. The beneficiary submits a project, but at the same time demonstrates the ensured co-financing for its implementation; the beneficiary is responsible for the actual implementation of the project and for handling of the resources.
Intermediate Body	An Intermediate Body is a public or private entity acting under the responsibility of the MA or performing activities relating to beneficiaries on the MA's behalf. In practice, it becomes a partner of authors of project applications, particularly in communication regarding the selection and subsequent implementation of the project.

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## **Annex 5 – List of Documents**

The concept of the EC OP is derived from many documents of a legislative, strategic, methodological and analytical nature. A list of the most significant documents is provided below.

### **EU Legislative Documents**

- Council Regulation (EC) No 1083/2006 on general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund and repealing Regulation (EC) No 1260/1999.
- Council Regulation (EC) No 1081/2006 on the European Social Fund and repealing Regulation (EC) No 1784/1999.
- Council Regulation (EC) No 1080/2006 on the European Regional Development Fund and repealing Regulation (EC) No 1783/1999.
- Proposal for Council Regulation (EC) laying down detailed rules for the implementation of the Council Regulation (EC) laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund, Commission Working Document, Brussels, 15 February 2006.
- Resolution of the Council and of the Representatives of the Governments of the Member States, meeting within the Council, on the recognition of the value of non-formal and informal learning within the European youth field 8562/06, Brussels, 24 April 2006.

### **Czech Republic Legislative and Methodological Documents**

- Act No 561/2004 Coll. (dated 24 September 2004), on pre-school, primary, secondary, post-secondary vocational and other education (the Schools Act), as amended by Act No 383/2005 Coll.
- Act No 563/2004 Coll. (dated 24 September 2004), on teachers and amendment to some acts as subsequently amended.
- Act No 552/2005 Coll., amending Act No 111/1998 Coll., on universities and on amendments and supplements to other acts (the Universities Act), as subsequently amended.
- Act No 179/2006 Coll., on verification and recognition of results of further education and on amendment to some acts (the Act on recognition of results of further education).
- We request that Act No 111/98 Coll. is added to as follows: “Act No 95/2004 Coll., on conditions for obtaining and recognizing professional qualification and specialized qualification to perform the medical profession of a physician, dentist and pharmacist as subsequently amended, and Act No 96/2004 Coll., on conditions for obtaining and recognizing qualification for the performance of non-physician medical professions and for the performance of activities relating to provision of medical care and on amendment to some related acts (the Act on non-physician medical professions), as subsequently amended.
- Act No 137/2006 Coll., on public contracts.

- Act No 320/2001 Coll., on financial control in public administration and amendment to certain acts.
- Decree of the Ministry of Finance No 416/2004 Coll., implementing Act No 320/2001 Coll., on financial control.
- Act No 552/1991 Coll., on state control.
- Act No 218/2000 Coll., on budgetary rules and amending certain related laws.
- Act No 250/2000 Coll., on the budgetary rules of district budgets.
- Act No 130/2002 Coll., on aid for research and development from public resources and amending certain related laws (referred to as the “Research and Development Aid Act”).
- Decree of the Ministry of Finance No 231/2005 Coll., on the participation of the national budget in the financing of asset purchasing and reproducing programmes.
- Methodology for the preparation of programming documents for the 2007-2013 period, Ministry of Regional Development, February 2006.
- National Code List of Indicators for the 2007-2013 Programming Period, Ministry of Regional Development, March 2006.
- Methodology of Financial Flows and the Control of Structural Funds and the Cohesion Fund, consolidated wording effective as of 1 January 2006, published by the Ministry of Finance.

### **EU Strategic Documents**

- Communication from the Commission – Cohesion Policy in Support of Growth and Employment: Community Strategic Guidelines, 2007-2013, COM (2005) 0299, Brussels, 5 July 2005.
- Conclusions of the European Council revising the Lisbon Strategy, 7619/1/05, Brussels, 22 and 23 March 2005.
- Working together for growth and employment: A new start for the Lisbon Strategy, COM (2005) 24, Brussels, 2 February 2005.
- Common Actions for Growth and Employment: The Community Lisbon Programme, COM (2005) 330, Brussels, 20 July 2005.
- Wim Kok’s Evaluation Report on the implementation of the Lisbon Strategy, November 2004.

### **Czech National Strategic Documents**

- Draft National Development Plan of the Czech Republic 2007-2013 (version: January 2006).
- Draft National Strategic Reference Framework.

- National Lisbon Programme 2005-2008 (Czech Republic National Reform Programme).
- Economic Growth Strategy; approved by the Government under Resolution No 1500 of 16 October 2005.
- National Education Development Programme in the Czech Republic, 2001.
- Long-term Development Plan of Education and the Educational System in the Czech Republic (2002 and 2005).
- Human Resources Development Strategy for the Czech Republic.