



Czech National Observatory for Vocational Training and Labour Market

# **Modernisation of Vocational Education and Training in Transition Countries**

## **National Report**

## **Czech Republic**

**Czech National Observatory**

This report was prepared with the financial assistance of the European Training Foundation.  
The views expressed here in are those of the contractor and do not represent any official views of the Foundation.

Prague

2001 up-date

**Editor and co-ordinator:** Věra Czesaná

**Team of authors:**

|                        |                      |
|------------------------|----------------------|
| Věra Czesaná           | National Observatory |
| Olga Strietska - Ilina | National Observatory |
| Věra Havlíčková        | National Observatory |
| Zuzana Freibergová     | National Observatory |

**Information and data provided by:**

|                   |  |
|-------------------|--|
| Ivo Makalous      | Czech Statistical Office               |
| Michaela Kleňhová | Institute for Information on Education |
| Eva Procházková   | Ministry of Labour and Social Affairs  |

**Technical support:**

|                     |                      |
|---------------------|----------------------|
| Alena Zukersteinová | National Observatory |
|---------------------|----------------------|

**Translation:**

Hana Čechová

**Basic Information:**

**The Czech National Observatory** was established in October 1996 on the initiative of the European Training Foundation. It is based at the National Training Fund (NTF) of the Czech Republic, set up in 1994 with the support of the Ministry of Labour and Social Affairs to implement the Phare Human Resource Development Programme. The NTF has become one of the leading institutions in the Czech Republic in the field of management training and human resource development in enterprises. It implements programmes aimed at supporting the reform of public administration and is charged by MoLSA as an implementing agency for pre-ESF programmes. The NTF also includes the Leonardo da Vinci National Co-ordination Unit, the National Resource Centre for Guidance, the Pro-Active Labour Market Intervention Fund and the Social Welfare Initiative Fund.

The National Observatory is in charge of many projects. In addition to studies and activities for ETF, it provides other projects such as a yearbook Human Resources in the Czech Republic, an OECD project Transition from Initial Education to Working Life, the Leonardo da Vinci project, Regular Forecasting of Training Needs, a CEDEFOP study on VET Research in CEEC and a study on VET Against Social Exclusion. It is also involved in the research partnership of the Fifth Framework Programme (Vocational Identity, Flexibility and Mobility in the European Labour Market). Beside the analytical project work, Observatory uses the expert capacity for the support to MoLSA in preparing to ESF and in programme evaluation activities.

**Contact:** National Observatory,  
National Training Fund,  
Opletalova 25  
110 00 Prague 1  
Czech Republic  
tel: +420 2 245 00 540  
fax: +420 2 245 00 502  
e-mail: [oli@observatory.nvf.cz](mailto:oli@observatory.nvf.cz)

## CONTENT

|  |            |
|--|------------|
| <b>Authors' Preface</b> .....  | <b>4</b>   |
| <b>Executive Summary</b> .....   | <b>5</b>   |
| <b>1. Political and Socio-Economic Background Information</b> .....  | <b>9</b>   |
| 1.1 Economic Developments  | 9          |
| 1.2 Demography   | 17         |
| <b>2. Labour market background</b> .....   | <b>19</b>  |
| 2.1 Economic activity of the population  | 19         |
| 2.2 Employment   | 20         |
| 2.2.1 Structural changes in employment   | 21         |
| 2.2.2 Employment in the private sector   | 24         |
| 2.2.3 Employment opportunities for graduates from educational institutions   | 24         |
| 2.3 Unemployment   | 27         |
| 2.4 Labour market policies   | 29         |
| 2.5 Future skills needs of the economy   | 32         |
| 2.6 Conclusions as regards the key labour market issues and their influence on the aspects of human resource development | 35         |
| <b>3. Modernisation of vocational education and training in the perspective of life-long learning</b> <b>40</b>          | <b>40</b>  |
| 3.1 Introduction   | 40         |
| 3.2 The HRD strategy and priorities of the National Development Plan   | 44         |
| 3.3 Preparation for European Social Fund (ESF) implementation  | 46         |
| 3.4 Modernisation of initial vocational education and training (IVET)  | 47         |
| 3.4.1 Structure and organisation of the IVET system  | 47         |
| 3.4.1.1 The entry to the initial VET system  | 49         |
| 3.4.1.2 The training levels and pathways within IVET and certification outputs   | 52         |
| 3.4.1.3 Description of the training provision within each level and path   | 57         |
| 3.4.1.4 Access to other levels of education and employment   | 61         |
| 3.4.2 Responsible bodies   | 62         |
| 3.4.3 Funding  | 66         |
| 3.4.4 Social dialog and integration of social partners   | 69         |
| 3.4.5 Curricula development  | 70         |
| 3.4.6 Legislation  | 75         |
| 3.4.7 Weaknesses, strengths and future government priorities in initial VET  | 78         |
| 3.5 Modernisation of Continuing Vocational Education and Training (CVET)   | 82         |
| 3.5.1 CVET provision (in terms of supply)  | 83         |
| 3.5.2 CVET provision (in terms of demand)  | 84         |
| 3.5.2.1 Participation of employees in CVET arranged by companies   | 84         |
| 3.5.2.2 Participation of the unemployed in CVET  | 86         |
| 3.6 Links between IVET and CVET  | 94         |
| 3.7 Development of career guidance and counselling   | 97         |
| <b>4 Management training</b> .....   | <b>100</b> |
| 4.1 Educational programmes within IVET in schools  | 100        |
| 4.2 Supply of continuing education   | 102        |
| 4.3 The focus of management training   | 103        |
| 4.4 Conditions for the development of management training  | 104        |
| <b>5 VET teachers/trainers, managers and administrators</b> .....  | <b>106</b> |
| 5.1 Teachers, schools/trainers, managers and administrators  | 106        |
| 5.2 Pre-service training of teachers and trainers  | 107        |
| 5.3 In-service training of teachers and trainers   | 108        |
| <b>6. Research in the field of education, training and employment</b> .....  | <b>110</b> |
| 6.1 Basic information about organisation, functioning and funding  | 110        |
| 6.2 Research infrastructure and capacities   | 112        |
| 6.3 Role of international assistance   | 115        |
| 6.4 Research topics  | 116        |
| 6.5 Current obstacles and future needs for the development of education-related research                                 | 119        |
| <b>7. International co-operation on IVET and CVT modernisation</b> .....   | <b>122</b> |
| <b>8. Role of National Observatory</b> .....   | <b>130</b> |
| <b>9. Conclusions: challenges and further needs</b> .....  | <b>135</b> |
| <b>ANNEXES</b> .....   | <b>142</b> |
| <b>TABLES</b> .....  | <b>147</b> |

## **Authors' Preface**

This report presents a survey of initial and further vocational education and training in relation to the development of the Czech labour market and economy, and to outline challenges and problems to be dealt with in the future. This year version is a follow-up of other reports presented on vocational education and training in the past years and an update of data and analytical conclusions based on information concerning developments in 2000 that are available in 2001.

As a method, it was used the expert secondary analysis of data available in the public domain and gathered from a number of specific researches. To secure objectivity, we have also drawn on studies about the Czech Republic published by OECD, the World Bank and the European Commission. The team of authors has also benefited from the assistance of experts from ministries, research institutions and social partners. The report is as factual as possible. An extensive data annex contains the set of tables that are newly gathered by the whole ETF Observatories network on the bases of common methodology.

Although some new promising projects on monitoring and forecasting skill needs started, there is a lack of systematic approach and valuable information where new job opportunities will arise in the future, what professions will be in demand, and what skills and training will employers look for. Studies of the development of sectors and their staff requirements are not available. All the above limits our ability to objectively assess the structure of educational pathways and areas in initial and further vocational education and training in terms of their responsiveness to the needs of the labour market.

In 1999 and 2000, a number of new policy papers and bills was drafted in the Czech Republic. Moreover, the reform of public administration was started. All these changes will have a major impact on the development of vocational education. The authors tried to cover these documents, although their practical results have yet to be verified by future developments.

## Executive Summary

In the course of the 1990s, fundamental changes have taken place within the Czech economy. Radical systemic changes have occurred (privatisation, the liberalisation of prices and external economic relations) and pre-conditions have been established for the workings of market mechanisms (the development of a legal framework and institutions). The economic developments included several changes combining transformation and cyclical elements

Regional administration reform is underway. New regions have been created as of 1 January 2000 at the level of NUTS 3 and became operational in 2001. As self-governing bodies, the Regional Assemblies and Regional Councils were established with significant powers in the area of education. Eight statistical regions have been set up at the level of NUTS 2, comprising one to three NUTS 3 regions. Regional development strategies and Regional operational programmes were drafted for the newly established regions in 1999 and tuned up in 2000. Two NUTS 2 regions -- Ostrava and Northwestern Bohemia -- have been selected as pilot regions for Phare 2000 funding.

Not all economic transformation steps have been completed; certain legislative and institutional conditions are yet to be created to improve supervisory environment and increase flexibility of individual markets. The fast pace of privatisation by a voucher method along with the lack of domestic capital has had negative effects on the quality of ownership structures and resulted in under-capitalisation and indebtedness of companies – which has rocked their stability. The undesirable symptoms of a dual economy occurred – Czech-owned companies with outdated technologies on the one hand and the progressively developing companies with foreign capital on the other hand. The recent years have seen a speeded-up restructuring of companies controlled by Czech capital – particularly due to economic recovery. Direct foreign investment has flown in relatively steadily throughout the period. Twenty five per cent of companies are controlled by foreign capital and supplied to by additional 25-30% of companies. Small and medium enterprises represent 56 % of the overall employment and play an important role in creating job opportunities.

As far as the structure of employment is concerned, the service sector has experienced significant growth, reaching 55,4 %, while agriculture dropped to levels comparable with EU member states, and mining and processing industries became leaner. These changes are likely to continue. Unlike the EU member states, low part-time employment is still typical of the Czech labour market. Unemployment has grown after 1997, reaching 9.4 % in the end of 1999 and fell little bit in 2000 to 8,8% in the end of year as a result of economic recovery. This predicament of the labour market has affected particularly the already disadvantaged groups, i.e. people with low skills, school leavers (particularly of basic and secondary schools), Romany, and people with disabilities. Long-term unemployment increased very quickly. In 2000, persons seeking job for more than one year formed about 38% of the total number of unemployed.

The employment policy rests on a well functioning network of labour offices and on basic active employment measures. As unemployment grew, the scope of tools had to be enhanced and the active measures had to be better targeted. The National Employment Plan and National Action Employment Plan were adopted in 1999 and 2000 as a strategy conforming to the EU labour market policies. In addition to broadening the range of active employment measures, it also contains measures to promote business, responsiveness of employers and employees to structural changes, job creation, training, and equal opportunities.

The demography development is characterised by steadily shrinking youth age cohorts entering secondary schools and starting population ageing. These trends are expected to deepen in the coming decade. Social and economic changes have led to dramatically decreasing birth rates in the 1990's. The total population has been decreasing since 1992.

Main features of the structure of the Czech system of initial vocational education, i.e. main types of schools, their arrangement and duration of educational programmes they provide, are product of a long development. New types of schools and new measures have been added in the 90's in response to fundamental political, economic and social changes in the country, and have modified and completed the school system.

There are three main types of secondary schools: *gymnasia* offer general secondary education; secondary technical schools offer upper secondary vocational education with *maturita* in a particular field of study; secondary vocational schools offer apprentice education in crafts and similar professions. Several types of schools have been added to the traditional ones in the past decade, mostly in attempt to merge features of the mentioned main types of schools. Technical and business lycea bring together the wide general education of *gymnasia* and the basic vocational theory of secondary technical schools. Integrated secondary schools offer two types of educational programmes that used to be available only in secondary technical schools or secondary vocational schools, respectively. Centres for vocational training offer continuing vocational training programmes as well as initial vocational education. A new type of schools, called higher professional schools, has been added on top of the upper secondary level of education.

The offer of vocational education has been further enhanced by the introduction of many new educational programmes by legacy state schools and new private schools. Access to education has improved, too; numbers of schools grew, increasing the density of the school network but decreasing the average size of schools.

Having said that, changes in the structure of the school system have not made horizontal permeability of the education pathways much easier, because longer and linear educational programmes without certification of partial completion still prevail. The structure of the school system continues to be criticised for not offering sufficient opportunities to people who, for various reasons, have not completed their education in a particular type of school or people who would like to pursue higher levels of education once they have gained some work experience. The curricular reform currently under preparation and the on-going decentralisation of the governance of education could facilitate a more flexible organisation of educational pathways. However, these processes are only in their beginning.

Several trends have occurred in the Czech Republic with regard to numbers of students. Although the ratio of students in general secondary schools (*gymnasia*) as opposed to vocational schools, typically very much in favour of vocational schools, remains roughly the same, the proportion of students enrolling in vocational programmes with *maturita* has grown substantially in nineties to the detriment of the number of students in vocational courses without “*maturita*”. However, this trend has been again reversed in recent years. The average duration of education became longer. Although drop-out rates have stayed low and without significant changes throughout secondary education programmes with *maturita*, drop out rates among vocational type without *maturita* increased.

Recently, a comprehensive reform of public administration has entered into the implementation stage that means delegation of responsibilities in the area of education from the central level to the decentralised level of self-government in regions. In relation to this the flows of finance have changed and programmes to support the development and innovation in education have been introduced. Regional self-government has acquired the power to set up secondary and higher professional schools and bears direct responsibility for their capital funding. The self-government has also gained the authority to influence those powers of state administration which were delegated to the regions. They include, most importantly, the development of the Long-Term Development Plans of Education and Education System and the allocation of public resources earmarked for education within the respective region.

In view of the fact that the state administration and self-governing authority is not strictly separated (in fact they are overlapping), the actual development will depend both on the initiative and professional competence of the regional self-governing bodies, and on the

willingness to comply with their decisions and to provide appropriate space for these decisions - which is the tasks of the Ministry. The Ministry is already developing the Long-Term Plan of Education and other framework documents which define the conditions for the decision-making of self-governing bodies in education.

We have seen attempts to approach the development of Czech VET more strategically over the past two years. In 2001, the long-term strategy National Education Development Programme was adopted by the Government. The aims set out in this programme are further elaborated in subsequent documents concerning the priority areas of the development of education (the already mentioned Long-Term Development Plan), including the curricular reform, the introduction of information technologies into teaching, the enhancing of the transparency of secondary school leaving examinations, the strengthening of the role of social partners etc. These documents are still at an early stage of development, their finalisation is proceeding slowly and the actual implementation may be expected not earlier than in five years from now. Continuing vocational training has undergone major changes in the Czech Republic over the past decade, and became highly diversified and differentiated. It evolves based on supply and demand. There are three main groups of CVT providers in the Czech Republic: schools, enterprises and training firms. Private institutions prevail among its providers; private money prevails in its funding (paid by companies and individuals). Links between initial and continuing vocational education are still tenuous. Insufficient legal framework for the development of continuing vocational education and training continues to be criticised.

Although there are major differences among individual companies, it can be said that the general development of in-house training as part of continuing vocational education slumped after a period of fast growth in the first half of the 90's. According to the CVTS 2 survey in 1999, two thirds of companies implement training activities for employees. This means that 49% of employees participate in some form of training. As regard participation in the training in companies, there is marked difference between men (53%) and woman (only 41%).

As concerned continuing vocational education and training of job seekers registered with labour offices, there is experienced gradual growth of re-training. The Ministry of Labour and Social Affairs has been investing more in the active employment policy over the last years, which has led to growing numbers of people in re-training. However the proportion of re-training participants in the total number of job seekers is still very low (only about 7%) comparing to the European countries. The National Employment Plan envisages growth in continuing vocational education for promoting employability of people.

Continuing vocational education is funded mostly from private resources (companies and other organisations). Re-training of job seekers on the files of labour offices has been paid for mostly by the government. Contributions of chambers, professional associations, trade unions and regional and local authorities to the funding of further vocational education are negligible.

In the field of research of education, training, labour market and employment, the structure of institutions involved into research was diversified after 1989. Apart from sectoral budgetary research institutes of MoEYS and MoLSA, and Academy of Sciences, such research is provided by universities, NGOs and private companies. After a steep decline of expenditures on R&D at the beginning of the 1990s, the situation has been steadily improving. Expenditures on research in the field of education increased substantially in recent years, however the level of research financial sources is still undervalued. Research capacities in the field of CVET and adult learning are not sufficient in the Czech republic, given the importance and the high priority need of the systemic development of the lifelong learning system in the country.

The bulk of financial aid to the Czech Republic has come in the framework of the Phare programme since 1990. During the years of its existence, the Phare programme has experienced substantial development, from assistance in the most urgent problems towards

assistance in the transformation process and preparation of the country for EU accession. The Czech Republic joined European Programmes as Leonardo da Vinci, Socrates, Youth for Europe. There have been also many bilateral and international donor programmes linked to education and labour market.



# 1. Political and Socio-Economic Background Information

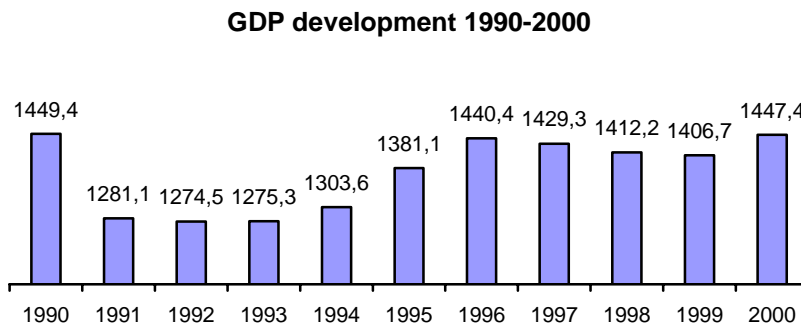
The Czech Republic is a Central European country with a population of 10,266 million, a territory of 78 864 km<sup>2</sup> and a population density of 130 inhabitants per km<sup>2</sup>. The parliamentary system is bicameral. Public administration is in the process of decentralisation. Fourteen higher units of self-government regions (VUSC) have been established and, after the regional elections, these will be in power from 1<sup>st</sup> January 2001 (the equivalent of NUTS III). At NUTS II level, the Czech Republic is divided into eight statistical regions formed by 1-3 VUSC.

The European Agreement of Association between the Czech Republic and European Communities was signed in 1993. In 1997, the European Commission recommended that the EU begin negotiations with the CR to join the European Union and an accession agreement was signed in March 1998. The Czech Republic has become a member of the OECD (1996) and a member of the NATO (1999).

## 1.1 Economic Developments

In the course of the 1990s, fundamental changes have taken place within the Czech economy. Radical systemic steps have occurred (privatisation, the liberalisation of prices and external economic relations) and pre-conditions have been established for functioning market mechanisms (the development of a legal framework and institutions). The economic developments included several changes combining transformation and cyclical elements: the period of 1990 – 92 was characterised by a transformation recession followed by dynamic growth between 1993-96, cyclical stagnation and a downturn in 1997-99 and by an economic upturn in late 1999. The GDP increased in 2000 by 2,9 % and was driven by investment activities and exports.

Chart 1.1



Source: Key Indicators – Table 1

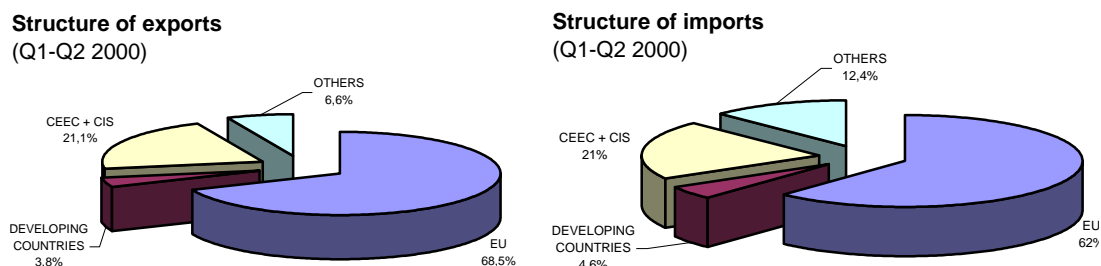
Note: GDP in bn CZK, 1995 constant prices

In the period of the transformation, the Czech economy opened up to the rest of the world and may be described as small-sized and open. This is why the influence of the world market is the most dominant for the development of the Czech economy. At present, some 66 % of GDP is exported and around 68 % is imported from abroad (these proportions are higher than those in Hungary and Poland)<sup>1</sup>.

<sup>1</sup> Sbornik analytických studií pro Strategický program sociálního a ekonomického rozvoje ČR (Collection of Analytical Studies for the Strategic Programme of Social and Economic Development), RASES, 2000

The Czech economy, from the point of view of foreign trade, has already become integrated into the EU, as the majority of its exports and imports flows to/from EU countries. (In 2000, these deals represented 68,5 % of total exports and 62,0% of total imports; in both cases they involved commercial exchange with Germany in particular.). This also means **that the Czech economy is strongly linked with the economic cycle of the European Union.**

**Chart 1.2**



## Privatisation

Privatisation, as the pillar of economic reform, was carried out using both traditional methods such as sales of property, and alternative means such as voucher privatisation. While there was virtually no private sector and the non-governmental sector (including co-operatives and public ownership of local authorities) generated only about 11 % of GDP in 1989, in 1996 its share amounted to 75 % of GDP. However, the speed of privatisation was detrimental to its effect. Vouchers have brought neither the capital that is indispensable to the further development of companies nor long-term owners who could, in turn, put better management in place. Most companies are therefore undercapitalised and suffer from high debts and low levels of technology.

Since 1999, following a certain pause, the privatisation of strategic companies has been under way again. The so-called “Czech way” has been re-assessed and foreign capital inflow and the resulting new form of strategic ownership has been promoted. Progress has primarily been made in the banking sector, the quality of which is a decisive factor for the workings of the whole business sector. In 2000, preparations were under way to privatise the last state-owned bank. Through the National Property Fund (NPF), the state still retains significant stakes in some 264 companies within the corporate sector<sup>2</sup>. Among them, there are 36 strategic enterprises, especially in distribution network sector (energy, fuel, gas), metallurgy, chemistry, telecommunication, air transport. The NPF and Government are relatively successful in finding suitable strategic owners, mostly from abroad. In order to speed up the privatisation of large companies, some support for restructuring of enterprises is provided through industrial programmes.

## Restructuring

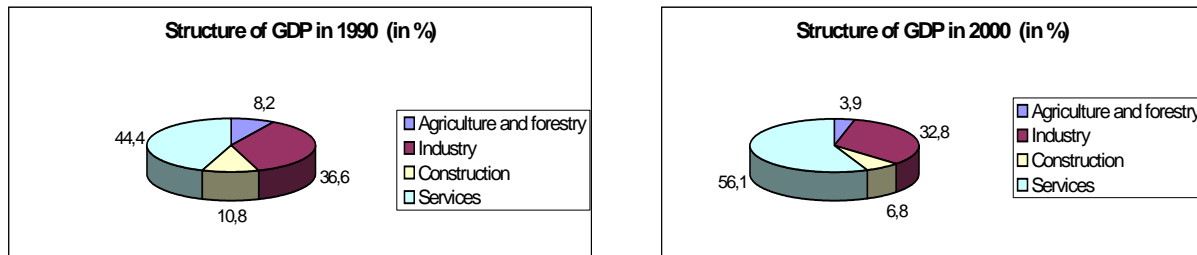
Structural changes of the Czech economy in transformation have had several dimensions which reflect previous “hypertrophies” of resources, production and commercial structures made under the conditions of a centralised economy. After 1990, a principal change occurred concerning the proportions of various sectors in GDP – the services sector began to account for the largest share and reached 56,1 % of GDP in 2000<sup>3</sup>. The share of agriculture and forestry in GDP dropped to a level comparable with EU countries. Industrial output downturn

<sup>2</sup> As of 31<sup>st</sup> December 2000. Source: 2000 Annual Report, National Property Fund

<sup>3</sup> Measured as share in Gross Value Added (in current prices), Source: Czech Statistical Office

has bottomed up and, at present, output is covering around 33 %. Within the services sector, the most rapid development occurred in business services (particularly legal, consulting, advertising etc) which have become the second most efficient sub-sector of the economy, and then in trade and financial intermediation. However, financial services have been stagnant in recent years. Stagnation can also be seen in transport and communications, while the proportion of public services (education, culture, health care) has increased.

**Chart 1.3**



Source: Czech Statistical Office  
 Note: Measured as share in Gross Value Added

Within the broad **segment of industry**, the branch structure has been changed during the nineties. It can be specified as three groups of industries, according to their growth rates of production in the second half of decade:

- branches consistently decreasing their real output - These include mining and quarrying, the textile industry, the leather industry, the production of coke and oil refining, the production of metals and metal products. The branches account for 36 % of industrial production
- branches basically stagnating - One can place the production and distribution of electricity, gas and water in this group (the influence of the economic cycle is especially noticeable here) and the wood-working industry. These two branches account for 17.5 % of the industrial production.
- branches robustly growing – They contribute to a significant degree to the overall change in the structure of Czech industry. They include production of electrical and optical appliances (with an average annual growth rate of output of 24.8 %), the rubber and plastics industry (11.9 %), the production of transport vehicles (8.3 %), the paper industry (6 %) and the production of machinery (4.6 %) etc. These branches represent 46.5 % of industrial production.

**Qualitative changes in production structure** have occurred more slowly - nevertheless, as foreign trade figures show, there was an increase in the proportion of production requiring high qualifications and technology<sup>4</sup>. On the other hand, there was a decrease in the proportion of products requiring natural resources and low-skilled labour. The production specialisation of companies continued which has resulted in the growth of the proportion of production components as compared to final products.

As regards the **restructuring of the corporate sector**, the situation varies significantly. The Czech economy has been experiencing dual developments, whereby a smaller part of companies have showed great vitality and have grown, while a considerable part of those companies remaining have been undergoing a wave of crises. The domestic processing sector, privatised in the Czech way, is undercapitalised, weak and unable to copy innovations and the work organisation of companies with foreign capital or to attract high qualified human capital

<sup>4</sup> For example, the hi-tech products (especially electro-technology, electronics, telecommunications and computing) share in total exports is increasing gradually (in 2000 by 1.2 points) and reached 7,8%.

and top level managers. The discrepancy between the two ownership sectors was addressed by some domestic producers by means of concentration on products for which lower levels of technology are needed. This has temporarily weakened competition between domestic and foreign companies which operate in related markets but do not compete. This has affected both price relations, exports opportunities and the level of wages, and the opportunities for taking over more advanced technologies.

A positive feature of the last two-year period is the fact that the economic recovery is strengthening the position of progressive companies in the business sector, particularly in the industry. This primarily concerns exports-oriented industrial companies with foreign capital stakes (there is a direct link to the inflow of foreign investment), which may take advantage of technological, organisational and marketing innovations exploited by leading foreign companies. This is also opening up ways to external markets and facilitating access to loans. Moreover, a number of traditional domestic companies benefit from the successful development of companies with foreign capital in that they co-operate in the production and supply of various components. In this way the structure of Czech industry is being enriched by progressive supply networks in the area of production and sales.

### **ICT sector development**

The Czech Republic is one of the markets which are experiencing the most dynamic development in the area of information and communication technologies in Central and Eastern Europe. Investment in IT was 116 EUR<sup>5</sup> per capita in 1997 (followed by Slovenia – 109 EUR, Hungary – 81 EUR and Estonia – 75 EUR). The structure of this expenditure is approaching that in West-European countries, where a major part of expenditure goes on services linked to the implementation of computer networks and the development of and support for applications rather than hardware. Expenditure on IT as a proportion of GDP was 2.6 % in 1997 (closely behind Estonia – 2.8 % and higher than Hungary – 2 % and Slovakia – 1.9 %) and 3% in 2000, which, in nominal terms<sup>6</sup>, is at the level of that in Western Europe and increases every year.

In the CR, there has been a considerable development of Internet-based networks thanks to a decision in 1992, regarding the use of the Internet, to build an academic network of Czech higher education institutions entitled CESNET. At present, the CR operates at least 14 international networks as part of the Internet, with over 240 Internet connection providers. There has been a strong entry of transnational telecommunications consortia.

The price structure of telecommunication is a major problem in the CR, since the Czech Republic is the third most expensive OECD country, in terms of purchasing power parity. The fees for the use of the Internet are far higher than those in other CEECs. Stiffer competition in telecommunications and price reduction could lead to a significantly broader use of the Internet and information technologies in the CR. Moreover, the CR's legal regulations must be reviewed if the conditions for a more rapid spread of ICT are to be improved. In mid 1999, a law on digital signature was passed. However, other legal regulations must be put in place to ensure development and reliability in the use of ICT (a new telecommunications law, regulations concerning the exchange of data within public administration and with foreign countries, providing for the security of information systems and data, certification etc.).

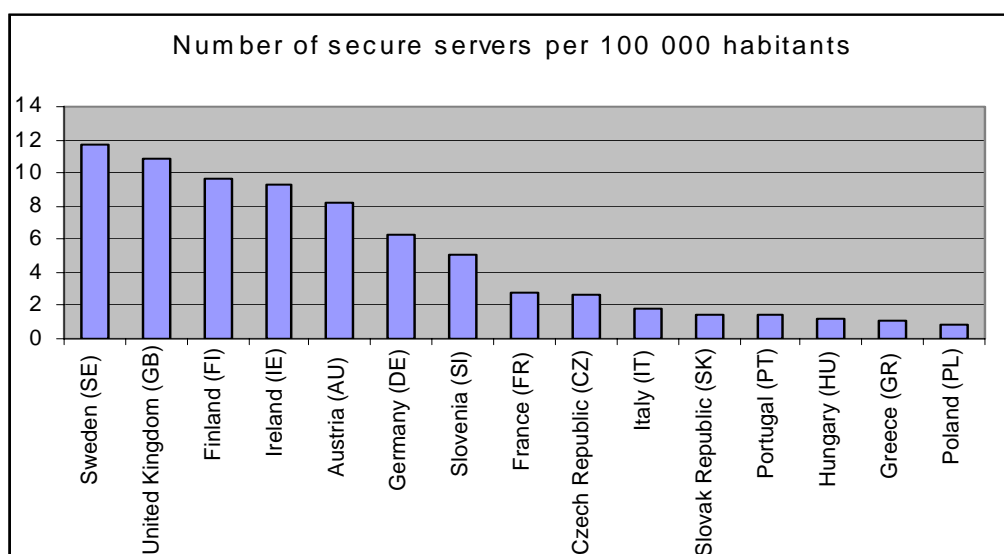
Practical experience of e-business in the Czech Republic shows a speed of development comparable to that in the developed world. The number of so called secure servers is higher than in Eastern Europe however it is still very low in comparison with some EU countries.

---

<sup>5</sup> Source: Zlatuška, J.: Problémy informatizace a komunikačních technologií in Sborník analytických studií pro Strategický program sociálního a ekonomického rozvoje (Problems of Information and Communication Technologies, in Collection of Analytical Studies for the Strategic Programme of Social and Economic Development) CR, RASES, 2000

<sup>6</sup> It is lower in real terms, since it is overvalued due to relatively high ICT prices in the CR.

Chart 1.4



Note: Secure servers for e-commerce provision

Source: SSL Server Survey January 2001, <http://www.netcraft.com>

The number of Internet hosts in the CR amounted to 9 per 1,000 inhabitants in July 1999. It is obvious from an international comparison that this figure approaches that in Spain and Italy and is similar to that in Hungary and higher than that in Poland, despite the fact that the use of the Internet is substantially cheaper in these countries. Full liberalisation of the communications market in 2002, which will hopefully bring about cheaper services, could constitute another impulse for expansion of the use of the Internet in the CR.

Surveys in the CR show that the Internet is largely used in employment (over 70%). Internet is used in households and in schools to a lesser degree. The access of rural population to the Internet is so far very limited, although this very tool could be the fastest provider of important information. According to a survey conducted in 2000<sup>7</sup>, only 27% of citizens and approximately one half of companies located in small towns use the Internet. Obstacles to its wider use include high costs of installing and operating the Internet and a low level of computer literacy (40% of people cannot use a computer). Another obstacle to a wider use of information obtained via the Internet (especially from abroad) is an insufficient knowledge of foreign languages.

ICT development should be promoted more by efficient government programme measures. State information policy is provided for and co-ordinated by a Government Council for state information policy and in co-operation with the Office for State Information System. An Action Plan for State Information Policy has been drawn up in 2000 for a period of two years. Three framework programmes have been formulated:

- 1) Information literacy (this programme is elaborated in the form of an Outline of Information Policy in Education - see chapter 3.1),
- 2) Electronic business,
- 3) Electronic public administration.

They contain specific aims to be addressed by governmental bodies and individual ministries in preparing legislation, institutional environment and measures or by means of projects in priority areas. However, insufficient financial resources have been earmarked for these purposes and, at the end of 2000, the action plan was in a delay. Many IT projects are

<sup>7</sup> Information Needs of People Living in Small and Medium-Sized Estates, The National Library of the CR, Dema, a.s., 2001, <http://www.aib.sk/infos/infos2001/05.htm>

therefore often only based on private activities and initiatives. There are also numerous non-profit associations promoting the development of Internet.

### Small and medium enterprises

Small and medium enterprises (SMEs) have been rapidly developing in the Czech economy since the early stages of transformation, that is since the so-called small-scale privatisation which allowed Czech entrepreneurs to become the owners of establishments without the need for much external capital. They have been receiving further support through state-run programmes that facilitate access to credit, provide consultancy, offer subsidies for creating job opportunities and promote export. SMEs have been the main driving force in the labour market flexibility in the Czech Republic, especially in the service sector. This sector has been absorbing the labour force released from industry and therefore also helping to maintain low unemployment during the initial period of economic reform. The emergence of small firms increased the demand for craftsmen.

Government support for SMEs still remains insufficient. One chronic problem is deteriorating access to financial capital. Small companies also have reduced room for doing business due to burgeoning bureaucracy (as compared to what is common in Europe) which affects them much harder than large companies<sup>8</sup>. There is insufficient support for research and development in SMEs, which should be expanded to also cover the area of the transfer of technologies and their use in SMEs.

As of the end of 2000, SMEs<sup>9</sup> were employing 59 % of all people working in industry, construction, business, catering and services<sup>10</sup>. The figure is still lower than the roughly 66 % in the EU member states.<sup>11</sup> Small and medium enterprises hold a dominant position in certain industries, both in terms of employment and production (see Table). The growing strength of small and medium enterprises is conducive to job creation. The sector of microbusinesses (own account workers<sup>12</sup>) has been growing steadily even through times of economic recession, and reached a 10.5 %<sup>13</sup> share of overall employment, and provides new job opportunities for some of the workers being laid off by large companies. The whole group of self-employed, containing other categories in addition to “own-account workers,” amounted to almost 14,2 % of the overall employment in 2000 (see also chapter 2.2.1).

**Table 1.2 Share of SMEs in Overall Employment and Outputs, in 2000**

|                          | Share in employment<br>(in %) |             | Share in outputs<br>(in %) |             |
|--------------------------|-------------------------------|-------------|----------------------------|-------------|
|                          | 1998                          | 2000        | 1998                       | 2000        |
| Industry                 | 42,9                          | 46,6        | 34,6                       | 35,3        |
| Construction             | 74,2                          | 78,5        | 68,6                       | 68,8        |
| Trade                    | 83,4                          | 79,9        | 91,0                       | 87,6        |
| Hotels and restaurants   | 86,8                          | 88,9        | 85,6                       | 85,7        |
| Transport                | 21,6                          | 24,1        | 44,4                       | 44,7        |
| Financial intermediation | 23,0                          | 18,7        | 25,2                       | 25,7        |
| Other services           | 83,7                          | 84,6        | 87,8                       | 89,1        |
| <b>Total</b>             | <b>56,4</b>                   | <b>59,1</b> | <b>51,7</b>                | <b>52,9</b> |

Note: SMEs are enterprises with 0-249 employees, including freelance entrepreneurs

Source: Czech Statistical Office, calculations provided by the Ministry of Industry and Trade, 2001

<sup>8</sup> A number of cost items for administrative proceedings are fixed irrespective of the size of the company (e.g. customs proceedings, construction approval, product testing, court proceedings etc.)

<sup>9</sup> As recommended by the European Commission, small and medium enterprises have been defined as companies with less than 250 employees since 1997.

<sup>10</sup> As of 31 December 2000, Czech Statistical Office

<sup>11</sup> Fifth Annual Report, The European Observatory for SMEs, 1997

<sup>12</sup> See chapter 2.2.1

<sup>13</sup> As of 4 Q. 2000. Source: Labour Force Survey, Czech Statistical Office, 2001

SMEs are becoming increasingly involved in foreign trade operations, although there are still considerable drawbacks as regards their orientation in foreign markets and the area of marketing. In 2000, the share of SMEs in export was 36% and in import 49 % and this is stagnating last years (higher share in import relates to the fact that many SMEs provide services in the sphere of retail trade).

SMEs are dynamically developing thanks to their capacity to fill gaps in the market. Unlike the situation in developed countries, however, they are only able to use modern technology to a small degree. There are hardly any small companies focusing on the application of research findings, in particular so-called “spin off” enterprises which, in many countries, constitute an important component of technical progress.

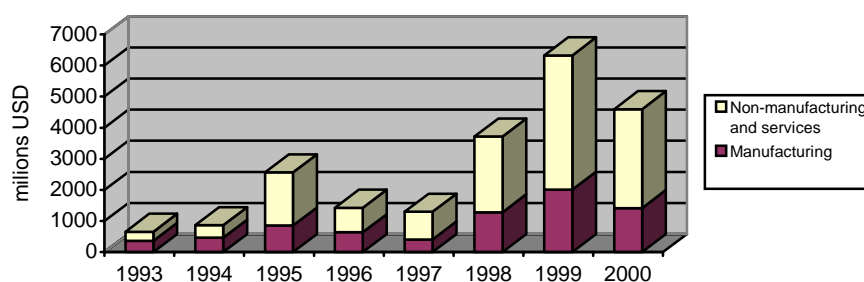
### Foreign direct investment

**Foreign direct investment** plays an increasing role in the Czech economy. Among the other Central European transition countries, the CR finds itself one of the leading places as regards the volume of FDI per capita. In the period 1993 – 2000, the FDI inflow reached 21,4 millions USD. The government has taken several steps in the past three years that have significantly improved the investment climate. The Act on Investment Incentives<sup>14</sup> has been passed and moreover the Ministry of Industry and Trade is running a programme to support industrial zones and the Supplier Development programme. The following is understood to include investment incentives: tax rebates, subsidies to cities for technical infrastructure, subsidies for new workplaces and subsidies for the retraining of employees. Incentives are aimed at either new enterprises or at broadening the work of current enterprises.

As a result of investment incentives and starting economic recovery, the flow of foreign direct investment into the CR increased by 88 % in 1999, greatly outpacing the world-wide trend (the CEE countries registered a mere 9 % increase). In 2000 the FDI inflow softened however kept its robust size (4,6 millions USD).

**Chart 1.5**

**Development of Foreign Direct Investment (1993-2000)**



Source: Czech National Bank, Statistics, 2001

Note: Till 1997, the FDI data cover investments to fixed basic assets only. Since 1998, the FDI data cover also profit reinvested and other capital forms.

The structure of FDI origin is quite stable. Considering the aggregate volumes since 1990, the first place is still held by Germany with 23 % followed by the Netherlands with 19,3 %. Behind these countries there is a certain gap, followed by Austria 12,6 %.

<sup>14</sup> Act No 72/2000 on investment incentives

Since 1993, the largest part of foreign investment has been allocated into trade, hotels and related services (approximately 18,7%), into financial sector (approximately 16,6%<sup>15</sup>). Among the industrial branches the biggest part fall on the production transport means and electrical engineering (11,4%) and on food products (5,7%). On the contrary, there is a low level of foreign investment in the ownership of companies within the traditional sectors such as textile, footwear, as well as the production and processing of metals and basic chemicals.

As a result of major investment in technology, human resources, work organisation methods and distribution networks, the efficiency of companies with foreign capital is roughly double<sup>16</sup> that of locally owned enterprises. Companies with foreign capital also tend to require a higher quality of labour force than locally-owned ones<sup>17</sup>.

Following the statistical data, 24,6% of companies<sup>18</sup> is currently controlled by foreign capital and it could be estimated that supplier relations link another 25-30% of companies to them. Some studies indicate that the number of joint venture and contracting projects with EU partners is significantly higher in the Czech Republic than in either Hungary or Poland. In addition to FDI, this can also be explained by the large number of medium-scale manufacturers who supply intermediate products to Austrian and German firms across the border.

#### **Expected trends in FDI into the Czech Republic**

- **Growth of FDI in telecommunications:**  
Investment in telecommunications over the past two years has significantly increased. Further striking growth is expected particularly thanks to the liberalisation of telecommunication connections and thanks to the development of mobile telecommunications and wireless data networks.
- **Investment in financial services:**  
FDI is expected to flow into privatisation and the further development of financial and banking services. The sale of Komerční banka, the third-largest bank in Central and Eastern Europe, is expected in the first quarter of 2001.
- **Growth of investment in real estate:**  
Thanks to renewed economic growth, we can expect a further increase of FDI into real estate.
- **Investment in revitalised firms and continued privatisation:**  
Continued privatisation, above all in the area of distribution networks, will bring further FDI. Its first fruits will also bring a revitalisation programme.
- **Greenfield investment:**  
Investment into new manufacturing facilities will further increase thanks to investment incentives. Unlike in previous years, the most advanced industries such as automotive components and electronics have a chance, as well as traditional industries such as precision engineering and textiles. Greenfield investment is increasing thanks also to the arrival of suppliers of large, multinational firms to the Czech Republic. Production in Czech affiliates of companies such as Matsushita, Flextronics and Philips already reaches such a level that it pays for their suppliers to follow them to the Czech Republic.
- **Investment in services:**  
In Central and Eastern Europe, the amount of FDI flowing into services attained record levels, reaching 56 % of total FDI. The Czech Republic does not want to miss this trend and plans to foster FDI into so-called strategic services, such as customer support centres, research & development centres and software development centres. The government is preparing the pilot project on investment incentives for these strategic services.

As part of the admission process, the Commission undertakes periodic reviews of the Czech Republic's progress in becoming a democratic market-led economy (the so-called Copenhagen Criteria). The first of these reviews was released in November 1998 and it

<sup>15</sup> Czech National Bank, Statistical information, 2001

<sup>16</sup> The Theory and Practice of Foreign Direct Investment, a paper from the workshop of the Czech Economic Society, Prague 1999

<sup>17</sup> As sample surveys show, in significant part of foreign companies (39% of them), the highly qualified labour force with tertiary education level forms over 20% of the company staff (average in the whole economy is around 12%).

<sup>18</sup> Statistical Yearbook, p. 361, Czech Statistical Office, 2001



criticised the slow progress made by the Czech Republic in adopting the Community Acquis, although acknowledging that it was broadly moving in the right direction. This was followed by a report with a similar message in October 1999, which highlighted the need to speed up legal and structural reforms and was critical of the slow progress made in passing legislation necessary for harmonisation.

The European Commission's review released in 2000 states the following:

- The CR may be considered as a functioning market economy which should be capable of coping with competitive pressures inside the EU on the condition that the implementation of structural reforms continues.
- Macroeconomic stability has increased. Economic growth has been restored while maintaining favourable inflation figures and external balance. Efforts are being made to enhance transparency in public funding. Progress has been made in the area of restructuring and privatisation of banks.
- In order to promote economic activity, however, it is absolutely necessary to strengthen competition and supervision in the financial sector. The sustainability of public funding in the medium term is not yet secured. It is necessary to continue the privatisation and restructuring of state-owned companies and corporate governance must be improved.
- Institutions must focus on the development of a favourable environment for business activities, primarily in the area of SMEs.

## 1.2 Demography

**The population figures** were relatively stable in the 1990s, although in the second half of this period natural increase changed to natural decrease (from +1.4 in 1990 to -18,1 in 2000<sup>19</sup> due to the birth rate dramatical decline. The economic and social transformation has had an impact on several demographic features of the population. The most prominent of all is the higher age for establishing families and having children.

**The age distribution of the population** varied in the past because of strong population waves in the 1950s and 1970s. However, the proportion of children in the population has been decreasing continuously since the early 1990s. This is not only reflected in lower enrolment in basic schools but also, from 1994, by lower numbers of students enrolling in secondary schools. This is why the number of students in secondary schools fell, compared to 1990, to some 77 % due to demographic and other influences<sup>20</sup> (see Key Indicators – Table 22). This has had an unfavourable impact on the size of schools and the efficiency of their operations. This trend will continue. On the other hand, the decline by some 20 % in the young population aged 20 to 24 years which is expected in the coming five years<sup>21</sup> could have favourable effects on education in the sense that the insufficient capacity of universities to take on students may be improved. The numbers of applicants may be in a better relationship to the number of places available, access to universities will be more open for a larger part of the age group and admission proceedings will be less selective.

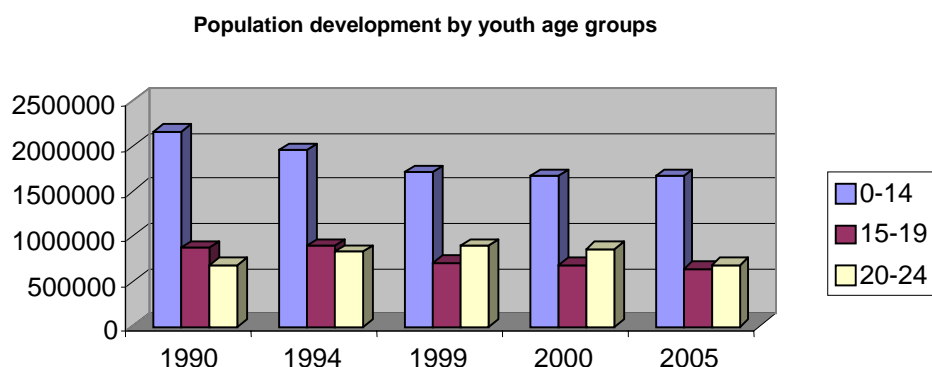
---

<sup>19</sup> Key Indicators – Table 5

<sup>20</sup> most importantly the extension of basic schooling since 1996/97

<sup>21</sup> see Key Indicators – Table 8

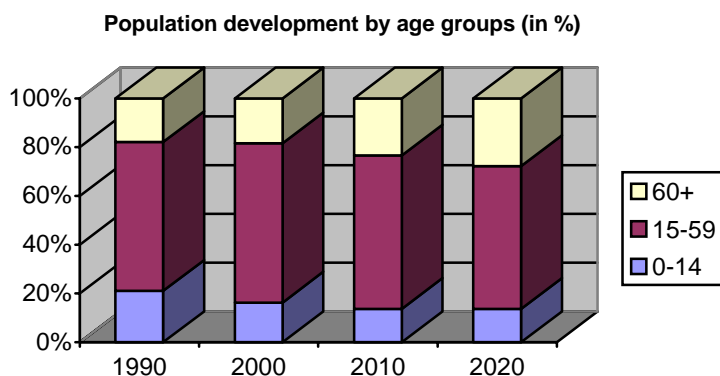
**Chart 1.6**



Source: Key Indicators, Table 7 and 8, National Observatory 2000

The changes in the economically-active population are currently characterised by an increase however, it will gradually slow down and change into a decrease of  $-0.2\%$ <sup>22</sup> in 2003. At the same time, there will be a growth in the proportion of older age groups. Compared to EU countries, where this development is more balanced, the CR will have more difficulties in coping with the process of **population ageing**. This will call for the need to focus education on adults to a much larger degree than has been the case until now, and very quickly to create an efficient system of continuing education for all generations.

**Chart 1.7**



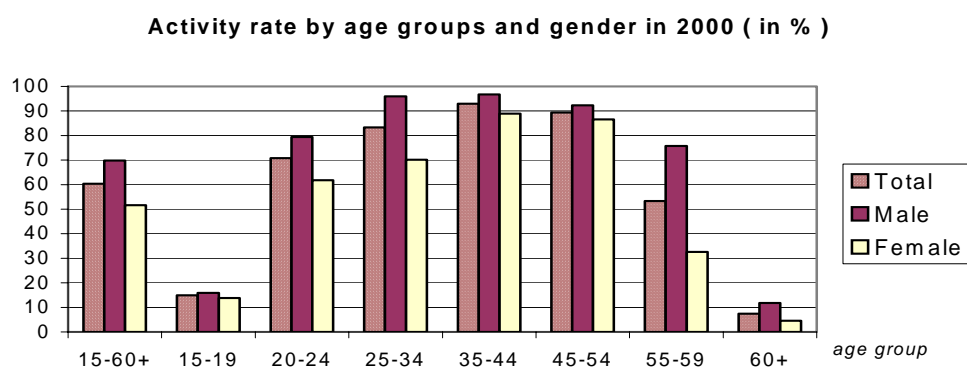
<sup>22</sup> Projections of the Czech Statistical Office, 1999

## 2. Labour market background

### 2.1 Economic activity of the population

**The rate of economic activity** in the CR is traditionally high and has stabilised, after a certain decline in the early 1990s, at around 61%<sup>23</sup>. This figure is still among the highest in Europe. The rate of economic activity is decreasing for young people due to a certain expansion of study opportunities at tertiary level. The extension of compulsory education at basic school by one year has also shifted the age of secondary school leavers. A change in the interest of students from shorter educational programmes in secondary schools in favour of longer “maturita” courses has also changed the age at which school graduates are entering the labour market. Consequently, the most important decline in economic activity was experienced in the 15-19 age group – from 35% to 15% between 1994 and 2000 (see Key Indicators - tables 10, 11). Due to the relatively low standards of living, it is not expected that the interest of other age groups in profit-making activities should decrease in the future – and this is true of economic activity as well.

Chart 2.1



Source: Key Indicators – table 11

**The economic activity of women** remains at a relatively high level and, even at the age of active maternity, is not dropping below 60%. At the age of 35 to 55 years, when most women may fully concentrate on their career, the rate of the economic activity of women is some 87 – 89% and does not differ greatly from that of men. It is expected that the economic activity of women will remain relatively high. Large population groups which have entered child-bearing age will be interested in returning to the labour market in the future. However, various programmes will have to be developed to help them overcome difficulties in terms of qualifications and adjustment, as well as in terms of combining employment with child care.

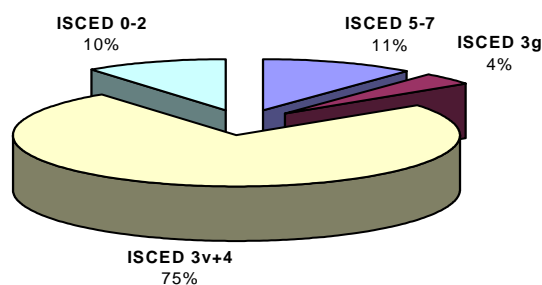
**The education distribution of the population** is marked by a relatively higher proportion of secondary education (more than two thirds of the population over 15 years). Statistical data, as well as data from comparative sociological surveys, show, however, that the education structure of the Czech population is improving, although the speed of this improvement is much lower than that in developed countries, particularly in the countries which have been going steeply up the competitiveness scale. The CR has gradually lost its originally decent position as regards the proportion of the population with a higher level of education, while comparable countries the competitiveness of which has been on the rise for several years, have been aiming for the top in this respect. While the CR’s position, in terms of education

<sup>23</sup> The rate of economic activity in 2000 was 60,4%. Calculated as a proportion of the economically active in the population aged over 15. Source – Key Indicators, table 11 in Annex; National Observatory

structure in the oldest age group (over 50 years), has been quite good (better than Ireland and close to Finland and the Netherlands), its position is almost ten points lower in the youngest age group (up to 35 years). The major deficit occurs particularly in the area of tertiary education<sup>24</sup>.

**Chart 2.2**

**Structure of active population by educational attainment in 2000**



Source: Key Indicators – table 9

Since the change in the education structure of the population associated with overall modernisation has been much less radical than that in developed countries, this has also had an effect on children's opportunities for achieving higher levels of education than their parents (**educational mobility**). The likelihood of a son achieving a higher level of education than his father (or of a daughter achieving a higher level of education than her mother) has gradually been decreasing in the CR. This likelihood is among the lowest in Europe in the youngest generation. While, in OECD countries, an average of 35% of men in the youngest generation achieved a higher level of education than their fathers<sup>25</sup>, this was only 26% in the CR. Women are not faring that much better. Within the youngest generation of women in OECD countries, an average of 45% of women achieved a higher education than their mothers<sup>26</sup>, this was only 31% in the CR.

The functional **adult literacy of the Czech population**, i.e. the capacity to work actively with information and, in this way, to apply the knowledge gained, is showing certain peculiarities in comparison with other countries. Only a small part of the population is achieving very low levels of literacy, the proportion of those with medium levels is dominant and there is a relatively low proportion of people who are achieving top levels of functional literacy. Sociological surveys have shown<sup>27</sup>, however, that there are disproportions between the levels of individual skills. Czechs have below average standards of prose literacy, i.e. the capacity to work actively with information contained in an ordinary text. In this respect, the CR is one of the countries with a relatively great disadvantage. The CR is slightly above average as regards document literacy, i.e. the capacity to work with documents, questionnaires and forms. Czechs rank among the top countries in the world in terms of quantitative literacy, i.e. the capacity to manipulate numbers, apply arithmetical operations and understand numerical applications, graphs etc.

## 2.2 Employment

In the course of the 1990s, there have been radical changes in the labour market which have concerned both the development and structure of employment. Overall employment dropped

<sup>24</sup> Secondary International Adult Literacy Survey (SIALS) – OECD, National Report, Prague 1999

<sup>25</sup> for comparison, this likelihood is 47% in Ireland and 42% in the Netherlands

<sup>26</sup> for comparison, this likelihood is 56% in Ireland, 51% in Finland, 60% in the Netherlands

<sup>27</sup> Secondary International Adult Literacy Survey (SIALS) – OECD, National Report, Prague 1999

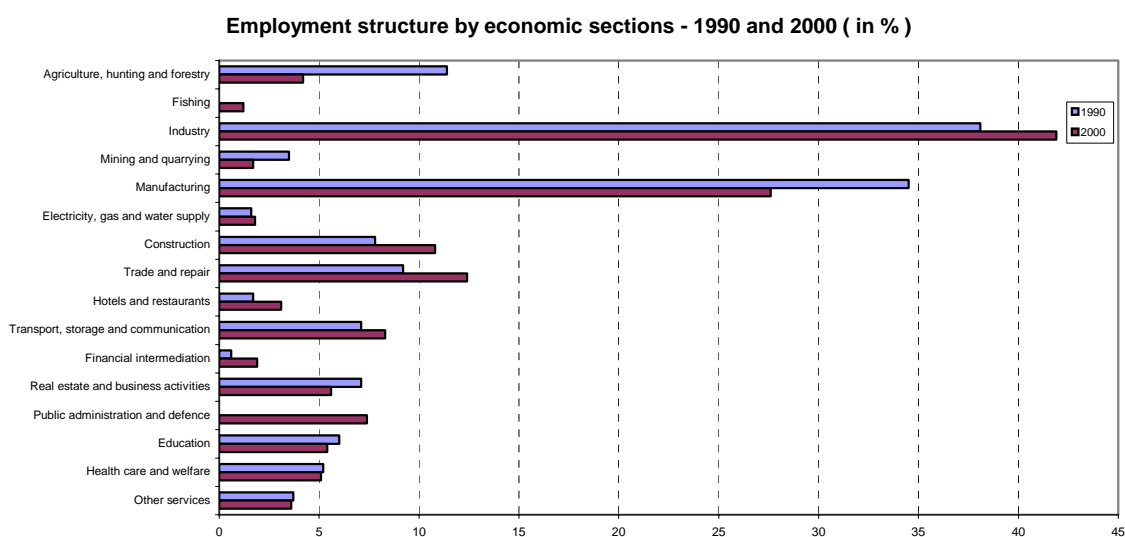
by some 10% during the first years of transformation, due to a transformation recession. However, the rate of unemployment did not exceed 4.5% thanks to a strong outflow from the labour market of people of post-productive age and a decline in the economic activity of women. During 1994-96, employment began to increase again because of economic growth and the preservation of outdated, work-demanding technologies in companies (by an average of 0.7% per annum). Since 1997, employment has been decreasing continuously by an average of 1,0% per annum (see Key Indicators in Annex, Table 13).

The proportion of hidden (grey) employment increased considerably during the 1990s – including illegal workers from abroad. Hidden employment is generating also by the high level of the labour force taxation and social security payment paid both by employers and employees. This influences employment especially in SMEs sector and some parts of construction and tourist sector. The official foreign employment has stabilised in recent years thanks to tighter work permission regulations. The employment of Czech citizens abroad has decreased significantly compared to the early 1990s, and does not represent any important group within the structure of employment.

### 2.2.1 Structural changes in employment

**Structural changes** in the 1990s mainly occurred **at an inter-sectoral level**. Due to an excessive share of primary and secondary sectors in the economy, some 366,000 employees from agriculture and 580 000 employees from industry had to leave their jobs. On the other side some 355 000 jobs in the sector of services which were insufficient arose. These structural changes took place in two waves conditioned by the economic cycle, namely in the recession of 1990-93 and further in 1998-2000. The share of agriculture and forestry has fallen to a level comparable with that in the most EU countries. The share of secondary sector workers have decreased substantially (specifically in mining and in most manufacturing branches). In 2000 the service sector was already predominant with a 55,4% share in employment. Employment continued to grow particularly in trade, public administration, business activity services, hotels and restaurants and financial intermediation (but in the two latter industries with signs of stagnation). However, no less important are shifts of employees between dampened and expanding industrial branches. In the expanding industrial branches such as production of electrical machines and devices, rubber and plastic products, motor vehicles, radios, TV and communication equipment and devices over 20 000 jobs were created.

Chart 2.3

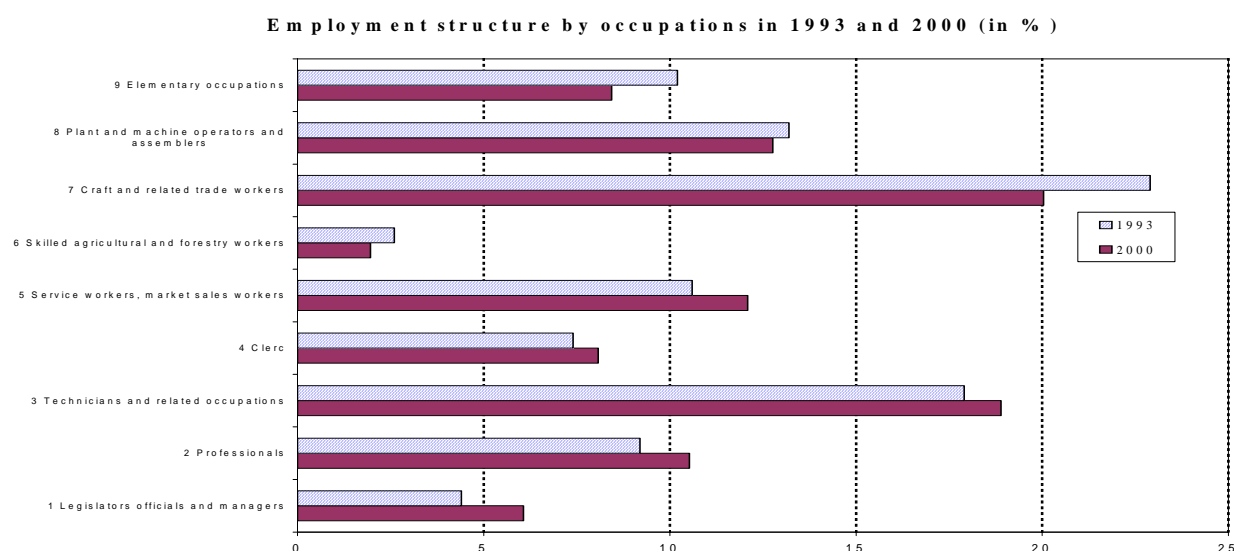


Source: Key Indicators – table 14  
 Note: in 1990, without defence

Despite these large changes in the structure of the labour force, the share of employment in industry and construction is excessive (together about 40%) as it does not comply to international standards calculated in relation to economic level or GDP per head. The deviation of employment in industry and construction from the level of developed countries is considerable – this means that there is still a space for larger shifts between industry and services in the future.

Following sectoral changes in the economy, there have also been important changes in the **professional structure of employment**. In addition to quantitative changes, there have been qualitative changes concerning job contents, the technologies used and labour organisation. What is particularly evident is the overall decline in the proportion of people in manual professions (a decline of over 4 percentage points between 1993 and 2000). The tightening of the requirements for employee qualifications has become evident, particularly in the decrease in the number of job opportunities for elementary occupations - which dropped by one quarter over the 1990s. On the other hand, the professions experiencing the most rapid growth include managers, professionals and service and market workers.

**Chart 2.4**



Source: LFSS 1999 September – November; CzSO  
 LFSS 2000 Q4th; CzSO  
 National Observatory

In view of the fact that new jobs have been created, particularly in small and medium-sized companies, the proportion of this sector in employment has increased considerably (for details, see chapter 1). While, before 1989, almost all economically-active people were employees, during the transformation period a strong new group of **self-employed persons** has emerged, primarily private entrepreneurs, owners, own-account workers and family workers. The share of self-employed (including members of production co-operatives and others<sup>28</sup>) make up 14% of the work force that is higher than in many EU countries. Two different trends are being reflected in the development of this group. One of the trends is that, during periods of economic downturn and redundancies in large companies, a certain percentage of employees become involved in independent business activities (own-account

<sup>28</sup> **The Self-employed** (working in own business) – comprise all **employers** (entrepreneurs with employees), **own-account workers** (entrepreneurs without employees), all **members of producer's or agricultural co-operatives** (employees of these co-operatives do not fall in this group) and **contributing family workers** (irrespective of the number of hours they worked during the week).

workers) as another possibility for activity in the labour market. In periods of economic growth, the increase in the numbers of self-employed persons is stimulated by favourable business conditions due to growing demand for production and services. The highest proportion of self-employed is in the services and construction sectors (see Table below ). Those fields dominate which are less demanding in terms of qualifications. There is a smaller proportion of activities which are demanding in terms of qualifications – this is also linked to the absence of minute companies using research applications (spin-off companies – see chapter 1).

**Ratio of Self-employed to the Total Number of Employed by type of economic activity (NACE) (in %)**

| Czech Republic                                     | 1993       | 1996<br>Spring | 1997<br>II.Q | 1998<br>II.Q | 1999<br>II.Q | 2000<br>II.Q |
|--|------------|----------------|--------------|--------------|--------------|--------------|
| <b>Total</b>                                       | <b>9,0</b> | <b>11,3</b>    | <b>11,8</b>  | <b>13,3</b>  | <b>13,8</b>  | <b>14,2</b>  |
| Agriculture and forestry                           | 7,8        | 12,2           | 12,5         | 14,7         | 14,6         | 16,6         |
| Mining and quarrying                               | 0,7        | 1,0            | 1,1          | 1,3          | 1,3          | 1,4          |
| Manufacturing                                      | 4,3        | 5,1            | 5,8          | 6,3          | 6,8          | 6,1          |
| Electricity, gas and water supply                  | 2,8        | 2,8            | 3,1          | 3,1          | 6,0          | 4,7          |
| Construction                                       | 16,1       | 19,0           | 20,2         | 25,7         | 29,0         | 30,7         |
| Trade, repair of motor vehicles and consumer goods | 21,3       | 24,3           | 24,1         | 26,0         | 25,7         | 27,6         |
| Hotels and restaurants                             | 15,1       | 16,7           | 15,9         | 16,4         | 18,1         | 20,1         |
| Transport, storage and communications              | 7,7        | 8,6            | 8,3          | 10,6         | 10,1         | 11,1         |
| Financial mediation and insurance                  | 2,3        | 6,6            | 6,6          | 9,5          | 9,6          | 11,9         |
| Real estate, renting and business activities       | 24,5       | 31,1           | 33,2         | 31,6         | 32,2         | 33,3         |
| Public administration and defence                  | 1,4        | 0,9            | 0,8          | 0,4          | 0,9          | 0,7          |
| Education  | 1,2        | 1,3            | 0,9          | 1,5          | 2,1          | 2,1          |
| Health and social work                             | 4,5        | 6,6            | 7,0          | 8,1          | 7,3          | 8,4          |
| Other community social and personal service        | 17,1       | 16,9           | 19,5         | 25,7         | 23,9         | 25,8         |

*Source:* Employment and Unemployment in the Czech Republic as measured by the Labour Force Sample Survey, Czech Statistical Office. (Calculation produced by the National Observatory).

The development of the employment structure in the 1990s and its projections confirm a **strong trend towards increasing labour force qualification requirements**. The employment prospects for people with low qualifications have been constantly deteriorating. Job opportunities for the low-qualified are not only being reduced rapidly by new technologies – if their number remains the same (for example, in trade or catering), these positions are being filled, preferably by cheap foreign labour.

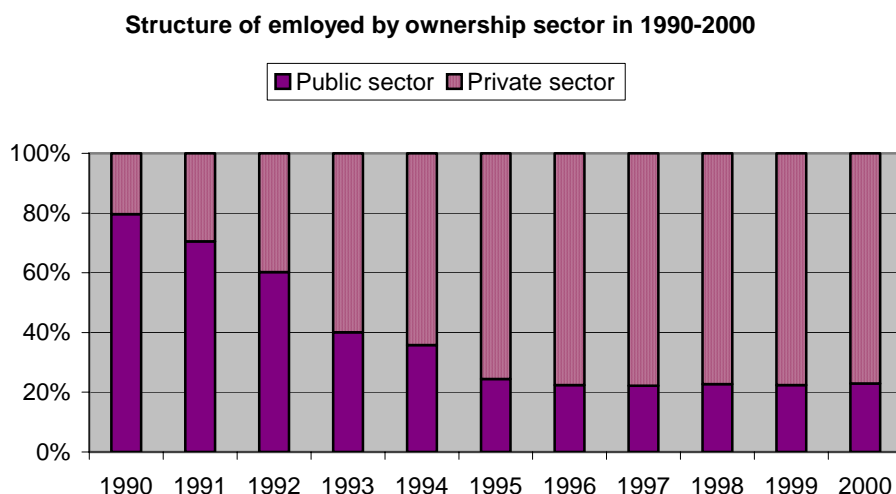
The growing proportion of the self-employed suggests that the expansion of the content of VET by certain elements of management and business (many schools have innovated their programmes in this way) has been a progressive move, which ensures graduates from these programmes a more stable position in the labour market in the long term.

The **increase in the number of job opportunities** in the services and production sectors, demanding in terms of qualifications, has resulted in an increased demand for secondary school graduates and, in particular, for experts with a university education. Now there are already structural deficiencies in terms of covering the demand for specialists in business and financial transactions, and in the electrical engineering sectors and communication technologies. Changes in the organisational structures of companies and the enlargement of the sector of SMEs have given rise to the need for managers at all levels with modern management skills. The **reduced number of job opportunities** in industrial production and investment in machinery have resulted in a lower number of jobs for skilled workers, particularly in traditional sectors such as metal processing, wood-working, heavy engineering, textiles, clothing and footwear production.

## 2.2.2 Employment in the private sector

Before 1989, the Czech Republic ranked among those countries of Central and Eastern Europe with hardly any private sector. If there were non-state companies in the services sector or in agriculture, these were mostly co-operatives. The proportion of the non-state sector (including co-operatives) in employment was some 20% in 1990. The very fast pace of privatisation (for details, see chapter 1) increased the non-state sector's share in employment to almost 78% in 1996. In view of the fact that most of the original co-operatives were dissolved, the non-state sector was almost exclusively represented by private or combined-ownership companies. From 1996, the proportion of the non-state sector in employment remained unchanged, due to the slowing down of privatisation. Another radical increase in the proportion of the private sector in employment cannot be expected, since the privatisation process has been largely completed. On the contrary, there may be a reduction in the number of jobs in that part of the private sector which is in the hands of domestic owners, since these companies have, so far, had a doubly low labour productivity compared to foreign producers – i.e. twice as many employees (overemployment).

Chart 2.5



*Note: Private including co-operatives, associations, mixed ownership*  
*Source: Key Indicators – table 12*

As regards qualification requirements, the dividing line in the business sector is not drawn between state and private companies – there are differences between companies which are owned by Czech owners and companies which are controlled by foreign capital. Foreign companies have substantially higher demands for staff qualifications (see chapter 1.1 – the part concerning foreign direct investment). They are also able to reward their staff far better in financial terms, so that the average wages in these companies are 15 – 40% higher than the national average. A further inflow of foreign capital and an increase in its influence on the domestic sector of the economy will strengthen demands for higher qualifications even further.

## 2.2.3 Employment opportunities for graduates from educational institutions

The position of graduates from educational institutions on the labour market is very sensitive to economic changes and the development of demand for labour and, therefore, was changing in the course of the transformation of the Czech economy. As the overall employment rate



was rising in mid 1990s, employers were interested in hiring school graduates because of their better flexibility and more up-to-date knowledge in comparison with older employees, including computer and language skills. The still low demand for technological changes and the slow pace of restructuring of companies also contributed to this situation. As economic problems of companies increased and competition in the labour market became tougher towards the end of the 1990s, the willingness of employers to recruit school graduates was considerably reduced.

The reason for unwillingness to employ school graduates which is most frequently cited by employers is their lack of practical experience. In order to increase chances of graduates in the labour market, various educational programmes include work placements in companies so that the students may be acquainted with the real work environment. Unfortunately, this is not yet a priority for many schools. For example, around 65% of students at secondary vocational schools do not enter a real workplace in the course of their studies. When recruiting school graduates, employers assess their relevant professional competencies and, particularly, their key competencies. Graduates are expected to show willingness to learn, to take responsibility, to work in a team, to show commitment and to be loyal to the employer<sup>29</sup>. Computer and language competencies are not yet widely used in employment - three quarters of school graduates stated in a survey conducted by the Czech Statistical Office (CSO)<sup>30</sup> that these skills were not relevant in their first job. However, employers who do require such skills are not entirely satisfied with their standards. As regards problems with communication and co-operation within a team and language skills, graduates from engineering, construction and business courses (mostly secondary vocational school leavers without „maturita“) have most difficulties.

The methodology for measuring **unemployment among school graduates** is not fully comparable with methodology for unemployment rate calculations used by the CSO or MoLSA. In the case of graduates, the so-called „rate of failure“ is monitored<sup>31</sup>. According to this ratio, unemployment most afflicts graduates from lower levels of education (particularly secondary vocational school graduates without „maturita“ - 26%), while unemployment among graduates from higher professional schools and universities ranges between 5 and 11% (see chart 2.6). However, this ratio is distorted in the case of basic school and *gymnázia* leavers since most of them go on in their studies. A certain distortion may also appear in the case of graduates from secondary technical schools with „maturita“ who also have a direct access to tertiary education.

Unemployment among graduates from social sciences at all levels is generally lower as compared to engineering disciplines. This is despite the fact that, in addition to demand for experts in IT, employers, labour offices and recruitment agencies also express great demand for specialists in mechanical and electrical engineering (see chapter 2.5). There is an unfavourable situation for graduates from courses in agriculture. Their numbers are still high and do not correspond with the receding importance of agriculture in the economy and employment. Conversely, graduates from courses in mining and metallurgy are not among those strongly affected by unemployment despite the fact that these fields are being phased out. This is due to a very low interest in these courses and a negligible number of graduates. The labour market is quite rapidly absorbing graduates from courses in business and services. This also applies to graduates from educational programmes which combine professional

---

<sup>29</sup> Employers' Needs and Preparedness of School Graduates for the Labour Market, a sample survey 1998-2000, Institute for Information on Education

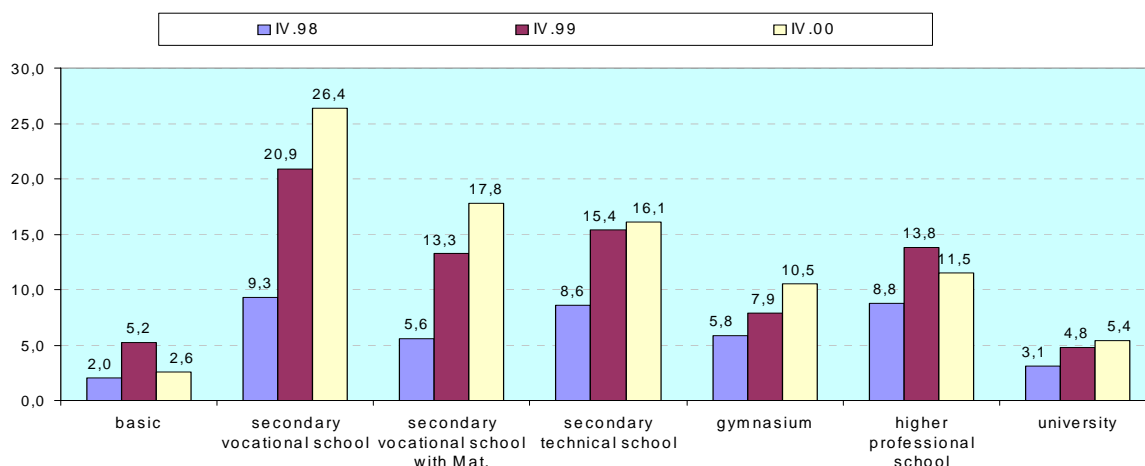
<sup>30</sup> An ad hoc module about the situation of school graduates on the labour market in the CR – implemented by the CSO on the basis of no. 1925/1999 Directive of the EU

<sup>31</sup> The source is data monitored by the MoLSA and the MoE about school graduates. Based on this data, the unemployed are related to the overall number of school graduates irrespective of whether they enter the labour market upon graduation or continue in some form of studies. The relation shows the rate of failure of graduates in the labour market or in the studies. At present, a methodology is under preparation for a more precise calculation of the rate of unemployment among school graduates.

competencies with entrepreneurial skills. In terms of levels of education, there is still unsaturated demand for specialists with university degrees. The proportion of university graduates who are unemployed is low and runs around the natural rate of unemployment.

**Chart 2.6**

**Ratio between unemployed graduates and total number of school graduates (in %)**



Source: Unemployed school graduates, April 2000, MoE

The period of **time graduates spend seeking their first employment** depends on their level of education. Although, on average, almost half of school graduates find their first job within three months, two thirds of young people with basic education remain jobless over six month. University graduates mostly find employment shortly after graduation (two thirds). Also, the stability of the first employment rises along with the level of education achieved<sup>32</sup>. Approximately 70% of graduates find their first **job in the field they studied**. Some 22%<sup>33</sup> of graduates, however, hold jobs which do not or only slightly correspond with their education. Women experience more difficulties than men in finding appropriate employment in the respective field. It is also women who more often show interest in working in a different field than that they studied. Graduates from courses in agriculture are those who most often take jobs in different fields since the supply of jobs in agriculture is low. This is also the case of graduates from mechanical engineering and construction courses - here a more important role is played by the lack of interest in the discipline studied. When seeking a job other aspects are also considered, such as work, social and pay conditions which may be more favourable in other disciplines. Around half of graduates from professional courses focused on business do not seek employment in their field at all, since business or management require prior practical experience. On the other hand, they have relatively good chance of finding a job as they mostly have professional skills and the entrepreneurial skills they have acquired may, after a certain time, increase their flexibility in the labour market.

Graduates experience serious difficulties when finding employment particularly in certain regions where the overall unemployment is accumulated (Nothern Bohemia, Nothern Moravia), but also in the Brno or Olomouc regions. The most favourable situation in this respect is in Prague.

<sup>32</sup> An ad hoc module about the situation of school graduates on the labour market in the CR – implemented by the CSO on the basis of no. 1925/1999 Directive of the EU

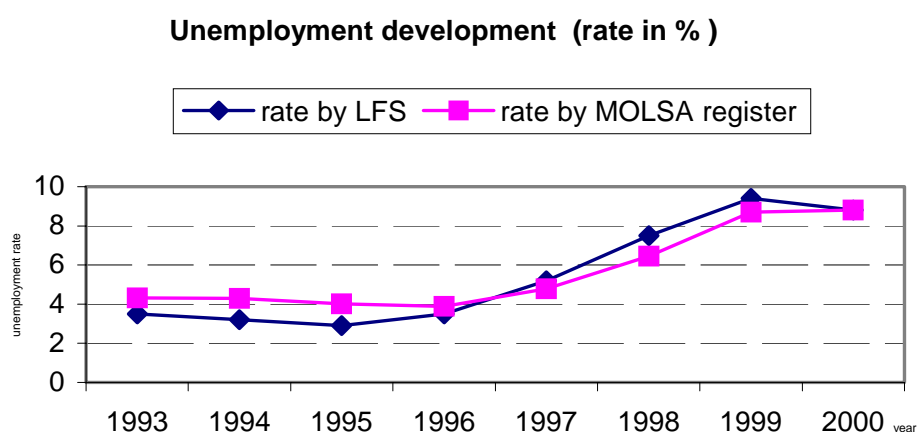
<sup>33</sup> Vojtěch, J.: A survey of the position of school graduates in the labour market – 2000. A background study within the project „Employment of School Graduates: Analysis and Outlook“. Institute for Information on Education, 2000.

**Underemployment** is not, as yet, one of the pressing problems facing young people in the labour market. Part-time jobs are generally not very frequent (which accounts for some 5% of total employment) and this reflects the quite considerable rigidity in employment – which is currently favoured even by employers. Moreover, there is a legal regulation which makes it impossible to conclude a temporary employment contract with a school graduate – only a permanent contract with common notice terms. This, on the one hand, works as the social protection of young people, but on the other hand it demotivates employers who cannot test the qualities of the young person during a probation period.

## 2.3 Unemployment

From 1997, the rate of unemployment increased radically and, at the end of 1999, the unemployment reached 9.0%<sup>34</sup>. After an increase in January to 9.8% the rate of unemployment gradually fell in the course of 2000 and amounted to 8.8% at the end of the year. In those regions most stricken by unemployment, the registered rate of unemployment reached level of 15% (NUTS 2 - Ostravsko 15,1%, NUTS 2 - North-West Bohemia 13,8%, including Ustecko region 16,1%.) With the exception of Prague, the relation between the regions affected the least and the most by unemployment is 1:2. However, there are far larger differences between various districts, which is the consequence of the uneven development potential of individual territories, the accumulation of ineffective production and its phasing out in certain places. Differences in the rate of unemployment between districts are increasing, and this trend is supported by a very low level of the inner-regional mobility of the population. The population in these regions must therefore be provided with some kind of assistance so that a substantial number of the people manage to cope with the loss of their original professions and re-train for new jobs. Moreover, it is important to improve the general level of education and labour flexibility in these declining regions, so that they become more attractive for important investors bringing modern technologies, new jobs and, as a result of this, social stability in the region.

Chart 2.7



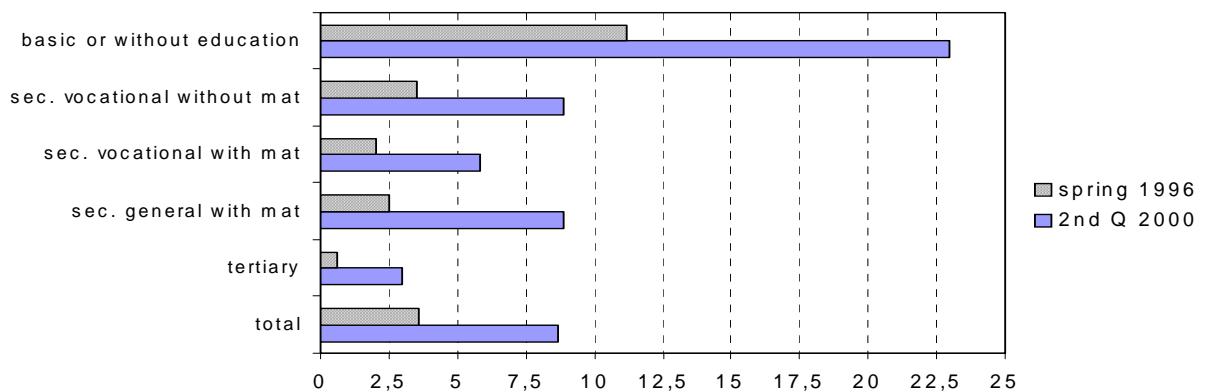
Source: Key Indicators – table 16

<sup>34</sup> Data for 4<sup>th</sup> Q. 1999, Labour force survey

**Disadvantaged groups** are being pushed out of the labour market and the gap between the rate of unemployment in these groups and that of the average population is still opening up. Groups at risk primarily include young people after completion of their schooling, women with small children, people with low qualifications and the disabled. While in 1993 labour offices registered 10.8% of the disabled and 12.9% of school graduates as unemployed, these proportions were 12.9% and 12.7%<sup>35</sup> respectively at the end of 2000. The rate of unemployment among young people is growing most rapidly in the 15 – 19 age group, i.e. after the completion of basic or secondary school. Unemployment in this age group is more than four times higher than that of the average population and has reached nearly 34%<sup>36</sup>. This dangerous trend, which represents a threat in terms of the development of socially and psychologically unacceptable habits, must be prevented by establishing conditions and developing programmes facilitating the transfer from school to employment, promoting co-operation between schools and companies, creating jobs for school graduates and developing special training courses for young people with low qualifications.

**Chart 2.8**

**Unemployment rates by educational attainment level**



Source: Labour Force Survey, Czech Statistical Office, 2<sup>nd</sup> Q 2000

Unlike the most European countries, the older people (after 55 age) in the Czech Republic do not suffer by the high unemployment. The unemployment rate in this population age group is more than 4 percentage points lower than average. (see Key Indicators, table 17). However this is not a sign of their favourable position in the labour market, because unemployment has been rising even in this group. The older people often solve their job losses by an early retirement, as it was the case in the 2000 when early retired persons make up nearly 60% of new pensioners. This is costly for the state budget and therefore the pension law amendment with financial penalty is under preparation.

The increase in **long-term unemployment** is also a matter for concern. While in 1994 labour offices registered only 20.8% of job seekers for more than one year, this was more than 38%<sup>37</sup> at the end of 2000. Besides disabled people, the most frequent representatives of the long-term unemployed group are young men after the completion of their education and after the completion of their military service, who have a basic education or have been trained in the manual professions. This social group represents the major problem in the long-term unemployment of men. As concerns women, the major problem in terms of long-term

<sup>35</sup> Data of the MoLSA

<sup>36</sup> Key Indicators – Table 17

<sup>37</sup> Data of the MoLSA

unemployment is in the 30-39 age group, i.e. mothers after the completion of their maternity leave. Another problematic group consists of women aged 40 to 55 who have lost their jobs – particularly in regions with a large proportion of textile, clothing and footwear industries.

The **Romany population** - which mostly combines the various disadvantages - suffers, according to estimates, from an average 70% rate of unemployment<sup>38</sup>. Solutions to this situation require new concepts of support schemes linking, in a comprehensive manner, measures in the area of education with those promoting employment. Various schemes for the disabled will also have to be expanded. Such schemes should promote education as well as establish conditions for the employment of this group, including motivating employers to hire these people.

## 2.4 Labour market policies

The employment policy is implemented by Labour Offices in individual districts. They provide employment brokerage, pay unemployment benefits to the people, implement measures within the framework of an active employment policy, provide guidance services and monitor and analyse the labour market. After creation of the new administration regions, 14 designated labour offices were charged by co-ordination of employment policy at regional level. However they have no decision functions.

**Instruments of the active employment policy** include:<sup>39</sup>

- Support for the creation of jobs for disadvantaged groups. Employers are subsidised by Labour Offices to create new jobs, or these subsidies are given to the unemployed as soon as they start independent profit-oriented activities;
- Support for the employment of low qualified labour, where employers are reimbursed a part of workers' salary after a certain period of time;
- Support for employment of the handicapped, where employers are subsidised by Labour Offices to create new jobs in so called sheltered workshops;
- Two types of retraining courses which are generally organised: specific, for specific professions with a concrete promise of employment by the employer, and non-specific, without any promise of employment, where course participants are trained to acquire skills which increase their chances on the labour market.
- Special attention is paid to school leavers, where employers are subsidised by Labour Offices after a certain period of time to cover salary costs related to school leavers' employment. Thus, after finishing school, young unemployed people can acquire at least basic practical experience and consequently increase their chances of finding permanent employment.

A new measure, effective from 2000, which is being implemented by labour offices is the system of investment incentives in regions where the rate of unemployment is higher than the national average. Investment incentives in the form of financial support are provided in order to create new jobs and to re-train new recruits.

**Career Guidance Centres** play a significant part in Labour Offices' activities. They assist people (e.g. a graduate) in the choice of a career and of a suitable educational institution where he/she could be subsequently prepared for such career, based on the abilities and interests of the person and based on the available information on the labour market. These services are provided to all people interested in choosing a career, perfecting, extending or changing their profession. The employees of these centres are in constant contact with

---

<sup>38</sup> The Report about the Situation of the Romany Community in the CR, Government Office of the CR, 1997

<sup>39</sup> Employment Services in the Czech Republic, Ministry of Labour and Social Affairs, Prague 1996.

educational institutions in the region, they monitor offers of study branches at individual schools. Special attention is paid to the final years in basic schools. The provision of career guidance, however, has to be more tailor-made, focused on younger students and develop complex methods of ability testing and career planning. Therefore a new network of the “**Centres de bilance**” was set up<sup>40</sup> in all NUTS 2 regions. The Centres provide psychological diagnoses and work out individual career plans, including counselling services. According to a special questionnaire survey at labour offices, which was conducted within Country Monograph in 2001, only 27% of labour offices use diagnostic services and co-operate with the relevant specialised centres for the present.

Labour offices have **relatively extensive powers** in the area of implementation of employment policy within various legislative frameworks. They may decide about the distribution of the total amount of resources for active employment policy (AEP) among various measures, depending on the needs and situation in the relevant district. On the one hand, this facilitates a flexible response to the development in the regional labour market, on the other hand, however, there are inequalities in the activity and outputs of individual labour offices. Many of them even fail to use appropriately the existing instruments of active employment policy and, conversely, some labour offices lack a broader range of AEP statutory instruments. This is also linked to the problem of non-existence of rules for evaluation of labour offices activities which would have a motivating nature. Apart from 2000, as a consequence of National Employment Plan process (see below), a first steps towards more targeted policy were done. As a starting point for the implementation of active employment policy by labour offices was the “Employment Action Plan Implementation Programmes for 2000”. The programmes were developed by labour offices on the basis of an analysis of district labour markets incorporating the objectives set by the Ministry of Labour.

Although there is basic monitoring of active employment policy measures including resources spent, number of participants etc., there is no **systemic evaluation of efficiency** of individual instruments and neither is there a system of indicators comparable in terms of methodology. Moreover, continuous analytical work at labour offices is, due to the lack of the relevant resources, inappropriate and fails to provide a basis for a subsequent development of quality regional policies and a clear identification of priorities for the forthcoming years. However, such activities will be very important in the future in terms of the planned fulfilment of objectives of European employment policy. The MoLSA is seeking to assess the efficiency of AEP implemented by labour offices and is preparing a uniform system of such assessment based on the data maintained by labour offices. In comparison with EU countries, where the proportion of **expenditure on active employment policy** reaches up to 3% of GDP, these resources in the CR account for some 0.18% of GDP<sup>41</sup>. Anticipated developments in the labour market require the enlargement of the spectrum of programmes within active employment policy, with an emphasis on preventive measures – these, among other elements, will facilitate the participation in various programmes of those groups which have so far stood aside.

The employment policy practice in the Czech Republic is entirely based on **legal provisions**. Most activities are based on Acts No 1/91 on employment and 9/91 on employment and institutions in the field of employment. In these acts, there are definitions of employment policy tools and measures. The Ministry of Labour and Social Affairs (MoLSA) - its Employment Services Administration - prepares ministerial orders and methodological guidelines for labour offices in respect of giving common direction on the understanding and usage of legal provisions, mainly those parts that concern an active employment policy (e.g. they stipulate who is eligible for which active employment tool or for what amount of subsidy, they concretize conditions for subsidising of school leavers etc. Orders also allow to distinguish among various districts in respect to the situation on the particular labour market.

---

<sup>40</sup> Governmental Decree No. 640 of July 1999 on support measures for employment of people with problems in placement in the labour market

<sup>41</sup> Data for 2000, MoLSA

Preparation of a new employment bill was launched in 2000. The **bill for a new employment act** includes some new instruments of active employment policy and enlarges the framework for the use of the existing ones. It is proposed that retraining be also provided to those applicants who are not registered by labour offices as unemployed. This has so far been an obstacle to taking retraining courses for women on maternity leave and persons at risk of unemployment. One of the new instruments is a financial contribution to employers to provide initial training to the unemployed who need special care. The bill introduces „targeted programmes“ (national and regional) which are designed to increase the flexibility of AEP measures and to facilitate a more comprehensive approach to addressing the problems of disadvantaged groups and to tackling problems of the relevant region. It will also be possible to provide AEP resources to co-finance other programmes funded from national, regional or foreign sources. However, the issue of labour offices obtaining funds from other sources than the budget for AEP has not as yet been addressed in a systemic manner. This makes it impossible for labour offices to exploit directly the opportunities provided by the Phare programme and, in the future, by the ESF.

The development of the **National Employment Plan (NEP)**, the **National Employment Action Plan for 2001 (NEAP)** have applied a new employment policy approach. These documents, which have been one by one adopted by Government since 1999, concentrate more on mid-term national priorities, while an important consideration in their development was to bring these priorities in line with the principal pillars of EU Employment Guidelines. However, they are not yet sufficiently detailed at the level of measures and actions that should be taken under each guideline. Another new aspect is the obvious effort to view employment policy in a more comprehensive manner and to involve other partners (particularly government agencies and social partners) in its development and implementation.

Government priorities within employment policy may be summarised as follows:

- To maintain high levels of employment through job creation particularly in regions where traditional sectors and productions are being phased out (support for the creation of employment opportunities, entrepreneurship and SMEs);
- To increase adaptability of employees and employers by means of retraining and a more extensive application of flexible workloads;
- To expand the range of active employment policy measures, to improve their flexibility having regard to the needs of various groups and regions; to increase the level of funding for active employment policy;
- To motivate to work through increasing the income from work as compared to welfare and other benefits, to promote re-socialisation and motivation courses;
- To develop continuing education in a coherent manner, particularly to define the relevant powers and responsibilities, to develop rules for financing and financial incentives, to develop information and other support systems;
- To accelerate the reform of the system of initial education, to improve its horizontal and vertical “permeability”, to include the key competencies according to the labour market needs and to establish links necessary for the process of life-long learning.

Then there is the **Joint Assessment Paper**, which is the only officially agreed document between the Czech Republic and the EU and shall be the basis for regular monitoring in the accession process (for more details, see Annex). A number of other strategic documents have been prepared or are currently under the process of preparation and approval which are connected with employment issues, such as the Sectoral Operational Programme for Human Resource Development (SOP-HRD) (for more information see chapter 3.2).

## 2.5 Future skills needs of the economy

Before 1989 in the planned economy system, individual companies also planned requirements for labour force qualifications. Admission to individual types of school was adjusted to comply with these requirements, as well as to the number of graduates. Although these quantitative proportions were binding for both companies and schools, various structural disproportions occurred even in this directive system. In the 1990s, the education process was made democratic - where the choice of education was not restricted by any administrative injunction. Schools adjusted their supply to demand on the part of students and their parents. However, what was neglected was demand on the part of employers. This did not appear to be a problem in the early 1990s, since the low rate of unemployment and slow technological changes (at that time) guaranteed employment to almost all school graduates. As unemployment increased in the 1990s, the structural discrepancies between the numbers and capacities of school graduates on the one side and employers' ideas on the other began to deepen. Forecasting qualification needs began to be felt to be a necessity for students, parents, schools and the providers of continuing education to be able to make appropriate decisions.

Two projects have recently been launched which represent two possible ways of obtaining information about future qualification needs. The **first** project is focused on **monitoring the demand for qualifications on the part of employers and on an analysis of the employment of school graduates**. The project is being carried out under the control of the Institute for Information on Education. The **second** project is based on a **formal model projection**, using procedures applied in the Netherlands, and is being managed by the National Observatory of Employment and Training.

The first project entitled “**Employment of School Graduates: Analysis and Outlook**” was launched by the Institute for Information on Education in 1999 in co-operation with other research centres in the area of education. Its objective is to build an information system concerned with job opportunities for school graduates – the system should also provide some outlook about future qualification needs. Various information sources are being monitored:

- A company sample survey aims to get an overview of the structure of required key competencies and demands being placed by employers on new recruits while paying special attention to school graduates. The survey took place in spring 2000 and was linked to a survey conducted in 1998.
- Expert opinions and the conclusions of foreign studies concerned with anticipated trends which should influence the development of professions and qualifications in 21 sectors. These primarily include the identification of global influences, the envisaged development of technologies and changes in labour organisation. However, development characteristics acquired in this way are rather general.
- An analysis of the outcomes of the operations of human resource agencies which covers in particular the demand for specialists with a secondary and tertiary education.
- An analysis of advertisements in the daily press and on the Internet takes place every autumn (one month). This type of advertising is used to hunt professions at secondary and tertiary levels of education.
- Information which is provided by labour offices about vacancies and the results of a poll among experts at labour offices, which was concerned with the professions and qualifications which are required by the labour market. One of the labour offices' functions is to monitor anticipated development of employment in various companies within the respective region. They search for data about redundancies or hiring new employees, as well as about companies' interest in various professions. Based on this



information, the labour offices decide on the focus of re-training courses being organised in the region. The problem is, however, that companies' thinking is only of a short-term nature. Moreover, most companies which are to undergo fundamental restructuring are unable to make appropriate estimates of their future needs.

The outcomes of the project have been included in a study entitled "What Do School Graduates Need to Find a Position in the Labour Market". The study summarises the requirements for graduates' competencies and provides an overview of the professions and skills needed in the labour market – declared by the employers themselves or by means of labour offices or recruitment and advertising agencies.

### **Education disciplines required by the labour market**

#### Employers:

- Mechanical engineering
- Electrical engineering, information technology
- Business
- Personal and business services
- Law
- Building construction
- Textile production and clothing

#### Labour offices:

- Mechanical engineering at all levels of education
- Metal worker
- Mechanical engineer
- Seamstress
- Building construction (graduates of secondary vocational schools and secondary technical schools)

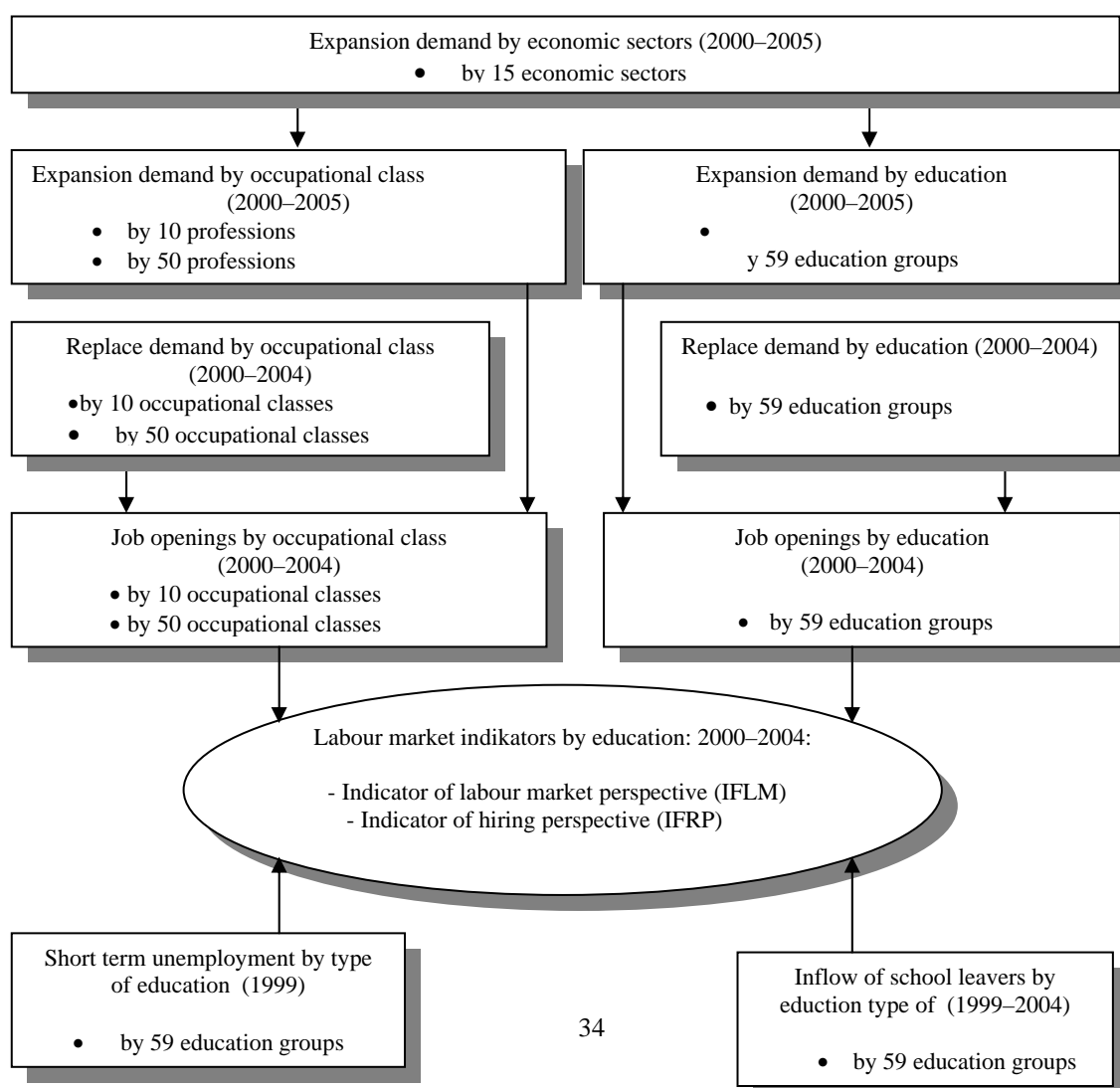
#### Personnel agencies:

- Electrical engineering, information technology
- Trade
- Mechanical engineering and machinery
- Business and administration
- Pharmacy
- Building construction, geodesy
- Transport and communications
- Management in individual fields and branches
- Textile production and clothing

One of the advantages of this approach is the fact that data about the most-required professions and skills being obtained from companies by means of questionnaires or advertisements may be very specific. However, this approach does not provide an overall picture of the demand, since professions which will not be required in the future are not advertised. Another disadvantage is the fact the information being obtained is of a short-term nature and therefore has only limited importance for the education sector, which needs to take rather long-term decisions.

The second project is focused on the **formalised projection of professions and qualifications** which is dependent on the development of the economy and trends in the area of professional and qualification structures in the labour market. The project, managed by the National Observatory of Employment and Training of the NTF, makes use of the experience of foreign partners in developing and testing forecasting methods at sectoral and national levels. The methods are appropriate in the conditions of a transitional economy.

The result of the project should be a quantitative model for forecasting qualification needs at a national level. The model is based on a comparison of supply and demand in the labour market, within a certain qualification structure in a medium term of five years. Two components of demand for certain qualifications are recognised: “expansion demand” which corresponds with new jobs which are created as a consequence of employment growth in various sectors, and “replace demand” which is the consequence of the departures of employees into other sectors or their leaving the labour market entirely. The model projection consists of several steps (for details, see annex). The first step consists of the identification of demand in various sectors of the economy. Another step is to process this demand according to individual occupational groups and the next step consists of determining specific requirements for individual educational disciplines. The central block of the projection is a comparison of the results of demand projection with anticipated inputs in the labour market (both school graduates and the short-term unemployed)



The model will gradually be tuned and enriched by means of so-called soft methods, such as qualitative surveys and expert estimates. This model will be the source of regular projections, which will be conducted by the Research Institute of Labour and Social Affairs. In addition to statistical data, it will also be possible to use the information provided by labour offices and to make use of their close links to the business sector. The results may then be used for counselling services, the provision of which is one of the labour offices' functions.

Both approaches to forecasting qualification needs reckon on the development of follow-up information products, which should be focused on individual types of users. They should contribute to the expansion of an information background, being drawn upon by students when making their career choice, by experts within the counselling system, labour offices when preparing re-training courses, schools and educational institutions when adjusting programmes of initial as well as continuing education, and by companies when planning their HRD strategies.

Another important tool necessary for anticipation of qualification needs is a so-called **Integrated System of Standardised Working Positions (ISSWP)**<sup>42</sup> that was commissioned by the MoLSA. At present, first version of the system was drafted on the basis of wide research in the world of labour (cooperation of employers, labour offices, experts, specialists) and would re-define qualification requirements for individual professions or working positions. The Integrated System of Standardised Working Positions consists of cards describing various occupations and the standardised positions (jobs) into which the particular occupation is broken down. The card presents a description of the activity performed in each standardised position, examples of the work performed, common performance requirements (qualification, personal, health) and the description of typical working conditions. This description is complemented by the characteristics of the relevant job's position in the labour market and the average wage. The card index is available on the Internet to ensure as wide a use as possible and to facilitate on-going updates by employers. The system is also being tested at pilot labour offices – based on specialists' comments the definitions of occupations as well as their presentation and user comfort are modified on an ongoing basis.

The ISSWP may be used in various areas – in counselling, employment policy and in education. The system provides information to educational institutions about qualification requirements for the performance of various occupations and, as such, could constitute a basis for the formulation of educational standards (for further details see chapter 3.4.1.2). Moreover, the above mentioned qualification projections will have also use the information from the ISSWP as an integral part of methodology.

## **2.6 Conclusions as regards the key labour market issues and their influence on the aspects of human resource development**

The labour market in the CR has been undergoing rapid changes which are linked to restructuring of the entire economy and individual companies, to technological advancement and demographic changes. This has brought about considerable changes in requirements concerning employability, qualifications, professional skills as well as the ways of acquiring the relevant professional competencies. It is particularly important to observe the following trends in the labour market:

---

<sup>42</sup> Integrated System of Standardised Working Positions, InfoPaket. CD ROM. Prague, Trexima March 2000.

- **Shifts of the labour force between companies and industries**

The restructuring of the economy may, still for some time, be expected to cause extensive lay-offs in declining companies. There will therefore be strong pressure on maintaining a relatively high rate of unemployment. It will be increasingly difficult for people with low qualifications to find jobs. On the other hand new investors report a lack of qualified workforce with the necessary skills<sup>43</sup>. Foreign companies are beginning to change focus from cheap labour to higher requirements for education, particularly university degrees.

Shifts between sectors in favour of the tertiary sector are still under way, although their pace has slowed down. This sector still has good prospects as regards its workforce absorption capacity – its proportion in the Czech economy is still low (54% as compared to the EU average of 66%).

Flexibility of the workforce is increasingly important in securing the necessary shifts of the workforce towards more effective sectors and companies. This places demands on initial education to provide young people with key competencies, which are transferable and constitute a foundation of any profession.

It is also necessary to stimulate processes to ensure that most employees are ready for occupational changes. This primarily entails the development of the necessary counseling capacity and the extension of participation in all forms of continuing education.

- **The use of high technologies**

A major challenge associated with the development of the labour market consists in keeping pace with current globalisation trends and in improving the comparative position of human resources. The proportion of sectors with a high skill intensity is gradually growing in the CR. Exports of products of electrical engineering, electronics and telecommunications are rising. There is also a growth in employment in services related to the use of modern technologies and business services. As regards the professional structure of employment there is a growing proportion of specialists classified in 1 – 5 categories of ISCO classification, i.e. mostly professions requiring a middle and higher qualification. An important part of these are engineering professions.

The proportion of the workforce with university degrees in the CR (for whom there is a growing demand in connection with the aforementioned changes) is far below that in developed countries. It is therefore necessary to expand access to tertiary education – particularly to make it possible for a far larger number of young people to study in short non-university courses. It is important to raise the standards of educational provision at higher professional schools and universities and to employ such teaching methods at secondary and tertiary institutions which would facilitate the search for and education of talented students. and the Sectoral Operational Programme for Human Resource Development (SOP-HRD)

There is a relatively fast development in the use of the Internet and e-business in the CR in comparison with other countries of Central and Eastern Europe. Developed countries, however, are still far ahead in this respect. A more general command of information technologies consists in a faster development of ICT skills in young people as well as adults. To ensure this it is necessary to expand and improve the quality of ICT teaching at all types of school which still make a little use of computer technology in the educational provision and which have insufficient technical facilities and their teachers lack appropriate training.

At the same time a sufficient number of specialists must be trained, as a lack of computer network specialists is beginning to show. This is suggested by a great demand for these experts on the part of companies, which results in “stealing” the specialists and overpaying them. The IDC survey has suggested that, in view of the expansion of the use of ICT in the economy and the current training capacity of the relevant secondary and tertiary institutions,

---

<sup>43</sup> For example, according to Czechinvest’s data 39% of foreign companies which invested in the CR experienced problems recruiting staff with appropriate qualifications in the location of the investment.

37% of this demand may be unsatisfied in the next two years<sup>44</sup>. This is why, in addition to the necessary expansion of initial training courses, it will be necessary to provide for a systematic development of continuing training and re-training, which would facilitate the acquisition of new qualifications for people trained in other fields.

- **Increase in employment in small and medium-sized companies**

Small and medium-sized companies, which already employ almost 60% of the workforce in the economy, mostly have specific requirements for qualification and skills of employees. Another characteristic feature of SMEs is a lower degree of human resource development – only one half of small companies with up to 20 staff provide for staff development in comparison with large companies. The low standards of staff development in small companies are not just related to their financial means – there is also an insufficient capacity of the management to create an innovative atmosphere supporting training. Small companies mostly cannot handle modern forms of acquiring new knowledge and experience. This fact may negatively affect the development of human potential in some professions and activities – particularly in services where these companies have a high proportion in employment.

It is therefore necessary to improve the provision of training by employing new methods, particularly distance learning, and to adjust the courses to the specific needs of small and medium-sized companies. SMEs must also be stimulated to enhance their approach to HRD and counselling and to develop information channels and networks for the exchange of good practices and experience.

- **Entrepreneurship and the acquisition of entrepreneurial skills**

Although Czech entrepreneurs setting up new businesses are faced with an unfavourable situation in terms of stability of the economic development in a transitional economy, the availability of capital and inadequate transparency of the administrative and legislative environment, the development of entrepreneurship was very dynamic in the 1990s. This was primarily due to the high motivation of the business persons involved. However, they often lack the relevant information, broader economic knowledge and management skills.

The situation of young people as regards their readiness to do business and acquaintance with the market environment is improving due to the fact that entrepreneurial skills and business education are part of an increasing number of vocational and technical courses. However, it is necessary to incorporate these skills into all curricula as one of the principal components of general education. Moreover, it is important to support starting-up business persons by means of the relevant counselling and re-training services. The level of management skills must be improved through raising the standards of continuing education in this area.

- **Growing competition in the labour market**

Competition in the labour market is stiffening and the position of disadvantaged people (particularly those with low qualifications, the disabled, Romanians, the juveniles and women with small children) is worsening. This results in a rapid increase in the proportion of the long-term unemployed. Between 1995 and 2000, the proportion of individuals unemployed for over 12 months doubled to reach 38.4% and continues to increase. The proportion of people unemployed for more than 6 months exceeds 56%. It has turned out that not even in a period of economic recover are the long-term unemployed absorbed by the demand in the labour market – unlike other groups of job seekers.

---

<sup>44</sup> International Data Company, [Http://www.idc.com](http://www.idc.com), [Http://www.cisco.com/public/corp\\_news.htm](http://www.cisco.com/public/corp_news.htm).

As for the level of education, people with basic education have the highest probability of remaining long-term unemployed (67% of the unemployed with basic education are without a job for more than 12 months). A high risk of long-term unemployment also concerns people with vocational education without “maturita”. The low level of education also hampers the possibilities of acquiring new skills demanded by the labour market.

One very unfavourable phenomenon is the low involvement of the disadvantaged in re-training and continuing training. Low-skilled persons show a minimum interest in education and training. Certainly, an important de-motivating role is played in this respect by welfare benefits and their relation to the wages of low-skilled workforce. Nevertheless their interest in training may be considerably stimulated by targeted counselling and re-socialisation courses. Although some steps have been taken in this direction, the development in this area is still insufficient.

Counselling services are not well adjusted to support the disadvantaged people in acquiring appropriate information about training opportunities, to stimulate their interest in training and to assist them in addressing the associated social, legal and health-related issues. Counselling must meet the needs of individual clients and focus not only on the choice of education or training, but also on assistance throughout the training process, maintenance of skills and acquisition of practical experience.

It is necessary to adjust the forms of continuing education to the needs of various groups of disadvantaged people and to provide stronger incentives for companies to pay more attention to low-skilled employees and to facilitate their participation in training.

- **The position of school leavers in the labour market**

The situation of school leavers is more difficult in comparison with employees with work experience. Employers require the knowledge of the working environment and stress the acquisition of the relevant skills and attitudes, such as the sense of responsibility and quality, and team working capacity. There is an increasing demand for language and computer skills. Greater emphasis must therefore be placed on their incorporating into teaching. However, the acquisition of key competencies is also affected by the methods and active forms of teaching, which, to date, schools have only employed to a little degree. Cooperation must also be established between schools and companies so that students may attain practical skills.

Although the group of young people who leave the schools system with basic education is not large, these individuals have no chance to find a job. It has turned out that re-training provided by labour offices does not address this problem, since re-trainees do not obtain a certificate providing them with a qualification. To improve this situation the appropriate conditions must be established to minimise the drop-out rate and to provide for more opportunities for re-entering the education system. The recognition of certificates obtained outside the formal education system also plays an important role in this respect.

- **Differences in the development of regional labour markets**

The differences between regional labour markets caused by their uneven development potential are growing, while the very low level of inter-regional mobility is conducive to these unfavourable trends. It will be important in declining regions both to promote the creation of new job opportunities, and to improve the general level of education and flexibility of the population in order to enhance the attractiveness of these regions for investors bringing in modern technologies. An increasingly important role will be played by regional strategies and the involvement of key partners and various actors in the regional policy in the areas of employment and education.

- **The ageing of the workforce**

The proportion of elderly citizens in the population structure is growing. The tackling of the problem of ageing population will be more demanding in the CR than in EU countries where this process is more balanced. Education and training will have to be much more focused on the adult population and an efficient system of continuing training for all generations will have to be rapidly developed. An important aspect will also be the willingness of people to invest in education from public budgets as well as private sources, and to employ the relevant effort and time. It is therefore important to develop appropriate stimuli for individuals, employers and other partners who invest in human resource development.

The existing training opportunities meet the needs of adult learners only partially. It is necessary to develop innovative approaches (in terms of methods, content and time demands) which would better suit adults. The participation of adults in education is also conditional upon better information and counselling services and the development of an appropriate system of certification of knowledge and skills, including those acquired informally.

### 3. Modernisation of vocational education and training in the perspective of life-long learning

#### 3.1 Introduction

In the first half of the 1990s IVET underwent modernisation, which was based on liberalisation principles and free initiative of schools. The educational policy of this period eliminated the existing barriers, expanded the supply of educational programmes and improved access to education. However, the policy was not derived from well thought-out plans and did not take account of the future needs of the labour market. Nor did it ensure links between the relevant players who should influence the content of education and the development of a system of life-long learning.

Similarly, CVET also developed spontaneously. Education on offer was significantly expanded. However, the quality was diverse and there was little transparency. In terms of coherent institutional development, no systematic policy was implemented and only haphazard solutions were pursued.

In the second half of the 1990s the Ministry of Education and the Ministry of Labour and Social Affairs increased the pressure to set up systemic foundations for the necessary changes and innovations, and the issue of life-long learning was raised. In the course of the 1990s various studies were undertaken which, in theory, discussed the principles of life-long learning. For example, a study entitled “Czech Education and Europe – Strategy for Accession to the European Union” was developed in 1998, the **National Programme for the Development of Education in the Czech Republic** was accepted by the Government in 2000 (**White Paper**, MoEYS), **Strategy for Human Resource Development** drawn up in 2000 within a project of the National Training Fund.

The principal document in the area of education – the White Paper- addresses the concept of life-long learning (“education for all and for life”) and sets out the major tasks of educational policy to support it. The first task is to lay foundations for life-long learning by means of increasing participation in pre-school education, raising the standards of and modernising basic education by means of individualised and diversified teaching, and by expanding secondary education and facilitating access to it for disadvantaged young people by means of developing support and evaluation systems. The second task is to develop links between learning and work, which would facilitate transition between education, placements and employment while combining these three activities in companies and at various levels of school. The third task is to define the role and responsibility of all partners at local, regional and national levels within the education system as well as outside it. The fourth task is to develop incentives for investment in human capital, primarily through tax policy, in order to raise the necessary funds for tertiary and continuing education.

The White Paper does not elaborate the tasks to the same degree of detail. It is rather focused on the first task. Concerning the other tasks, it identifies the respective problems while measures to tackle them are only indicated. The White Paper also contains a chapter dealing with adult education, which was written in cooperation with the National Training Fund.

A document entitled “**An Outline of State Information Policy in Education**” adopted by the Government in the late 1999 provides for the development of knowledge and the use of information technologies. It sets out binding objectives in terms of equipping schools at all levels with computer technology and Internet connection, and integrating computer information networks into teaching. The measures concern the provision of necessary ICT to schools and libraries as well as arrangements for the relevant training of teachers, librarians,



lecturers and civil servants. Moreover, the document sets out steps to establish favourable environment for the development of information literacy of the entire population.

### **The Objectives of State Information Policy in Education**

- To establish conditions facilitating effective and efficient introduction of ICT in teaching at basic schools, secondary schools, and also at higher professional schools and, consequently, to achieve “information literacy” of those leaving these schools by the end of 2005. Specific requirements for information skills of leavers from individual school types will be incorporated into framework educational programmes by the end of 2004.
- To provide, by the end of 2001, for at least one room with high-quality multi-media computers at 70% of basic schools, secondary schools, and also at higher professional schools. The room should be accessible to students and teachers during as well as outside teaching hours. Each computer room should be connected to the Internet. The remaining 30% of schools should be provided with at least one quality multi-media computer connected to the Internet.
- To ensure that, by the end of 2005, 75% of teachers at basic and secondary schools including integrated and secondary vocational schools, and also at higher professional schools use ICT as a common working instrument
- To establish conditions for effective involvement of schools in the system of life-long learning in the area of ICT by the end of 2005.

Some forms of the programme results evaluation:

- Beginning 2003 the level of “information literacy” of school leavers will be assessed in line with a set of methods, which will be developed by the end of 2001.
- Beginning 2003 The Ministry of Education, Youth and Sports will provide for the evaluation of the existing provision of life-long learning programmes at secondary schools and universities.

The information policy in education should be implemented in two stages. In the first stage (planned until 2001) schools should be equipped with computer technology and conditions should be established for the introduction of the relevant software in teaching. Also, a programme for increasing information literacy of teachers should be developed. However, the putting of the plans into practices has been considerably delayed – there was only little progress made in 2000 and 2001. A favourable development has been the establishment of a Coordination Centre at the MoE consisting of external experts as well as the Ministry staff. The plan for the second stage aims at continuing education of teachers and at establishing conditions for involvement of schools in life-long learning of citizens and civil servants in ICT.

The MoEYS has drawn up a **bill for the new Schools Act** (law on pre-school, basic, secondary, higher professional and other types of education) which sets out principles and general aims of education. It also introduces changes to the development of the content of education and takes account of conditions established within the reform of public administration. However, there was not yet an accord between the bill and the objectives set out in the White Paper. The bill was rejected by the Parliament and a new version is under preparation.

The **reform of public administration**, which came into effect at the beginning of 2001, brings about extensive decentralisation of governance of education. The newly set up regional self-governing authorities (NUTS III) take over the responsibility for setting up and administration of all secondary and higher professional schools. It is expected that decision-making procedures will improve concerning the structure of schools in the region in relation to availability of education, labour market needs and efficient school operations. The reform changes **the role of the Ministry of Education**. The core of its activities is shifted more towards policy development.

In order to ensure a uniform approach to the development and implementation of state education policy in the conditions of decentralisation, and not to disrupt the cohesive nature of the education system, the Ministry of Education and regional authorities have the

statutory<sup>45</sup> obligation to develop inter-linking long-term plans. The Ministry develops and presents to the Government a **Long-Term Development Plan of Education and Education System in the CR** (by March of every even year) and provides methodological guidance for the development of **Regional Long-Term Development Plans of Education and Education System**, which are drafted and finalised by the end of March of every odd year. The Ministry's Long-Term Development Plan covers the period of 7 – 10 years while specifying measures to be implemented in the upcoming 3 – 6 years. In relation to this there is a room for specific solutions at the regional level. In order to provide the regions with better guidance in the development of their respective plans, the analytical part of the Long-Term Development Plan sets out specific features of individual regions and differences that should be taken into account in the plans.

Priority aims set out in the Long-Term Development Plan will be implemented both by the Ministry and the individual regions, while the legal and systemic aspects of the measures will be the Ministry's responsibility. The implementation of the priority aims will be supported by **Development Programmes** declared by the Ministry which constitute a new instrument of programme financing and a means to interlink central and regional educational policies. The programmes should be funded both from the Ministry's budget and from the regional budgets.

The Ministry is currently developing its first Long-Term Development Plan (the working version of the document is only available). This working version elaborates on six principal priority aims pursued by the Ministry. After completion, the final document should be observed and implemented by means of regional policies and should influence the operations of educational institutions (see also chapter 3.4.7). Each priority aim contains specific measures for the nearest future period and an estimate of resources necessary for their implementation in the form of programme financing. Complementary measures are also proposed in order to establish appropriate conditions for the implementation of the measures and to determine ways of pilot testing, monitoring of progress and evaluation of results. The Plan also envisages integrated support from European programmes (e.g. Socrates). A final version of the Long-Term Plan should be completed by mid-2002.

### **Priority Aims**

#### **of the Long-Term Development Plan of Education and Education System:**

1. Reform and modernisation of aims and content of education
  - Focus on aims and change in the content of provision – the development and implementation of framework educational programmes, support for language teaching, raising the standards of provision at the 2<sup>nd</sup> stage of basic school
  - The use of information and communication technologies in the schools system
2. Management of quality in education and monitoring the operations and outcomes of educational institutions and the system as a whole
  - New methods of assessing the outcomes of educational provision in schools and the education system
  - Ensuring objectiveness of secondary school leaving examinations
    - (i) the introduction of a standardised national part of the “maturita” examination
    - (ii) partial standardisation of the content of the school (“profile”) part of the final examination in vocational courses (groups of courses)
3. Development of integrated, diagnostic, information and counseling system in education
4. Development of non-university higher education
5. Establishing conditions ensuring a high quality of human resources in teaching and management of educational institutions
6. Support for continuing education in the process of life-long learning

<sup>45</sup> Law No. 564/1990 as amended by Law No. 132/2000

In addition to the policy documents developed by the MoE, important aims in the development of education have also been set out by the MoLSA. Both the **National Employment Plan** (1999) and the **National Employment Action Plan for 2001** (for details see chapter 2.4) specify, *inter alia*, the requirements concerned with narrowing the gap between continuing education and labour market needs. Since neither of the plans is binding for all partners involved, the MoE is not being sufficiently active in their implementation and this is why only some objectives have been put into practice.

**Measures  
of the National Employment Action Plan for 2001  
related to vocational education**

- To continue the process of optimisation of the network of secondary schools, its programme structure and funding, also taking into account the success of graduates in the labour market (in the context of the reform of public administration)
- To propose measures to minimise the number of drop-outs
- To propose solutions to eliminate barriers to „permeability“ of the education system and equal access to education by means of ensuring various alternative educational routes in line with the existing schools act
- To establish condition for accelerating the process towards „computer literacy“. To extend the proposed policy to cover the adult population
- To include the subject „Career Choice“ in all basic school curricula, similarly to the „Introduction to the World of Labour“ at secondary and higher professional schools so that teaching could start on 1 September 2001
- To establish conditions for appropriate training of teachers in „Career Choice“ and „Introduction to the World of Labour“ at teacher training faculties and within continuing education of basic and secondary school teachers
- To propose measures to improve transition of basic and special school pupils to secondary schools in order to minimise the number of pupils entering the labour market after compulsory education (with basic level of education).

Another important document setting out priorities in the development of education in relation to employment policy is the **Joint Assessment Paper**<sup>46</sup> (for details see chapter 2.4). The priorities officially agreed by MoLSA and European Commission representatives include:

- Proceed with IVET reform in a more strategic perspective;
- Increase the involvement of the social partners in IVET and CVET, in particular through encouraging links between schools and enterprises
- Reinforce links between IVET and CVET with a view to implement an overall concept of human resource development to strengthen employability and competitiveness of the workforce and to foster lifelong learning
- Promote access to training and lifelong learning for older workers.

<sup>46</sup> Joint Assessment Paper of the Czech Employment Policy of the Czech Republic, May 2000

- Encourage enterprises to create more training opportunities for people with low skills.

A detailed analysis of the state of implementation of JAP priorities is presented in annex No 1.

### **3.2 The HRD strategy and priorities of the National Development Plan**

Despite significant efforts to reform education, the CR still lacks an integrated policy for human resource development, which would establish links between initial and continuing education, employment and economic development. This is why the National Training Fund launched a project in 2000 for the development of an HRD strategy, within which a team of leading Czech as well as foreign experts was set up.

The project responds to external as well as domestic challenges, determines major national weaknesses in terms of resources and sets out principal strategic aims in order to radically raise the standards of Czech human resources and their competitiveness in the context of the globalised world economy. The strategy for Czech employees focuses on professional excellence, professional adaptability and ethical integrity. The strategy for Czech entrepreneurs and managers is designed to promote leadership and management skills as early as in basic and secondary schools, and to support training courses particularly in strategic, crises and innovate management. Professional competence of corporate boards of management and supervisory bodies should also be strengthened.

The strategy suggests the roles of various government, public as well as private institutions and social partners. The strategy has received significant support from the MoLSA and social partners. The project continued with direct participation of Irish experts, regional representatives, social partners and other institutions. A methodology was developed for the management of strategic human resource development at regional level with the use of good practices from Ireland. Steps were proposed for the setting up of a national Council for Human Resource Development. A proposal was also drafted for the development of an Information Databank which would contain basic trends in HRD, analyses and, perhaps, HRD funding schemes, good practices and methods for implementation of HRD programmes. The Databank would serve as a source of information not only to decision-making bodies at national and regional levels, but also to all partner institutions and the general public.

#### **Regional Development Plan (RDP)**

The Regional Development Plan as the principal policy and programme document of the Czech Republic also constitutes a foundation on which the preparations of the CR for future implementation of the policy of economic and social cohesion will be built. The development of the plan started in 1999. The plan is currently being modified and updated. Its ex-ante evaluation is expected to take place in 2002 and the final version, after it is approved by the Government, should be put forward to the European Commission by the end of 2002.

A significant part of the Regional Development plan deals with priorities of economic and social policy of the Czech Republic in the pre-accession period during which programmes ISPA (transport and environment), SAPARD (agriculture and rural development) and PHARE will be implemented. After the CR joins the EU, resources from Structural Funds and the Cohesion Fund of the EU may be utilised.

The RDP contains a synthesis of sectoral as well as regional problems and priorities. The strategic aim formulated in the RDP is the increase of GDP per capita to reach 75% of EU

average before 2006. Moreover, regional disparities should be prevented from deepening and the environment should be significantly improved. In efforts to achieve this strategic aim, the CR will focus, apart from other issues, on upgrading qualifications and adaptability of the labour force.

**Human resource development is one of six priority lines defined in the RDP as follows:**

1<sup>st</sup> line – Strengthening competitiveness of the industry and business services

2<sup>nd</sup> line - Development of basic infrastructure

3<sup>rd</sup> line – Human resource development

4<sup>th</sup> line – Environmental protection and improvement

5<sup>th</sup> line – Rural development and multi-functional agriculture

6<sup>th</sup> line – Development of tourism and spas

The sequence of the priorities has been derived from their position in various regional consultation papers as the NUTS 2 regions proposed them. The position of HRD in the middle (3<sup>rd</sup> line) reflects the fact that regional representatives do not fully appreciate the importance of the human factor in developing their policies. This is why the development of the sectoral operational programme is so important as well as the establishment of partnerships for its implementation at the regional level.

**Sectoral Operational Programme for Human Resource Development (SOP-HRD)**

The priority line of Human Resource Development is elaborated in the SOP-HRD which sets out objectives and priorities for a medium-term period between 2000-2006 in more detail. The programme is presently being updated. The scope of the programme should cover especially areas of employability, social integration and life-long learning. Other issues, such as civil society, health care and public administration, still need to be incorporated either in SOP HRD or in Regional Operational Programmes. The final structure should be determined in the course of 2002 on the basis of the document **Policy Frame of Reference** developed by the MoLSA and of a government decision determining the content of operational programmes..

The activities aimed at **enhancing employability and adaptability** will include the creation of new job opportunities particularly in SMEs, including new forms of flexible workloads, enlarging the scope of retraining programmes for the unemployed, employees as well as economically inactive people, and improving information literacy of employees.

Activities promoting the role of employment policy will concentrate on preventing the growth of long-term unemployment, development of information and counselling services and creating a more efficient environment in terms of motivation to employment both on the part of the unemployed and on the part of employers.

**Social integration** will be based on the development of retraining designed for specific groups, and on the development of re-integration programmes including experimental solutions. Programmes designed to address the situation of the disabled will place emphasis on a comprehensive approach combining re-training, work, rehabilitation and counselling activities.

Activities to promote **equal opportunities** will be focused on strengthening legal and institutional instruments designed to eliminate all forms of discrimination, to develop the relevant methodology and to promote information and counselling services facilitating self-identification of discriminated persons. Moreover, the activities will attempt to increase motivation of employers to employ citizens belonging to groups at risk of discrimination.

Measures designed to promote the development of the **education** system will stress links to the labour market and **life-long learning**. Individual activities will be focused on the establishment of conditions in initial education to improve access to continuing education (key competences, modularisation, development of tertiary education). Furthermore, the involvement of social partners in VET will be promoted as well as the development of

cooperation between schools and companies, and expanding counselling and information services facilitating the transition between school and employment.

As regards **continuing education**, the activities will concentrate on the development of the necessary institutional background and other systemic elements, and on promoting the participation of population in continuing education as well as support for competitiveness of human resources. The systemic elements will include support for the development of certification, the setting up of pilot centres for adult education, expanding the services of support systems (information, accreditation, counselling), and the development of new programmes within continuing education – including increased involvement of schools. The promotion of participation in continuing education will consist in activities related to HRD in companies (including modern management and qualification upgrading methods such as rotation, self-appraisal, personal audits). Moreover, training courses will be promoted designed to enhance the business culture and pro-innovation behaviour of companies, and to improve the knowledge of the population concerning the use and application of information technologies, language and other key skills.

**Ex-ante evaluation** of the SOP HRD programme will take place in the course of 2002. At the same time, programme evaluation methods will be developed and a working group will be established consisting of representatives of partner ministries, regions and institutions carrying out evaluation. The group's task will be to provide for technical co-ordination of the development of evaluation instruments, to review the evaluation outcomes and develop expert capacity in this area in the CR.

### 3.3 Preparation for European Social Fund (ESF) implementation

During the 90's, the preparation of the Czech Republic for accession to the EU and for the future use of structural funds was implemented according to the Accession Agreement of the CR and using the Phare funds administered by special organisational units. Although the Phare funds were limited, they were used to support important projects. Meanwhile, experience with project management and with financing using European resources was gained on both central and local levels.

The overall preparation for the Structural Funds including ESF accelerated in 1999, when the Government adopted a decision<sup>47</sup> that **stipulated the responsibilities for economic and social cohesion** and co-financing of the EU pre-structural funds for the year 2000 and subsequent periods.

To transfer finances from the EU to the CR, the **National Fund** was established with the Ministry of Finance. It will store European finances as well as Czech finances for co-financing from the state budget, other public budgets and private resources. These finances will be handled so as to ensure programming for several years and the transfer of finances to subsequent years.

The **Sectoral Management and Monitoring Committee for HRD**, presided by a MOLSA representative, was established in 1999. Its members were appointed by the Minister of Labour and Social Affairs. They are representatives of sectors, regions, social partners, labour offices, school associations and non-profit organisations. The SMMC-HRD is the chief body that approves strategic documents related to the HRD programme, final project selection and monitoring and evaluation results, as well as may propose possible changes within Phare programme.

In January 2000 **Department of Employment and HRD Strategy** was set up within the MoLSA, which deals with key activities related to the drawing of pre-accession funds and,

---

<sup>47</sup> Government Decision No. 40/1999 to ensure preparation for the use of the EU Structural Funds and Cohesion Fund

particularly, with the preparations for the future use of the ESF. In order to ensure implementation of ESF in regions and to provide for co-ordination of projects in the area of HRD, **regional offices of the MOLSA were established in NUTS II regions** in the course of 2000. At the same time, new staff were hired to the central department. The staff are being trained within the Phare 1999 by 45 EU experts in order to gain practical experience in the area of ESF and related activities.

The tasks related to Phare-HRD activities at the MoEYS are the responsibility of the Department of foreign relations and European integration. The department cooperates with the MoLSA. A training of selected staff of pedagogical centres (facilities for continuing training of teachers) will take place in 2000 and 2001 within a development programme of the MoEYS. The training will aim, apart from other things, at ESF preparations.

**The NTF has been authorised to act as an Implementation Agency** for Phare investment programmes within economic and social cohesion – the support for HRD. The NTF will be in charge of the implementation of an ESF-type of grant mechanism and, in this way, pick up the activities within PALMIF programme concerning the development of a model for the implementation of a sectoral programme promoting employment and human resources. The NTF elaborated the Operational guidelines and procedures for HRD fund scheme financed from Phare 2000.

#### **Further preparations for ESF will include:**

- Ensuring full operations of Department 45 – Employment and HRD Strategy – so that it may perform the role of the Management Authority. Another body should be set up which will later on take over the role of the Payment Authority;
- Verification and strengthening the capacity of the NTF as the Implementation Agency. There are two objectives: 1) to verify and possible modify the organisation and management structure, work content and procedures, the system of internal control and IT used; 2) to increase the capacity by means of transferring the existing and recruiting new staff and their training with the aim of achieving accreditation for programme management in the ex-post control regime;
- Drawing up a bill for a new Employment Act which will alter the responsibilities of Employment Administration so that a legal framework may be established for the implementation of ESF programmes in the area of HRD;
- Developing a monitoring and evaluation system including the methodology for the use of indicators and for data collection. Establishing the relevant institutional background and cooperation mechanisms, setting up the coordination role of the relevant Evaluation Working Group. This system will be verified within the Phare programme so that it is ready for the use of ESF in line with EC requirements.

### **3.4 Modernisation of initial vocational education and training (IVET)**

#### **3.4.1 Structure and organisation of the IVET system**

The Czech system of initial vocational education is a broadly-conceived one, and it therefore facilitates, at pre-primary, primary and secondary levels, the participation of a large proportion of age groups of children and young people, including children with specific disabilities. The bottleneck of the system is its tertiary sector.

The duration of compulsory education in the Czech Republic is nine years of **basic school** (*základní škola* - the equivalent of primary and lower secondary level) with the exception of pupils admitted to the first years of the extended gymnasium scheme (approximately 8 % of the age population). These pupils leave basic school after five or seven years of attendance. Following the completion of basic school almost all pupils continue their education at secondary schools, commonly up to the age of 18 - 19.

In **upper secondary education** there are three main types of schools in the Czech Republic: gymnasiums, secondary technical schools and secondary vocational schools<sup>48</sup>. The system of vocational education has a school-based feature both in preparation of students with technical qualifications at secondary technical schools and in apprenticeships training at secondary vocational schools. There is no dual system of apprenticeship in the Czech Republic. Practical training of students is an integral part of education at schools, no matter whether it takes place in school workshops or in enterprises.

Besides the three main types of secondary schools there are also *integrated* secondary schools and vocational training centres (ISCED 3), which were established in the first half of the 1990s as the result of the transformation of secondary vocational schools.

**Non-state schools** (private, enterprise or church schools) emerged in early nineties as a new feature of the Czech education system. They assisted in the creation of a broader spectrum of education supply and the evolution of a competitive environment in the education system. Concerning basic schools, there are only a few private schools attended by only 1.3% of pupils. Private basic schools aim, as a rule, to provide education for specific groups of students with specific educational needs. At upper secondary level, the role of private schools is far more important and they provide education for some 10 to 12% of students (depending on school type). The largest number of private schools operate in post-secondary education (ISCED 4) and are attended by about 33% of students.

**Vertical permeability**<sup>49</sup> is ensured by a system of educational pathways, which enable students to pass smoothly from basic to other different types of secondary education. In secondary education, from the institutional point of view, there are no dead ends, and students of gymnasiums, secondary technical, vocational and integrated schools have access through different paths to the *maturita* exam which serves as a basis for further educational studies. The equivalence of *maturita* exams passed at gymnasiums and at secondary vocational and technical schools after 4 years of studies is very important in this regard. The students of secondary vocational schools, who usually finish 3-year educational branches with an apprenticeship certificate, can continue their education in so-called follow-up courses. These courses give them the opportunity to finish their secondary education with a *maturita* exam. However this possibility is limited. In reality, the fact that the Ministry of Education reduces funding of follow-up courses means that, for many vocational school graduates, courses without “*maturita*” mean an educational dead end. Permeability at higher educational institutions is naturally limited by the existing capacities of higher educational establishments (see chapter 3.4.1.4).

**Horizontal permeability** between individual secondary school branches is possible under the Schools Act (§20). On accepting an applicant a school director decides himself on the conditions of a transfer (e.g. difference exams). In reality horizontal permeability is limited due to the linear character of educational programmes and because they do not allow recognition or certification of the parts of the programmes accomplished. Transfer to another branch does not occur very often and usually it takes place when weak students are transferred from secondary schools with *maturita* to less difficult branches.

---

<sup>48</sup> For more details - see chapter 3.4.1.2

<sup>49</sup> The vertical permeability of the educational system and the variability of educational pathways are indicated by arrows on the Educational System Diagram - see Annex.



### 3.4.1.1 The entry to the initial VET system

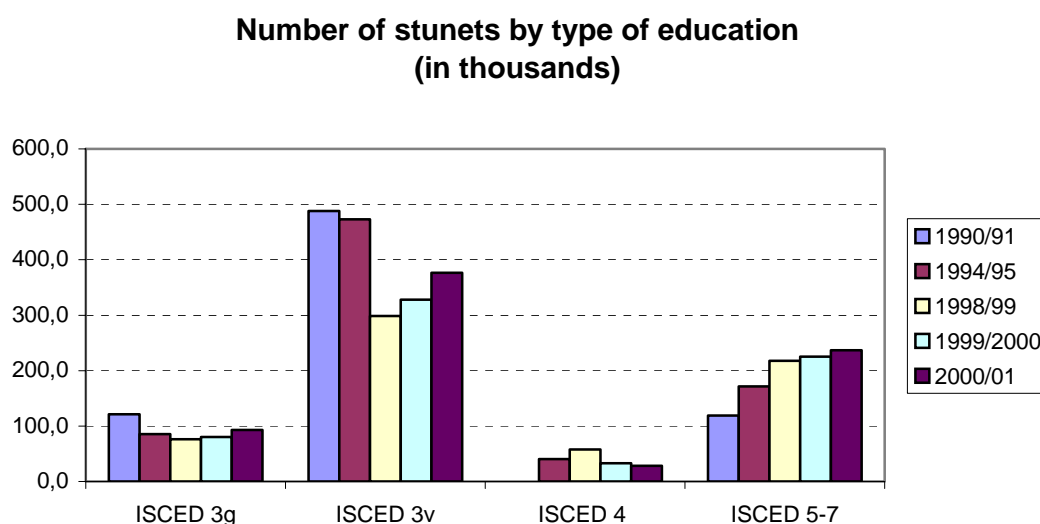
**Applicants** to schools at upper secondary level<sup>50</sup> are accepted mostly on the basis of **exams**, although, a school (a director) can now decide to accept students without exams and on the basis of their previous study outcomes. The content of exams is the responsibility of schools and thus their degree of difficulty differs. The most difficult and the most selective are the exams at gymnasiums and secondary technical schools, for which competition is strongest.

**Vocational education** enjoys **high prestige** in the Czech Republic. Although a part of the community, particularly in cities, considers general secondary education to be more “elite,” the demand for some areas of vocational education exceeds interest in general education. It’s particularly true of some educational fields as the arts, business, hotel management, tourist industry, catering, IT, teaching. The prestige of vocational education in the country shows very well in the high percentage of young people educated in vocational schools, as a network of these schools developed mainly as a response to demand.

### Enrolment figures in upper secondary education

At present about 95% of graduates of compulsory basic school or lower level of gymnasiums (ISCED 1 and 2) continue their education<sup>51</sup>. These young people enter or continue at one of the three kinds of secondary schools (ISCED 3). Currently (year 2000/2001), about 18,5% of those entering the upper secondary level of education enrol in four-year secondary general schools (gymnasiums) or continue their studies eight-year gymnasiums, about 36,4% enter to secondary technical schools (mostly four-year programmes) and about 45,2 % enter to secondary vocational schools (mostly three-year)<sup>52</sup>. The total number of students accepted to the first years of “maturita” courses in all these schools accounts for approximately 59% of all students – which is substantially more than in the early 1990s.

Chart 3.1



Source: Key Indicators – table 22

<sup>50</sup> Special schools for the handicapped excluded

<sup>51</sup> Estimated.

<sup>52</sup> Full time study only. Source: Country Monograph of the Czech Republic, Background study, National Observatory, 2001, Annex, table 2.4

### **Access to vocational education**

All social groups regardless of sex have **access to some type of vocational education**. Handicapped youth can get education at special schools (see Chapter 3.4.1). The special education was traditionally developed in the Czech republic. Most essential has been recently the change in approach to handicapped children in society at large, which no longer seeks to isolate them. Today, if their health allow, these children attend the same school as children without disabilities. Attention is also devoted to special school graduates with mental disabilities and pupils with incomplete basic school education in the form of special practical schools. These are non-professional schools to gain abilities and skills for practical activities. These schools prepare students in one or two year courses for simple activities.

On the other hand, there are clear social and economic **barriers impeding access to education**. Socially disadvantaged children study in worse conditions and show lower interest in education. The vicious cycle of low social status, unemployment and insufficient training tends to pass from one generation to another. This trend is very strong particularly among the Romany minority, with two thirds to three quarters of children attending, mostly as their parents once did, schools for children with special learning needs. Having said that, these children do not suffer from mental problems; they are disadvantaged mostly by insufficient knowledge of the language of instruction and a bad support network. Experts have made recommendations to create conditions conducive to adjustments in the system of education that would make it possible for Romany children to become as successful as other children. These measures include: overcoming the language barrier, introducing preparatory classes preceding basic and secondary schools, using Romany as an ancillary language in schools, hiring Romany assistants in schools, promoting individual approach to pupils, establishing flexible and transferable catch-up classes. Catch-up classes would enable Romany children to gradually overcome knowledge gaps in certain subjects and return to regular classes. Some schools have already implemented some of these measures (particularly catch-up classes preceding basic school and hiring of Romany assistants). However, these progressive measures mostly concern only basic schooling and little attention has so far been paid to improving study conditions for disadvantaged secondary school students. On the one hand the structure of secondary schools does make it possible for lower achievers to take two-year training courses or vocational courses without “maturita” at secondary vocational schools. On the other hand, there are not sufficient support mechanisms which would help these students proceed to higher levels or at least prevent their dropping out of school.

One step in this direction was taken by the amendment to the Education Act currently in force in January 2000. Unlike in the past, graduates of special schools can now be admitted to any secondary school, provided they complete the regular admission procedure. It is expected that Romany children may benefit from the new regulation (according to 1997 estimates, 60% of Romany children attend special schools. This opportunity will not be exploited unless the relevant conditions are established (primarily as concerns teaching and support programmes) for Romany children to overcome knowledge, social and other barriers.

According to the results of a survey in secondary schools<sup>53</sup> (secondary vocational schools and training centres) where a considerable part of students are disadvantaged, the schools are not sufficiently prepared to respond to the needs of their students and to support them efficiently. The problems include:

---

<sup>53</sup> IVET field research results, Country Monograph - background study, Czech National Observatory, 2001

- unresolved issues concerning the integration of disadvantaged pupils to mainstream schools (schools are not ready to work with them);
- the inappropriate capacity of the schools system to adjust to the individual needs of disadvantaged pupils, the focus of curricula on the average pupil (in reality very often, adjustment means only a transfer to a less demanding programme);
- the limited scope of operations of educational counsellors at schools (he/she rather acts as a coordinator of various activities) – the issue of the necessity of a school psychologist and social worker is therefore discussed;
- insufficient interest on the part of some schools in the situation of their graduates in the labour market;
- problems concerning information flows between the relevant institutions;
- a lack of links between the social and education systems (the link between welfare benefits and the obligation to undertake education).

### Choice of the IVET pathway

When entering the system of initial vocational education after basic school (or rather compulsory education), a straightforward **structure** still predominates which is based on the following path: **basic school – a one-off decision about an educational pathway – training in a linear course of study (fixed from the beginning to the end) – transition to employment or, possibly, continuation of education**

Besides the possibility of secondary general education, there are still only **two main alternative choices** within initial vocational education: a vocational programme leading to the award of a vocational training certificate (*výuční list*) or a technical course completed by “maturita“ enabling the graduates to go on to study at the tertiary level.

It is a positive development that compulsory education at the **basic school** has been extended again to 9 years, since this postpones the necessary choice of secondary education. However, the **problem** is that the need to provide pupils with sufficient **information** so that they may **choose their subsequent educational path** is only slowly being recognised within the basic school curriculum. A new optional subject entitled „Career Choice“ has only been part of the Standard of Basic Education since 1. 9. 1998. Most schools still do not pay appropriate attention to this issue and do not teach this subject. Another problem is that the basic school curriculum has been modified so that even the limited volume of training in practical skills has been reduced even further and theory clearly prevails. This makes it impossible for many pupils to use or develop their manual skills and to feel happy about their achievement. This may cause unwillingness in pupils of this type to continue in their education.

A system of **professional and career guidance** (for more information see chapter 3.7 ) is being developed mostly outside the education sector within the purview of the Ministry of Labour and Social Affairs. The system’s main component is information and counselling centres at labour offices. This is causing certain problems since pupils of basic schools in particular are not guaranteed permanent counselling services directly in schools<sup>54</sup>. At the same time, the issue of professional orientation and career guidance has so far been underestimated in secondary education. It was only in 2000<sup>55</sup> that the government commissioned the development of a new subject (a component of the curriculum) devoted to professional orientation and career choice, which should become an obligatory part of curricula at all secondary schools. Similarly to basic education (see above), the situation at secondary schools in this respect has not changed considerably – despite several Government Resolutions and

---

<sup>54</sup> Educational counsellors who work in schools and a network of educational and psychological guidance centres which provide services associated with study and psychological problems. However they lack the capacity to assist very well in carrier choice or the professional orientation process.

<sup>55</sup> Government Resolution No 325/2000

the fact that this requirement is one of the priorities of the National Action Plan 2001<sup>56</sup>. Most schools fail to provide information about the labour market and professional orientation as part of their educational provision.

As has been mentioned before, the first important choice of an educational path occurs in the CR after the completion of basic school. According to empirical surveys<sup>57</sup>, the **success rate of this choice** (defined in terms of harmony between this choice and reality, i.e. the pupil's acceptance onto the chosen course or type of education) is **relatively high**. Only some 10% of pupils are not successful in this sense. No marginal groups have been pinpointed whose rate of success in this respect would be significantly lower (the groups were broken down by location, gender and achievement in basic school). Certain differences between the pupils' desires and their choice of secondary education show, primarily in smaller towns, that the pupils adjust their actual choice to the existing educational opportunities offered within the region and to the expected chances of admission. This situation itself may be of a restricting and selective nature. However, it may be stated that there are no significant distortions in terms of equality of access to education at this pivotal moment of the professional orientation process.

Other surveys (for example TIMSS<sup>58</sup>) which examined in detail the relationship between certain sociological characteristics (e.g. education of parents, household facilities etc.) and the study achievement of pupils lead to the conclusion that there is a **high level of dependency of study achievement on the situation of the pupils' families**. This strongly influences professional orientation and career choice not only after basic school, but most importantly as concerns the choice of further education after secondary school or after entering employment.

As regards transition of basic school leavers to the system of initial vocational education it is positive that an overwhelming majority of young people continue to study at an upper secondary level. Moreover, the education provided by secondary schools satisfies demand in most cases both in terms of the capacities and the interests of the applicants and there is no discrimination based on region and gender. Although the degree to which demand for education is satisfied is high, it is limited to an extent, particularly in small towns and rural areas, due to insufficient diversity in supply.

Students who studied at secondary general schools obtain professional qualification as late as in the tertiary sector. **After they leave gymnasium** (some 18% of all secondary school graduates), young people have two major alternatives for entering the tertiary sector – higher professional schools and higher education institutions (universities). This issue will be dealt with in detail in chapter 3.4.1.4. An issue that, after post-maturita studies have been abolished, **still remains to be addressed** is the question of whether *gymnasium* leavers (and this also applies to secondary technical school leavers) will be able to get a **second „maturita“ or a vocational training certificate** (*výuční list*) and how.

### 3.4.1.2 The training levels and pathways within IVET and certification outputs

**Gymnasiums** (ISCED 3) are secondary schools providing general education. They offer a broad background of general knowledge primarily aimed at preparing students for university studies. At the end of gymnasium students take final exams (*maturita*). Gymnasiums can offer four, six, or eight years of study (see diagrams of education system in Annex). The curriculum gives the students a choice in specialisation (humanities, science, general).

**Secondary technical schools** (*střední odborná škola* - ISCED 3) usually provide a complete secondary vocational education which takes four years and requires a final exam (*maturita*),

---

<sup>56</sup> National Employment Action Plan for 2001, Government Resolution No 165/2001

<sup>57</sup> Popelkova, M.: Survey of professional orientation of 8<sup>th</sup> grade pupils (in basic schools) – empirical survey report, Prague, VUOS, 1997.

<sup>58</sup> Achievement of students from the final years at upper secondary schools in the „Third International Mathematics and Science Survey“ - TIMSS. Prague, VUP 1996.

and sometimes also lower-level secondary vocational education without a final exam (*maturita*) (two- or three-year courses) (ISCED 3). They aim to develop the abilities of practical application of skills and knowledge. The schools prepare their students for technical work in the chosen specialisation. Those who have completed the four-year training programme with a final exam (*maturita*) can continue their education at higher professional schools or universities.

The students study in about 249 education programmes with *maturita*<sup>59</sup>. About 40% of teaching time is devoted to general education. The scope of vocational/technical education is varied. Practical and theoretical lessons often overlap, there is a lot of emphasis on acquiring skills in laboratories and other workshops held at schools. Schools work together with companies on curricula amendments and during internship training in companies, which is compulsory for the second and third-year students. The tuition at secondary technical schools usually takes the form of a regular full-time studies. Mature students at those schools can also take evening classes or study through distance learning in employment.

**Secondary vocational schools** (*střední odborné učiliště* - ISCED 3) usually offer apprenticeship training (in three year and sometimes also two-year courses) with a final exam and apprenticeship certificate. They can also offer a four-year secondary vocational education (four-year programme) at the end of which the students take a final exam - *maturita* - which is recognised at other types of secondary schools and allows students to continue their studies at higher professional schools or universities. An integral part of tuition is practical training (which represents about 50% of teaching time in three-year courses)<sup>60</sup> aiming at the acquisition of manual or manipulation skills. The remaining teaching time is devoted to general education and theoretical study of technical subjects.

The secondary vocational school graduates can immediately look for a job in the labour market, those who have completed the three-year programme can continue to study by taking **follow-up courses** at the end of which they can pass the final exam (*maturita*).

At secondary vocational schools students receive qualifications in 189 vocational education programmes (three year courses) and in 106 *Maturita* education programmes<sup>61</sup>. About 28 % of studies are devoted to general education, while the technical part of training emphasises skills acquisition. The proportion of general education is higher in two-year follow-up courses which are completed by a “*maturita*“ examination. It reaches on average 34%<sup>62</sup>. Secondary vocational schools provide both theoretical and practical training. Practical training can sometimes take place directly in companies.

The **integrated secondary schools** (*integrovaná střední škola*) offer both secondary technical school programmes and secondary vocational schools programmes. At some integrated schools in the framework of the Phare VET Reform Programme experiment (has been achieved in 1998) a trial first joint grade for both types of studies has been introduced. The educational programmes are separated at the second year of studies where students can make their choice. Integrated secondary schools help to create a wider education choice and make it easier for the students to transfer from one to another type of courses. Another advantage is the availability of secondary vocational school resources for teaching secondary technical subjects, better utilisation of equipment for technical training, lower overhead costs etc. In 1999/00 there were about 266 integrated secondary schools<sup>63</sup>.

There are also **special vocational education schools** that provide training to young people with disabilities. These schools provide education to students (with the exception of mentally

---

<sup>59</sup> Statistical Yearbook of Education 1999/2000. Performance Indicators, Prague, ÚIV 2000.

<sup>60</sup> Vojtěch, J. - Kofronová, O. : Curriculum Policy after 1989 and its Impact on the Development of Educational Branches in Secondary Vocational Education, Prague, VÚOŠ, 1996.

<sup>61</sup> Statistická ročenka školství 1999/2000. Výkonové ukazatele. Praha, ÚIV 2000.

<sup>62</sup> Kofronova, O.-Vojtech, J.: Analysis of Educational Programmes in terms of Employability of Graduates, Prague, Tauris 2000

<sup>63</sup> Statistical Yearbook of Education, ÚIV, 2000, calculations Vojtech.

handicapped) at the level of a standard school for the general population using special methodology. There are special gymnasiums, secondary technical schools, secondary vocational schools, *conservatoires* and practical centres. The share of special school students in the corresponding age group is relatively stable, amounting to 3% of the age population.

**Technical and business lycea** are a new type of upper secondary education programmes that emerged in the 90's. These programmes try to transcend the sharp border lines that divide general and vocational secondary schools. Therefore, their curricula contain a large portion of general subjects taught in general secondary schools, as well as theory of vocational subjects that are typical of secondary technical schools. Graduates receive Maturita certificate and they can continue education in colleges and universities. Due to the fact that these educational programmes have so far been viewed as experimental, they have not spread significantly. These lycea, of which there is a few dozens, operate within secondary technical schools.

**Post-maturita studies**, which used to be the dominant form of post-secondary education are currently being phased out. The post-*maturita* studies offered regular full-time courses or part time courses for those who had completed secondary schools in general studies. The full-time programmes took one or two years. Under the new Education Act of 1995 post-*maturita* studies were abolished and a new system - higher professional schools - was introduced. Higher professional schools are usually established within existing secondary technical schools.

**Higher professional schools** (*vyšší odborná škola* - ISCED 5), which were endorsed from 1996/97, provide the necessary qualifications for demanding technical activities which do not require a university degree. The programmes take a minimum of two years and a maximum of three and a half years. In 1999/00, there are 166 higher professional schools teaching in approximately 181 branches<sup>64</sup>. At higher professional schools the students pay a fee for the tuition.

It is important to stress the advantage, within **secondary technical and vocational education**, of **recognising technical and vocational education as equal to academic education** (i.e. *gymnázia*). There is also a long tradition of high respect for vocational educational paths – consequently, there is a high proportion of young people in VET. The CR is one of the European countries with the highest share of young people in VET at a secondary level. However, there have been and still are efforts in various forms to undermine this equality. For example, the new concept of a “maturita“ examination and its common part (see below) gives advantage to secondary general school students (*gymnázia*).

There is also a tradition of a high „permeability“ capacity in the Czech education system in a vertical direction. It may be said that all successful basic school leavers may continue towards a higher level of education, no matter which educational path they choose. Until 1989, there was only one limitation to this – graduates from vocational courses without “maturita“ could take „follow-up“ courses only when in employment. This limitation was cancelled after 1989 and, since then, it has also been possible to take a full-time follow-up<sup>65</sup> course. However, without specific assistance and measures it is difficult for socially disadvantaged young people to exploit the vertical “permeability” inherent in the schools system (see chapter 3.4.1.1).

There is an entirely different situation in the CR as far as **horizontal „permeability“** is concerned – i.e. the possibility of transfer between selected educational paths. Overall, the VET system may be described as a **rigid** one, which requires a clear choice before entering the system and a necessity of completing the chosen programme before leaving the system. In spite of many efforts, barriers have not been lifted between the two educational paths (with

---

<sup>64</sup> Statistical Yearbook of Education, *ÚIV*, 2000,

<sup>65</sup> In 1996 some one half of graduates from secondary vocational schools continued in follow-up courses. In 1999 it was only some 10% (calculations by Vojtech)

“maturita“ and without “maturita“ – vocational programmes) in VET at the secondary level. It is a major problem that if a student after four years of study fails in a final examination or in „maturita“ examination, the four years cannot be recognised in any way and, in terms of education achieved, he/she is considered to have completed only the basic school.

It may be summarised that the CR **still has a linear system of educational paths** which is not sufficiently flexible in terms of life-long learning. **Neither** does this system **make it possible to establish flexible links between initial and continuing education**. This is one of the reasons why parallel systems of continuing education have developed which are not linked to initial vocational education and training.

### **Certification of outputs**

Generally accepted certificates are obtained in the Czech Republic only within the framework of the school system. These certificates are apprenticeship certificate and a *maturita* certificate which are recognised in the labour market as they express the achieved level of education and qualification. The graduates of higher professional schools receive diplomas - *Absolutorium* - which indicates the field of graduation.

The issuing of certificates within the **schools system** is provided for in the Schools Act and relevant decrees of the Ministry of Education. Education in schools is therefore the basis for achieving certified (recognised) levels of education. A person interested in increasing the level achieved within initial education may, within the system of continuing education (so-called second chance), re-enter educational institutions operating within the schools system. After a certain period of slowing down immediately after 1989, new opportunities for part-time studies have been developing in the past 2 or 3 years (e.g. distance learning). **Out-of-school forms of continuing education** develop primarily in an informal manner (private institutions, employers). In terms of certification, the two systems are not inter-linked and therefore certificates awarded outside the schools system are not formally equal.

Educational programmes within initial VET at the secondary level are completed either by a final examination which is certified by a vocational training certificate (*výuční list*) – or by a final examination certificate, or by “maturita” examination where the student gets a “maturita” certificate. Higher (professional) education is completed by *absolutorium* and the award of a diploma.

The aforementioned certificates are valid nation-wide and are issued on the basis of examinations, the form of which is laid down by the law and decrees. The examinations are not standardised and are not external in nature. They are organised by the respective schools in which the courses take place and students are examined in front of an examination panel. The panel members include teachers of the relevant school and the panel is chaired by an external teacher appointed by the relevant Education Authority. Assessment of education outcomes and their certification are therefore the **professional responsibility of teachers**.

The varying standards of examinations at different schools have recently become a subject of criticism, particularly as concerns the “maturita” examination the passing of which facilitates access to higher education. The differentiated content of education (depending on the nature of the educational programme) which is the subject of “maturita” examinations makes it impossible to conceive of “maturita” as a uniform examination for all students. In view of this a proposal for a new model of **“maturita” examination**<sup>66</sup> has been subjected to a broad discussion and experimental testing for several years.

According to the proposal, the “maturita” examination should be composed of a common (external) part and a profile (internal) part. Both parts would have to be successfully passed if the student is to receive the “maturita” certificate. **The common (external) part** of the

---

<sup>66</sup> An Outline for Maturita Examination Reform, Prague, CERMAT, September 2000.  
www.ceremat.cz

examination should consist of three obligatory examinations in the Czech (native) language and literature, in a foreign language and mathematics or civics and basics of social sciences – depending on the student's choice. The common part will be conducted in the form of standardised written tests. These tests, which will be prepared at two levels of difficulty, will be developed and assessed by the State “Maturita“ Centre which has already been set up by the Ministry of Education.

**The profile (internal) part** of “maturita” examinations will consist of four obligatory examinations in the following subjects: Czech language and literature (written and oral), a foreign language (written and oral) and first and second optional subject. The director of the school organising the examinations will decide about the optional subjects for the profile part of “maturita”. He/she may also decide that, particularly in VET, the optional subjects will be replaced by a comprehensive vocational examination. The director will also determine the concept, content and form of the examinations. The profile part of “maturita” will, as has been the case until now, take place in front of a panel. The appointed chairman of the panel may be a teacher with professional as well as pedagogical competence corresponding to the relevant or related field of study, with at least five years of experience and he/she is not employed by the school where the students take the profile part of the “maturita” examination.

It is expected that the common part of „maturita“ will be conducted for the first time in 2004. The common part of „maturita“ is envisaged as addressing the issue of comparability and transparency of results of general education at secondary schools – particularly with regard to the requirements of higher education institutions.

However, this does not address the issue of transparency of **outcomes of the vocational component** of secondary education with regard to employers. The same certificates also have a **qualification function**. This means that they certify the capacity of their holders to perform certain practical activities linked, as a rule, to a specific occupation or group of occupations. The vocational training certificate (*výuční list*) normally testifies that its holder is able to perform manual occupations or other shop-floor or administrative and technical activities, depending on the nature of the vocational programme. The „maturita“ examination taken at the end of programmes at secondary technical and secondary vocational schools also has a qualification function and authorises the person to perform more complex professional administrative and technical activities (depending on the nature of the programme).

As regards assessment of the abilities of a school leaver to perform a specific job, certificates obtained in the initial education system have only a „tentative“ value for employers. They provide certain information about the level of education achieved and about the professional capacities of applicants for jobs. As legal regulations for employment in the CR stipulate, it is up to the employer to assess whether an applicant is suitable for a job. The only exception is certain regulated activities and professions where qualification requirements are laid down in laws and the relevant occupation may not be performed unless these requirements are met. Overall it may be said that there is no (bar the exceptions) direct, i.e. binding in terms of legislation, relationship between individual jobs (performance of certain activities or occupations) and certificates which testify to the completion of a type of vocational education.

The situation in this respect may be improved by the Integrated System on Standardised Working Positions (see chapter 2.5). The system should become a foundation for the development of so-called professional standards which will be binding for educational programmes which are completed by the award of a relevant certificate testifying to a particular qualification. This should enhance the transparency of output qualifications obtained in initial vocational education for employers.

On the whole it may be summarised that the credibility of certificates would be enhanced by means of employer participation in the development and implementation of examinations, so that requirements demanded from graduates would be adequate to the needs of employment. At the same time, it is necessary to enhance comparability of outputs in individual fields at various schools, since the organisation of examinations is to a large degree the responsibility



of individual schools. Certification in the system of initial education is also not connected to the area of continuing education implemented outside the schools system. And finally, the issue of certification of skills acquired in an informal manner based on work experience has not been raised at all in the CR.

### 3.4.1.3 Description of the training provision within each level and path

The development of the overall number of schools and teachers is primarily linked to the total number of students in secondary and higher professional education. The most important factors which have affected these figures in recent years include: demographic decline, extension of the basic school to 9 years, enlarging and reducing again the workload of teachers and an extensive process of optimisation of the network of schools.

#### School types and numbers

Secondary education and higher professional education is organised in various types of schools (see chapter 3.4.1.3) in line with the School Act and depending on the type of educational programme they provide. A school as one legal entity may also be made up by two or more school types. A typical example is integrated schools which normally consist of a secondary technical school and a secondary vocational school and, possibly, a training centre. There is a similar situation at higher professional schools where there is also a secondary technical school within one legal entity. In 2000, there were 2 258 schools at ISCED 3 and 4 levels – the number of legal entities is lower by approximately one third.

**Table 3.1: Number of schools**

| Schools by ISCED level |        |        |            |           |        |            |              |        |            |       |        |            |       |        |            |
|------------------------|--------|--------|------------|-----------|--------|------------|--------------|--------|------------|-------|--------|------------|-------|--------|------------|
| ISCED                  | 0-2    |        |            | 3 general |        |            | 3 vocational |        |            | 4     |        |            | 5-7   |        |            |
|                        | Total  | Public | Non-public | Total     | Public | Non-public | Total        | Public | Non-public | Total | Public | Non-public | Total | Public | Non-public |
| 1990/91                | 12 371 | 12 367 | 4          | 230       | 229    | 1          | 1 080        | 1 076  | 4          | 0     | 0      | 0          | 31    | 31     | 0          |
| 1994/95                | 12 069 | 11 789 | 280        | 355       | 279    | 76         | 1 683        | 1 366  | 317        | 316   | 261    | 55         | 309   | 259    | 50         |
| 1998/99                | 12 009 | 11 700 | 309        | 360       | 280    | 80         | 1 490        | 1 147  | 343        | 621   | 482    | 139        | 212   | 149    | 63         |
| 1999/00                | 11 957 | 11 615 | 342        | 349       | 279    | 70         | 1 432        | 1 110  | 322        | 537   | 408    | 129        | 203   | 142    | 61         |
| 2000/01                | 11 710 | 11 403 | 307        | 351       | 280    | 71         | 1 442        | 1 129  | 313        | 465   | 358    | 107        | 212   | 144    | 68         |

Source: Key Indicators – Table 22

Although the number of students in secondary schools was decreasing in the course of the nineties (particularly in the second half), the number of schools providing educational programmes of different type has significantly increased comparing to 1990 year. Two thirds of this increase may be attributed to non-state schools. The highest number of secondary technical schools was reached in 1996 and the highest numbers of secondary vocational schools and the number of gymnasia were reached in 1997. Since these years their number has been decreased, however **the small size of schools** remains to be one of most serious problems - in view of rationalisation of the educational process and efficient management of resources. In 1999, in spite of optimisation measures to date, secondary technical schools had the average of 197 students, secondary vocational schools 294 students. The size of secondary technical schools was reduced the most in the 1990s – by up to 40%.

This is also the case of higher professional schools. Despite an increase in student numbers, there are too many small schools where more than one half of them have less than 150

students<sup>67</sup>. It is difficult – with so few students - to achieve certain standards of quality in teaching, to expand individual choice of studies and enhance teachers' specialisations.

**The regional structure of major school types** is well balanced in terms of proportional distribution. This is the result of the planning of the school network before 1990 and its effects still last. The situation in Prague is an exception with the higher proportion of *gymnasia* (25%) while national average in individual regions is 20%. The national average of secondary technical schools is 47% with the maximum deviations of –5 and + 7%. The lowest number of secondary vocational schools is in Prague (25%), the highest in Olomouc region - 40%<sup>68</sup>. The high proportions of *gymnasia* and the low share of secondary vocational schools in the capital corresponds to the nature of economic activities and educational structure of its population. It also reflects the fact that educational opportunities within the tertiary sector are concentrated there.

The demographic decline and basic school extension have resulted in excessive capacity of secondary schools - this capacity could be used for continuing vocational education and re-training. In terms of quantity, distance forms of education did not develop significantly in the relevant years. A programme of schools network optimisation – i.e. reduction of their numbers and mergers – was initiated in 1997. At present, it has been almost halted due to expected changes in the system of management of education. Powers in this area will be gradually taken over by regional offices which should be able to address these issues in a more appropriate manner, taking into consideration availability of programmes, needs of the relevant region as well as efficient and rational functioning of schools.

### **School facilities and preparedness to use ICT**

While all higher education institutions are connected to a high-speed computer network (and by means of this to the Internet) and although, to a varying degree, they have enabled access to ICT to all their students, the situation in secondary and basic schools is far less favourable. There are big differences between schools both in terms of equipment and teachers' preparedness<sup>69</sup>.

The number of students per one computer in basic and secondary schools is still disproportionately high and, in most cases, makes it impossible to use computers as an integral part of teaching. As regards **connection to the Internet**, the situation is very bad – one third of secondary and virtually three quarters of basic schools are not connected. The quality of connection is also inadequate in most cases. As for software to support teaching and electronic and multi-media teaching aids, the situation is unfavourable as well. Only 15 to 30 percent of secondary schools have programmes for tests, teaching games or laboratory experiments. The level of ICT use for self-study in secondary schools is low. The approach to providing schools with the relevant equipment and introducing ICT to teaching may be described as haphazard and inconsistent. The problem of information literacy of teachers persists at all levels of the education system. This negatively affects the quality and efficiency of both ICT teaching and the use of on-line methods in the educational process.

---

<sup>67</sup> Karpíšek, M.:Problémy a budoucnost vyšších odborných škol v kontextu terciárního vzdělávání, podkladová studie pro Bílou knihu (Problems and Future of Higher Professional Schools in the Context of Tertiary Education, a background report for the White Paper), 2000

<sup>68</sup> The 1999 annual report of the MoE about the state and development of the education system

<sup>69</sup> The state of ICT availability in basic and secondary schools was the topic of an international survey entitled SITES (Second Information Technology in Education Study), the Czech part of which was carried out by the Institute for Information on Education in 1998. At the turn of 1999 and 2000, a complementary survey was conducted concerned with the availability of computer technology in schools.

According to surveys<sup>70</sup> one of the largest groups of Internet users are students. As concerns access to the Internet, some three quarters of the users get connection to the Internet at their workplace, two thirds at home and only about quarter at school<sup>71</sup>. The high number of students using the Internet and the relatively low connection capacity in schools suggest that the students' ICT competencies are ahead of the school technical facilities and based on their own initiative rather than on school support.

The situation should improve in years to come, since the MoE has drafted and outline of information policy in education until 2005 which envisages a rapid provision of facilities and training of teachers for ICT use (see chapter 3.1).

### Number of teachers

The **number of teachers** in Czech vocational schools has been influenced by numbers of schools, numbers of students and the student-teacher ratio. In the early 90's, the overall number of teachers and foremen in vocational schools at upper secondary level grew along with the number of schools and students. In the second half of the 90's, the figures stagnated or dropped along with numbers of students. Apart from demographic reasons, the decrease of students was caused by adding a year in basic schools and dropping it in secondary schools. In 1999, the whole year of graduates of three-year programmes in secondary vocational schools was missing. The same situation was in 2000 in four-year study programmes with „maturita“. This steep decline in the number of students, along with an increase in teachers' work load has resulted in a decline in the overall number of teachers. Despite the fact that their workload was decreased again by the new social democratic government in 1999 (to the original 21 teaching hours per week), the number of teachers did not increase. In 2000/01 when the third (or fourth) years at secondary schools were re-filled again, the number of teachers at secondary VET schools increased again.

The **student/teacher ratio** has been changing over the past ten years both in total and among the different types of schools.

In recent years, the student-teacher ratio is slightly increasing (with the exception of higher professional schools) – indicated in full-time equivalent. On average, there were 8 students per teacher (full time) in secondary general schools (gymnasiums) in the academic year of 2000/01 (see Key Indicators, Table 24). In secondary technical schools and secondary vocational schools, there were also about 8 students per teacher. These figures are lower than in other countries.<sup>72</sup> One secondary school teacher teaches only three quarters of his/her teaching load. The reason for this is that many teachers teach on an external basis.

One major problem is appropriate pay of teachers. Qualified teachers leave the education system for better-paid jobs (particularly in administrative centres and big cities with higher levels of pay). As for age distribution, the proportion of younger age groups is decreasing. In 1999 more than 60% of teachers at secondary schools were over 40. The proportion of women teachers is increasing (62% at STS, 58% at SVS in 1995).

**Table 3.2 Age structure of teachers at secondary and higher professional schools (in %)**

| Schools and school facilities  | 20 – 29<br>years | 30 – 39<br>years | 40 – 49<br>years | 50 – 59<br>ears | 60 – 69<br>years |
|--------------------------------|------------------|------------------|------------------|-----------------|------------------|
| All school except universities | 13,7             | 28               | 27,9             | 25,4            | 4,1              |
| Of which                       |                  |                  |                  |                 |                  |
| Secondary schools              | 11,4             | 26,4             | 30,3             | 25,5            | 5,4              |

<sup>70</sup> The 5<sup>th</sup> round of a the survey of Internet users in the CR (June – July 2000)

<sup>71</sup> The sum exceeding 100% implies that the respondents state more than one possibility of Internet connection.

<sup>72</sup> For instance, in 1995, vocational colleges in OECD countries averaged at 14.2 students per teacher. (Education at a Glance, OECD, 1997)

|                              |      |      |      |      |     |
|------------------------------|------|------|------|------|-----|
| ”gymnasia”                   | 14,7 | 28,2 | 29,2 | 22,9 | 4,1 |
| Secondary technical schools  | 9,7  | 25,8 | 30,5 | 26,5 | 6,5 |
| Secondary vocational schools | 7,7  | 22,5 | 34,3 | 31,1 | 3,5 |
| Higher professional school   | 13   | 25,7 | 31,7 | 23,3 | 5,5 |
| Special schools              | 11,8 | 28,4 | 26,7 | 27,7 | 4,7 |

Source: Statistical Yearbook on Education 1999, ÚIV

Note: Full-time equivalent, in %, as at 31.12.1999

The Ministry’s **Long-Term Development Plan** include also aims to improve the quality, structure and position of teachers. The plan envisages appropriate changes both in initial training at teacher training faculties, and in continuing education and professional development of teachers. Last but not least, changes to the system of self-evaluation, appraisal and remuneration of teachers are also planned. Along with this the position of teachers must be considerably enhanced and the development to date should be reversed as it has lead to the departure of young teachers from education and a permanent increase of teachers’ average age.

Specific measures, which should be implemented by the end of 2003, are proposed in a number of areas – they concern initial as well as continuing education, the teachers’ motivation to get involved in their own personal development and the development of the school, and better attractiveness of the teaching profession. The starting point is the definition of a teacher’ profile, the key competencies and the differentiation and classification of pedagogical activities. These steps form a foundation both for the drawing up of teacher training programmes at universities and continuing training programmes, and for the development of systems of career progression and pay increases.

### **Student participation**

The level of **participation in education** is high among young people between 15 and 18 (19) years of age in the Czech Republic. In 1999<sup>73</sup> more than 90 % of the population of 15 - 16 years old students, about 81% of 17 years old, 55 % of 18 years old and 36.9 % of nineteen years old students participated in education. These levels have grown slightly in the lower half of the age spectrum and rapidly in the upper half of the age spectrum of 15 - 19 years. For example, the participation rate grew by 27.6 % among 18 years old students and by 14 % among 19 years old students between 1990 and 1997. Main reasons for this development include the added year to basic schools and a higher student population in longer educational programmes (4 years, leading to Maturita certificate). The growth of the involvement of 19 year old students in education reflects also growing numbers of students in tertiary education.

In international comparison, Czech Republic scores high in the participation of upper secondary school age students in education; in fact, the country exceeds the EU average. However, since the average duration of secondary studies is shorter and young people leave schools earlier to enter the labour market, it is already at the age of 19 that participation of young people in education begins to decrease below the European level. This steep fall is even clearer in the 20-to25 age group as the Czech Republic lags behind developed countries particularly regarding participation of young people in tertiary education.

### **Drop-outs**

There is no specific data available in the CR which would monitor the progression of students through the education system. Neither are there statistical registers of students who leave individual schools before properly completing their studies. These numbers are only estimated based on the difference between the enrolment in first years and numbers of graduates.

<sup>73</sup> Own calculation (RIVE - Vojtěch) based on data for Statistical Yearbook of Education 1999/2000.

Although the proportion of drop-outs is relatively low (see table below), the problems of young people who find themselves in the labour market without a qualification are serious. This concerns primarily those who, within compulsory education, complete the basic school in a lower than ninth year which means that they have not completed basic education – and cannot continue to further educational levels. According to estimates, their share amounts to some 4-5%<sup>74</sup>. Problematic groups also include students who drop out from secondary vocational schools. Although there is not precise data it may be expected that, in many cases, these young people leave not only the school, but also the education system. This may be inferred from the fact that there are still 7-8% of people with basic education in the 25-29 age group.

Drop-outs from *gymnasia* and secondary technical schools do not normally constitute a departure from the education system. Students who fail in this type of school transfer to another, relatively easier type of education – i.e. *gymnasia* students to secondary technical schools and secondary technical school students go to secondary vocational schools.

A higher drop-out rate occurs only within the tertiary sector, i.e. in higher professional schools and universities (estimates of drop outs from the latter are rather unreliable). A failure to complete studies at this level is not so serious compared to lower levels. Still, it may cause problems to students who graduated from *gymnasia* and do not have any professional qualification required by employers.

Boys face a higher risk of dropping out than girls, particularly in programmes leading to „maturita“ and in tertiary education. An exception is girls at secondary vocational schools and schools without „maturita“ who drop out more often than boys.

**Table 3.3 Estimated drop out rates (in %)**

|      | General education |     |       | Secondary VET with Maturita |     |       | Secondary VET with qualification |     |       | Total sec. VET |      |       | Higher professional school |      |       |
|------|-------------------|-----|-------|-----------------------------|-----|-------|----------------------------------|-----|-------|----------------|------|-------|----------------------------|------|-------|
|      | M                 | F   | Total | M                           | F   | Total | M                                | F   | Total | M              | F    | Total | M                          | F    | Total |
| 1995 | x                 | x   | X     | x                           | X   | x     | x                                | X   | x     | 7,4            | 10,4 | 8,7   | X                          | x    | X     |
| 1996 | 2,1               | 1,8 | 1,9   | 2,4                         | 1,4 | 1,8   | 7,5                              | 9,2 | 6,9   | 4,9            | 3,7  | 4,4   | 21,5                       | 13,5 | 16,2  |
| 1998 | 1,9               | 1,6 | 1,7   | 3,8                         | 3,2 | 3,5   | 4,9                              | 5,5 | 5,1   | 4,3            | 3,8  | 4,0   | 21,8                       | 15,1 | 17,2  |
| 1999 | 1,0               | 1,4 | 1,3   | 4,8                         | 3,4 | 4,0   | 5,9                              | 7,3 | 6,4   | 5,4            | 4,7  | 5,1   | 24,2                       | 13,5 | 16,9  |

Note: M - males, F - females

Source: Key indicators 1995-1998, Czech National Observatory of Employment and Training, 1999 Institute for Information on Education

Although the education system provides opportunities to complete basic and secondary vocational and technical education, many of these young people do not make use of them. They need a specific approach and a more comprehensive care which the school fails to provide. Rigid educational programmes making it impossible to divide up or interrupt studies while completing at least an individual study unit deter these people from returning to school where they would have to start virtually all over again.

The education system lacks embedded mechanisms for an early search of students at risk, and it is not sufficiently inclusive to provide individualised assistance and re-integration in studies (see also chapter 3.4.1.1 on access to education). The work of educational counsellors at basic and secondary schools is formal and inefficient in this respect.

#### **3.4.1.4 Access to other levels of education and employment**

In the Czech Republic the majority of young people start their working life after finishing secondary school and only a smaller part continue their studies.

<sup>74</sup> Estimation - 1999, Institute for Information on Education

After completing their secondary education with “maturita” examination, the graduates have two possible ways of entering the tertiary sector: higher professional schools and higher education institutions (universities). The participation rate in tertiary education is about 22% from the 19 year old population group<sup>75</sup>. Around 31-32% of recent graduates from all secondary schools went on to the tertiary education<sup>76</sup> – of these about 24% enrolled to universities and 9% to higher professional schools<sup>77</sup>.

However, it may be inferred from analyses of admission proceedings that many graduates, particularly those from *gymnasia*, seek admission and are enrolled to tertiary institutions in subsequent years following their graduation. Graduates from *gymnasia* are far more successful in admission proceedings at universities, while graduates from secondary technical schools are slightly more successful as regards admission to higher professional schools. Of students enrolled in universities in 1999, 53% were graduates from *gymnasia*, 33% from secondary technical schools and 14% from secondary vocational schools (including follow up courses). At higher professional schools graduates from secondary technical schools prevailed (63%), much smaller was the proportion of *gymnasia* graduates (28%) and graduates from secondary vocational schools (9%).

The problem remains the small capacity of tertiary education in spite of a certain relaxation of pressure after the introduction of higher professional schools. The number of those wishing to enter higher education is steadily growing, and although universities are also expanding their capacity, the rate of applicants is twice higher. Even in 2000 – which was not typical, since a whole year of secondary school graduates was missing and admission to the tertiary sector was sought by “older” graduates – universities again rejected approximately one half of applicants (depending, of course, on field of study)<sup>78</sup>.

It is clear from the above that some two thirds of secondary school graduates enter the labour market immediately after graduation – some of them only temporarily as they want to seek admission to the tertiary sector again later on. It may be estimated (with a certain degree of inaccuracy) that the group which enters immediately the labour market consists of some 15 to 20% of *gymnasia* graduates, and 85-90% vocational school graduates without “maturita” and 70-80% vocational school graduates with “maturita”<sup>79</sup>.

Graduates who enter the labour market find various kinds of problems and unemployment depending on their field of study, the situation in the relevant regional labour market as well as on their personal qualities (for more information see chapter 2.2.3).

### 3.4.2 Responsible bodies

The **Ministry of Education, Youth and Sports** (MoEYS) is the central managing body in the field of education. Until 2000 all principal powers in education including its administrative governance were concentrated in the hands of the Ministry, which exercised these powers either directly or through school offices. These were bodies of the MoE in individual districts (abolished on 1 January 2001). Since 2001 part of the steering powers has been delegated to the regions within the reform of public administration (see below). Currently, the main responsibility of the MoEYS is to design the concepts and strategies of the government's education policies, to elaborate draft education bills and decrees, to ensure

---

<sup>75</sup> estimation – Observatory's calculation made on the data from Press release of MoEYS (Admission to the universities and higher professional schools), <http://www.msmt.cz/cp1250/web/80/PRIJVS.htm>

<sup>76</sup> Press release of MoEYS 2001 (Information on real numbers of participants in tertiary education in CR), [http://www.msmt.cz/cp1250/info/nas-vyzkum\\_uiv.htm](http://www.msmt.cz/cp1250/info/nas-vyzkum_uiv.htm)

<sup>77</sup> As 2000/01 school year is not a typical one because of very low number of secondary school graduates (a whole year of secondary school graduates was missing due to extension of basic school by one year in 1996), the indicated data on graduates is reliable to 1999/2000 year.

<sup>78</sup> Interest in HE studies in 2000. A joint press release by the MoE and the Institute for Information on Education of 1.8. 2000

<sup>79</sup> Own calculation (RIVE-Vojtěch)

the standards of the content and quality of education, to provide for the financing of direct costs of education and to coordinate the public administration management in education.

The **Council for Education Policy**, which was established in 1999, as a advisory and consultative body of the Minister. The actual influence of this Council has so far been limited. Its members are mostly specialists from various sectors of the education system. The representation of the labour sector and social partners is very low.

**Secondary school directors** have significant powers. They are responsible for the implementation of approved training programmes, for professional and pedagogical level of the school work as well as for management and effective use of financial resources and personnel policies (hiring and dismissing teachers and other staff) and for the development and publication of a school annual report. The director also sets admission requirements and takes decisions about course interruptions and modifications of the educational programme within the limits defined in the curriculum. Schools can also voluntarily set up their own school boards, which act as consultative bodies. All vocational schools are independent legal entities - so-called „school legal entities“.

The **Czech School Inspectorate (ČŠI)** is a state body established by the MoE to conduct inspections. The inspectors of the ČŠI identify and assess the results of the education in schools and their courses taking into account the valid vocational training documents (curriculum), the personal and material technical conditions of instruction and the efficiency of financial resources allocated from the State budget. With the enlarged autonomy of schools, ČŠI's role is shifting from administrative control activities to assessment activities. Moreover, every year, MoE proclaims a so-called thematic inspection focusing on given current important aspects of the education system (for example the integration of handicapped, art education) which are the subject of cross-section evaluation at a certain sample of schools.

### **Public administration reform in education**

Recently, a **comprehensive reform of public administration** has entered into the implementation stage in the CR. The reform is expected to affect substantially the system of the management of education. Global trends are represented in the reform by the introduction of subsidiarity and participation principles, by delegation of responsibilities from the central level of public administration to the de-centralised level of regional self-government and, in education, by further promoting the autonomy of schools and powers of school councils. Similar trends can be also seen in the area of financial flows.

The current reform facilitates a modern definition and performance of **the function of the MoEYS** which, even in the new circumstances, plays an important role primarily in carrying out the tasks of conception, coordination, regulation and distribution. Its main functions are defined as follows:

- **Development of medium-term and long-term policies and strategies** - drafting the educational policy, strategic planning in the form of Long Term Development Plan of Education and Education System (LTDPEES), methodological guidance and coordination of the development of LTDPEESs by individual regions (see chapter 3.1), carrying out analyses, preparation and introduction of structural changes
- **Curricular policy and assurance of quality in education** - drawing up and continuous innovation of the State Educational Programme, Framework Educational Programmes (see chapter 3.4.5), evaluation of the state of affairs in and results produced by the education system, certification and examinations, support mechanisms, research and development base
- **Political action** - efficient communication with the professional as well as lay public, establishing mechanisms and ways to facilitate participation of social partners in decision-making at the central level, international commitments, systematic communication with representatives of the central and regional administrations

- **Management, funding and legislation** – decisions concerning the financing of so-called direct costs of education including teachers’ wages (determining “normatives”, amounts of resources for various regions, allocation principles), management and implementation of innovations, provisions for financial support for priorities set out in LTSDPEES by means of so-called development and innovation programmes (see chapter 3.4.3), selective intervention in critical areas, justifying and securing an appropriate share of public funding for education, efficient, supervision of the use of public resources, legislative activities.

The reform of public administration completes the setting up of the **regional level** of administration (which the CR did not have before) and considerably enlarges **the role of self-government**. The fundamental change in the management of education therefore consists in **abolishing school offices** at the end of 2000 and in distributing their responsibilities among self-governing bodies and Regional Offices of newly-established regions.

At the regional level the following bodies have been established which have powers in the area of education:

**a) self-governing bodies:**

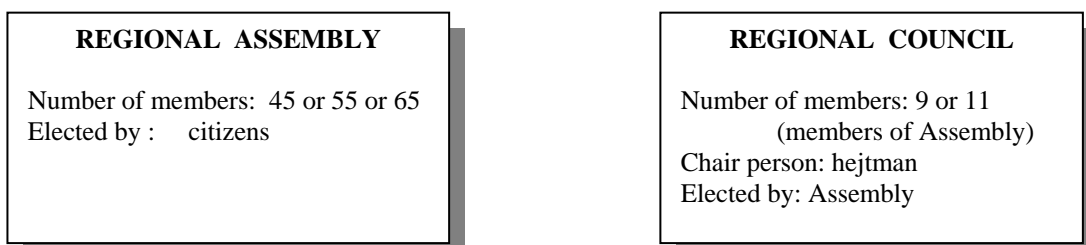
**Regional Assembly** (45 – 65 members depending on the number of inhabitants in region) which is elected by citizens and has a decision-making function. Its powers are defined by law – the ones relevant in the area of education include: submitting new bills to the Chamber of Deputies and proposals to abolish legal regulations to the Constitutional Court, issuing generally binding regional decrees, coordinating regional development, approving the regional budget and setting up and closing down organisations in the region’s administrative area. Assembly has four specialist committees, that have to be created obligatorily. One of them is the **Committee for Education and Employment**. There could be created other Committees – the total number of committees differs from 4 to 10 in region. All members of the committees are elected by the Assembly. Concerning Committee for Education and Employment, the composition of the committee varies in regions, the number of members is usually about 10 (the minimal number is 5). The committee members are mostly members of the Assembly (7-8 persons), there are also other professionals (2-4 persons) which are nominated by the political parties. The chair-person of the Committee must be a member of the Assembly.

The Committee comments, for example, upon: the network of schools and school facilities, the structure of education programmes and changes thereof. It also submits proposal to enhance the quality of activities of schools set up by the region, comments upon the granting of subsidies in the area of youth, education and sports.

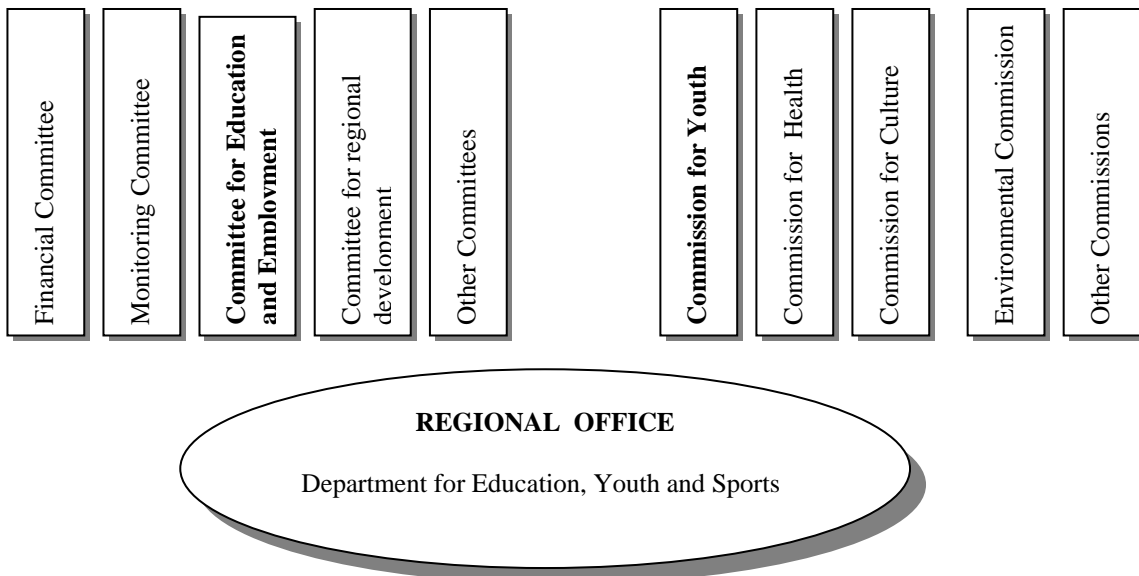
**Regional Council** which is elected by the Assembly and composed of the Assembly members (9 or 11 persons depending the number of inhabitants in region. Council is headed by the “hejtman”). It has an executive function. The Council provides for and supervises the management of approved resources, issues regional regulations etc.

It also establishes **Commissions** as its advisory and suggestion-making bodies (their number ranges from 4 to 12 in the regions). The commissions present their comments and suggestions to the Council. They are mostly made up by professionals in the respective area (including representatives of schools labour offices, the regional office) and a small number of the Council members. The total number of members is normally around 10. One commission could be concerned with the issues of youth, leisure and sports.

**Organigram of regional bodies**







**Direct powers of self-government** (the so-called independent jurisdiction of regional bodies) in relation to vocational training are as follows:

- Setting up and closing down schools<sup>80</sup>. (the decisions concerning the schools' inclusion in the register of educational facilities is still taken by the MoEYS so as to ensure the appropriate quality of all schools)
- Setting up and closing down centres of practical training, educational guidance facilities, centres for school services (including IT centres), continuing teacher training facilities, school facilities (out-of-school activities and meals)
- Taking decisions about the inclusion of practical training centres into the register of educational facilities
- Decisions about direct financing of schools' capital costs
- Decisions about increases of resources for the so-called direct costs of education (above the level allocated by the Ministry) from the regional budget
- Appointing and dismissing school directors (appointments must be approved by the Ministry)

**b) State administration body:**

The body executing state administration in the region is the **Regional Office**, which also has a **Department for Education, Youth and Sports** responsible for the execution of state administration in education in the region. The execution of state administration which was delegated to the Regional Office is designated as "**delegated regional powers**". Delegated regional powers in relation to vocational training are as follows:

---

<sup>80</sup> The responsibility for secondary police schools and secondary military schools, remains the concern of the Ministry of Interior and the Ministry of Defence.

- Drawing a Long-Term Development Plan of Education and Education System within its administrative area. Besides this, the body is obliged to publish annual reports about the state of affairs and development of the education system and schools in the region.
- Taking decisions about the allocation of all financial resources allocated by the Ministry to cover so-called direct costs of education in schools set up by the respective region. Supervision of the use of these resources.
- Allocating state financial resources to denominational schools and supervising their use
- Appointing and dismissing members and chairmen of examination panels for “maturita” and final examinations
- Methodological support to schools

Since neither the Council nor the Assembly have their own administrative background for a professional performance of their functions, their decision-making powers in education have administrative support of the Department for Education, Youth and Sports of the Regional Office, which is also the region’s state administration body. In view of the fact that the director of the Regional Office reports to the self-governing bodies, the regional self-government – in addition to direct powers – has certain influence on the delegated powers as well. This means that there is a **overlap of the self-government and state administration at the regional level** (besides education, this also applies to other areas of regional administration). The law does not precisely stipulate which of the delegated powers are subject to approval by the self-government. In most cases the reality is that simple administrative tasks are entirely up to the respective department of the Regional Office, while the self-government requires that it should have control over more complex or important issues. Consequently, the important delegated powers, such as the development of LTDPEESs, the allocation of resources to schools etc., are entirely controlled by the self-government and in line with its policies (although the methodology and overall principles prescribed by the Ministry must be observed). This implies that the self-government’s influence on education in the region could be very strong. However, it is premature to make any judgment in this respect. The actual development will depend both on the capacities of the regional self-government, and on the quality and nature (scope for discretionary modifications) of the framework policies drafted by the Ministry in order to influence the development of regional education.

### 3.4.3 Funding

Initial vocational education provided by public technical and vocational schools is free (with the exception of higher professional schools). **The main source** of IVET funding is the **state budget**, from which an amount is allocated to the Ministry of Education, Youth and Sports on an annual basis. Share of public expenditures to GDP fluctuated and in 2000, the amount accounted for 4,57 % of GDP. Although the Ministry aims at 6% of GDP by 2010, the stagnation trends have not yet been reversed. Expenditure on IVET makes up approximately one sixth of the total expenditure on education<sup>81</sup>.

#### 3.4 Share of public expenditures on education in GDP

|              | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Share in GDP | 4,09 | 4,12 | 4,17 | 4,52 | 5,21 | 4,82 | 4,67 | 5,21 | 4,64 | 4,47 | 4,73 | 4,57 |

<sup>81</sup> Education Yearbook, Economic Indicators, Institute for Information on Education – IIE, 2000

Source: *Historical Yearbook of Education, Institute for Information on Education, Prague, 1998*  
*Statistical Yearbook of Education, Institute for Information on Education, Prague 2001*

Note: *Public expenditures = expenditures of MoEYS, other ministries (Ministry of Defence, Ministry of Interior), municipalities and regions, including public expenditures on private and church schools, without expenditures paid by private institutions, students and parents*

IVET funding procedures (and partially sources) change with effect from 1 January 2001, since on that day a public administration reform came into force in the Czech Republic. The management, administration and funding of secondary schools (including vocational and technical schools) are taken over by **regional offices** in 14 newly-established regions. The financial resources to cover teachers' wages, textbooks and teaching aids are still provided to these offices by the state (the Ministry of Education, Youth and Sports). However, secondary schools' operating costs will be covered by the regional offices' resources (see the Funding of Education Chart). Since the Ministry's powers and responsibilities are only gradually taken over by the new regional offices, the funding mechanism in 2001 is a temporary one – a combination of the old and new procedures.

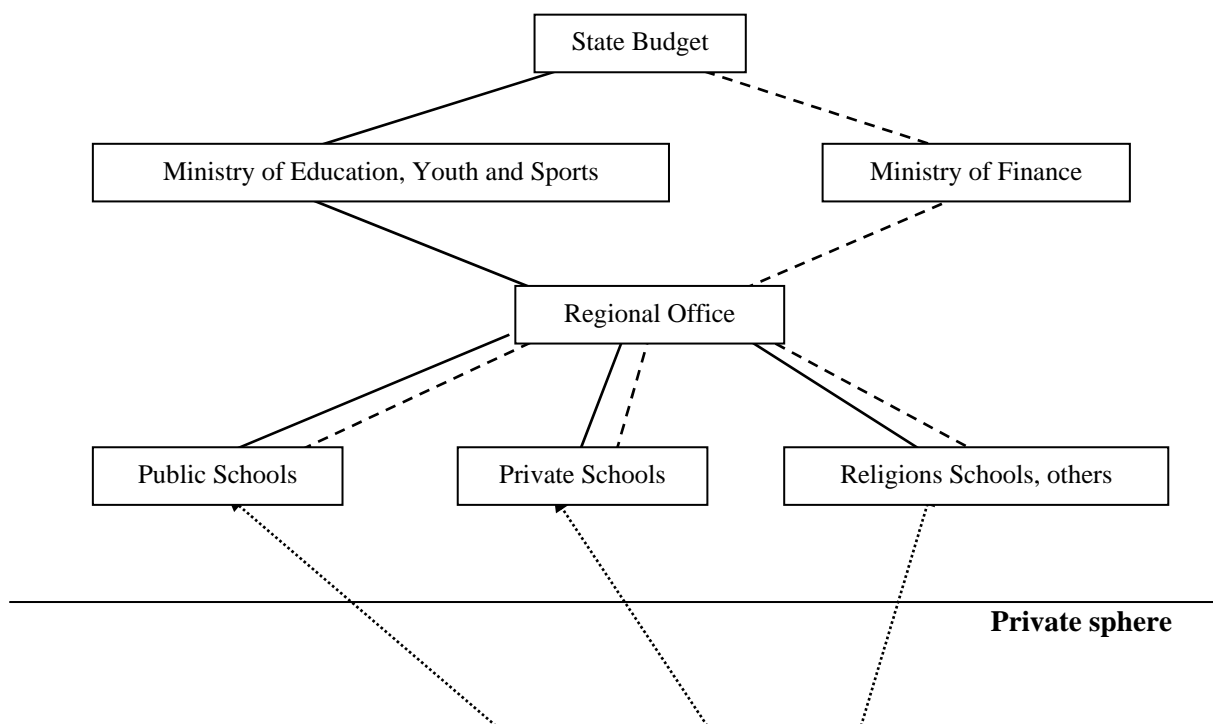
The Ministry of Education, Youth and Sports allocates financial resources to regional offices (to cover teachers' wages, textbooks and teaching aids) on a **per capita** basis. The Ministry determines an amount (rate) for one student. These amounts (rates) differ depending on school type (secondary technical, secondary vocational or higher professional school) and type of vocational education. The rates had been increasing until 1997; since then, however, the increase has been halted and they are even lower (and this is even true of 2000 and 2001) than in 1997.

In connection with the reform of the governance of education, a new component has been introduced in the model – the so-called **programme financing** (see the funding scheme). The Ministry will propose and finance Development and innovation programmes to promote schools' initiative and to provide for the implementation of priority aims of the development of the education system. Co-funding by regions and from EU funds is also envisaged.

**Chart 3.2**

**Education funding scheme**  
 (Target score from 2002)

**Public sphere**



Companies, families and other sources

- „direct educational costs“ – salaries and the other costs related to salaries, learning supports materials and development programmes
- - - - - „other educational costs“ – operating and investment spending
- ..... contributions from private sources

Note:

There are two major types of costs within VET financing:

- The first type is costs covered from the budget of the Ministry of Education, Youth and Sports. These include funds covering the wages of teachers and other staff, mandatory contributions (health insurance and social security), funds for teaching aids and, since recently, funds for so-called development and innovative programmes. These programmes are declared by the MoEYS (or possibly by other state bodies) together with specification of targets and rules and schools can apply for participation in specific programmes at their discretion.
- The second type of costs include funds for facilities, operating costs (e.g. heating, maintenance) and investment expenditure. These are covered from the budget of the relevant regional authority as the school founder. If the MoEYS continues to function as a founder of a specific school providing specific VET courses of national importance (for students from all regions), it will also continue to cover its operating and investment costs. The relevant regional authority receives the resources from the national budget to cover these costs and may increase the amount by providing its own funds.

Besides financial resources provided by their founder, schools providing VET may, in certain cases, also receive funds from private sources. Examples include tuition fees in private schools, contributions from companies for the training of apprentices etc.

**Employers’ contribution to IVET funding** is close to none. There are only exceptional situations where an employer volunteers to pay for the practical training of public secondary vocational school students.

As concerning other sources of public schools, public higher professional schools are allowed to charge tuition fees. Some secondary vocational schools obtain part of their revenues by means of selling their own products and services. The proportion of such revenues varies significantly, since it is dependent on both the field of education and the school’s initiative, and does not, as a rule, exceed one tenth of the school’s total revenues.

**Investment costs** account for some 7-8% and **operating costs** for some 92-93% of total expenditure on IVET. The low level of investment costs have been criticised by schools, experts and the public for several years. The largest component of operating costs is the cost of teachers wages, which account for some 70% of total operating costs. Although this proportion is increasing, the level of teachers’ pay (it is even lower than the national average in VET schools) only increases slowly and this issue is one of the most criticised issues in the education system.

**Private schools** providing VET may charge tuition fees. The state contributes considerably to the funding of private schools. Private schools receive state subsidies, the level of which depends on the number of students and the proportion of funds being allocated to public schools (this is determined by the MoE). At present, it is 60% for secondary technical and secondary vocational schools. This rate may be increased up to 90% depending, for example, on the evaluation of the school by the Czech Schools Inspectorate or on the statement of the labour office concerning the situation of graduates in the labour market, etc. The ways of funding private schools constitute one of the permanent conflicts between schools and Ministry representatives.

IVET funding, which is almost entirely covered by public sources, depends to a large degree on the national economy development and the priorities of government and regions. The negligible participation of employers in IVET funding is a shortcoming which lowers the equality and relevance of VET. The new strategy being drawn up for the development of the Czech education system does not envisage any major changes in this respect.

Up until now, IVET has been almost in full funded by the state. At present – after the decentralisation of the governance and the transfer of some finance responsibilities to the regions - most resources still come directly from the national budget (either from the MoEYS – for so-called direct educational costs, or indirectly through regional budgets – to cover capital costs). However, the regional self-government has a real influence on the allocation of the resources to individual schools and programmes. It may also decide to earmark additional resources from its budget for these purposes. However, currently, own resources of the newly set up regional self-governing bodies are limited and do not provide much space for a higher level of education funding.

#### **3.4.4 Social dialog and integration of social partners**

There is no specific forum at a national level for a dialogue about IVET issues. If an official discussion about important IVET issues does occur between state officials, employers and trade unions (such as draft legislation), it takes place within the Economic and Social Agreement Council. The Council is a tripartite body set up to discuss all relevant issues (most frequently economic ones). One of the Council's working groups is focused on educational issues. Since it was established based on an agreement between the government and social partners (i.e. not as a result of any legal provision) the results of the discussions are complied with accordingly, and are not legally-binding. Although proposals were put forward in past years regarding the establishment of a specific body for social dialogue about VET, they did not materialise. In 1999, the Minister of Education, Youth and Sports set up a Council for Educational Policy as his advisory body. Out of the 18 members, two are representatives of social partners on the Council. However, this is only a consultative body which advises the Minister on all educational policy issues.

At present, regional tripartite bodies **Regional Councils on Human Resource Development** are being established in some newly set up regions. They incorporated representatives of social partners, employment services, training institutions, schools, companies and regional agencies. The objectives of such councils have been to create a working environment where the interested parties could actively exchange opinions in order to promote lifelong learning and human potential of the regions, and to harmonise the skills and qualifications available in the region with the demands of the labour market. The experience has been evaluated in the regions as very positive. However, it is premature to assess their real influence.

There is a **legal framework** for collective bargaining and for certain aspects of the relationship between trade unions and employers. However, this framework does not provide for the participation of social partners in important IVET issues (i.e. the development of curricula and educational standards, quality assurance, the identification of IVET needs, the allocation of funds etc.). The current legislation on IVET does not lay down any powers or responsibilities for social partners in IVET. This is why all contact by social partners with institutions and IVET bodies at all levels (national, regional, local) is on an ad-hoc basis.

In these circumstances, the activities of employers' associations in the area of IVET vary significantly sector by sector at a national level. Most activities are undertaken by the Czech Union of Employers in Energy which, for example, facilitates teachers' access to the training courses and seminars it organises. The activities of professional associations in the area of IVET also differ significantly. The Union of Car Service Stations of the CR, for example, holds student competitions (for auto mechanics) in professional skills. In recent years, it has been the Economic Chamber of the CR that has been the most active in terms of contact with

VET schools. Its education section organises, among other things, seminars for VET school directors and arranges for participation of experts in final examinations in VET schools, etc.

Although there is some **co-operation between schools providing VET and companies** at a **local** level, it is most often only restricted to certain aspects (e.g. the employment of graduates). The small scope of co-operation between secondary VET schools and companies is partly caused by practical training's low share in a real working environment in enterprises. Although the proportion of practical training in secondary vocational schools is high (approximately 50%), the training mostly takes place in specially-equipped classrooms and school workshops – not in companies. According to a survey conducted by the National Institute for Technical and Vocational Education (NITVE) in 2000 (Vojtěch), some two thirds of all secondary vocational school students never enter a real working environment in the course of the three or four years of their IVET. The survey found that interest in practical training in companies is low, both on the part of schools and on the part of companies. Some VET school directors have set up a School Council as their advisory body, where company representatives are also represented.

Since the participation of social partners in IVET is mostly weak, the major IVET aspects (such as curricula, the structure of fields of study, quality, funding) are primarily influenced by the education sector and by other sectors only to a small extent. The insufficient legal framework for social dialogue and the integration of social partners in IVET on one hand provides room for initiatives of various players (schools, companies, associations), but on the other hand hinders a systematic approach by all sectors. Incentives for a larger degree of company participation in IVET are non-existent.

The Long Term Development Plan of Education and Education System, which is being developed by the Ministry<sup>82</sup>, envisages a proposal for arrangements ensuring the involvement of employers and regional representatives in the setting of the content of final vocational examinations and in the actual final examinations. This involvement of social partners should be obligatory. The new concept of final examinations at secondary vocational schools should be prepared by 2007.

Also new curricula reform envisage the participation of social partners in formulating professional standards and in school curricula development (see below).

### **3.4.5 Curricula development**

#### **Curricular policy**

In its basic features the **curricular policy** is still **centralised**, since all curricular documents (with the exception of textbooks) are subject to approval by the MoE. On the other hand, the CR is one of the countries where, particularly in the first half of the 1990s, strong liberalisation trends occurred which resulted in a relatively **large degree of school autonomy** **which** have caused a certain lack of transparency in vocational training where a great number of educational programmes were approved, while due attention was not paid to their quality. This situation has not as yet been fully addressed, although a Standard of Secondary Vocational Education was adopted in 1998 which sets out a framework for MoE's requirements concerning the aims and content of curricula in vocational education and training.

The Standard of Secondary Vocational Education was originally developed within a Phare project entitled VET Reform and envisaged an implementation of a so-called bi-polar curricular policy. This means that schools themselves were to draw up their own educational programmes based on framework requirements defined in the Standard. Although this model was tested in pilot schools and the Standard was then adopted as a binding document for the

---

<sup>82</sup> 2<sup>nd</sup> working version, The Ministry of Education, Youth and Sports, 2002

whole system of vocational education and training, the authority to approve educational programmes prepared by schools have remained within the purview of the centre. The reason for this can be seen not only in the traditionally centralised educational policy, but also in an insufficient preparedness of school directors and teachers in vocational schools to take on new tasks without due time for preparation.

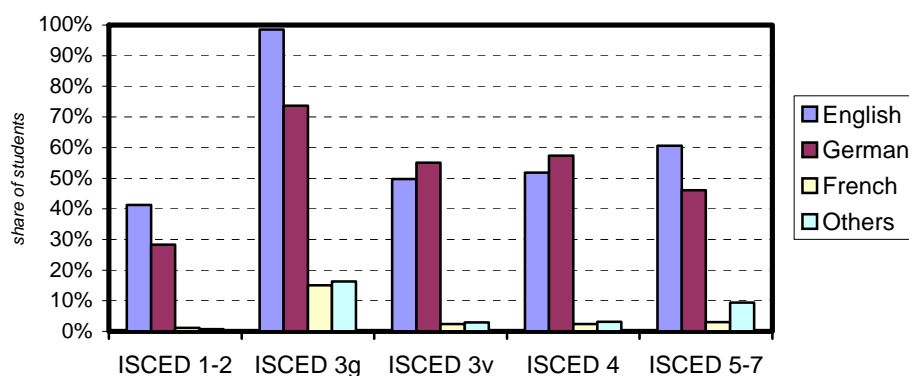
At present, there are efforts to introduce a new balance in terms of distribution of powers between the Ministry, regions and schools in the context of the new administrative set-up and, consequently, changes in the management of education. The draft of the Long-Term Development Plan (LTDEES) aims towards some changes in **curricular policy** where the Ministry determines framework objectives and the nature of vocational education, as well as so-called „**Framework Educational Programmes**“ (FEPs). The FEPs will form the basis of school-based curricula (a second part of the curricular document), which will be developed by the particular school and should take account of the needs of the regional labour market.

In order to facilitate transition of graduates from school to employment it is important to ensure that **practical training** is part of an educational programme. While in training programmes at secondary vocational schools the proportion of practical training is large (although it is often performed only in school and there may be problems with quality), there is a **negligible** share of practical training (in a workplace) in programmes leading to „maturita“ – this is particularly true of **business and engineering programmes** (agriculture and health care make an exception with a traditionally high proportion of practical training). The reason for this is problems related to the organisation of placements and practical training in companies. There is often both lack of interest and appropriate opportunities on the part of employers, since the issue of motivating companies to take part in vocational education remains unresolved. Consequently, it is even in vocational training without „maturita“ that the training is of a „school“ nature without any links to specific employers.

Concerning present situation in curricula modernisation, there have been significant improvements as regards **foreign language teaching**, although the quality of the teaching remains to be low. The issue of introducing a foreign language as an obligatory subject to the curriculum of some training programmes without „maturita“ is still a matter for discussion, since the achievement of these students has been rather unsatisfactory. In view of the requirements of life-long learning, the Standard sets out the duty to introduce a foreign language to all training programmes. There are still problems as regards the use of new **information technologies**. It is alarming that there is still a certain proportion of students who, during their secondary vocational education, do not get acquainted with computer technology. Improvements may be expected as a result of a massive IT support scheme in education which has been launched by the MoE and for which the Ministry has earmarked considerable amount of financial resources (see also chapters 3.1 and 3.4.1.3).

**Chart 3.3**

**Share of students learning foreign languages in 2000/01**



Source: Key Indicators – Table 25

Note: \* without universities

As regards the **development of curricula**, linear programmes with the duration of 2, 3 or 4 years still prevail. Although **modular structure of teaching** was tested in practice<sup>83</sup> within the PHARE VET Reform experiment, a wide-spread introduction of modules is still far from reality. The reason is that the advantages of this structure are restricted by persistent efforts of the MoE to modify the modular system to comply with the existing legislation<sup>84</sup>. This trend reduces significantly the benefits of a modular system and, consequently, only isolated modular programmes may be introduced – not a modular curriculum. The standard of vocational curriculum applied at present does not allow for a modular approach.

The Czech Republic lacks a well-developed evaluation system and, consequently, quality evaluation of educational programmes and outcomes of vocational education. Evaluation in general (and this applies to vocational education as well) concentrates only on study achievement in general subjects. Evaluation of **professional competencies of graduates** is carried out within the purview of individual schools. Due to the absence of social partners (most importantly representatives of employers) in the evaluation process it is impossible to assess the relevance of vocational education outcomes to the needs associated with employment.

### **Characteristics of the vocational education curriculum**

The **Standard of Secondary Vocational Education**<sup>85</sup> was adopted in January 1998 as a national binding document which defines a common educational base for all **newly-developed educational programmes**.

The **component of general education** is set to account for 45 % of teaching hours in courses leading to „maturita“ and 30 % in training courses without „maturita“. The general education part is divided up into six areas (languages, social sciences, science, mathematics, creative arts and physical education). There are educational goals defined for each area and a number of sub-areas in terms of content. Key competencies make up a relatively independent category in the Standard<sup>86</sup>. They involve communication skills, personal and inter-personal skills, problem-solving skill, numerical applications, skills associated with the use of IT.

As regards the **vocational component of education**, it consists of two different parts: theory and practical training. The Standard sets out requirements for the basic content of educational provision in 21 broadly-conceived branches (e.g. mechanical engineering, chemistry, economics and administration etc.). This means that the Standard does not include requirements for specific competencies of graduates in individual fields of education.

It is clear from what has been stated above, that foundations for a systematic approach to the development of curricula for vocational education have been laid. Due to the fact that compliance with the Standard is obligatory only for newly-developed educational programmes, the application of the new curricula is limited (to some 14 % of educational programmes), while most schools still provide educational programmes developed in the early

---

<sup>83</sup> Kubátová, H. et alia: Závěrečná zpráva z experimentu PHARE VET (Final Report on PHARE VET Experiment). Prague, RIVE 1998.

<sup>84</sup> Legislative obstacles include: a strictly fixed number of teaching hours per week (hindering a flexible distribution of hours in modules), regulations concerning student assessment (annual assessment based on subjects and not on mastering a module)

<sup>85</sup> Standard středoškolského odborného vzdělávání (Standard of Secondary Vocational Education). Prague, MoE 1997.

<sup>86</sup> Jezberová, R.: Klíčové dovednosti v kurikulu počátečního odborného vzdělávání (Key Competencies in Initial Vocational Education Curriculum) – a study within a grant assignment. Prague, RIVE 1998.



1990s. This is one of the reasons why the draft of the new law on education includes a requirement for the development of a so-called **State Programme for Education** which should set out basic requirements as concerns the aims and content of educational provision as well as output competencies for pupils from 6 to 19 years of age (i.e. to „maturita“). On the basis of this document, so-called **Framework Educational Programmes** for different levels of education and individual fields of vocational education are being designed up.

### **Framework Educational Programmes**

Framework educational programmes are based on the principle of a **two-level curriculum**. They define the obligatory framework of education guaranteed by the state for a particular level of education. In the existing administrative set-up, the system of framework educational programmes will constitute a key instrument for a coherent system of vocational training in the CR. The programmes **identify the target requirements for school leavers' competencies and the corresponding content of education**. This will ensure a **comparable level** of education and qualifications achieved at the particular level regardless of the provider.

The FEPs are a foundation for **school-based educational programmes**, which will be formulated by individual schools in line with their aim and needs of the region. Schools who do not aspire to develop their own programmes may follow centrally-prepared model educational programmes.

The National Institute for Vocational and Technical Education is preparing a first version of FEPs for secondary vocational and technical education. The programmes are broken down by educational levels and by the so-called “branches” of vocational education. Each branch covers a certain group of related subject-areas. This set contains 16 FEPs for secondary vocational education (with a qualification) and 20 FEPs for full secondary vocational education (with “maturita”)<sup>87</sup>.

The FEPs define the requirements for general as well as professional competencies of course leavers and the content of various components of the educational provision – i.e. the content of the principal areas of general education (foreign languages, social sciences, mathematics, aesthetics, physical education) and the content of vocational education in the relevant branch. Moreover, they contain a time schedule with an obligatory minimum of teaching hours for individual areas and the conditions on which it may be followed. There are other guidelines which should be observed in the development of the school-based curriculum: “cross-section” topics (the individual and the world of labour, the individual and the environment, information and communication technologies, the individual in a democratic society), guidelines for the education of students with special learning needs, the basic requirements for FEPs' implementation and the principles for the development of school-based programmes.

#### **The differences between FEPs and the existing Standard of Vocational Education of 1998:**

- **The concept of FEPs is based on the competencies** which express a particular aptitude of the school leaver – i.e. they are not only concerned with knowledge, but also with the necessary skills and attitudes. This concept differs from the concept founded on objectives and content in that it shifts the core emphasis from what the school should provide to what the student should know (the output of an educational programme).
- **The requirements for the content of education** are not defined according to the subjects of teaching, but according to the components of education. Each component is broken down into so-called “*content areas*”. This means that the requirements **are above the subject level**. This allows for diversity in the structure of school-based educational programmes - including modules and the development of integrated subjects - and for

---

<sup>87</sup> <http://www.msmt.cz/cp1250/info/sql/web/informace.asp?kods='20'>

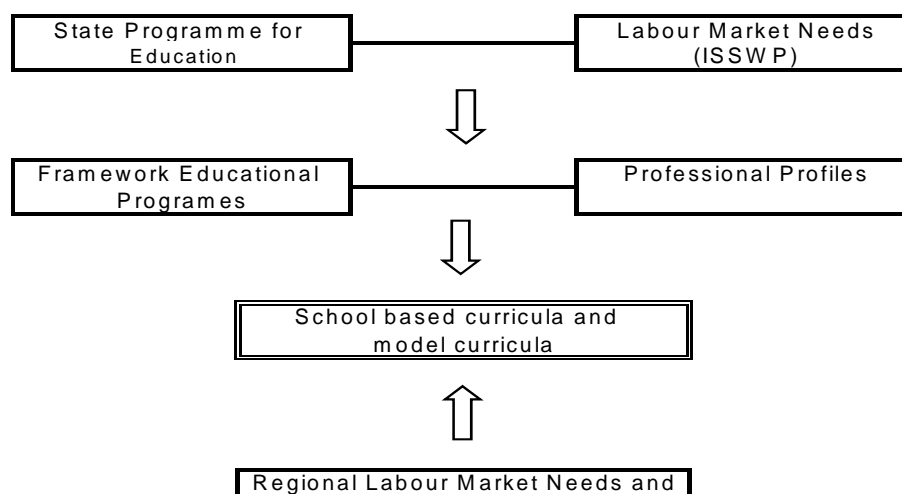
combining the aspects of general and vocational education depending on the particular course.

- The requirements will be valid for all educational programmes, not only new ones as was the case of the 1998 Standard

School-based educational programmes for individual disciplines must take account of the FEP for the relevant level and branch of education, as well as of the qualification requirements for the particular occupation. Since FEPs for the levels and branches of vocational education define requirements for a number of courses within one branch and do not contain **specific** requirements related to individual occupations, the second prerequisite for the development of school-based educational programmes is the so-called **professional profiles**. The professional profiles define common qualification requirements for the performance of one or more related occupations, contain information as to potential employment opportunities, a rough description of working activities and general requirements or their performance.

These requirements must be formulated by social partners, particularly employers. The information basis for the development of the professional profiles will also be the **Integrated System of Standardised Working Positions (ISSWP)**, which is being designed and which is guaranteed by the MoLSA. The qualification requirements will have the strongest impact on school-based and model programmes defining the requirements for specific disciplines.

The principal links between the curricular documents, the starting points and the system of the design of the educational programmes is illustrated in the following chart:



The Long-Term Development Plan<sup>88</sup>, which is being prepared by the Ministry, sets out the following tentative steps for **the design and implementation of the new curricular documents**:

- The first version of Framework Educational Programmes for vocational education will be put forward for discussion in the course of 2001 and 2002.
- The programmes will be gradually complemented by a set of professional profiles, the final version should be ready so as to be introduced from 2005/6
- A methodology for the design of school-based educational programmes will be developed. Model educational programmes have been under development since 2001.

<sup>88</sup> Long-Term Development Plan of Education and Education System in the CR, 2<sup>nd</sup> working version, MoEYS, February 2002

- A network of pilot schools will be designated to test the framework programmes. The schools will be selected by the end of 2002. Pilot school-based programmes will be prepared by 2004.
- In parallel with the pilot stage other schools will be gradually prepared for the introduction of the framework programmes. Good practices gained in pilot testing will be employed.
- A system for monitoring and evaluating the outcomes of educational provision in line with the new documents will be developed, as well as methods for schools' self-evaluation.
- Development programmes will be designed in order to stimulate and financially support the activities of schools related to the introduction of framework educational programmes (including teacher training). First development programmes to promote vocational education were launched in 2001.

Although the preparation of the new curricular documents has already begun, their completion is a matter of four to five years. The implementation of the new curricula in schools is conditioned upon the passage of the new education bill.

### 3.4.6 Legislation

At present there are three fundamental laws in the field of basic, secondary and higher professional education. Two of them were approved before 1989 - Act No. 29/1984 on the System of Basic and Secondary Schools (the School Act) and Act No. 76/1978 on School Facilities. Both of them have been amended since 1989. Act No. 564/1990 on State Administration and Self-government of Schools was approved in 1990. Among other changes, the new law introduced so called 'sector management of education', in other words an independent school management structure not subject to other state administration sectors.

The fundamental Act No. 29/1984 on the Structure of Basic Schools, Secondary Schools and Higher Professional Schools (the School Act) outlines the schools system in general, presents the framework of school types and the detailed characteristics of individual education levels from basic up to higher professional education. It stipulates the essential conditions for the operation of basic, secondary, higher professional and special schools, and for entry and completion of studies. It also contains several provisions of an organisational and technical nature which deal with compulsory school attendance, obligatory school documentation, the school year organisational framework, basic regulations on teaching materials and manuals. It briefly defines teaching personnel including, for example, vocational training instructors and schoolmasters. In the case of secondary vocational schools it stipulates a detailed process for their establishment and closure. For schools of other types this is covered by of the Law on State Administration and Self-government of Schools.

The School Act as a whole was amended eight times, two times very profoundly. The first very important amendment was made in 1990 (Law No. 171/1990) following the basic changes in society, school independence was strengthened to such a degree that secondary schools became independent legal subjects, and compulsory school attendance was changed to 9 years of basic school. This law also allowed the establishment of private and church schools with education equivalent to state school education.

In 1995 another significant amendment to the School Act, Law No. 138/1995 was approved. It completed the shift to a 9-year basic school and to a new basic school structure. Furthermore, higher professional schools were introduced into the school system. Changes were also made in post-*maturita* studies. Some parts of these studies were abolished and some were transferred to higher professional schools. In the field of professional preparation of the disabled, in addition to the existing vocational school a new type of school, the so-called

‘practical school’, was introduced. They were shown to extend the possibilities available to disabled young people.

Act No. 564/1990 on Public Administration and Self-government of Schools deals with the relations within the school system and determines the obligations and authorities of individual administration bodies, partly of the Czech School Inspectorate or bodies in charge of public administration (school directors, municipalities), or self-governing bodies (municipalities, local school councils, partly school councils).

The Act was amended four times, the most important changes being made in 1995 through the introduction of Law 139/1995 and in 2000 through the law 132/2000. This amendment stipulated the establishment of school councils as voluntary school bodies with as yet rarely used powers such as, for example, the approval of an annual school report, school budget and school economic report. The law 132/2000 Coll., which has in principle governed the reform of public administration since 2000, has brought about the following most important changes in education:

- The abolishing of school offices and transferring most of their powers to regional bodies (delegated powers), or, in part, to district authorities and, in some instances, even to municipalities,
- The abolishing of the direct governance (the so-called “sector governance”) and an important shift towards strengthening self-government,
- Powers and responsibilities for the regions concerning the establishment of secondary schools, higher professional schools, a bulk of special schools and most school facilities,
- Partial, but significant changes in the system of entering schools and school facilities into the register of pre-school facilities, schools and school facilities.

Act No. 76/1978, on School Facilities deals with the category of school facilities. Among facilities for vocational education (besides such usual school facilities as school canteens, hostels, school libraries), the most important represent facilities of educational guidance, and the school farms of agricultural, forestry, gardening and other secondary technical schools. The most notable change was amended by Law No.138/1995. It required school facilities as a part of the educational system. The range of schools which were allowed to manage and generate their own finances was broadened.

In 1999 Parliament passed a new **law no. 306/1999 on the provision of subsidies to private schools, pre-school and school facilities**, which governs the relationship between the state and private schools particularly as regards financing. The law stipulates that private schools must be given state subsidies ranging from 60 to 100% of the state “normative” contribution to public school, depending on the school type and management of resources. The basic 60% subsidy belongs to every private school which is recognised by the state and has concluded an agreement with the state administration and, apart from other things, has prepared an annual report about its activities and provided appropriate financial accounts of the subsidies it has been allocated. The subsidy may be increased for selected schools (particularly special ones) on the condition, that the Czech School Inspectorate has rated the school to be at least of average standards. Another requirement is that the school’s activities must not be carried out to make profit.

**Act No. 111/1998 on higher education** codified all the significant socio-political changes that took place through recent years, and it annuls Act No. 172/1990 on higher education in its amendment Law No. 216/1993 from January 1<sup>st</sup> 1999. The new act introduced a concept of university and non-university type of higher education [§ 2(3)]. A university provides Master (*magisterské studium* - four to six years of studying) and doctoral studies (three years) but it also can run Bachelor studies (*bakalařské studium* - three to four years) programmes. It has a right to organise itself into faculties with their own self-governing academic bodies. A non-university type of higher educational establishment provides bachelor studies and cannot be divided into faculties. Bachelor studies programmes are mostly aimed at professional training but they also contain certain theoretical aspects [§ 45(1)]. Masters programmes are based on

acquiring theoretical knowledge on the basis of contemporary scientific learning, research and development [§ 46(1)]. Both university and non-university types of higher education may undertake related scientific research and development, artistic or other creative performance. Along with state (military or police) and public higher education, the law also introduced private higher education [§ 2(7)]. All institutions and their study programmes have to be accredited by the MoE.

Besides the above mentioned laws, individual regulations, issued mainly by the MoE on a legal authority basis, are still very significant for VET organisational activities. Particularly important are those regulations that stipulate in detail the condition of admission to secondary schools, the organisation of secondary school studies with an outline of manuals and study branches, completion of secondary school studies, organisation of studies and their completion in higher professional schools, as well as governmental provision of the amount of school fees at higher professional schools.

### **Draft for new School Act**

The new School Act has been under preparation since 1999. The first version was rejected by the Parliament in 2001 and the new version will be put forward to the Parliament in 2002. The proposed law should replace four laws currently in place which provide for the respective areas of education: the law on the system of basic schools, secondary schools and higher professional schools (the School Act), the law on state administration and self-government in education, the law on funding private schools and the law on school facilities (educational establishments). The reason for this is that the wording of the School Act is currently, in effect, the result of nine amendments to the original law passed in the 1980s. (see above). This is why the inconsistent, patchy and disorganised nature of school legal regulations has led to the decision to draw up a comprehensive law covering the issue in its entirety. However, the main impulse was the adoption of new laws which fundamentally change the exercise of public administration in the sense of its de-centralisation – and this affects the management of education to a large degree.

**In the area of vocational education and training**, the bill suggests a range of changes. In general, it aims to ensure a higher degree of “permeability” in educational paths, to expand participation in the education of social partners, to strengthen the autonomy of schools and to promote the role of strategic planning and evaluation.

### **The following measures are envisaged to promote:**

#### **1) The “permeability” of educational paths within IVET:**

A new level of education is being established – “middle” education; this level is being achieved by graduates of one- and two-year programmes, as well as by those who have completed two years of longer programmes;

It is possible to enrol students in the first year which is common for several related programmes and to accept students to higher years, with the possibility of recognising their previous studies; Graduates with “maturita” and full secondary (vocational) education may undertake a shortened programme of vocational training and obtain the relevant training certificate.

The introduction of shortened vocational programmes will make it possible for those with full secondary (vocational) education with “maturita” to obtain a training certificate (qualification) which is in many cases required by the labour market,

There is an independent section about continuing education. In addition to various forms of continuing education (adult education), post-secondary vocational courses are introduced as a new form. They are designed for secondary school leavers who have “maturita” and would like to complete their education outside the system of higher professional and university education.

The bill adopts an approach than one currently being taken to higher professional schools (HPSs). The aim is for these schools to become closer in nature to tertiary education. New self-governing bodies are being proposed – a higher professional school council and a collegium. There are provisions facilitating better transferability between higher professional schools and universities. Changes are also being proposed regarding the organisation and completion of studies at these schools, the recognition of previous education and the evaluation of the quality of HPS

programmes. (However, these proposals constitute a compromise, since the representatives of higher professional education have pursued the development of a separate law which would address the specificities of this type of education.)

These changes address several existing problems, although only partially. The bill still builds on linear educational programmes, which make it impossible to create a flexible system of “mutually-permeable” educational paths and to increase horizontal mobility between various programmes - let alone the implementation of module and credit systems.

## **2) Curriculum reform and evaluation improvement**

A new system for the development of curricula – a multi-level preparation of basic documents for teaching – so-called educational programmes. The Ministry will design a national educational programme (curriculum) as a basic framework within which education will be provided in the Czech Republic, and framework educational programmes for each educational field. The framework programmes will be the basis for the development of school educational programmes in each particular school. Schools may also use model educational programmes developed by the Ministry (for details see chapter 3.4.5

Unlike the legislation currently in place, the law contains general provisions concerning the evaluation of student achievement (school marking regulations) and evaluation of the school (also by means of the school annual report), and introduces evaluation of the education system as a whole.

A fundamental systemic change is the introduction of a new “maturita” examination from 2004, which is expected to increase the comparability and transparency of its results (see chapter 3.4.1). One major problem remains the test (closed questions) of the common part of “maturita” examinations which, as experiments carried out until now have shown, focuses on the evaluation of knowledge obtained rather than on key competencies.

## **3) Management and funding reform**

The issue of the expansion of participation in school management is being addressed by the obligation to set up school councils at all schools as well as a Council for Education at a central level. However, the regional level of management has not been taken into consideration at all – the bill does not envisage the establishment of a body which, due to the participation of social partners from the region, would become a partner to public administration and self-governing bodies in managing schools and education.

Autonomy of schools should be strengthened – schools should become legal entities, so-called “school legal entities”. At the same time, measures are being suggested which aim to promote evaluation and self-evaluation, such as a responsibility for drafting the schools’ educational programmes and the provision of an annual report.

New principles have been stipulated for the funding of education in schools and school facilities (direct educational costs, direct costs of services, running costs, investment costs). The sources of financing are more clearly distinguished – direct costs of education are covered by the MoEYS, running costs and investment are normally paid by the founding body,

Direct costs of all schools and school facilities are covered following type of education discipline or school service in the same amount for the founders regardless of the position of the founder, Inspection activities and powers of school inspectors and other employees of the Czech School Inspectorate have been laid down in greater detail.

### **3.4.7 Weaknesses, strengths and future government priorities in initial VET**

#### **IVET strengths and weaknesses**

The CR ranks among countries with a strong tradition in the sector of **secondary technical schools**, with high standards of the general education component. This makes it possible for graduates to continue directly to the tertiary sector. Some 30% of graduates<sup>89</sup> from secondary technical programmes with a “maturita” immediately continue their studies in tertiary education. The technical education sector was transformed in the 1990s and has proved its viability. Its capacity has been enlarged to accept more students and significant changes to the

---

<sup>89</sup> Expert estimate - Ing. J. Vojtěch, RIVE.

curriculum have been made. Virtually all educational programmes have been innovated, and new ones have been developed so that they can respond to the changed needs and interests of students as well as to different labour market needs. On the whole, however, the programmes' profile has not been broadened sufficiently, which means they are still overly specialised and that there are too many educational branches compared to the situation in foreign countries.

The situation is much more difficult in the area of **secondary vocational schools**, which do not allow graduates direct entry to the tertiary education sector. The curricula mostly fail to include appropriate foreign language teaching or the use of computer technology. International studies show<sup>90</sup> that students and graduates from secondary vocational schools achieve a considerably lower level of general knowledge as well as the functional literacy compared to graduates from programmes with "maturita".

As regards the **structure and organisation of the system**, there has only been partial progress concerning the flexible establishment of educational paths. Linear educational programmes still prevail, limiting the chance to change focus or transfer to another educational programme in the course of one's studies. This approach to the development of the curriculum makes it possible for schools to influence the curriculum, based on the knowledge of regional needs or the capacities and interests of students and their parents. However, this does not guarantee an appropriate opportunity to influence the course of individual educational paths. Although various structured or module programmes were developed in the first half of the 1990s, they did not receive official support and were only implemented as part of experiments. The new concept of curricula, the so-called framework educational programmes which are being developed by the Ministry, will provide the option of a modular structure of the curriculum. However, the whole process is only beginning and it is difficult to assess the extent to which schools will exploit this option. It is also clear that without a uniform system of certification of various modular levels (which has not yet been proposed) both schools and student may not find the modular approach to be sufficiently attractive. In view of the system's traditions, it may be expected that future development will go in the direction of a limited number of broadly-conceived educational programmes rather than the introduction of a modular curriculum to the whole VET system.

IVET is not sufficiently flexible in its response to **individual needs**. There is still a high proportion of linear programmes - i.e. fixed from the beginning to the end; they do not allow for any modifications by the school or choice by the student. Optional subjects are only part of some 5 per cent of educational programmes. There is also an inappropriate capacity of the schools system to adjust to the individual needs of socially disadvantaged pupils because the curricula is focused on the average pupil and the scope of operations of educational counsellors at schools is limited.

The law provides for an **equal position of men and women** in schools and Czech society is not experiencing any major difficulties in this respect. There is relatively equal representation of males and females at secondary schools. However, there are still programmes which it is customary to call "for girls", as regards tertiary education.

An evaluation system and, consequently, the **evaluation of the quality of educational programmes and the outcomes of VET** is not sufficiently developed in the CR. The evaluation of the professional competencies of graduates only takes place within the authority of individual schools. The absence of social partners (particularly employers) makes it impossible to adequately assess the relevance of VET outcomes to the labour market needs. The varying standards of examinations at different schools have recently become a new model of "maturita", subject to broad discussions and experimental testing for several years. Certification in the schools system is not linked to continuing education, provided outside the schools system. Finally, the issue of the certification of skills obtained informally, on the basis of experience, has not as yet been raised in the CR.

---

<sup>90</sup> Matějů, P.: Funkční gramotnost dospělých. Národní zpráva z projektu SIALS (Secondary Adult Literacy Survey, National report from SIALS Project). Prague, SoÚ AV ČR 1998.

The low level of the **involvement of social partners'** (primarily employers and employees representatives) is a critical problem. This consists particularly of participation [or rather non/participation] in the development of educational programmes, in setting examination requirements and in arranging for industrial placements. The CR still lacks an institutional framework, nor is there a legislative base for social partners' participation in the development of VET. Forms of this participation in the CR, if any, have developed informally and are more likely to exist at regional and local levels, as **partnerships between schools and companies**. The National Council for Education Policy, which acts as a consultative body for the Minister of Education, has not raised the issue of VET as yet and its tasks are of a rather general nature. The only existing structures at a central level are so-called **NITVE<sup>91</sup> groups for educational branches** which have been set up to function as advisory bodies for the development of curricula in the relevant VET sector. They consist of school representatives and social partners. However, those members are not official representatives of social partners. They are in fact experts who are able to speak from the position of social partners about the prospects of VET development. A similar form of co-operation takes place at a local level, where company representatives consult schools on various issues or co-operate with them in other ways.

The involvement of social partners in VET could be strengthened in the future, provided that the Ministry's aims concerning the curricula and evaluation of VET outcomes are successfully implemented. Moreover, the decentralization of the governance of education provides space at the regional level for a stronger influence of the self-government, trade unions, employers and other relevant institutions.

### **Future government priorities in the area of IVET**

Since 1999, there is a marked emphasis on more coherent and structured approaches to the development of education. Various documents have been prepared which set out aims for a medium-term period. The National Programme for the Development of Education (so-called White Paper), approved by the government in February 2001, establishes the overall framework for national educational policy, aims and priorities. It sets out the decisive steps for their implementation in all educational sectors. An Outline of State Information Policy in Education has also been adopted. Its purpose is to gradually enhance the knowledge and use of ICT in schools and in population at large. Also in other conception documents in the field of labour market policy drafted by MoLSA (National Employment Plan and Employment Action Plan), there are formulated priorities for IVET development.

The White Paper sets out the following medium-term objectives and recommendations for IVET development:

- To increase the **proportion of the population** with a full secondary education with **“maturita” up to 75%**. At the same time, the proportion of general programmes including broadly conceived vocational programmes (e.g. *lycea*) should be increased up to 30%. Follow-up courses for graduates from vocational programmes without “maturita” should also be promoted. To develop and provide for, in terms of legislation, a **state educational programme and framework of educational programmes**, based on a broad knowledge base and key competencies and their incorporation into school educational programmes.
- To develop a **two-degree “maturita” examination** in the area of general education (This is the difficulty degree that will be certified and it can be chosen by student). The writing and **defence of a final thesis** should be made part of the school (profile) part of the “maturita” examination.

---

<sup>91</sup> National Institute for Technical and Vocational Education



- To support the optimisation of the network of schools in favour of so-called **multi-functional schools** providing general as well as vocational educational programmes at various levels of education.
- To increase the share of **broadly-profiled** vocational educational programmes with a transfer function to the tertiary sector (such as lycea)
- To support the development of branching and multi-level programmes and to introduce gradually modules into the organisation of VET curricula, facilitating vertical as well as horizontal “permeability” and links to continuing education
- To establish, **in cooperation with social partners**, support measures improving the transfer of school leavers to employment:
- To provide for legislation ensuring the participation of employers’ representatives in final examinations at secondary vocational schools
  - To support and provide for, in terms of legislation, at least several-month controlled placements in companies for each student in VET
  - To support the development of vocational and career counselling
  - To support the development of an information system inter-linking education with the world of labour

The recommendations contained in the White Paper are only general and are not elaborated into more specific steps. This is why the Ministry is developing the **Long-Term Development Plan of Education and Education System** which formulates the priorities in the form of specific measures with the relevant time schedule (this document is presently available only in a draft version). It concerns the following areas of education including IVET:

- **The curricular reform focused on the aims of education and changes in its content** – The priority is a new concept of the curriculum – emphasis should not be placed on the absorption of as many pieces of information as possible, but on a balanced development of both knowledge and skills (key competencies) including the adoption of appropriate attitudes and values. This means that certain forms of teaching will be prioritised, for example foreign language teaching – the aim is to learn one and later two foreign languages (this is also an aim declared by the EU). Various new topics will be introduced such as the nurturing of civic and democratic attitudes, professional orientation, European integration, multi-cultural and environmental education. These changes will be implemented by means of a two-level curriculum (i.e. national and school-based), while a progressive composition of educational programmes and teaching methods will be promoted (modules, project teaching). As regards VET, qualification profiles will be defined so as to provide clearer information to match qualification requirements. Cooperation with employers and their associations is envisaged in determining the structure of courses, in setting the objectives for VET and proposing innovations to the qualification profiles, as well as in evaluating the outcomes of education and student performance.
- **The introduction of information and communication technologies in teaching** – The priority is to build information infrastructure at all levels of education and to provide for the integration of ICT in all educational programmes across the system. Teachers must therefore get appropriate training and the development of plans for ICT use in schools must be supported. Conditions must also be established for schools to become the centres for enhancing information literacy among the population.
- **New methods of assessing the outcomes of education and the work of schools** – the objective is to develop a comprehensive system of evaluation, which is necessary in the conditions of decentralised governance of education and broader autonomy of schools. The use of standardised instruments of external evaluation is being envisaged including

the application of evaluation tools proposed within international surveys in which the CR participated. Self-evaluation of schools should be introduced, which would be carried out with the participation of schools' main partners (particularly the School Council).

- **Standardising school leaving procedures at secondary schools** – a new approach to the development and implementation of final examinations in vocational courses, where the content of practical part of the exam will be influenced by professional associations. Representation of social partners on examination panels will be obligatory. Objectiveness of the “maturita” examination at secondary schools will be ensured and the exam will be based on evaluation standards guaranteed by the state.
- **Developing an integrated diagnostic, information and counselling system** – The objective is to expand the existing system of educational guidance by the introduction of the position of a school psychologist, to develop standards for the provision of counselling services, to prepare a system of comprehensive diagnostic, counselling and information services at the level of regions; to conduct surveys and analyses of the situation of school leavers in the labour market.
- Establishing conditions for the **training of teachers and managers** in education – expanding and improving the quality of initial teacher training – teachers should be able to apply the new curriculum and teaching methods. The plan for continuing teacher training should be finalised and implemented by regional pedagogical centres with the participation of the relevant regional partners. Provisions should be made for teachers of vocational subjects and practical training supervisors at secondary schools to upgrade their qualifications. A system for continuing training of practical training supervisors should be developed and so called Craftsmen Master Examination should be incorporated in the training in co-operation with the Economic chamber.
- **Increasing the proportion of the population with secondary education with “maturita”** including vocational education with “maturita” – the objective is to increase the number of school leavers with “maturita” in line with the needs of regional labour markets. This objective should be implemented not only by means of raising the number of students in “maturita” courses, but also by means of improving the conditions for the development of follow-up courses for the graduates from three-year vocational courses. Cooperation with labour offices and other institutions in the region should be pursued to this end.

**Placements in companies** - Support and legislative provisions (in co-operation with social partners) for at least three-month managed placements in companies for each student in secondary vocational education. Improving the conditions for work placements and enhancing the cooperation between schools and employers by means of concluding work placement agreements.

**Expanding STSs' and SVSs' functions within life-long learning of adults** – the objective is to support the development of distance and combined educational programmes in schools so as to provide opportunities for adult education. Teachers should be trained in such forms of education.

**Restructuring higher professional schools and improving transferability between higher professional courses.** This includes both the creation of an environment for the evaluation of schools so as to make a distinction between shorter HPS courses at the “post-maturita” level and longer programmes of higher quality at the level of undergraduate university courses. Modular courses should be introduced with credit systems of evaluation and transferability should be ensured both between HPS courses and between HPSs and universities.

### **3.5 Modernisation of Continuing Vocational Education and Training (CVET)**

### 3.5.1 CVET provision (in terms of supply)

The existing structure of CVET providers is the result of developments in the 1990s. At the beginning of this period a majority of those educational institutions which were subordinated to various ministries and which, before 1989, provided continuing vocational education in the relevant sector, ceased to exist. If these institutions were not abolished, they were, as a rule, privatised and set themselves new objectives in the area of CVET. Parallel to this development, a high number of new private educational institutions were set up – some of them closed down later, others still exist. At present, these **private educational institutions** make up one important group of CVET providers. This group is not homogenous, since the providers differ in several respects (their size, legal status, theme profile, quality). It includes most importantly educational firms, companies' educational facilities and agencies as well as individuals licensed to do business in the area of education. The establishment of these institutions not only increased the number of CVET providers, but also expanded the CVET on offer and, most importantly, has brought market principles and competition into the whole of CVET. This means that the market relationship between supply and demand is a decisive one for the development of CVET.

Another important group of CVET providers consists of **VET schools**, both private and public: secondary vocational schools, secondary technical schools, higher professional schools and universities. These schools have traditionally provided vocational education leading to a generally recognised level of education as a „second chance“ for employed adults. Apart from still performing this function, some schools have expanded their repertoire by various mostly shorter educational programmes which are provided on a commercial basis to various target groups, including re-training courses for job seekers.

Information about the **quantitative aspect** of CVET providers cannot be backed up by exhaustive statistical data – there are no such statistics. However, estimates can be made based on outcomes of various partial surveys and research. The number of CVET providers which fall within the first group, i.e. the number of educational establishments other than schools, can be estimated at some 1,100 – 1,200. Compared to past years, the number has slightly decreased, since some (mostly small) educational institutions closed down for economic reasons, as supply exceeds demand (see below). Contrary to this, the number of schools providing, besides IVET, CVET as well, has slightly increased. The reason is that, due to a falling demand for IVET (lower numbers of young people in population age bands), schools expand their activities in CVET. For example, some 300 to 400 schools (mostly secondary vocational and secondary technical schools) provide re-training courses for job seekers<sup>92</sup>. Besides this, other schools provide CVET programmes leading to the completion of generally recognised levels of education. Their number may be estimated at 300 – 400 as well. The total number of CVET providers therefore amounts to 1700 – 2000.

As regards the overall scope of educational courses on offer, the results of various surveys among education providers<sup>93</sup> suggest that the supply of courses substantially exceeds demand in their regions. However, the supply of continuing training courses is only relatively higher than demand, since there are other factors at play – the standard of living, motivation for training, the availability of courses, economic and time limitations etc. In this respect, the CR still has to catch up with the EU – this is also confirmed by the lower participation of active population in education in CVET in comparison with EU countries.

**CVET educational programmes** are differentiated to a large degree, both in terms of content and in terms of their duration. The longest programmes are those which lead to the acquisition of a certain level of education. They may be of the same length as full-time programmes for young people, or one year longer – i.e. 3 to 5 years in secondary schools, most frequently 3 years at higher professional schools and normally 5 years at universities. The content of these

---

<sup>92</sup> Survey of the Ministry of Education, Youth and Sports, 2000

<sup>93</sup> Palán, Z.: CVT field research results, in Country Monograph, National Observatory, 2001

programmes is analogous to that of vocational or technical programmes in secondary schools, higher professional schools and universities.

CVET programmes for job seekers, i.e. **retraining courses**, show a great diversity in terms of content. According to surveys into this type of CVET, the content/focus of these courses is expanding. This concerns courses which are focused on re-training of manual professions as well as technical and administrative professions. In the past five years, the number of professions towards which this type of retraining is directed has more than doubled and amounts to almost 300 professions. The length of the most frequently provided retraining courses ranges between 600 and 4000 hours.<sup>94</sup>

Concerning **CVET for company employees**, it is possible to use data from a CVTS 2 survey<sup>95</sup> that used EUROSTAT methodology and referred to the year 1999. Approximately one half of the companies implement training through their own training units, the second half use external providers. The **most frequently used providers of staff training are private training organisations**, while secondary schools and universities rank among the least frequent (1.4% and 3.7% respectively). Decisions concerning the main features of staff development (i.e. the scope, content, providers or financing) are taken by the companies as private organisations. The main players in the training of employees are the companies themselves in the role of employers and their powers in this respect are extensive. The links between this sector and the education system are very weak.

Mechanisms ensuring the **quality of CVET** only cover some CVET components and not the whole of CVET. The quality of CVET provided by schools, which leads to the completion of a level of education, is monitored (as in the case of IVET) by the Czech School Inspectorate. In order to maintain the quality of re-training courses, a Commission for Accreditation of Re-training Programmes was set up at the Ministry of Education, Youth and Sports as early as the 1st half of the 1990s. When organising re-training for job-seekers, labour offices give preference to programmes which have been accredited. There are no universally valid mechanisms for assuring the quality of in-service training in companies. However, there are requirements for the content and quality of CVET programmes in certain professions (physicians, teachers, accountants) which have been set by the relevant responsible institution (ministry, association).

Innovative educational methods (such as distance learning, modular systems) have also been applied to CVET - however, their use is low. Traditional teaching methods predominate in CVET. According to surveys, there is a larger degree of use of computers in CVET in companies.

### 3.5.2 CVET provision (in terms of demand)

#### 3.5.2.1 Participation of employees in CVET arranged by companies

There are no significant legal or administrative obstacles to the access of employees to VET. The network of CVET providers is sufficiently dense. In spite of this, the participation of company employees in CVET is relatively low, primarily due to two reasons. The first reason is the **unfavourable economic situation of companies**. The economic situation of companies may be expected to improve in years to come and the participation of their employees in CVET may increase. The second major reason is the **underestimation of the role of CVET** in business development strategies – both on the part of managers and on the part of employees. This may be demonstrated from the results of various partial surveys.

According to a survey focused on management of human resource development in Czech companies (Koubek, Acta oeconomica), only less than a half of the companies (45%) had a

---

<sup>94</sup> Survey of the Ministry of Education, Youth and Sports, 2000

<sup>95</sup> Continuing Vocational Training Survey, Czech Statistical Office, 2001

written HRD strategy in 1998. Compared to the situation two years ago, the proportion has increased by only 6%. The share of companies with a written overall business development strategy was considerably higher (62%). According to this, about every third company had a business development strategy and did not have a written HRD strategy.

The training of employees is one of the largest components of CVET. Although there are no national statistics about in-service training in the Czech Republic, its scope was until recently estimated from the results of various surveys. The results of the first more extensive statistical survey of this kind (CVTS 2), which was conducted within an EUROSTAT survey, suggest that, in 1999, two thirds of companies (67%) implemented staff development activities while one third of companies did not provide for any training of their employees. This means that 49% of employees participated in some form of training. Most attention is paid to the CVET of employees by large companies (54% of employees participated in CVET), the least attention is paid to this issue by small and medium-sized companies (only 21% of employees participated in CVET). There are also the usual sectoral differences: sectors with the highest scope of CVET are electricity and gas supply industry, transport equipment machinery, telecommunication and the sector of financial services. Companies which pay higher attention to CVET include companies with a foreign capital stake.

**Table 3.5 Enterprises providing and not providing CVT: by branch of economic activity (CZ-NACE)**

| Economic activity<br>(CZ-NACE)   | All<br>enterprises | Employees in<br>these<br>enterprises<br>(thousand) | Enterprises<br>providing CVT |                        | Enterprises not providing<br>CVT |                        |
|--|--------------------|--|------------------------------|------------------------|----------------------------------|------------------------|
|  |                    |  | Number                       | Percentage of<br>total | Number                           | Percentage of<br>total |
| Mining and quarrying   | 122                | 64   | 97                           | 79.5                   | 25                               | 20.5                   |
| Manufacture of food products; beverages & tobacco  | 1 172              | 127  | 817                          | 69.7                   | 355                              | 30.3                   |
| M. of textiles & textile products; leather & leather prod.   | 962                | 121  | 571                          | 59.4                   | 391                              | 40.6                   |
| M. of pulp, paper & paper products; publishing & printing  | 641                | 43   | 408                          | 63.6                   | 233                              | 36.3                   |
| M. of coke, refined petroleum products; chemicals, chemical<br>products & man/made fibres  | 1 301              | 161  | 1 024                        | 78.7                   | 277                              | 21.3                   |
| M. of leather and leather products   | 1 937              | 193  | 1 412                        | 72.9                   | 525                              | 27.1                   |
| M. of machinery and equipment  | 2 185              | 262  | 1671                         | 76.4                   | 514                              | 23.5                   |
| M. of transport equipment  | 240                | 86   | 211                          | 87.9                   | 29                               | 12.1                   |
| M. of wood and wood products; furniture; recycling   | 1 408              | 92   | 717                          | 50.9                   | 691                              | 49.1                   |
| Electricity, gas and water supply  | 291                | 74   | 262                          | 90.0                   | 29                               | 10.0                   |
| Construction   | 4 465              | 220  | 2 992                        | 67.0                   | 1 473                            | 33.0                   |
| Sale, maintenance and repair of motor vehicles; retail sale of<br>automotive fuel  | 925                | 32   | 711                          | 76.9                   | 214                              | 23.1                   |
| Wholesale trade  | 4 300              | 135  | 2 606                        | 60.6                   | 1 694                            | 39.4                   |
| Retail trade, except of motor vehicles; repair of personal and<br>household goods  | 3 516              | 156  | 2 010                        | 57.2                   | 1 506                            | 42.8                   |
| Hotels and restaurants   | 1 097              | 43   | 503                          | 45.8                   | 594                              | 54.2                   |
| Land, water and air transport; supporting and auxiliary<br>transport activities; activities of travel agencies   | 1 170              | 195  | 817                          | 69.8                   | 353                              | 30.2                   |
| Post and telecommunications  | 107                | 71   | 87                           | 81.3                   | 20                               | 18.7                   |
| Financial intermediation   | 230                | 77   | 197                          | 85.6                   | 33                               | 14.3                   |
| Loan and credit granting, financial markets  | 86                 | 2  | 67                           | 77.9                   | 19                               | 22.1                   |
| Real estate, renting; computer and related activities; research;<br>consultancy; refuse disposal; membership, cultural and<br>sporting organisations; other service activities | 5 374              | 232  | 3 954                        | 73.6                   | 1 420                            | 26.4                   |
| Total  | 31 529             | 2 386  | 21 134                       | 67.0                   | 10 395                           | 33.0                   |

Source: Continuing Vocational Training, Czech Statistical Office, 2001

The length of continuing vocational education of employees of Czech companies was on average 25 hours in 1999. It is substantially fewer than in EU countries where the number ranges between 30 and 35 hours per annum. As regards participation in the training, there is a marked difference between men (53%) and women (only 41%). In view of the fact that

participation of women in other forms of CVET (retraining or part-time programmes organised by schools) is comparable or even higher than that of men, this difference is remarkable and perhaps deserves a more detailed analysis of the reasons.

### 3.5.2.2 Participation of the unemployed in CVET

CVET for job seekers developed in the Czech Republic after the creation of the labour market in the early 1990s and after the establishment of a network of labour offices. Within measures of active employment policy the Ministry of Labour and Social Affairs introduced CVET by means of **re-training courses** at the very beginning of this period. They are organised by labour offices in districts in line with instructions of Employment Services Administration of the Ministry of Labour and Social Affairs which also provides the necessary finance. Re-training courses are meant primarily for job seekers. However, employees who are at risk of losing employment may attend them as well.

There are two main types of re-training courses: **specific** and **non-specific**. The specific re-training courses are focused in terms of content on a specific specialised issue as described in the job the trainee has been promised. Non-specific re-training courses are more broadly conceived and focused in terms of content on certain professional activities which occur in several occupations (e.g. computer use courses). Re-training courses are organised by labour offices in cooperation with various CVET providers in the relevant region – both VET schools and educational firms. The length of courses varies and ranges from several days to several months.

In previous years, over 11,000 job seekers participated in re-training in one year. This accounted for approximately 5% of the total number of job seekers. In 1999, the Ministry of Labour and Social Affairs reinforced its active employment policy and earmarked more funds for re-training courses. Thanks to this **the proportion of re-training participants in the total number of job seekers** is increasing however it is still very low comparing to the European countries and it reaches only some 7% in 2000.

**Table 3.6 Re-training programmes in the CR**

| Year | Number of participants | Training course duration (months) | Expenditure (mil. CZK) |
|------|------------------------|-----------------------------------|------------------------|
| 1993 | 11 352                 | 2,5                               | 73,36                  |
| 1994 | 15 167                 | 2,3                               | 103,25                 |
| 1995 | 14 034                 | 2,2                               | 100,09                 |
| 1996 | 12 133                 | 2,2                               | 91,73                  |
| 1997 | 11 918                 | 2,2                               | 90,42                  |
| 1998 | 16 381                 | 1,7                               | 147,32                 |
| 1999 | 22 136                 | 1,9                               | 236,23                 |
| 2000 | 32 260                 | 2.1                               | 345,92                 |

Source: Employment Services Administration, MoLSA

**The efficiency** of CVET in the form of re-training for job seekers is relatively high. According to data of the Ministry of Labour and Social Affairs<sup>96</sup>, re-training helped a majority of the participants in finding a job. Some 67% of participants were successful in their search for employment (64% of women and 67% of juveniles), while a majority of them found a job within three months of completion of the course. Those with secondary vocational education predominate among those who have undergone re-training (43% - out of which 34% hold a training certificate – without „maturita“, and 9% have „maturita“). There is also a high proportion of people with secondary technical education with "maturita“. Interest in re-

<sup>96</sup> An analysis of employment and unemployment development in the 1<sup>st</sup> half of 2000, MoLSA, 2000

training is expressed particularly by younger age groups (people of up to 35 years of age account for 63% of re-training participants).

**The focus of re-training courses in terms of content** varies to a large degree. According to a survey by the Ministry of Education, Youth and Sports, the most frequent topics of re-training courses for manual professions included skills for the operation of specific construction machines and means of transport. The most frequent topic of courses other than those for manual professions was the use of computers, accounting, basics of business, taxes and customs duties. A modular structure of courses occurs only to a small extent.

As the participation of unemployed people in retraining is generally low, the **participation of disadvantaged groups** is entirely insufficient. According to analyses<sup>97</sup>, only around 4% of the long-term unemployed (over 12 months) underwent retraining in 2000. In the group of the disabled unemployed, this was 3%, and 2.7% in the group with low qualifications (the average participation in retraining was 7% of the total number of the unemployed). Targeted retraining is not related to the unemployment rate in the relevant district. On the contrary, the “creaming” effect often results in a situation where the lowest participation of disadvantaged groups in re-qualification courses is in districts with a high rate of unemployment.

Interest in retraining and continuing education on the part of persons with low qualifications is very low<sup>98</sup>. Counselling services and re-socialisation courses which should stimulate this interest are underdeveloped. Pre-retraining, re-socialisation and motivation courses only account for approximately 9% of all re-qualification courses<sup>99</sup>. The most frequently cited problems concerning the involvement of disadvantaged groups in retraining include: a low level of interest and motivation on the part of the unemployed, insufficient penalties for turning down retraining opportunities and, in some cases, a lack of clarity in the provision and funding of motivation courses. A higher rate of participation in re-training organised by labour offices is also hindered by the current legislation which excludes some groups from the entitlement to free participation in these courses (e.g. women on maternity leave or employed people at risk of losing employment).

It could be stated that it is necessary to promote approaches which take account of the specific re-training needs of individual groups of job seekers and, at the same time, ensure comprehensive services. This means that the content of re-training courses must be tailor-made and the courses must have links to other measures which contribute to re-socialisation and placement of the relevant person in the labour market.

### 3.5.2.3 Participation of individuals in CVET on their own initiative

There is no data available about the number and structure of CVET participants who undergo various educational programmes on their own initiative. According to information that is available, this area of CVET is **highly differentiated**. Short-term courses predominate with a very diverse focus. They often aim to develop the knowledge, skills and interests of individuals from children to elderly people. These courses are provided by various institutions, most frequently schools, private firms, professional associations, sports clubs and civic associations. The courses are usually paid for by the participants themselves. Language teaching and ICT courses are very common.

Apart from short-term educational programmes, individuals also undergo, on their own initiative, longer courses which lead to the completion of a certain level of education. These studies are analogous to those of young people and, in the case of adults (mostly employed), normally take the form of part-time study or distance learning. The number of these students

---

<sup>97</sup> Rákoczyová, M. – Sirovátka, T.: Analýza cílenosti rekvalifikací (“Analysis of Targeted Retraining”), Research Institute of Labour and Social Affairs, 2001

<sup>98</sup> A questionnaire survey at labour offices, 1998, Research Institute of Labour and Social Affairs

<sup>99</sup> A questionnaire survey at labour offices, 1998, Research Institute of Labour and Social Affairs

decreased in the first half of the 1990s and, in recent years, has increased again. At present, the proportion of adults in total student numbers is some 8% in secondary technical schools, some 12% in secondary vocational schools, 10% in higher professional schools and 10% in universities. Besides this traditional way of undergoing CVET, a small number of adults also take part in „Third Age Studies“ organised by universities.

Participation of **ethnic minorities** in CVET is not separately monitored. In recent years, government as well as non-governmental organisations have been involved in efforts to enhance participation of Romanies in education. The largest degree of attention is devoted to promoting participation and achievement of Romany children in IVET. Within CVET, new opportunities have occurred to complete basic education in courses provided by basic schools. Unemployed Romanies are sent to ordinary re-training courses organised by labour offices and, with the exception of pilot projects, there are no specific educational programmes for them. The efficiency of re-training among Romanies is lower than that in the majority population and it should be promoted by a closer cooperation with specific prospective employers. Official documents<sup>100</sup> recommend that re-training courses also include the teaching of skills which Romanies do not have, although these are common within the majority population. These skills include, for example, the ability to swim, the absence of which hinders Romany men from serving in the armed forces or in the police. There are also proposals to resume the successful practices before 1989, where young Romany men had the opportunity, during their compulsory military service, to complete their education, to enhance their social status by means of working in the army and, at the same time, to improve their chances of obtaining a permanent job even in circumstances where they left the armed forces. There are proposals, apart from re-training courses, to provide more courses for Romany women, teaching household skills, financial management etc. – these courses could complement basic education and could significantly improve the social situation of Romany families.

Nationals of other countries who work in the Czech Republic (primarily from Ukraine, Slovakia and Poland) usually perform manual work and hardly participate in CVET at all.

### 3.5.3 Responsible bodies

There is no government or non-governmental body at a **national level** which would be responsible for CVET as a whole. For example, the Ministry of Education, Youth and Sports is responsible for adult education in public schools, while the Ministry of Labour and Social Affairs is responsible for re-training of job seekers. Other ministries are responsible for the CVET of certain groups of people working in their respective sectors. For example, the Ministry of Health is responsible for the CVET of physicians, the Ministry of the Interior for the CVET of civil servants, and the Ministry of Defence is responsible for CVET in the armed forces. There is no body for CVET at a national level which would be composed of representatives of various state, or possibly non-state bodies. Several associations at a national level for certain CVET areas have been spontaneously set up, for example the Association of Institutions providing Adult Education or the Czech Society for Human Resource Development. These are voluntary associations without any formal (decision-making) powers.

There are also no bodies with responsibilities for the whole of CVET at a **regional level**. For example, the responsibility for re-training of job seekers is borne by labour offices which are managed by Employment Administration Services of the Ministry of Labour and Social Affairs through individual labour offices in 76 districts (plus three in Prague). However, in relation with public administration reform, it could be expected that the situation could

---

<sup>100</sup> Outline of government policy towards Romany community members which assist their integration into society; Government Resolution no. 599 of June 2000



ameliorate in the future. Since 2001, in newly established 14 new administrative regions, there could be seen some self-governmental initiatives to support and coordinate CVT development in more strategic way following the regional needs.

Since there only exist bodies which have a partial responsibility for a certain part of CVET, the major role in this area is played by individual CVET providers and **CVET development is mostly determined by market relationships between supply and demand**. This situation has its advantages (e.g. flexible response to educational needs of the moment, competition), but also disadvantages (e.g. the absence of a CVET strategy including development priorities, unclear legal framework, weak support for CVET by the state).

In these circumstances, **decision-making powers** are held, to a great extent, by CVET providers. In most cases, they decide about the curricula, teachers, teaching and learning methods, teaching materials and propose the price for their courses. The providers must seek approval of their proposed curricula (apart from specific cases) only for programmes leading to the acquisition of a certain level of education, or in the case of re-training courses. In both instances, the approving authority is the Ministry of Education, Youth and Sports. The quality of this kind of CVET programmes is checked by the Czech School Inspectorate in public schools and there is no integrated system of quality control in CVET as a whole.

The issue of powers and responsibilities in CVET is included in the strategy for the development of the Czech education system as one of three major problems in adult education. The proposal for improvement of the current state of affairs is based on the fact that powers and responsibilities in CVET are unclear and that CVET lacks an appropriate legal framework – which has negative implications for, for example, quality control, accreditation, certification of CVET etc. This is why the strategy recommends that, for the forthcoming period, powers and responsibilities in CVET should be defined with more precision. It is proposed that the powers of the Ministry of Labour and Social Affairs should be expanded at a national level to cover the whole of CVET.

### 3.5.4 Funding

CVET which is provided or organised by state institutions (public schools, government-funded bureaus, state companies) is free in most cases. CVET which is provided or organised by non-state institutions (private schools, private educational firms) is for a payment in most cases.

CVET costs are covered by both **private** and **public** (state budget) resources. Costs of in-service training for company employees are mostly covered by companies themselves. There is a common practice which, however, is not provided for in any legal regulation. According to this, VET organised on the initiative of the employers is paid by the employer, while the costs of CVET borne by an employee on his/her own initiative is at the employee's own expense, although the employer may contribute an amount to this. There is no exhaustive statistical data about the level of corporate spending on in-service training.

There is no data available to quantify the proportion of major stakeholders (the state, employers, municipalities and regions, trade unions, individuals, etc.) in CVET funding. **The state covers** two CVET components. In most cases it covers costs for re-training of job-seekers and for part-time courses provided by schools.

As concerns the **funding of retraining**, the level of expenditure on retraining rose considerably over the last four years to follow the rising number of participants (it almost tripled in this period). While in 1997 the expenditure was roughly 90 million CZK, in 2000 it was 346 million CZK. Retraining is one of the most rapidly developing components of CVET. However, in spite of this fast development, the proportion of retraining expenditure in

GDP reached only 0.02%, which is many times lower than in EU countries.<sup>101</sup> The financial incentives stimulating participation in retraining do exist – however, specialists from labour offices claim they are not very effective, since the difference in the level of unemployment benefits for those who do and do not participate in retraining is only 10-20%. It is not just a matter of increasing the number of participants in retraining – there must also be a possibility for the organisation of longer retraining courses. Only longer training may secure more profound qualification changes which may then satisfy labour market requirements. In the existing situation labour offices organise longer retraining courses only to a limited extent. One serious problem is that after the period of six months during which a registered job seeker receives unemployment benefits, such an individual is not, when taking a retraining course, entitled to any financial contribution – he/she only gets an amount to achieve the subsistence level (paid by social departments of municipal offices). Such participants of longer courses are then in a severe need of resources. This lowers the demand for such type of retraining, although it is very important in view of the situation in the labour market.

Besides re-training of job seekers, the state pays for **CVET that leads to the completion of a level of education and which is provided by public VET schools** (secondary and tertiary). Funding of this CVET is based on the same principles as IVET funding. This means that rates („normatives“) are used by means of which the Ministry of Education determines the level of contribution for one student in CVET. In CVET, this level of contribution accounts for 30% of those set for the relevant field in IVET. This way of funding currently concerns approximately 65 000 persons (11), while the numbers of participants at the level of secondary education (ISCED 3) are stagnant and only account for roughly 6% of the total number of students. The numbers are slightly rising at the tertiary level (ISCED 5 or 6) and account for approximately 15% of the total number of students. The data about expenditure on this type of CVET are not publicly available. Our estimates put it only at some 2-3% of public expenditure earmarked for secondary and higher professional schools and universities (except for special schools) – the figure was 27 billion CZK (12) in 1999 – the amount ranges between 540 and 810 million per annum. There are no financial stimuli for this type of CVET in the CR. The employer, whose employee is taking a part-time course, can voluntarily (in line with the Labour Code) grant the employee a paid leave for his/her studies. The employer may reimburse him/her for the lost wage or travel expenses.

As concerns **private CVET providers**, the state contributes, as a rule, only to private schools which provide CVET. The funding mechanism is similar to that used in funding IVET provided by private schools. In 1999, state subsidies to private schools (including denominational ones) accounted for 3.2% of the total expenditure on education by the Ministry of Education, Youth and Sports. The biggest cost item is teachers and lecturers' wages.

According to the results of the CVTS 2 survey, the **expenditure of companies** on their staff development in 1999 was 5.09 billion CZK, which is 1.13% of labour costs. The development of this indicator over time suggests that the trend is stagnation or a slight increase (from 0.9% to 1.13% in six years). Although the survey involved companies which employ approximately 47% of all employed people, the data suffice to make an estimate that the expenditure of companies (and other organisations) on staff development only amounts to some 11 billion CZK per annum. The financial incentives to stimulate staff development are insufficient.

Generally, based on available information about CVET funding in the CR and in other countries it may be said that there are two features peculiar to the CR. Firstly, the **number of CVET funding sources is lower** in the CR than, for example, in West European countries – a

---

(1) <sup>101</sup> In 1998, the proportion of expenditure on retraining in GDP in EU member states ranged from 0,10% (Norway) to 1,07% (Denmark), Source: Human Resources in the Czech Republic, Prague, National Training Fund and Institute for Information on Education, 1999. ISBN 80-211-0325-6.

fact which is particularly evident from the small involvement of organisations other than ministries, companies and individuals (i.e. the small involvement of municipalities and regions, professional associations, trade unions, etc.). Secondly, the **total expenditure on CVET** is relatively **lower** in the CR. It could and should be increased by means of introducing financial (as well as non-financial) incentives for CVET development which would be focused on employers, individuals and CVET providers – as proposed in the White Book and also in the Human Resource Development Strategy.

A persistent problem of CVET financing of is **the non-existence of incentives for CVET development**. This applies both to companies and to employees/individuals. Companies may include CVET costs in a total productive costs and therefore these costs are out of the corporate tax base. However, results from previous years show that this measure is not efficient enough. There have been no incentives introduced by the state. It is the very issue of financial and non-financial incentives that is one of the most frequently discussed issues in the whole of CVET. There should be different types of incentives so that they affect at the same time various CVET players: employers, employees/individuals, job-seekers and CVET providers. These incentives (the specifics of which are to be agreed between state officials and social partners) should become part of the CVET legal framework in the future.

### 3.5.5 Social dialogue and participation of social partners

The role of social partners in CVET is not an important one. The existing legal framework concerning CVET gives them no major role which could influence the whole of the CVET system. There are two platforms at a national level on which social dialogue may take place, perhaps even about vital CVET issues (the Council for Economic and Social Agreement and the Council for Educational Policy – see section 3.4.4). However, representatives of social partners only play a **consultative role** on both platforms. Neither on a regional, nor on a local level do social partners have a more important role in CVET defined for them.

At a national level, there are two most important associations of **employers**. These are the Confederation of Industry and Transport of the CR and the Union of Employers' Associations of the CR. The Confederation of Industry and Transport has set up, as one of its commissions, a schools commission which mostly discusses topical CVET issues. The Union also established a body dealing with vocational education – the Coordination Council of Secondary and Basic Schools which also deals with CVET issues. None of these associations of employers has significant authority or responsibility in CVET. As regards **trade unions**, the most important one is the Czech-Moravian Confederation of Trade Unions which brings together several trade unions. Its education and training department is focused primarily on the CVET of trade union members and staff. As for the CVET system, the Confederation only expresses its positions on this issue and has neither powers nor responsibilities in this area. The **Economic Chamber of the CR** has an education and training division which has initiated and begun to implement the CVET of entrepreneurs and craftsmen by means of courses provided by the Academy of Crafts and Services, which the Economic Chamber established.

In larger companies which have trade unions collective bargaining takes place between the company management and the trade unions and collective agreements are concluded. The core of the bargaining and agreements is the issue of wages and employment terms and sometimes also the CVET of employees. CVET at a company level is usually initiated by the company management. Larger companies organise the CVET of their employees in their own training facilities (e.g. Český Telecom) which may also serve as an educational institution for the public (e.g. Škoda Auto which has its own secondary technical, higher professional school as well as a university).

Employers play an important role only in the **compulsory CVET** of employees as representatives of certain professions. The scope and content of this CVET is set out in laws and other regulations valid in a relevant sector. These professions include, for example,

physicians, electrical engineers, welders etc. Employers are responsible for the compulsory CVET of their employees which they provide either themselves or arrange for it through other CVET providers. Compulsory CVET is always related to a specific target group and does not significantly influence the whole system of CVET.

It is evident from the above, that the participation of social partners in the development of CVET as a system in the Czech Republic is restricted to the consultative function which is defined in the current legislation. Activities of employers in CVET exists primarily at a company level and aim to satisfy specific educational needs of their organisations. Incentives for a higher level of participation of companies in CVET development are non-existent. At a sectoral, regional and national level employers' or trade unions' organisations hardly influence the CVET system at all.

A certain promising step in this respect could be the establishment of tripartite bodies at the regional level. There are efforts on the part of the newly set up self-governing regions to influence the development of human resources and educational opportunities in the regions. Some regions have already established Councils for Human Resource Development – however, it is premature to assess their actual influence..

### **3.5.6 Curricula development**

In most CVET areas curricula are used that have been developed **specifically for CVET**. These specific curricula are used in the CVET of company employees, in re-training courses for job seekers, in compulsory CVET for certain professions and in education undertaken out of interest. Curricula developed for IVET or IVET curricula adapted for CVET needs are used only in CVET which leads to the completion of a level of education.

The development of CVET curricula is **liberal**. Most CVET providers develop their own curricula. Since there are no educational standards for CVET, the authors of curricula need not adhere to any requirements set. CVET providers that are state entities must use curricula that are approved by the Ministry of Education, Youth and Sports or by another state body appointed to do so. Private CVET providers (e.g. companies) need not present their curricula for approval to any body. An exception is curricula for CVET which leads to the acquisition of a level of education which must be approved by the Ministry of Education, Youth and Sports. On the one hand, the liberal development of curricula facilitates their rapid preparation without any bureaucratic delays, on the other hand the quality of the developed and used curricula varies significantly.

The development of curricula for CVET which leads to the completion of a level of education at secondary vocational, secondary technical and higher professional schools is the responsibility of the Research Institute for Vocational Education. The Institute staff either develop the curricula themselves (in cooperation with schools and some social partners), or they assess proposed curricula developed by other institutions and express their position on these proposals to the Ministry of Education, Youth and Sports. The development of CVET curricula leading to the acquisition of a university degree is the responsibility of individual universities.

Curricula for CVET which leads to the completion of a level of education have similar parameters to those for IVET: they normally contain the same subjects and the ratio between general and vocational subjects is similar. A modular structure of curricula is hardly used at all. Curricula used in other CVET areas, particularly in the CVET of company employees, are, as a rule, developed to suit the needs of the users (tailor-made). The situation is similar as concerns curricula for re-training of job-seekers.

No institution is concerned with the modernisation of curricula for the whole system of CVET. If any work on modernising CVET curricula does occur, it relates only to specific cases (most frequently compulsory CVET) and specific target groups (e.g. physicians, tourist

guides), and this work is performed by institutions responsible for the particular CVET area or by professional associations.

### 3.5.7 Evaluation and certification of knowledge

There is no integrated system for evaluation and certification of knowledge gained in CVET. At present, **several types of certificate** are used.

Upon completion of CVET leading to the acquisition of a level of education, the graduate is awarded a certificate which is **recognised at a national level** and has the same validity as a certificate awarded upon completion of CVET. Graduates from secondary vocational schools receive a vocational training certificate (*výuční list*) which is awarded upon passing a final vocational examination. Graduates from secondary technical schools receive a “maturita” certificate which is awarded upon passing a „maturita“ examination. At present, work is under way to modernise “maturita“ examinations (see chapter 3.4.1). Graduates from higher professional schools get a graduation certificate (*absolutorium*) upon passing a final examination and university graduates are awarded (also if they pass the relevant examination) a university diploma.

Those who have completed compulsory CVET receive a certificate which testifies to a successful completion of the CVET required. It is a document which makes it possible for its holder to perform specific professional activities (similar to a driver’s licence for drivers). The certificate has a nationwide validity, but relates only to **specific professional activities** or a specific **sector**. Successful graduates from re-training courses and, as a rule, company employees who passed CVET organised by the employer, obtain a certificate which only provides **information about the completion of a course**. Specific certificates are also used which are issued upon completion of generally recognised or generally known types of CVET (such as MBA, certificates of a level of proficiency in the English language – TEFL). These certificates may be issued only by institutions which have the relevant accreditation.

Professional knowledge which is the result of informal CVET is not recognised or certified. The proposed strategy for further development of the Czech education system recommends that the existing system of certification be improved by means of introducing a uniform way of describing basic aspects of CVET (e.g. length, level) - this would enhance transparency and mutual comparability of certificates.

### 3.5.8 Legislation

**The current legal framework for CVET is not integrated.** There is no comprehensive law which would provide for CVET as a system. Individual parts of the CVET system are provided for by different legal regulations. For example, re-training is regulated by means of the law on employment.

CVET leading to a completion of a level of education which takes place mostly in public schools, is catered for by the School Act. This School Act of 1984 has been amended several times – which is why, since 1999, the Ministry of Education, Youth and Sports has been drafting a **new School Act** which could be passed in 2002. The objectives and content of this new law should be in harmony with the medium-term strategy for the development of the Czech education system. CVET provided by universities is catered for by the Higher Education Act of 1998 which was also amended in 2001. The amendment concerned, for example, the enlargement of CVET studies at higher education institutions through paid study programmes that the universities (even public ones) can charge by tuition fees.

The existing legal framework is at its **weakest** as far as **CVET for company employees** is concerned, since there is no law which would provide for the most important aspects of in-service training in companies. The proposed strategy for further development of the Czech education system recommends that the existing legal regulations should be improved by

means of a more precise definition of the powers and responsibilities of state bodies, social partners, municipalities and regions, professional associations and other players in the area of CVET. Moreover, clear rules should be set for CVET funding, and the processes of accreditation, certification and support for the development of infrastructure in CVET should be enhanced (information, monitoring, research, international co-operation).

### **3.5.9 Strengths and weaknesses of CVET and government priorities in further CVET development**

The Czech system of CVET has several **strengths**. The network of CVET providers is sufficiently dense. It facilitates the provision of CVET to various target groups of learners in various sectors. CVET providers are rather evenly distributed in individual regions so that there are no significant differences between regions. The existing legislation catering for CVET is liberal to such a degree that there are no major bureaucratic barriers to the further expansion of CVET. The liberal legal framework also contributes to the rise and workings of competition in the CVET market – this competition favours CVET development. One other strength is a long tradition of CVET in some sectors (e.g. in health care) or the great interest shown by young people in CVET.

The previous chapters mentioned several **weaknesses of CVET**. They include, for example, the unclear CVET legislation, the non-existence of efficient incentives for CVET development on the part of the state, considerable dependence for the funding of certain areas of CVET on the state budget, the negligible role of social partners, the non-existence of integrated systems of quality assurance, accreditation, certification, etc.

**The government** declared **main priorities** in the field of CVET in several strategic papers: National Programme for the Development of Education, National Employment Plan, National Action Employment Plan for 2001. At the moment, they represent only plans and aims for the future but the implementation still delays. The following key measures are proposed in the strategy to be implemented in the area of adult education:

- a) To enhance the legal framework for the development of adult education, primarily by means of a more precise definition of powers and responsibilities of state as well as non-state bodies in major areas of adult education and to set clear rules for funding.
- b) To develop and introduce financial and non-financial incentives for employers, employees, job-seekers, education providers and individuals which would stimulate the scope and quality of adult education.
- c) To establish mechanisms for continuous quality assurance, accreditation and certification in adult education, and for supporting the development of its infrastructure (information, research, international cooperation).
- d) As regards the measures supporting CVET in terms of labour market requirements, the aim is to:
  - Increase the scope of retraining within active employment policy so as to match the structure of the available workforce with the needs of new investors and the development of SMEs and other employers at the regional level
  - Expand re-socialisation and training programmes designed for disadvantaged groups with the aim of bringing them back to employment
  - Promote management training programmes and counselling-educational programmes for new entrepreneurs, and also retraining programmes accompanying the restructuring processes in companies

## **3.6 Links between IVET and CVET**

Links between initial and continuing vocational education are very weak and underdeveloped till now. There are two type of reasons. First consists in inertia of IVET system that did not undergo through progressive changes of curricula structure, educational pathways and certification. Therefore, the new requirements for lifelong updating of knowledge and skills are not fully respected by IVET. On the other hand, CVET development – that was very fast and spontaneous in the past decade – was influenced by supply and demand relations without formal system framework. The CVET has been developed independently from the IVET structures (with some exceptions such as: part-time study of adults provided by schools, and some types of requalification courses). It concerns both separated training capacities and different content of training programmes.

In the second half of the 1990s, the issues of IVET and CVET links and of life-long learning were raised in more comprehensive and systemic way. The broad discussion on life-long learning key priorities was organised under the **LLL Memorandum consultation process** in 2001<sup>102</sup>. The core of the consultation process was implemented in the form of informal workshops and discussions organised around six key messages of the Memorandum.

The consultation process was planned as a logical follow-up and extension to public discussions on a number of other major strategic documents recently developed mainly by MoEYS and MoLSA (see chapter 3.1). The consultation process has thus helped to focus general awareness on **critical problems** already addressed by above strategic documents.

Basically, they fall into two groups. The first one relates to the existing form of the **education system** and its inherent problems (e.g. a measure of selectivity, certain rigidity, little concern for the individual, low levels of involvement of social partners, insufficient financing and investments, undervalued importance of development of human resources in education, little support for schools and teachers).

The second group of problems relates directly to **continuing education** (or adult education). This comparatively neglected sector of the education system has not still been fully developed. Most serious weakness is the non-existence of **comprehensive legal framework** which would clearly set out the responsibilities of the main stakeholders in continuing education (the State, social partners, communities, regions, public and private institutions), foster transferability between various forms of education, especially between initial and continuing education, and ensure effectiveness and cohesion of education, employment and social policies.

One of the main obstacles is the **undervaluing of the role of human resources in the development of businesses, sectors, regions and state**. It is therefore one of the most important steps to convince both policy-makers (national and regional) and enterprise executives that education is not a consumption, but an investment with a high return, and that people are the most valuable asset both of the society and every enterprise. The strategic documents that have been recently prepared (or are being prepared) aim at this objective and try to address both groups of problems.

Systemic mechanisms that exist were tailored to the needs of a traditional education system. They have to be modified to respond to new needs and, still more, to cater for a new clientele.

#### **Recommendations from the LLL Memorandum consultation process:**

- Development and implementation of an open, continuously updated **system of qualifications** which would be based on qualification requirements for the performance of individual jobs and recognised by social partners, appears a major tool for the coherent,

---

<sup>102</sup> The Ministry of Education, Youth and Sports (MoEYS) as a body bearing the main responsibility for the consultation process in the Czech Republic has authorised the National Observatory for management of the consultation process.

open and accessible system of lifelong learning. It will ensure transferability between various educational programmes as well as their recognition in the labour market. Such a system can be linked to e.g. the Integrated System of Typical Jobs developed by the MoLSA.

- It is also necessary to create mechanisms for **certification** of the relevant qualification on the basis of recognition of competencies which may have been acquired even outside the formal system (informal learning) and to create a participative mechanism (involvement of social partners) for accreditation and evaluation of output qualifications.
- It is recommended to introduce to all types of curricula the concept of **generally applicable competencies** in the context of civil and working life; to develop pro-active methods in initial education – independent work, team work, project teaching; to develop methodological materials, support programmes and pilot projects facilitating educational changes in the given direction.
- It is necessary to develop educational programmes consisting of **modules as independent units** with clearly defined objectives and assessment criteria. Such modular structures facilitate assessment (certification) of partial qualifications and enhance transferability between various programmes within the overall system of lifelong learning.
  - In order to ensure a comprehensive perspective career, educational and educational-psychological counselling must be perceived as an integral part of all components of lifelong learning and should be provided in a **far more integrated form** using in a larger measure the wide network of information and counselling centres established at all labour offices. It has to be **better accessible** to its potential clients. Obstacles which are still hindering the putting of the intended or proposed measures into practice primarily include insufficient co-ordination at the level of ministries and a missing legislative framework which would clearly define the responsibilities and, in this way, facilitate co-operation at lower levels. Integration of counselling services in schools should be understood as a part of a broader process of bringing together counselling services in co-operation with the sector of labour and social affairs.
- It is recommended to fully support development of educational products for assisted and managed self-study and to use all available technology for this purpose. Only such study products have the chance of being successfully used by individual who are fully involved in economic and social activities and, for objective reasons, cannot participate in full-time studies. At the same time it is necessary to provide for an effective quality assurance and quality control system of such courses.

The new strategic documents of the MoEYS - the National Programme (White Paper) and the Long-term Development Plan - have defined a **coherent national lifelong learning strategy**. It acknowledges that the introduction of lifelong learning for all on the eve of Knowledge Society means a profound transformation of the education system. As its first principles it acknowledges three aspects of the transformation which taken together create a new quality:

- First, it is the **lifelong** aspect. It has two consequences at the same time - the **expansion of continuing education** (or adult education) catering for needs of those who have already left the school, and the **transformation of the traditional school**. Its role has changed, instead of just transmitting a certain amount of facts and skills it has to build a foundation for independent lifelong learning, to provide both tools and motivation. However, if learning has to have personal meaning, not only the contents and methods of teaching but the school climate and environment have to change, allowing for activity, creativity and responsibility.
- Second, it is the **lifewide** aspect, covering all forms of learning irrespective of the institution or setting, taking away barriers between education and the society, enabling to



gain the same qualification and skills by diverse paths. The **opening of schools** has more ways. It is the school offering education services to the whole community, it is the participation of main stakeholders in running the institution and the system, it is the devolution and empowering individual schools.

- Third, it is the learning **for all** aspect, offering equal opportunities irrespective of age, interest, talent or position. Instead of selecting the best the education system must aim at developing everyone, making the best use of human potential available. To improve the **access to education** requires not only adequate number of study places, but the diversity of the offer as well. **Equity** means overcoming both economic and socio-cultural differences, compensatory and remedial measures are often necessary.

This approach stresses the unity of the lifelong learning perspective and the close relationship of both main areas, the initial and the continuing education. At the same time it declares the necessity to **establish a comprehensive legal framework** for the new area of continuing education, and to set-up **necessary systemic mechanisms** which are for the most part the responsibility of the state - such as a financing policy, a definition of responsibility of various actors, especially of participation of social partners, evaluation systems, quality assurance and certification, support programmes and an information system.

### 3.7 Development of career guidance and counselling

Career guidance and counselling has developed considerably since 1989 in **two parallel mainstream systems**. Their objectives are slightly different but they have one common aim - to take care of young people in finding optimal solutions to their personal and career-related problems – i.e. the choice of an appropriate educational route, career and the associated specific individual issues in their personal and working life. One system operates under the **MoE**, the other one functions within the purview of the **MoLSA**. Guidance and counselling under the MoE is focused on educational and psychological issues, services in the choice of an individual pathway and a professional career. Counselling services concerning occupation and employment, the pursuit of an appropriate career and position in the labour market (i.e. professional guidance) are provided under the MoLSA.

The existing system of counselling and guidance services **under MoE** consists of three components:

- **Institutions concerned with organisational and methodological tasks:** MoE, MoE's advisory body for educational guidance and the *Educational and Psychological Institute of the Czech Republic* (founded in 1994 by the MoE). *The Institute publishes information concerning counselling services in a periodical entitled „Educational Guidance“.*
- **Guidance and counselling institutions:** 101 *Educational and Psychological Guidance Centres (EPGC)*; 96 state, 4 private, and 1 denominational), 35 newly-established *Special Educational Centres*, 1 *Counselling Centre for Young People* established by the Institute for Children and Youth and 43 *Higher Education Counselling Centres*. These institutions provide services to children and young people, including the disabled, to their parents and other legal guardians, to teachers, and to other educators from schools and educational facilities. EPGCs assist in finding solutions to the educational problems of pre-school children, basic school pupils and students of secondary and special schools and educational facilities within the schools system. Their staff also carry out educational-psychological examinations and assist their clients in their professional orientation. They provide methodological assistance to teachers and educational counsellors in schools and

to psychologists in educational facilities. The results of a survey conducted by the Czech School Inspectorate in 1999 have shown that 82% of EPGs' clients are basic school pupils. This means that the care that should be taken of secondary school students falls short of appropriate standards, not to mention students of higher vocational and higher education institutions. EPGs are gradually being transformed so that their approach changes from merely establishing a diagnosis to also include practical therapeutic services. They seek to meet the needs of their clients, to cooperate with schools and to intensify communication with their clients' parents. Their services are increasingly focusing on prevention of socio-pathological disorders.

- **Individual specialists working at schools:** *educational guidance specialists*, newly-introduced position of *school psychologists* and *school special teachers* that are employed by all basic, secondary and higher professional schools and provide counselling services normally as part of their working duties. Their role in career guidance consists primarily in enabling the student to come into contact with special guidance and counselling units. Unfortunately, the work of educational counsellors at many schools is still undervalued or remains only "on paper".

As one of many measures contained in the National Employment Plan, in 1999, the MoE introduced the new subject Career Choice into the curricula of all basic schools. Depending on the school, the Career Choice could be either part of compulsory curriculum or part of non-compulsory education. The subject "Introduction to the World of Labour" has been incorporated into curricula of secondary and higher professional schools. The schools should co-operate with labour offices in this field.

In order to secure further development of the system operating under the MoE it would be appropriate to amend the Decree on Educational Counselling in kindergartens, secondary and higher professional schools (No 130/1980 Coll.) which is currently out of date. In view of the development of counselling in higher education it is most appropriate to prepare a methodological document providing for the position and activities of counselling centres for university students.

**The system of counselling and guidance services under the MoLSA** was set up as an entirely new body after 1989. The national employment policy is aimed at attaining a balance between the supply of and demand for labour, at a productive use of labour resources and at safeguarding the right of citizens to employment. This policy is implemented by:

- *MoLSA's Department of Employment Administration* which sets out and controls employment policy implemented by *Labour Offices (LO)*.
- Services of the network of *77 LO's Departments for Career Guidance* are primarily focused on assisting the unemployed in tackling personal and social problems related to their situation or difficulties experienced when (re)entering the labour market. They provide information, advice, job or re-training placement, individual and group counselling. Special attention is paid to disadvantaged unemployed persons, such as recent school graduates, people with low education, disabled people, refugees, ex-offenders, etc..
- The network of *77 LO's Information and Counselling Centres* for the choice of an occupation (Czech acronym – IPS) are specialised in career choice primarily for young people and provide information on educational opportunities and vocational training, on educational facilities, forms of study, conditions on the labour market and services for unemployed young people. These centres also work with high-risk groups of children and young people (see also chapter 1.5). They offer a range of printed<sup>103</sup> and

---

<sup>103</sup> Job descriptions, Which School, Which Training (National Institute of Vocational and Technical Education), Atlas of Education (P.F.art), Which University to Choose (Centre for Higher Education Studies), etc.

audio-visual<sup>104</sup> career information and computer programs<sup>105</sup> assisting vocational choices of pupils and students, but they are open to and sometimes used by adult clients as well. The “Integrated System of Standardised Working Positions” is under preparation for the general public (<http://www.istp.cz>). The system should assist in assessing the general aptitudes of an individual to perform a particular type of work.

The network of 15 Diagnostic Centres was set up as a result of the Government Resolution of 1999 “Measures to Assist Employment of Individuals with Difficulties Finding a Position in the Labour Market (with particular regard to members of Romany community)”. These centres assist people with difficulties in seeking employment, particularly juveniles, persons with low qualification or unskilled persons, Romanies, the disabled, elderly people and others. The aim is to strike an optimal balance between their competencies and labour market requirements. The diagnostic method is also employed by counselling and job-brokering departments at labour offices as a form of counselling.

Czech Employment Services are consolidated and provide career guidance and counselling of quite a high standard. The two Government initiatives (National Action Employment Plan 2001 and Fund for Human Resource Development), supported also by the European Commission, include concrete measures to extend the provision of career guidance and counselling and to improve access to continuing education and training.

MoLSA also grants licences to *employment agencies* carrying out their services as a non-profit or profit-making activity. There are currently about 300 *private recruitment agencies* approved by MoLSA and listed on the Ministry's website.

The **National Resource Centre for Vocational Guidance** was established under the Leonardo da Vinci programme in 1998. Its aim is to collect, process, disseminate and exchange information about learning opportunities, national education and training systems, and guidance issues.

---

<sup>104</sup> Guide to the World of Occupations.

<sup>105</sup> Guide to the World of Occupations, OK Work, Pupil, BKO.V.

## 4 Management training

Before 1989, Czech managers were not really used to organising the production and services and did not experience real pressure for efficiency in the management of their companies. As a result of this, most managers have good professional and technical knowledge and a well-developed ability to improvise – capacities which may be useful in resolving crises rather than in systematic business development. When faced with European standards – as some studies show<sup>106</sup> - numerous shortcomings appear which reveal the weaknesses of Czech managers, particularly as regards management skills (soft skills). The deficiencies include a lack of willingness to delegate powers, low flexibility in management styles, an inability to form and lead a working team efficiently, an inability to recognise priorities, a focus on short-term outlook and problematic ethical awareness. Apart from these basic qualities and strategic management.

The main route to the better management of Czech com, managers also lack modern knowledge (hard skills) such as foreign languages, economics, controlling panies is, in addition to a better choice of suitable candidates for management positions, through the improvement of the requisite knowledge and skills. The breadth and quality of educational programmes on offer play an important role in this process. Providing students with the basics of business and economic decisions is necessary for their capacity to work in various management structures later on, particularly in small companies.

### 4.1 Educational programmes within IVET in schools

**In schools at upper secondary level**, fields (economics and business) which would be focused exclusively on management only rarely occur. Rather, management training is included in teaching as one component of the curriculum in the form of optional subjects which may be chosen by the students of various courses. The situation for graduates from these programmes (economics and business, business in various fields, organisation and management) in the labour market is very problematic. According to labour offices<sup>107</sup>, they largely contribute to unemployment and the period of their unemployment is the longest. The reason is that there were almost three times as many graduates from courses in social sciences than in technical fields, and the strongest (in terms of student numbers) programmes are those stated above in the brackets. However, this does not mean that their rate of unemployment is the highest (calculated with regard to the number of graduates). On the contrary, the rate of unemployment in social sciences is the lowest. According to surveys, one half of these graduates do not even seek employment in their field. It is understandable that employers refuse to accept these people to any position within their management structures, since they lack practical experience which is indispensable in the area of management. This is why the studies of management as the only specialisation are not very appropriate at the initial upper secondary education level. On the other hand, the development of business and management skills as a complement to the studies of other disciplines improves the prospects of one's own business activities and better opportunities for employment later on.

---

<sup>106</sup> Průzkum potřeb organizačního a osobnostního rozvoje podniků v ČR, březen 2000 (A survey of the need for organisational and personal development in Czech companies), March 2000, Brodbeck, Felix V. et al: Cultural Variation of Leadership. Prototypes across 22 European Countries. Journal of Occupational and Organisational Psychology, 2000

<sup>107</sup> Uplatnění absolventů škol (The situation of school graduates in the labour market), RIVE, 1999, 2000

Management training provided by **higher professional schools** mostly takes the form of two key branches: the marketing of companies (11 schools) and business economics (3 schools). Twelve higher professional schools provide combined programmes, such as hotel management, the management of trade, management in engineering disciplines, tourism management, transport management, sports management and even electronics management, management and logistics and company management and economics. There were 1,205 graduates from management disciplines at higher professional schools this year and another approximately 60 students completed courses in human resource management. Even larger numbers of graduates may be partly included in this category, such as graduates from public administration, economics and accounting courses etc. In terms of the employability of graduates, similar conclusions to those which apply to secondary education may be applied to higher professional education in these disciplines.

Of the total number of 27 public and state higher education institutions (universities), 14 (i.e. more than 50%) of them provide accredited courses in management. Management training in an integrated form<sup>108</sup> is provided by 26 faculties out of 120 (21% of faculties). Only twelve courses are at an undergraduate level (Bachelor) and six courses at a graduate level (Master). Both undergraduate and graduate programmes are provided by 22 faculties. Some faculties offer several courses. In total, there are 43 courses in the area of management. The most frequent include economics and management (16), informatics (6), business economics (3), management (3), educational management (2) and information management (2). In addition to the above mentioned specialised management courses, there are components of management training (one and more subjects) in a number of other courses. Subjects include organisation and management, human resource management, banking, accounting, quality, business discipline, marketing, business operations organisation, consultancy, training in key skills, etc.

A considerable part of management education is provided by private higher education institutions (in autumn 2000 there were 12 in the Czech Republic). Eight (66%) provide management training, mostly within their economics and management study programme or their informatics study programme. In this academic year, new courses have been introduced: management and marketing, banking management, business operations management, trade management, business, hotel, catering and spa management, tourism management and the management of organisations. One of the other two private universities established before the end of 2000 delivers a study programme in economics and management (the course is entitled “Organisation and Management of SMEs”).

In view of the fact that management disciplines are also taught in programmes other than those for specialised study, it is difficult to determine the number of graduates. A very rough estimate of graduates from management disciplines comes to approximately 1,500. There should be another 200 to 300 graduates from private schools in two to three years time.

Despite this diverse range, it cannot be said that higher education institutions cover demand both in terms of individual interest in the studies and in terms of labour market requirements (companies). As regards the satisfaction of the demand for studies, the situation in management disciplines is similar to that in higher education in general – i.e. only some half of applicants are accepted. Graduates from the aforementioned courses are more employable in the labour market, compared to other disciplines. Demand on the part of companies for specialists in these disciplines will partially be satisfied in two or three years' time, after the first graduates from private schools enter the labour market. At present, the demand for a

---

<sup>108</sup> An overview of study programmes and fields of study at Czech higher education institutions, *Učitel'ské noviny* (Teachers' newspaper), 14 November 2000, *Jak na vysokou školu* (How get accepted into an HE institution), Centre for Higher Education Studies, 2000

more narrow specialisation is compensated by continuing education courses via institutions involved in adult education and consultancy agencies.

## **4.2 Supply of continuing education**

### **Statistical data and indicators concerning life-long learning**

In view of the inappropriate level of development of the system of continuing education in the CR, there are no continuous monitoring mechanisms in place. The development of the system is currently monitored by comparing outputs of various levels of education in the form of statistical data. These data, however, fail to cover continuing education. There is no sufficient information about this area, which constitutes one of the most serious obstacles to a coherent development of this sector of education. The existing statistics are mostly obtained by means of ad-hoc, irregular surveys (such as the Cranfield study, studies of the National Observatory, MoE, CVT2, the CSO-Eurostat, the Know-How Fund). There are plans to be materialised in the near future to expand the questionnaire and the database used within Labour Force Sample Survey so as to cover continuing education.

### **Private institutions providing continuing education**

Private institutions which provide continuing education, while trying to respond immediately to labour market needs (i.e. a gap in the market), began to introduce management training courses immediately after 1989, when this need first arose in the CR. They primarily provided courses in general management theory and very often employed foreign agencies or lecturers.

Institutions involved in CVET mostly provide short-term courses – not a long-term, comprehensive management education. They offer training in various skills, innovations, management training linked to consultancy, training linked to ISO certification, training leading to the acquisition of foreign certificates, training courses in team work and communication, business education, conflict- and crisis-solving by means of overcoming stereotypes, creativity, sales skills, negotiation skills, individual psychological guidance, in-service training and the training of work teams, etc.

According to what is offered on the Internet, of some 2,000 institutions providing CVET, approximately 84 specialise in management education. Dozens of others deal with management education in addition to other activities. According to surveys conducted by the MoE, roughly 10% of CVET institutions focus on management. This means that the number of those attending courses in management disciplines may be estimated at 60,000 a year.

According to estimates made on the basis of data from various sources there are some 2500 educational institutions active in the market (November 2001). The number continues to grow while the structure changes. Overall, there is a decline in the proportion of private firms and large educational institutes specialised in educational activities. This decline is market-related and corresponds to the structure of learners. What is alarming is the declining interest in continuing training on the part of companies.

The efforts to improve access to information about continuing training and to provide a more coherent overview of courses on offer have resulted in the development of a multi-language Internet database of continuing training. The Database Advanced Training (DAT) was developed with the support of European Communities and the cooperating countries were the Czech Republic, Germany, Austria and Greece. It contains an up-to-date overview of courses of professional education, which are continuously being put in by the respective providers. There is an unlimited access to the database for employment services, counselling services and the general public.

### **MBA programmes**

MBA-type management training is provided by some 20 firms, according to data available at the Ministry of Education. Since this is not a type of education which is provided by the school legislation which is currently in place, this education is qualified in the same terms as any other business activity by foreign investors. This is why there is not a uniform educational standard in this area and courses differ in terms of content, duration and form. There may be certain standardisation if this type of education is provided by a public higher education institution in co-operation with a foreign university (e.g. at the School of Economics in Prague, the Technical University in Brno or the Czech Technical University in Prague). Some institutions also provide “distance” MBA programmes (e.g. the Open University in Prague). MBA studies have not as yet become a common part of management education – which is why the annual number of graduates may be estimated at 200 – 300.

### **School programmes**

The role schools play at all levels in continuing education does not correspond to their mission in terms of its importance. Their participation in continuing education is about 10 percent. This also applies to management education. The role of schools in continuing education should be primarily on the provision of longer programmes, which would be more general and focused on upgrading and completing managers’ qualifications. Barriers to development in this area particularly include the problem of capacity, but also often the low motivation of schools and teachers to implement these programmes in the form of the school’s subsidiary economic activities (although existing legal provisions are making this possible).

### **4.3 The focus of management training**

Courses in management rank first among continuing training courses (12,4%) before computer skills, languages, sales skills, communication and other courses (according to a survey by MoE conducted in May 2001).

In terms of content, the supply of management programmes (and, to a certain extent, the supply of comprehensive management education) is of large variety however the quality is unequal. The supply includes disciplines such as management techniques, performance optimisation (this concerns managers as well as teams), the organisation and management of team work, communication (including negotiations, presentation, etc.), as well as support management disciplines, such as human resource management, marketing, business skills, motivation, corporate culture and business ethics, etc.

For a short while, the management training on offer has been undergoing the following changes:

from general management theory to the theory of management in specific fields (such as security management, foreign trade management, international transport and forwarding management, environmental management, etc.)

from training top managers to training middle managers and supervisors. This fact reflects new approaches to organisation and management (flattening organisational structures, the delegation of powers, the trend towards group management as close as possible to the customer, etc.)

from knowledge to skills. Recently, training in specific skills began to prevail - i.e. instructions to act (time management, negotiation, leadership styles, tendering etc.). Methods used change accordingly – case studies, role-playing, simulation etc.).

According to a survey carried out in autumn 2000 among 53 companies<sup>109</sup>, the companies cooperate with a number of educational institutions in the provision of external management

---

<sup>109</sup> The survey was conducted by the Department of Adult Education and Personal Management of Charles University’s Philosophical Faculty

training. Co-operation with universities is not very common (only 3% of the companies surveyed stated this possibility). 13% of the companies provide for their own management training and do not co-operate with any external organisation.

With regard to the increasing range of activities in **small and medium-sized companies**, their managers need far more universal training. Often, the problem is that this sort of training may, in most cases, be obtained by means of the completion of a full-length educational programme at schools – something which would place disproportionately high time-demands on managers. Courses within continuing education offered by private institutions, which fill the gaps in the market most of the time, are often unacceptable for SMEs managers, since they are overly narrow in specialisation and focus on the details of management work.

The supply of educational programmes which focus on the management of SMEs is not sufficiently developed – there is a lack of communication between partners. In order to improve the supply, a range of various elements would have to be present. These include the unification of the content, information about certified lecturers, information about price optimisation, uniform quality review procedures (which implies guarantees for SMEs), the unification of accreditation and certification procedures, the development of credit systems for continuing education and the establishment of mutual links with initial education, two-way permeability between school systems and continuing education systems. Moreover, management education is not supported by means of tax instruments.

#### **4.4 Conditions for the development of management training**

Further development of management education depends on many circumstances, including the development of the economy, the inflow of foreign capital, the development of competitiveness, quality and the demands of the business environment, etc. These conditions are inter-related. It is impossible to expect the development of management training in a situation where unqualified management is tolerated, a lack of professional competencies in management is tolerated and where continuing education is neglected. The problem is that, although permanent pressure for the improvement of the quality of the education on offer is being exerted by non-government organisations, the state is failing to create the conditions which would be conducive to such developments. A range of non-government institutions are concerned with the quality of management training:

- **The Association of Institutions of Adult Education** – this is a non-government institution associating those legal entities involved in continuing education. It influences quality primarily by means of its ethical code, compliance with which is a condition for membership, and through its system for the certification of lecturers and its system for the certification of programmes and institutions, which is under preparation;
- **The Association of Management Trainers and Consultants** – an independent and voluntary interest organisation, which aims to create the conditions for the successful development of trainers' and consultants' activities;
- **CAMBAS – The Czech Association of MBA Studies** is attempting to accredit distance educational programmes in the area of teaching, leading to the award of an MBA degree;
- **Cametin** – a non-governmental organisation associating institutions providing adult education in the field of management training. It promotes the quality of education, primarily by means of its system for the certification of institutions;
- **The Czech Distance Learning Association**– this raises public awareness of distance studies opportunities, provides counselling services and accredits distance-learning programmes;
- **The Czech Marketing Society** – this deals with the development of education in marketing. It certifies lecturers within a system of quality assurance;



- The **Economic Chamber of the CR** – an institution which provides various services for Czech businessmen and managers. It organises a range of educational and counselling events in the area of corporate management training.
- The **Management Association** – this is concerned with the development of management and management training. It is involved in the implementation of a number of tasks associated with its mission.
- The **National Training Fund** – a general welfare society . Its mission is to support the transformation of the Czech economy with the help of human resource development. In line with its mission, the NTV is and has been implementing a number of projects – also in the area of management training.

It is clear from the above list that the quality and organisation of management training is the subject of many institutions. The problem lies in the co-ordination of their activities, the clarification of the basic parameters of management training, and the specification of the content of its modules which could become a basis for the unification of training. This unification would enable the more simple certification and separation of the review process from the provision. Barriers to the development of continuing education are found in its cost – both for individuals and for companies. Companies are deterred by a lack of transparency in the area of supply and expect assistance in the form of counselling, which would result in a specific recommendation concerning the choice of continuing education for both individuals and groups.

## 5 VET teachers/trainers, managers and administrators

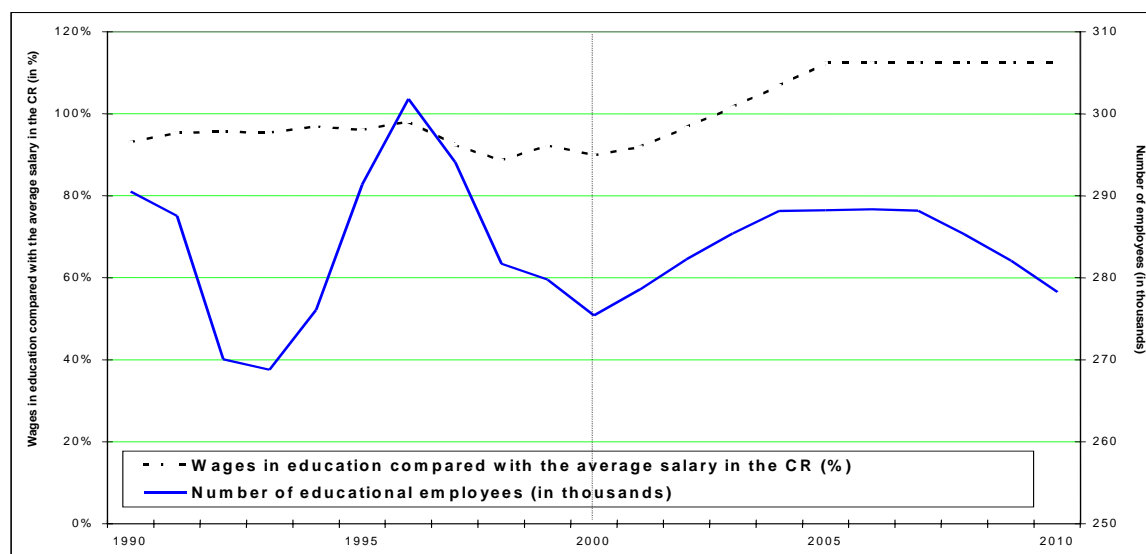
### 5.1 Teachers, schools/trainers, managers and administrators

Some 50.000 of 61.000 of the secondary education teachers in the Czech Republic work as vocational education teachers and trainers in the vocational education field. The pedagogical staff of vocational education schools is grouped into several categories according to the content of their pedagogic activity:

- teachers: mainly concerned with teaching and tuition in general or vocational subjects
- teachers of in-site practical training: practical education at a secondary vocational school
- teachers of practical education: practical education at a secondary vocational school
- vocational education trainers (foremen): practical part of training and education at a secondary apprentice training centre.
- trainers - instructors: concerned with supervision of practical and manual on-the-job training (They are members of the employers' staff. They've been appointed for the training but do not have any pedagogical qualification.)

The age structure of teachers in the Czech education system (including VET) is unfavourable in comparison with the EU. There is a high percentage of trained teachers who do not work within the education system (around 30%). The outflow of young teachers is the most alarming. The most important reasons for this include dissatisfaction with financial remuneration of teachers, particularly with the first level of pay upon entering employment. The enormously low level of pay in education in the CR compared to other professions, which are demanding in terms of qualification, is shown by the relation between the pay of a teacher and that of a bank officer. While in the CR this ratio is hardly 1 : 2, in a majority of developed countries the two levels of pay are either equal or, on the contrary, the teacher's pay is higher.<sup>110</sup> Although the National Programme for the Development of Education (White Paper) sets out the aim of increasing the pay in education to be 20% higher than the Czech national average (by 37% for teachers), this aim cannot be reached before 2007.

*Wages in education compared with average salaries in the CR, number of education employees*



Source: National Programme of Education Development

<sup>110</sup> This is true, for example, of Finland, Ireland, the Netherlands, the USA – see World Competitiveness Yearbook 1999

As the autonomy of school is increasing, the decisive role of school directors is being stressed and recognised. There is an acute need to develop a comprehensive qualification standard for school directors. The standard should set out qualification requirements, i.e. a Master's degree and the length of practical experience, professional and management competencies, criteria for and forms of verification and evaluation of qualifications and personal qualities of applicants for the post of a school director, as well as the form of certification.

### **CVET trainers**

As there is no information or statistics system for continuing education in the CR (see chapter 3.5), the **data about the number and orientation of lecturers, trainers and consultants** can only be hypothetical. Their numbers have been increasing for a short while. Therefore, several institutions exist which are concerned with improving the quality of their work. The most important are those which have developed a system for the certification of lecturers and trainers.

**Trainer certification** is primarily dealt with by the Association of Institutions of Adult Education (AIVD), the Association of Management Trainers and Consultants and CAMETIN. These three associations are currently discussing the possibility of merging their systems. Due to the fact that their systems have only begun their operations, there are some 100 certified lecturers and trainers – about half of whom specialise in management training. The Ministry of Education is not interested in this issue. MoE is responsible for accreditation of retraining programmes in the framework of Active Employment Policy however it is not interested in accreditation of trainers. As regards those projects which are submitted for accreditation, a decree has been issued by the Accreditation Commission which stipulates that it is appropriate for the project promoter only to provide a statement about the sufficient qualifications of lecturers.

Schools' participation in the entire CVET project is about 10 percent. The numbers of teachers who are involved in continuing education at all levels correspond to this. Schools are not very interested in this type of education, primarily due to capacity reasons but also due to a lack of personal motivation. The level of pay in schools is below average and, according to prognoses, is expected to reach the national average as late as 2003 (see above). Teachers' hourly wages consist of some CZK 70 to 80. It is understandable that this situation is not very motivating.

**The pay of lecturers in CVET** is higher, since their remuneration is not dependant on the pay scales used in schools. There are rather big differences in remuneration – an hourly wage ranges from CZK 150 to 1,000 (and over) as regards external lecturers (contract-based). The pay of lecturers and trainers who are employed by various institutions or educational and consultancy facilities is double on average compared to the pay of teachers in the schools sector.

## **5.2 Pre-service training of teachers and trainers**

The teacher qualification requirements are stated in the Ministry of Education decree of 1997. The teachers of general subjects have an M.A degree from a higher education system (tertiary level – ISCED 6,7). For teachers of vocational and technical subjects the requirements are an M.A. degree from higher education system in a subject (M.A degree) and pedagogical studies. There are two possibilities for teachers of vocational and technical subjects to gain pedagogical qualification: con-current pedagogical studies or consecutive pedagogical studies taking usually 2 years at an academic level including in-site teaching practice.

Teachers of specialised subject, where no higher education exists (waiter, dressmaker, etc.) have to take a B.A at a special teacher training college or a 6 terms broadening study.

Trainers (foremen) have a secondary vocational education and the Maturita supplemented by complementary pedagogical study.

Instructors have an apprentice training course and an additional pedagogical course („pedagogical minimum“).

Teacher training courses within the tertiary sector are provided by pedagogical faculties as well as other university-type of institutions (economics, engineering, agriculture, arts). They deliver vocational courses designed for teaching. Since universities are autonomous, teacher training has, in recent years, undergone extensive diversification both in terms of content and organisation.

Initial teacher training in the Czech Republic is characterised by a fragmented curriculum, insufficient links between the vocational and pedagogical-psychological component and inadequate links between theory and practical training. Although partial innovations have been introduced (primarily in the pedagogical-psychological component of teacher training), there is not a systemic approach to the issue of raising the standards of initial teacher training. The training of teachers of vocational subjects should be very flexible and respond to modern technologies and the labour market. In this way, teacher training falls short of practical demands.

Initial training of trainers is not delivered as a separate course by either universities or other institutions.

### 5.3 In-service training of teachers and trainers

There is no law on continuing education of teachers and trainers. The current legislation allows all sorts of public and private providers to develop continuing and in-service training of teachers.

At the beginning of the 1990s the existing system of continuing training of teachers was abolished. The responsibility for continuing education of teachers and its financing was given over to schools. However, schools are restricted by their own circumstances both in terms of finance and organisation. The situation is the most difficult as regards continuing training of teachers of vocational subjects. While teachers of general subjects may attend numerous courses and seminars organised by pedagogical faculties and pedagogical centres, **there is no body within the sector of education providing continuing education of teachers of vocational subjects in its entirety.**

A certain progress has been made by means of unifying the fragmented structure of establishments providing continuing teacher training, and establishing a network of pedagogical centres in the 14 newly set up regions. Apart from these 14 regional centres, there is another one with a specific focus on the Polish minority. The centres employ certain innovative elements (training courses in European integration, exchange of good practices between schools, support for the development of school curricula etc). Their priority is the provision of general pedagogical support and this is naturally linked to continuing training. The continuing training for teachers of vocational subjects, which could help them keep abreast with the current technological trends and innovative applications, is not provided by the pedagogical centres. Also, there is a lack of opportunities for these teachers to undergo regular internships where they could gain practical experience in the corporate sector and its current development.

### **Objectives of Pedagogical Centres Activities**

- ❑ To promote professional development of teachers with emphasis on pedagogical-psychological aspects,
- ❑ To raise professional standards of management work of senior staff in education,
- ❑ To provide information about new trends and methods in education, to facilitate the exchange of experience, to disseminate information about the EU,
- ❑ To provide counselling concerning teaching methods, to provide information about curricula, to facilitate the exchange of experience and support teachers in developing their curricula

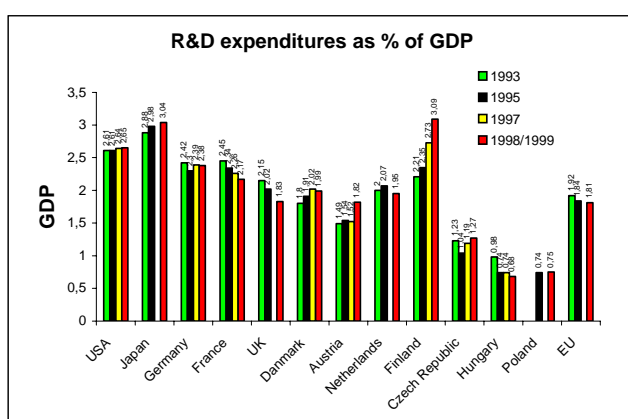
### **Continuing training of trainers**

**The CVT of trainers** is not implemented in a systemic way. However some training programmes are provided by the Association of Institutions of Adult Education by means of their distance and full-time courses. A series of study materials for distance learning has been published. This type of education may be completed by certified examinations. Management lecturers are also being trained by the Association of Management Trainers and Consultants which aims to create conditions for lecturers' self-study and offers them an extensive library, video materials, training programmes and manuals. The Association has issued a series of management training modules, ATKM, which is used to train lecturers. There is no other permanent system for the training of lecturers and consultants. However, a range of events has been organised as the need arises.

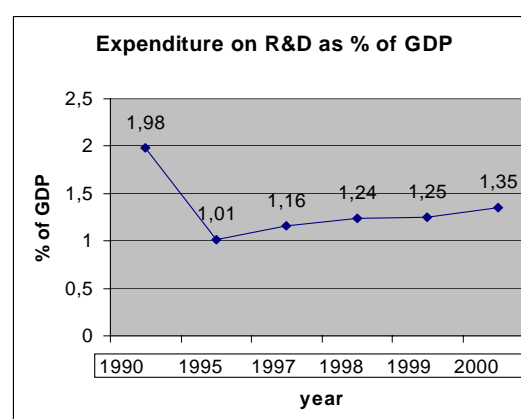
## 6. Research in the field of education, training and employment

### 6.1 Basic information about organisation, functioning and funding

The system of research and development in the Czech Republic have gone through significant changes since 1989. The system of state support for research and development (R&D) in the form of institutional as well as grant support was newly established. At present R&D is executed in a broad range of organisations: Academy of Sciences, universities, ministerial budget research institutions, private organisations, NGOs and R&D divisions of companies. In terms of funding similarly to other CEE countries after a steep drop in expenditures on R&D between 1990 and 1995, the situation started to improve in the second half of the 1990s. The expenditures on R&D still however are much lower than in advanced OECD countries. Nevertheless, the dynamics of the expenditure indicator in the Czech Republic is progressing, especially in the most recent period.



Source: OECD Main Science and Technology Indicators 1998; 1998/1999 data: OECD in Figures, 2001



Source: CSO, Statistical yearbook of the CR, 2001, NO's calculations

According to the Act No. 2/1969 Coll. and its later amendments the Ministry of Education provides administration of the state policy in science, research and development, including international cooperation in these areas. MoEYS is in charge of general conceptual and legal framework of R&D, methodical guidance for the state support, information infrastructure, monitoring of R&D, results assessment, and analysis of state of art of R&D.

The Research and Development Council of the Government of the Czech Republic was established on the basis of the Act No. 300/1992 Coll. and its later amendments on State Support of Research and Development. This laid the foundation for the overall change of research and development organisation and financing in the Czech Republic. The Council is a professional and advisory body of the Government of the Czech Republic in the R&D sphere. The members of the Council are public officials, appointed by the Government from among prominent scientists and experts from universities, the Academy of Sciences of the Czech Republic, research institutes and others. The Council proposes targeted subsidies on R&D from the state budget to the government, evaluates programme proposals of individual ministries for the R&D support, suggests the level of institutional subsidies for state-supported research organisations, provides performance appraisal of budgetary research institutions, statements on key legislative and conceptual documents on R&D, incl. the budget proposal and the composition of the Grant Agency of the Czech Republic. Furthermore, the

Council is responsible for the administration of R&D databases of state-supported projects, products, research plans, and public tenders.

The Grant Agency of the Czech Republic was created on the basis of Act No. 300/1992 Coll. on State Support of R&D and its further amendments. It provides targeted state funding of R&D from a separate central budget chapter on the basis of public tenders. This funding provides grants to institutions and individuals, supports basic research and specific projects falling in line with governmental principles and priorities in the field of R&D<sup>111</sup>.

Furthermore the state funding of R&D is also provided from the budget chapters of individual ministries and other bodies of the state administration. This funds are provided to budgetary research organisations on the basis of the approved research programmes and in the form of grants. The latter are provided on the basis of public tenders either for specifically announced projects or for broadly defined priority themes under the guidance of the sectoral grant agencies in ministries. Similarly support to research in the Academy of Sciences (AS) is conducted through the internal Grant Agency of the AS. In the field of education the primary institutional and grant support to R&D is provided by MoEYS. Research in the area of employment, labour market and social cohesion is mainly supported through the budget of MoLSA.

In accordance with the Governmental Resolution No.16 (5.1.2000) on National Policy of R&D in the CR institutional subsidies for non-specified research is provided to public universities on the basis of approval by MoYES. This support is aimed at encouragement of such research assistance to public universities that is directly linked to the education process and where graduate students participate. This should assist a greater involvement of universities into research activities and to abolish the division between higher educational establishments and the research function widespread under socialism. The amount of subsidies is defined by the R&D Council of the Government in the framework of the overall state budget.

In spite of many healthy changes in the system of R&D since the beginning of the 1990s, the importance of preparation of conceptual and strategic documents in the Czech Republic was still underestimated. The state support was implemented on the basis of vaguely defined principles of governmental policy in the field of R&D. The lack of strategic approach caused to some extent stagnation in the process of development. The need to continue the system reform resulted in preparation of the Analysis of Previous Trends and Existing State of Research and Development in the Czech Republic and a Comparison with the Situation Abroad. The National Research and Development Policy of the Czech Republic was approved by the government in January 2000<sup>112</sup>. The main goal of the R&D policy is to increase the outcome and efficiency of the R&D in the Czech Republic, to ensure a flexible renewal of the capacities, including the development of the human potential active in them and to put these resources into the solution of the future needs of citizens, the society and the economy. In the Czech Republic, similarly as abroad, the focus will be put on the R&D results and the possibilities of their utilisation in all areas of life of the society<sup>113</sup>.

The state support to research in the field of education in the initial reform period often relied on the initiative of researchers and institutions. While such approach assisted active development of the research initiative, it lacked a complex strategic approach and a comprehensive research support to policy design. MoEYS therefore adopted a principle where the research topics were announced for an open public tender. For the next period (2002)

---

<sup>111</sup> Governmental Resolution of 13 June 2001 No. 590, Annex No. 2

<sup>112</sup> National Research and Development Policy of the Czech Republic, Government of the Czech Republic, Attachment to the Governmental Resolution from January 5, 2000 No. 16

<sup>113</sup> Ibid.

however MoEYS elaborated a new approach to the system of announcement of the research topics for a public tender where the topics are not defined in advance but can be announced throughout the year. The request about the theme selection comes from ministerial departments and should be approved by the Council of Deputy Ministers of MoEYS. This leaves space for both strategic planning on the side of education policy administrators as well as for the initiative of the research side, although subject to negotiations with the ministry in the latter case. The overall administrative procedure however may prove to be too demanding taking into account the usual time constraint given by the budget-year restrictions.

The MoEYS's programme *Research for State Administration* defines priority areas in science and research, mostly in line with the concept and development of the system of lifelong learning. It puts the major stress on the development of integral parts of lifelong learning, stabilisation of its structure, quality of systemic mechanisms and procedures for the development of adult education in the Czech Republic. Furthermore the priority areas include assessment of educational outcomes, interaction of vertical and horizontal segments of the education system, new dimensions in teachers and trainers training, modern concepts of management of educational institutions, further development in forecasting of education needs in interaction with the field of labour, development of information technologies for education processes. The regional dimension attains specific attention in the programme. MoEYS states the necessity and preference for multiple partnership approach in projects, including institutions outside the field of education.

Research which supports employment, labour market and social policies is funded by MoLSA. Apart from institutional support to sectoral research institutions, the ministry provides grants for targeted research activities mainly on the basis of public tenders. The support is provided to research (including international cooperation) which assists integration to the EU, research for information infrastructure of the ministry, long-term continuous research into labour market and employment, social dialog and industrial relations, social protection, family policy, income and wages policy. The ministry has increased funding for R&D in last years and plans to continue rising the funds in the next period.

After a steep decline of expenditures on R&D at the beginning of the 1990s, the situation has been steadily improving. Expenditures on research in the field of education increased substantially in recent years. The dynamics of this process in the field of education was more intensive than in R&D in general.

**Tab 6.1 Expenditures on Research and Development**

|   | 1997       | 1998       | 1999       | 2000       |
|---|------------|------------|------------|------------|
| Domestic expenditures on R&D in <b>education</b> (in thousands) | 1 794 550  | 2 182 253  | 2 938 419  | 3 794 445  |
|   | 100%       | 122%       | 164%       | 211%       |
| Domestic expenditures on R&D (in thousands)                     | 19 477 442 | 22 864 970 | 23 646 660 | 26 487 246 |
|   | 100%       | 117%       | 121%       | 136%       |

Source: Statistical Yearbook of the Czech Republic, CSO, 1999, 2001

## 6.2 Research infrastructure and capacities

At the beginning of 1990s the infrastructure of R&D underwent significant changes. As the result of restructuring, rationalisation and also financial constraints in the research sector, there was a sharp decrease of number of employees in R&D. This process was not always



justified and in many cases significantly damaged research capacities in the country. Many researchers abandoned their profession and moved to a private sector. The situation has been steadily improving and the number of employees involved in research in the field of education increased substantially in recent years. The dynamics of this process in research in the field of education was more intensive than in R&D in general. Nevertheless, due to still undervalued expenditures on research and inadequate wages of researchers in state and public organisations, the research sector often fails to attract young specialists.

**Tab. 6.2 Employment in Research and Development sector**

|   | 1997   | 1998   | 1999   | 2000   |
|---|--------|--------|--------|--------|
| R&D employees in the field of <b>education</b> (full-time equivalent) | 3 994  | 4 045  | 4 759  | 5 356  |
|   | 100%   | 101%   | 119%   | 134%   |
| R&D employees (FT equivalent)   | 23 230 | 22 740 | 24 106 | 24 198 |
|   | 100%   | 98%    | 104%   | 104%   |

Source: Statistical Yearbook of the Czech Republic, CSO, 1999, 2001

A positive development in the field of research into education, training, labour market and employment was diversification of organisations involved into research after 1989. Apart from sectoral budgetary research institutes of MoEYS and MoLSA, and Academy of Sciences, such research is provided by universities, NGOs and private companies.

### 6.2.1 Research infrastructure in the field of IVET

Research into different subsectors and levels of initial education in the Czech Republic is mainly conducted by research institutes established by the MoEYS and universities (pedagogical faculties). Other institutions which obtain granted research assignments from the MoEYS are also involved.

**Universities and higher education institutions**, especially pedagogical faculties, usually conduct field research at schools. The research is linked to the training needs of teachers and focuses on teaching at primary and secondary schools. The Pedagogical Faculty at Charles University in Prague works closely together with the Institute of Research and Development of Education (*ÚVRŠ*) (approx. 30 FT<sup>114</sup> employee of which cca. 18 are involved in research). The institute is involved in education policies, comparative pedagogy and various international projects. The Educational Policy Centre is an integral part of *ÚVRŠ* also working in the framework of the Charles University. It is focused at the policy of education as well as at Czech participation in international projects (especially in OECD projects - e.g. Reviews of National Policies for Education, the First Steps of Tertiary Education in OECD Countries, etc.)

There are several **research institutes managed and financed by the MoEYS**. The Institute for Pedagogical Research (*VÚP*, 56 FT employees) aims at analysing primary and secondary general education, in particular curricula and standards. It is also involved in the pupil achievement evaluation.

**The National Institute of Technical and Vocational Education** (*NUOV*, formerly *VÚOŠ*, 94 FT employees of which 61 involved in research) is a research, advisory and co-ordinating institution for vocational education. The Institute's activity is focused on conceptual work, occupational and educational standards, curricula innovation, certification, social partnership, and information services. The Institute has put considerable effort into conceptualising curricula and elaboration of standards in accordance with the labour market requirements. It monitors trends and developments in groups of kin occupations with the support of working

<sup>114</sup> FT = full time equivalent

groups that represent social partner organisations organised by groups of study fields. In the framework of international co-operation, *NUOV* functions as a national UNEVOC centre (managed by UNESCO) and is involved in international (e.g. in the framework of Leonardo da Vinci programme) and bilateral co-operation (e.g. with BIBB).

**The Institute for Information on Education** is a statistical and analytical centre (*ÚIV*, 160 FT employees, of which approx. 17 involved in research). It is in charge of collection, processing, and publication of statistical data on education, development of alternative information resources (e.g. sample surveys, quality indicators) and analysis for public administration needs. Among the most prominent publications it is worth mentioning the Annual Report on State and Development of the Educational System in the Czech Republic, the Statistical Yearbook of Education, SET Program (it compares qualitative aspects of secondary schools), Public Attitudes to Education (opinion poll), the Analysis of School's Network Development. Its international activities are focused on the INES OECD, EURYDICE, EUDISES, and Education Thesaurus projects.

**The Centre for Higher Education Research** (*CSVŠ*, cca. 40 FT employees, of which cca. 16 involved in research) carries out analytical and conceptual work in the field of university education, distance learning, provides professional resources for the accreditation of universities and higher educational institutions and co-ordinates international programmes (e.g. TEMPUS, Socrates).

**The Association of Schools of Professional Higher Education** is an independent affiliation which unites part of schools at the level of higher professional studies. The Association provides conceptual and coordination support for the development of higher professional, non-university, education in the Czech Republic and develops methodology for quality evaluation and assurance of higher professional schools.

### 6.2.2 Research infrastructure in the field of CVET

**The J.A.Komenský Academy** is a training institution which provides courses for adults and youth (232 FT employees of which 13 involved in research). The Academy is involved into applied research in the field of adult education, lifelong learning, distance education, and legislative and institutional development of adult education.

**The National Training Fund** (NTF) is a public benefit organisation established by the MoLSA (48 FT employees of which cca. 9 involved in research and analysis). NTF supports and implements analytical and strategic studies in the field of human resource development, lifelong learning, adult training, social issues, labour market and employment. NTF has been in charge of the Phare VET Reform Programme, Phare HRD programme, Leonardo da Vinci, National Resource centre for Vocational Guidance, and others. NTF provides technical and conceptual assistance to MoLSA in preparation to intervention of European Social Fund. National Observatory of Employment and Training is an integral part of the NTF and comprises its analytical section. It provides applied policy research as a back up for national and international policy makers in the field of lifelong learning and labour market (see more chapter 8).

It is important to note that research capacities in the field of CVET and adult learning are not sufficient in the Czech republic, given the importance and the high priority need of the systemic development of the lifelong learning system in the country.

### 6.2.3 Research infrastructure in the field of employment-related issues

The Research Institute of Labour and Social Affairs (RILSA) is a primary research institution in the field of employment, labour market and social issues (52 FT employees of which cca.

37 researchers whereas cca. 9 involved in research in the field of employment and labour market). The research plan lies along several main themes: reform of the social policy and services under new demographic and socio-economic conditions, transformation of the pension insurance system, the family, poverty and social exclusion, and the labour market. As part of support to MoLSA the institute provides analyses of effects of the National Employment Plan on employment trends in individual regions, maps the changes in households' incomes and social relations, verifies economic aspects of individual social phenomena and economic aspects of individual social protection systems, etc.

The Centre for Economic Research and Graduate Education of Charles University - the Economics Institute (CERGE-EI) is a joint workplace, associated with Charles University and the Academy of Sciences of the Czech Republic (cca. 100 employees of which cca. 30 involved in research whereas approx. 6 are involved in research into employment, labour market, training and qualifications). The partnership represents a good example of cooperation in the Czech Republic and serves as a model of how to break down the artificial division between universities and research institutions that existed throughout the communist period. CERGE-EI reinforces the relationship of teaching and research in the area of advanced scientific and policy-oriented economic research. CERGE-EI carries out significant research programmes generating both theoretical and empirical studies<sup>115</sup>.

Both of the above mentioned institutions are involved into development of the system of forecasting of skill needs in the Czech Republic, in a close cooperation and under the leadership of the Czech Observatory of Employment and Training (see more further).

#### **6.2.4 Capacity of research into links between education and labour market**

Intersectorial approaches are provided in the research activities of the **National Observatory of Employment and Training** of the National Training Fund (NO-NTF, 6 FT employees of which 5 involved in research). The Observatory provides information about the development of human resources and carries out analyses of trends in education and labour market, skill needs assessment and forecasting at regional and sectoral levels, including development of methodology in this field (see further detailed information in chapter 8).

The situation of graduates on the labour market is followed in the framework of inter-ministerial agreement between MoEYS and MoLSA. Some institutes under MoEYS and MoLSA are also involved into analyses of skill needs (see further information under description of research topics). It is however important to note that the current research capacities in the border area of labour market and education cannot adequately cover the needs for research and policy support for employability, learning society and knowledge economy.

### **6.3 Role of international assistance**

**International projects** supported and financed from abroad played a significant role in the development of research into vocational education in the Czech Republic. For instance the outcomes of the Phare VET Reform programme have been an analysis of 8 basic areas of VET development in the Czech Republic (curriculum, evaluation, training of teachers, co-operation with social partners, management, financing, legislation and research), the policy paper Education for Prosperity: Towards a Learning Society, and the short-term and long-term action plans. The latter document paved the way for further development of the overall system of education in the Czech Republic. The findings of the Phare VET programme however were not fully implemented at the national scale, nor were they fully taken on board by the legislation, and many programme innovations unfortunately remained on a pilot level.

---

<sup>115</sup> <http://www.cerge-ei.cz/>

A great deal of new research products, methods, scientific contacts and expertise is attained through participation in the community programmes, such as Leonardo da Vinci, Socrates and especially 5<sup>th</sup> Framework programme where Czech Republic fully participates. It has been demonstrated throughout last decade that such programmes assist not only transfer and exchange of top international know-how but also serve as laboratories of innovation. Institutions that managed to get involved in such projects often demonstrate its advanced expertise and experience. Unfortunately these programmes allow either only partial research/scientific project focus (e.g. Leonardo), or the field of education and labour market are not priority matters of the programme (e.g. 5<sup>th</sup> Framework). Czech institutions can also benefit from additional support frameworks that provide for participation in European networks, bilateral projects and specific research programmes (COST, EUPRO, INGO, KONTAKT and others).

Taking into account the developments at the level of the European Commission during conceptualisation of community programmes, a greater involvement of Czech institutions into internationally funded research projects in the next period will depend upon two major factors: ability to cooperate across institutions, sectors and disciplines at a larger scale, and development of capacities for project design and management in research organisations and especially universities.

## 6.4 Research topics

Among recent research activities that have significant analytical outcomes we can mention a number of projects on **the situation of graduates on the labour market**. Exchange of information and data, and a common publication on unemployment of graduates are part of the agreement between the MoEYS and the MoLSA (1997). The MoEYS also financed thematic research *Employment of Graduates of Higher Education*, including sample survey of graduates of all universities and faculties.

The OECD project *Transition from Initial Education to Working Life*, financed by the MoEYS, and co-ordinated by the National Observatory – NTF, has contributed to the field by information generation and analysis, depicting main problems and suggesting recommendations on how to overcome system deficiencies. The project also included analysis of educational paths and sociological survey among young people aged 20-29 - graduates of all types of schools on the labour market.

Another survey on entrance of graduates to the labour market (INES, OECD – network B) and opinions of employers on school graduates was carried out by the Institute for Information on Education and the agency AMD. Furthermore, The Research Institute of Technical and Vocational Education conducted an analysis of unemployment among secondary vocational and technical school graduates on the basis of available statistics and other sources. Finally, at the beginning of 1998 the MoEYS established a working group on *Employment of Graduates and the Labour Market* within the ministry, which is aimed at exchange of information on on-going activities in the field and at initiation of the new ones. Since then a regular annual report on the situation of graduates on the labour market is produced as the result of data exchange between MoLSA and MoEYS.

Two other **research projects under OECD** initiative and implemented under the aegis of the National Training Fund have substantially contributed to VET research field. One of them is SIALS (*Second International Adult Literacy Survey*), which assessed the quality of human capital, conformity between functional literacy with the level of education, and defined the groups with low level of functional literacy at risk on the labour market. OECD project *Alternative Approaches to Financing Lifelong Learning* was invaluable in mapping of the

system of financing, including an attempt to cover the white spots of data absence, and in defining the barriers to lifelong learning within the system of financing.

Recent years were marked with a number of significant research, conceptual and analytical inputs to elaboration of **strategic documents for development of lifelong learning and human resources in the Czech Republic**. One of the first attempts to analyse the overall situation in the education sector before EU accession, and to suggest the subsequent tasks was the strategic study of human resources in the Czech Republic (*Czech Education and Europe*, 1998). The study was financed by Phare and prepared by a team of experts on the basis of background materials compiled by different institutions from the human resources sector and by these means identifying the interdependent and multidisciplinary character of the topic. The study summarised the basic principles of the EU education policy and their consequences for a further development of Czech education, and analysed the so-far development of all integral parts of the education system. Although the study attempted to formulate a general view of future directions and tasks for development, it lacked suggestions for concrete measures and actions to reach the defined objectives.

The findings of the above-mentioned document were followed and further elaborated in the *National Programme of Development of Education in the Czech Republic*, which was initiated by MoEYS and approved by the government<sup>116</sup>. The document is widely known as *The White Book on the Education in the Czech Republic*. A broad public discussion articulated by MoEYS under the title *The Challenge for 10 millions* preceded finalisation of *The White Book* (1999). The ministry gave the task to a group of specialists from universities, school administration and from among the active teachers to take part in the formulation of *the White Book*. The follow up phase of the discussion took place in the year 2000 and attempted to incorporate the views of the public, social partners, educational institutions, academicians into the text of *The White Book*. The document draws the strategy for implementation of the system of lifelong learning for all, the adaptation of educational and study programmes to the needs of the knowledge society, monitoring and assessment of quality and effectiveness of education, the openness of educational institutions, the new role and professional prospects of pedagogical and academic workers, transition from centralised management to accountable shared decision making<sup>117</sup>. The strategic objectives were further specified and elaborated into specific measures in the *Long-term Development Plan of the Education and Education System in the Czech Republic*<sup>118</sup>. The Plan defines general priorities for the period of 7-10 years and specifies measures for the period of 3-6 years. The plan is based on the analysis of educational statistics, surveys, and other analytical inputs.

Whereas the strategic documents prepared under the guidance of MoEYS mainly deal with the system of education, although from the perspective of lifelong learning, the *Strategy for Human Resource Development*<sup>119</sup> is mainly focused on the broader questions of human resources and employability from the perspective of the needs of the knowledge-based economy. The strategy was prepared by the NTF under the aegis of MoLSA with the Phare support. The document draws on strategic objectives of achieving competitive economy and therefore competitively skilled labour force in the global perspective. It therefore focuses on development of the functional literacy of employees, language and IT skills, overall upskilling of the labour force and upgrading of the qualification structure of the entire population. It suggests specific measures for management of human resources at the national and regional levels, including the institutional framework and mechanisms for diversification of funding for education and training. The project received the support from Phare for further methodological elaboration of mechanisms of HR management at the national and regional

---

<sup>116</sup> Resolution No.113, February 7, 2001

<sup>117</sup> The White Book on the Education in the Czech Republic, English Summary, 2001, [www.msmt.cz](http://www.msmt.cz)

<sup>118</sup> MoEYS, 2001, 1<sup>st</sup> Draft.

<sup>119</sup> Human Resource Development Strategy for the Czech Republic, English Summary, NTF - DHV CR, Prague 2000

levels. A set of methodological guidelines for institutional, analytical and information frameworks were elaborated with the help of the Irish experts (FAS) in 2001<sup>120</sup>.

Further conceptual development of CVET was encouraged by the study *Adult Education in the Framework of Lifelong Learning* (2001). The project was initiated by MoYES and carried out by NTF. The study analysed the infrastructure, the system of financing, quality assurance and counselling and guidance of adult education in the Czech Republic, and verified its main trends as compared to the development tendencies and motivation mechanisms in other European countries. The study proposed key recommendations for improvement of the system, and its institutional and legal framework.

The recent research activities are also focused on **anticipation and forecasting of skill needs as well as drawing scenarios for VET**. Several important projects have already been completed in this area. The project *The Position of School Graduates in the Labour Market: Analysis and Outlook*<sup>121</sup> was implemented with the aim to develop an information system for the needs of decision-making structures in the area of education, professional counselling, students, schools and regional authorities.

The project *Regular Forecasting of Training Needs: Comparative Analysis, Methodology Elaboration and Testing* (1999-2001) was implemented under the Leonardo da Vinci programme by the National Observatory in co-operation with selected research institutions of EU member states and candidate countries. The project was aimed at development of a system of forecasting applicable in conditions of transition economies. The project therefore put a big stress on a combined quantitative and qualitative approach to forecasting. It is assumed that the elaborated model of national manpower forecasts will be operated by the Research Institute of Labour and Social Affairs (RILSA) based on an agreement between the relevant institutions and ministries. The model will be enriched by additional and specifically elaborated analyses at the regional and sectoral levels performed by various institutions (e.g. National Observatory). A pilot analysis of the skill needs in the sector of tourism in the North West Bohemia conducted by the National Observatory contributed to elaboration of qualitative methods of the model. MoLSA will support further the methodological development and activation of the model as well as implementation of the overall institutional system of national, sectoral and regional skill needs analyses and forecasts. The National Observatory shall continue to take the charge for this development and implementation. Results of forecasts will be used by decision making, social partners and by institutions of counselling and guidance.

In the future it is also planned to include the information on labour market prospects by groups of occupations as a new module for the *Information System of Standardised Working Positions (ISTP)*. The ISTP system was developed by Trexima under the auspices of MoLSA. It integrates information on requirements for specific skills and predisposition for work performance, including adequate education level and type. The system is the result of close cooperation between researchers and social partners and represents a great deal of information with a high potential for future development and extended usage.

Future development of VET was the subject of a Cedefop international project *Scenarios and Strategies for Vocational Education in Europe*<sup>122</sup>. The CR actively participated in this project through the National Institute of Technical and Vocational Education. The outcome of the

---

<sup>120</sup> Metodika strategického managementu rozvoje lidských zdrojů pro Českou republiku - krajská úroveň (Methodology of the strategic management of HRD for the Czech Republic - regional level); Klíčová doporučení pro posílení strategického managementu rozvoje lidských zdrojů na národní úrovni (Key recommendations for strengthening of the strategic management of HRD at the national level); Strategický přístup Irska k rozvoji lidských zdrojů (Strategic approach to HRD in Ireland), FAS-NTF, Prague 2001, <http://www.nvf.cz/strategie>

<sup>121</sup> Uplatnění absolventů škol: analýza a výhled (The Position of Graduates in the Labour Market: Analysis and Outlook). Praha, ÚIV, VÚOŠ, CSVŠ, 1999-2000

<sup>122</sup> Národní zpráva z výzkumu scénáře a strategie odborného vzdělávání v Evropě. Praha NÚOV, 2001.

project is three national scenarios of the development of VET in the CR in relation to the development of the economy and the labour market. The project has contributed to drawing European scenarios of the future of vocational education and training.

In the framework of preparation to accession the subject matter of transparency of qualifications and regulated professions gains its importance. The National Institute of Technical and Vocational Education with the support of ETF elaborated a study *Regulated Professions in the Czech Republic* (1998-1999). A seminar on transparency and recognition of qualifications was co-organised by the Institute and the National Observatory in 1999, which resulted in publishing proceedings *Transparency and Recognition of Qualifications in the European Union* (1999). This work opened a way to raising awareness on the existing legal European framework and the minimum requirements for the institutional coordination of mutual recognition of qualifications. The Institute in cooperation with key ministries and social partners continues the work on the preparation of the information and institutional environment for the introduction of the system in the Czech Republic.

## **6.5 Current obstacles and future needs for the development of education-related research**

Development of research in the field of education, training and labour market has gone in line with overall R&D advancement. In the recent period education-related research enjoyed growing attention and support from the state authorities, a greater access to international funds, increase of state expenditures, greater involvement into research of universities, private companies and non-profit organisations. More attention has been paid to strategic thinking and conceptual development where research supported policy development. Some examples of good practice of cooperation between different institutes in the sector of education has marked the period. International assistance as well as national support facilitated start up of the development of research into links between labour market and education.

In spite of these and other positive changes, however there have been some drawbacks. Despite the fact that education-related research in the Czech Republic has a fairly broad scope, it is not sufficiently co-ordinated across ministries and research organisations. It therefore sometimes happens that research is duplicated but at the same time there are areas which are not covered sufficiently. For instance assessment-type of research is insufficiently developed in the Czech Republic. This concerns evaluation of education, training and employment policies, and programmes and projects in this field. Some steps have been already undertaken in the area of international programmes (e.g. valorisation report of the Leonardo I Programme, ex-ante evaluation of the EQUAL initiative). It is however important to note that in the framework of preparation to EU accession a greater emphasis will be necessary to put on different types and levels of evaluations to ensure relevance of the programme priorities, their compatibility with national policies and strategies, and last but not least effectiveness and efficiency of the programme performance and national policies. This will require extension of evaluation capacities and support to the development of methodological expertise in this field.

The research results themselves are not always sufficiently evaluated and implemented into practice. It is rather typical that research is linked to a project life-cycle, i.e. a one-off task without follow-up activities. Scientific results however often require specific assignments for transfer of research findings into practice.

Research capacities in the field of CVET and adult training, links between education and the labour market requirements are insufficient and need further support and development. A general lack of multi-disciplinary research, that can link analyses in initial and continuing

VET, labour market, and socio-economic aspects is a weak point of the current state of affairs in the research field. Lack of multi-institutional partnerships and sometimes unnecessary rivalry approach between different institutions engaged in research into education is not in line with the future philosophy of research support from the European Commission, which will be targeted at multi-institutional research consortia and larger projects with multidisciplinary character. This needs to be taken into account by institutions involved in research in the CR.

Research and analyses at the sectoral as well as regional levels are not sufficiently developed. Limited participation of social partners and companies in the research into education and training does not contribute to facilitation of research in sectors and industries. Regions often suffer from uneven and often insufficient research capacities. Research into education and training clearly has not been a priority for regions. With the approach of the structural funds intervention as well as the result of decentralisation of state and public policies, such research at the regional level will be highly needed. Such research will be essential for ESF and structural funds programming, as well as for the support to regional policy makers in the field of HRD. It is essential to establish a transparent and open system of announcement of projects and funding of research in regions. A greater involvement of universities, private and non-governmental sector into research may contribute to strengthening of research at the regional and sectoral levels.

In spite of the increase in funding of research, financing still is not appropriate for the objectives of research development and competitiveness at the European scale. The role of infrastructure in the research development, including IT hardware and software, also should not be underestimated. Due to natural limitations of the state budget in the period of transition, it is necessary to look for alternative mechanisms of research support (tax relieves, greater involvement of the private sector in research, creation of specific funds for loans, subsidised information and counselling support, creation of multi-purpose research and resource centres equipped with IT and high-tech for multiple usage by non-commercial institutions involved into research, etc.). The state support for research, including education-related research field, often suffers from diffusion among a large number of relatively small projects and lack of concentrated approach. We can also still observe too egalitarian approach to institutional financing of education-related research and lack of healthy competitive spirit in the system of regular institutional funding. Support to research at universities and consequently their engagement into research projects are not sufficient. In the sector of research into education and training still the mainstream of support comes to budgetary institutions of the MoEYS, whereas not only universities but also non-profit and private sector have limited access to funds and therefore play a minor role.

Inadequate remuneration of researchers, including high-profile analysts, especially in budgetary organisations and universities, weaken the research capacities and quality of research. Although some older data on emigration of researchers demonstrated that the risk of braindrain in the Czech Republic is low as compared to other CEE countries<sup>123</sup>, there is still certain risk of brainwaste as the result of unsatisfactory wages of researchers<sup>124</sup>. Furthermore, although there are no precise data available, it is widely known that the Czech research is getting older in terms of age cohorts of researchers. The research sector needs to become more financially attractive for young people. Furthermore, the human capital of the research field needs to be strengthened, especially with regard to possession of such knowledge and skills, as foreign languages, IT, drafting of international project proposals, project

---

<sup>123</sup> Bobeva D., 1997. *Migration, Europe's integration and the labour force brain drain. Synthesis report*. EC: COST

<sup>124</sup> Contrary to "braindrain", which involves outflow of brains from the given territory (emigration), "brainwaste" means outflow of researchers to less demanding but often better paid occupations in the private sector in the context of the same territory



management, management of research institutions, etc. If the adequate attention to these issues is not paid now, this may create a barrier to effective engagement into research activities, integration into the common European research space and successful usage of EU funds for R&D in the future.

In spite of growing importance and incidence of strategic-type of analyses in the Czech Republic, it should be stated that research still is not sufficiently targeted with the view to the needs of the society and the economy. Further attention and deeper coverage is necessary in many areas of the education and employment research fields, such as comparative analyses (cross-country, cross-regional, cross-sectoral, etc.), evaluation of systems of financing of education and training at all levels with the view of suggestion of the most efficient and motivating measures, CVET and adult training with the view of systemic and legislative changes, prospective - future-oriented - research in the fields of qualifications and skills (e.g. scenarios, strategies, forecasting), new role and modern methods of counselling and guidance in the framework of lifelong learning and employability, evaluation and assessment research, applied policy research, theoretical and non-oriented research.

## 7. International co-operation on IVET and CVT modernisation

### 7.1 Development of the Phare assistance

The bulk of financial aid to the Czech Republic has come in the framework of the Phare programme since 1990. During the years of its existence, the Phare programme has experienced substantial development, from assistance in the most urgent problems and the first steps of school and university co-operation within the TEMPUS programme towards assistance in the transformation process and preparation of the country for EU accession.

In 1994 a *Multiyear Indicative Programme* was introduced in which the priorities of Phare assistance were formulated in accordance with the medium-term economic policy of the Czech government. Reorientation of Phare priorities in 1994 put a special stress on the harmonisation of Czech law with the EU and cross-border co-operation, along with continuing support to the private sector, industrial and labour market restructuring, human resource development (HRD), regional support and infrastructure development. This approach was further developed in *1995-1999 Indicative Programme* with a special focus on legislative integration and the implementation of the Europe Agreement.

In 1997 the system of Phare financial and technical assistance was reformed. A former demand-driven approach of beneficiary countries was replaced with the accession-driven approach for all candidate countries<sup>125</sup>. Since 1998 Phare allocation derives from the strategy and key priorities determined in the two main documents. The document *Accession Partnership* (AP) is annually prepared by the European Commission. The document identifies short-term and medium-term priorities in preparation of the associated countries to EU accession. In parallel the Czech Republic prepares *National Programme for the Adoption of the Acquis* (NPAA), which draws the strategy for accession, including the steps and measures for achievement of priorities defined in the AP<sup>126</sup>.

Furthermore, since 2000 the European Commission defined new principles for the Phare system support, where a move to structural funds determines the objectives. Therefore a multi-annual programming shall be adopted for 2002-2006 on the basis of *The National Development Plan* (NDP), which foresees implementation of regional and sectoral programmes of an Objective 1 type. The NDP includes implementation of the measures compatible with the European Social Fund objectives and priorities. *The Sectoral Operational Plan for HRD* will serve as a key strategic document for implementation of the ESF-type measures in the country, whereas it is still under discussion whether in parallel HRD measures shall be included in other sectoral programmes and also into regional programmes. SOP is in the process of preparation where many partner ministries and other sectoral institutions actively participate. It is also planned to run an ex-ante evaluation of the document to ensure that the defined priorities and objective are in line with the needs of the society and the economy, and that the plan complements and enhances national policies in the area of employment, HRD and social issues.

### 7.2 Important programmes of Phare assistance and their relevance to national priorities and impact

#### National Phare support programmes

---

<sup>125</sup> Programy pomoci ES Phare, ISPA, SAPARD, Ministry of Finance, Prague, 2001

<sup>126</sup> Programy pomoci ES ČR od roku 1995, CFA MF, Prague, 2000

One of the first major programmes related to HRD was the *Labour Market Restructuring Programme* (15,2 MECU since 1991) established to develop policies, institutions and instruments for the promotion of employment and efficiency of functioning of employment services for seeking job opportunities, counselling and guidance, and pro-active labour market interventions<sup>127</sup>. The programme assisted to develop a number of labour market analyses, the information base, established Proactive Labour Market Intervention Fund - PALMIF - for the support of innovative projects at a local level. The programme had a significant VET component aiming at increasing flexibility and efficiency of training in order to respond to labour market developments. The programme has significantly contributed to the development of the governmental employment policy. The following projects have been organised within the programme: *Strategic Study on VET* (by Birks and Sinclair Company 1993); *Adult Education Policies and Programmes* (designed by AFPA 1994); *Information and Career Guidance Network* as an integral part of the labour office system (devised by DHV ČR, pilot run 1995, implementation 1996-97), and others. *The PALMIF Human Resource Development Programme* supported local employment initiatives and piloted innovative measures with the view for the future mainstreaming in the framework of active employment policy.

The Phare programme *VET Reform* (4.6 MECU, 1994-1998<sup>128</sup>), started in 1993 with the strategic study<sup>129</sup>, represents a significant contribution to VET in the Czech Republic. The objectives were to contribute to a long-term VET reform through new approaches to curriculum development, educational standards, management, teacher training, quality control, involvement of social partners and financing of VET. Nineteen pilot schools were selected to develop and test innovative curricula and to participate in school development and staff training courses. Evaluation of results from the programme was presented in the form of a policy paper at the end of 1997, including recommendations for key areas of the VET reform. On the basis of these results a background discussion policy paper was published and a broad public debate was initiated<sup>130</sup>. A programme document *Further Transformation Steps* was published in 1998 on the grounds of the public discussion with a proposal for concrete short-term and long-term tasks and measures, presented at the final conference of the VET Reform programme in September 1998. The programme had however some drawbacks. It was implemented in a policy vacuum where a general policy and strategy in the area of education were lacking and therefore there was neither consensus nor commitment on the side of key ministries to the programme. This resulted in a bottom-up character of the programme with a high-profile performance of schools and other institutions. Such an approach did not disrupt elaboration of the strategic programme for implementation of the reform on a larger scale<sup>131</sup> but due to very low commitment of MoEYS most of pilot results still have not been mainstreamed.

The programme *Renewal of the Education System* (5,5 MECU from 1991 to 1996) aimed at improving quality of primary, secondary education and non-university tertiary education, extension of teaching of foreign languages, strengthening decentralised management and administration of schools, and modernisation of the overall education system. The main programme impact was enhancement of foreign language teaching in schools, the reform of the education programmes and of the school administration. The non-university sector of

---

<sup>127</sup> Program Phare v ČR 1990-1996, CFA MF, Prague, 1996

<sup>128</sup> Program Phare v ČR 1990-1996, CFA MF, Prague, 1996

<sup>129</sup> Birks, Sinclair and Associates Ltd., *Strategic Review of Vocational Education and Training - Czech and Slovak Republics*, Prague, Phare, Labour Market Restructuring, 1993.

<sup>130</sup> *Vzděláváním k prosperitě. Na cestě k učící se společnosti, podklad k veřejné diskusi*, Education for Prosperity, Towards a Learning Society, *Fragment*, 1998.

<sup>131</sup> See more *From Pilot Schools to Reform Strategy*, Outcomes of the Phare programme Reform of VET, NTF, *Fragment*, Prague 1997

tertiary education was financially supported to give the way for alternative forms of higher education in the Czech Republic<sup>132</sup>.

*The Human Resource Development Programme (7 MECU)* was launched in 1994 when a foundation National Training Fund was established by MoLSA. The programme activities focused in particular on the development of management training and its further use in companies, along with the management development in Czech companies for the competitiveness on the European and international markets. The programme contributed to the improvement of quality of management training, management of human resources in companies, networking of CVT providers, development of information environment for training providers and HR experts and practitioners. At the beginning of its existence the National Training Fund carried out its activities in the environment with the lack of policy strategy. Many studies proved that support efficiency is often damaged by the lack of systemic development of CVET. Therefore NTF initiated a strategic study on human resource development which resulted in delivery of multi-level strategy and methodology of human resource development and management in the Czech Republic<sup>133</sup>. The project was a major step forward in designing the systemic framework for improvement of HRD in the Czech Republic. Implementation of the strategy into practice is however subject to negotiations at the policy level, active support from the side of social partners, elaboration and implementation of specific legislative, institutional and budgetary steps.

National Training Fund is also in charge of implementation of the *Phare 2000 - the HRD Fund* grant scheme - in two pilot regions (North West Bohemia and Moravia-Silesia). The programme supports the improvement of employment and qualification in regions and development of implementation structures at central, regional and local level for management, administration and implementation of the ESF type projects. The support is focused on 4 measures: 1) sustainable employment and adaptability of human resources; 2) social inclusion and equal opportunities; 3) development of lifelong learning; 4) HRD in Industry. In the coming period *the HRD-Phare programme* will play the role of preparation for the ESF type support. Unlike previous stages, the new Phare programme has a more systematic and strategic basis with active usage of key planning documents elaborated in the country, such as *National Development Plan, Consultation Document for HRD, Sectoral Operational Programme* and *National Employment Plan*. Projects under Phare will be co-financed from the newly created National Fund (Phare 2000 HRD Fund comprises 4 MEUR from EU sources and 4 MEUR from national sources).

Furthermore, in the framework of Phare 2000 a project *Improvement of the Quality of Education for the Romany Minority* was designed aiming at development of the revised educational programmes for the Romany children in order to enhance their integration into the Czech system of education<sup>134</sup>. The project assumes elaboration of teaching and learning materials for the improvement of the multicultural education in Czech schools. Furthermore the project includes training of teachers for enabling them to adequately use new educational programmes.

Since 2000 the ministries can benefit from the so called twinning approach where Phare assists placement of the long-term and short-term experts from the EU member states in the CR for the provision of the targeted technical assistance. Such assistance is provided in the framework of preparation to structural funds. MoLSA, being in charge of preparation to the European Social Fund, benefits from the Twinning projects in this area. Such initiative not

---

<sup>132</sup> Program Phare v ČR 1990-1996, CFA MF, Prague, 1996

<sup>133</sup> Human Resource Development Strategy for the Czech Republic and Promotion of HRD Concepts - Phare project (implemented in 2000); Implementation of HRD Strategy in the Czech Republic - Phare project (implemented in 2001).

<sup>134</sup> Programy pomoci ES Phare, ISPA, SAPARD, Ministry of Finance, Prague, 2001

only assists transfer of know-how but also supports elaboration of the key strategic, conceptual, programming and analytical documents in line with the EU policies (e.g. *Employment Action Plan*) and facilitate institution building and system development for the administration of ESF. This generally very useful initiative sometimes suffers from the lack of capacities on the side of the recipient ministry, lack of an efficient and competent national counterpart, and lack of the targeted approach in tasks assignments for EU experts. This needs to be taken into account in the design of future twinning projects.

### **Phare multi-country programmes**

Many multilateral programmes also have a vocational education component. *The Trans-European Co-operation Scheme for Higher Education (TEMPUS)* was designed in 1990 to help partner countries reform their higher education (50,8 MEUR allocated since 1990<sup>135</sup>). It concentrated on joint projects between EU member states and Czech higher education institutions, staff and student placement and exchanges, revising curricula, upgrading training materials, implementation of the European Credit Transfer System and the system of evaluation of quality of education. One of major contributions of the programme was the new contacts of Czech universities with their European counterparts. The programme has a significant impact on the transformation of higher education, improvement of education quality and introduction of new modern methods of education. TEMPUS projects expire in 2001. The programme activities are followed by the logic of the community programme Socrates (see further).

*Multi-country Programme in Higher Education (1997 - 2000)* included five components: 1) evaluation of quality in higher education, 2) system of international indicators in education, 3) equivalence and recognition of diploma and education credits attained abroad, 4) data collection in the field of higher education (database Ortelius), and 5) European studies. The programme involved eleven candidate countries, and the Republic of Bosnia and Herzegovina at a later stage. The programme fulfilled its initial objectives and included an especially effective dissemination year in its final stage. In order to reach the maximum effect however, the programme needs to be followed up, especially in the components which are not partly integrated into other programmes (e.g. Socrates), in particular quality evaluation and assurance with regard to accreditation mechanisms.

*Multi-country Programme in Distance Education (1994-2000)* aimed at the support to the establishment and development of distance education. The programme involved 13 Phare countries, where the national contact points for distance education were established. The programme supported establishment and development of 45 regional centres of distance education in the involved countries. A number of studies was developed, such as quality management and assurance of distance education, accreditation of distance education programmes, evaluation of the state of art of the technical infrastructure for the provision of distance education. Three specific distance education programmes aimed at the support to integration of the candidate countries to the EU were prepared, and 400 tutors for distance education were trained in the involved countries. The programme significantly contributed to raising awareness and to the implementation of distance education into the Czech system of legislation at the level of higher education. Further expansion of distance education (including other sub-sectors of education) and its greater effectiveness will not be however possible without a bigger attention from the side of national policy makers, substantial budgetary allocations from national and international sources and an on-going quality assurance and awareness raising campaign.

## **7.3 Community programmes in the field of education and training**

---

<sup>135</sup> Programy pomoci ES Phare, ISPA, SAPARD, Ministry of Finance, Prague, 2001

The Czech Republic joined *the Leonardo da Vinci Programme* in autumn 1997 (programme allocation in 1997-2000: 10,45 MEUR, of which 4,38 from Phare sources<sup>136</sup>). Full participation in the programme enabled the involvement of Czech organisations in the transnational projects consequently improving the quality of both initial and continuing vocational training and broadening the scope of lifelong learning possibilities in the country. The numbers of Leonardo projects with participation of the Czech vocational schools, universities, enterprises, employment services and other organisations have been increasing rapidly comprising 358 projects by 2001. Till the end of 2001 nearly 3 300 Czech young people performed their practical vocational training in the EU countries in the framework of *placements and exchanges*. Moreover, 477 Czech organisations have been involved in *the Leonardo da Vinci pilot projects* leading to new innovative teaching and learning methods, tools and products with European dimension. The results of the Leonardo programme are the most significant in the area of placements and exchanges, which enable participants (mostly secondary and post-secondary technical schools and technical universities) to acquire a better understanding of foreign VET systems, to expand international cooperation, and to acquire additional professional knowledge, language skills and broaden general horizon of the participants. Furthermore with the help of pilot projects the programme has significantly contributed to the development of new and innovative educational products and methods. The first phase of the programme (1996-1999) in the Czech Republic was evaluated with the view of valorisation of its results<sup>137</sup>. The preliminary report defined a number of projects and products recommended for further support and mainstreaming. The start of the programme was characterised by the lack of policy framework for definition of priority areas for the programme. Nevertheless the evaluation has demonstrated a high degree of accord of the programme measures with the key strategic objectives elaborated in later policy and strategic documents. In a relatively short time period of the programme performance in the Czech Republic, it proved to become very efficient, where Czech projects are evaluated as of the good-quality as compared to other European countries.

In 1997 the Czech Republic also accessed another EU community programme *Socrates* (programme allocation between 1997 and 2000: 21,37 MEUR<sup>138</sup>). The programme is aimed at cooperation in the area of general education at all educational levels, including adult education and lifelong learning. In the framework of the programme especial attention is given to the European dimension in teaching and preparation of teachers. The programme involves several components that deal with higher education, cooperation between all levels of education, improvement of language competencies, management in education, ODL, knowledge development and raising awareness about EU, support to the information and data environment. The programme supports student exchanges in higher education, teachers and headmasters placements abroad, that have contributed to innovation of education process and management of education institutions in the Czech Republic. The programme also contributes to raising awareness about the Czech culture abroad. The programme results are used by MoEYS in the design of the long-term education strategy and planning.

Both of the above mentioned community programmes derive from the supranationally defined priorities and objectives. With the full respect to their European character and therefore the European dimension as a prerequisite for all projects, it is however advisable to take into account in the decentralised procedure<sup>139</sup> national priorities, defined in the recent strategic documents<sup>140</sup>. Furthermore, the experience of recent years demonstrated that Czech projects

---

<sup>136</sup> Data obtained from the National Agency of the programme Leonardo da Vinci

<sup>137</sup> *Evaluace prvního období (1996-1999) programu Leonardo da Vinci v ČR a valorizace jeho výsledků*, NVF, Národní agentura programu Leonardo da Vinci, 2002

<sup>138</sup> *Výsledky programu EU Socrates v Česku '97-99*, Socrates office, Prague 1999.

<sup>139</sup> i.e. where project proposals are submitted at the national level

<sup>140</sup> e.g. *The White Book on Education, National Employment Plan, Strategy of HRD in the CR*, and others.

are highly competitive at the EU level. The size of the entry ticket paid in the framework of the programme should not become an obstacle to a bigger number of the approved Czech projects at the European level.

Another community programme *Youth for Europe* (since 2000 - *Youth*) supports exchange activities of the youth outside school education and in their leisure activities. The programme results are especially positive with respects to the development of language competencies, communication and organisation skills of participants as well as support to new contacts across Europe. The programme represents a necessary supplement to the MoEYS youth subsidy policy.

#### **7.4 Bilateral assistance**

There have been many other bilateral and international donor programmes linked to education that focused on know-how transfer, modernisation and system development, transfer of new technologies and introduction of new methods. Since 1990 governments of the advanced states have deliberately provided the newly emerged democratic countries with the support aimed at transition to the plural society and market oriented economy, consolidation of democratic governments, respect of human rights, and EU integration. Such support was provided in the form of economic, scientific, social, technological, cultural and educational cooperation. In the framework of bilateral cooperation the bulk of support was provided in the form of technical assistance, mostly training, study visits, consulting services, project preparation, etc.

Individual bilateral support programmes derive from the respectful national programmes for bilateral assistance of the individual donor countries. The extent to which those programmes take into account specific strategic objectives in the area of education, training and HRD in the Czech Republic in the relevant period depends on a number of factors in those countries and therefore cannot be assessed. In many instances however the announcement and approval of the individual project in the framework of bilateral assistance is a subject to the consultation within relevant Czech ministries and other authorities. Their general relevance to the strategic objectives of the Czech Republic therefore is ensured.

The bilateral assistance to the Czech Republic in 1990-1999 was actively performed by 16 states. Since 1997 some countries (e.g. USA, Austria, Switzerland, Germany and Sweden) gradually withdrew their activities with the argument that the Czech Republic has already completed its social and political transformation. Currently the following countries are active in the provision of the bilateral support: Belgium, Denmark, France, Italy, Israel, Japan, Canada, the Netherlands, Spain, Taiwan and the UK<sup>141</sup>.

Bilateral assistance aimed at supporting initial and continuing vocational education has been provided at several levels: to the central government, regions, local authorities and organisations. Bilateral donors are of different character: ministries, foreign offices or financial aid divisions of western state governments, and various funds (e.g. the British Know-How Fund, the Austrian ECO Fund). The Ministry of Finance of the Czech Republic is in charge of coordination of the bilateral assistance at the national level only, i.e. only in the framework of intergovernmental agreements. Therefore other elements of bilateral assistance are not coordinated in the CR. It is very difficult to estimate the impact of bilateral assistance, since the record of such projects is unsystematic and rather poor. Most of bilateral projects were targeted towards specific objectives and target groups while the dissemination of outcomes and follow up programmes were not explicitly considered to be part of them. Evaluation of results and impact is only performed in the field of individual projects, and therefore we cannot draw any conclusions for the sector of human resources in general. Such

---

<sup>141</sup> Bilaterální programy pro Českou republiku, MFCR, 2000

evaluation can become a subject of a specific (and major) project, which can also recommend specific measures for implementation and mainstreaming of the results achieved so far with the help of bilateral and international assistance.

## **7.5 Importance and relevance of EU funding**

It could be roughly estimated that between 1990 and 2001 approx. 149,87 MEUR was allocated to the human resources and social components, including TEMPUS programme and community programmes (both entry ticket and Phare contribution)<sup>142</sup>. Although the support to the sector of human resources was not defined as a main priority area for the EU assistance and enjoyed significantly lower allocation than e.g. infrastructure investments, private sector support or regional development, it benefited from the significant financial assistance. We can roughly estimate that approximately 15% of the EU support between 1990 and 2001 was devoted to the human resources and social components, including TEMPUS and community programmes (incl. entry tickets). Although the ratio of the funds allocated in the framework of the EU assistance to the national public expenditures on education is not significant (very roughly it can be estimated as 0,73% of the public expenditures for the same period), the importance of this assistance should not be underestimated.

EU assistance has been a major push for the reform process and system modernisation in education and training as well as the main instrument for the transfer of know-how, modern and innovative methods, technologies and products. However, the impact and efficiency of the EU assistance was deteriorated by the general policy vacuum with lack of the policy and strategic documents in the area of education and training, and lack of consensus and commitment to mainstreaming the results at the policy level, especially in the initial phase of Phare assistance. Under these circumstances EU assistance programmes mostly relied on the bottom-up approach, which proved to be useful but in a number of cases insufficient. Another significant weakness of the EU assistance was sometimes direct transfer of the knowledge, experience and system elements from abroad without significant adjustment or even verification of the relevance of those elements to the specific institutional, legislative or cultural environment of the country. Lack of thorough ex-ante type analyses, including labour market component, feasibility and absorption capacity analyses of the environment, contributed to deficiency in awareness of relevance and mainstreaming opportunities of the assistance. Phare assistance, especially at its earlier stage, failed to successfully involve national experts and policy makers in the design of programmes and in the implementation. This in some cases led to lack of commitment to programme outcomes.

A major shift in the elaboration of the national policy framework at the end of 1990s may significantly contribute to the systemic provision and relevance of the national and international funding in the Czech Republic. This development however should be seen not only as a major opportunity but also a crucial challenge for the adequate planning and administration of the EU assistance.

## **7.6 Further options and priority areas for future support**

Whereas the initial phase of the Phare assistance was marked with the general lack of the strategic and conceptual planning and programming documents, the current situation is totally different. There is a major push from the side of the European Commission in the framework of preparation to ESF implementation towards elaboration of numerous planning documents. Unfortunately this generally positive development is depreciated by the fact that programming is too rushed in order to meet determined deadlines (often unrealistic). This has

---

<sup>142</sup> The financial contribution of the bilateral assistance cannot be estimated due to the lack of reliable data



a triple negative effect: 1) such planning suffers from lack of prior analyses and therefore lacks a thorough argumentation basis; 2) it suffers from inadequate time devoted to the process of negotiations and therefore lack of consensus among major partners; 3) it often results in poor quality of planning documents. More attention should be paid to harmonisation of different programming documents and national policies to make them additional to each other and contributing to the overall strategy of development for the society and the economy (e.g. Phare programming vs national policies in education and employment, sectoral programmes vs regional programmes).

Furthermore, the country still lacks an adequate expertise for drafting planning documents with the prior analyses and evaluations, as well as it lacks the culture of the partnership approach across ministries and sector institutions. The Czech promoters are not yet prepared to implementation of larger ESF type projects lacking project design and implementation skills. These factors have to be taken into account and we recommend to include training and counselling component at all levels into the planned assistance programmes.

The Czech Republic, as other CEE countries, does not possess a tradition and culture of evaluations of policies, programmes and projects (both nationally and internationally funded). This leads to scarcity of the follow up actions and of valorisation of piloted results. Such activities should become an integral part of planning. It is crucial to consolidate on achievements of past reforms to obtain a maximum benefit of that what is already in place. Valorisation of Phare programmes can be very useful also in the framework of preparation to ESF.

HRD component needs more systemic approach in programming and allocation of funds, which can contribute to the development of the system of lifelong learning for all, promote employability, stimulate the role of social partners in education and training. We recommend to support such projects as development of modular training in IVET and CVET, introduction of the credit transfer system in IVET and CVET, development of the unified qualification system for IVET and CVET, awareness raising and start up for the development of the system of accreditation of prior learning, enhancement of counselling and guidance and the information environment with regard to lifelong learning and mobility of labour in Europe, support to quality management and quality assurance in IVET and CVET, support to development of special training courses in accordance with labour market demands.

## 8. Role of National Observatory

The **National Observatory of Employment and Training (NOET)** was established in 1996 as an analytical unit within the framework of the National Training Fund under the initiative of the European Training Foundation and with the approval of the MoEYS, MoLSA and the Ministry of Economy. Over the first years of its operations NOET, as a part of a network of similar institutions in countries of Central and Eastern Europe, was predominantly focused on activities commissioned by the ETF. The activities particularly included the development of monitoring VET in relation to the labour market. NOET gradually enlarged the scope of its projects by means of cooperation with national and international partners and clients. At the national level the primary customer of the Observatory is MoLSA. Observatory also cooperates with MoEYS, Ministry for Regional Development, regional authorities and employment services, social partners, research and statistical institutions. NOET has actively cooperated with the OECD, CEDEFOP, it has implemented projects in the framework of the Leonardo da Vinci programme and the EC Fifth Framework Programme. NOET functions under the guidance of the Steering and Advisory Committee which is composed of representatives of MoLSA, MoEYS, regional employment services, a human resource specialist representing the private sector, Czech-Moravian Chamber of Trade Unions and Employers Association.

The current Observatory's staff consist of six employees, including a research assistant and a financial officer. Further extension of the staff for an additional senior expert and a junior researcher is foreseen for 2002 due to the increase in the volume of activities in the framework of preparation to ESF and other urgent analytical tasks. The **qualifications and expertise of the current team** cover the areas of initial and continuing education, labour market, vocational guidance, sociology and economics. This inter-disciplinary approach constitutes an advantage in the implementation of analytical projects as well as coordination of working teams. NOET has developed a **pool of cooperating experts and institutions** from the areas of research, higher education, statistics, state and public administration, employment services, social partners, private sector, non-government organisations, regional and local authorities, and independent experts. There are currently some 200 experts included in the pool. The structure of professional contacts facilitates a very flexible and instant design of expert teams according to specific project needs.

The activities of the Observatory can be conditionally divided into two types. The first one consists of **regular activities**, the second area covers **analytical projects** designed to address specific research issues. The recent development demonstrate that some of one-off analytical projects become incorporated into the regular activities of the National Observatory.

### Regular activities of the Observatory

The Observatory collects, analyses and regularly updates information on the VET system in the Czech Republic. These activities result in the production of *Country Reports on VET*. The report includes selected indicators (*Key Indicators*) which are provided to the ETF for the purpose of comparative analyses on the annual basis. The indicators concern the economic activity of various groups of the population, participation in education, drop-outs from education, public and private funding of education, and others. As a member of the international network NOET provides the Czech entities with information on systems of vocational education in associate countries. The public interest however lays rather in comparisons with the advanced EU and OECD countries. This information can be normally obtained within project activities (see further). Unfortunately NOET does not possess

sufficient funding and capacities for regular translation and dissemination of such information.

In 2000 the National Observatory re-designed its major activities in order to provide support to the MoLSA and other institutions in policy development and analyses within the framework of **preparations for the implementation of the European Social Fund**. This change occurred in line with the new focus of assistance to pre-accession countries provided by the European Training Foundation (ETF). The National Observatory provided support in the development of programming and assessment papers within preparations for accession to the EU. For example, it annually coordinates commenting by major national institutions on the ETF-produced document entitled *Review of Progress in Vocational Education and Training Reform in the CR*. NOET also participates in the development of the Report on Progress achieved in the implementation of conclusions of the Joint Assessment Paper, which is jointly approved by the MoLSA and the European Commission. NOET developed a number of background materials concerning VET for this report. The National Observatory cooperated with the MoLSA in the development of other analytical and policy documents within Phare/ESF programming, particularly contributing to *The Sectoral Operational Plan for Human Resource Development (SOP HRD)*. NOET also participated in the working group preparing *The National Employment Action Plan 2002*.

The most recent shift of NOET's activities however are from direct participation in drafting programme documents towards evaluation analyses. For instance, an ex-ante evaluation for *EQUAL Community Initiative* was elaborated in 2001. NOET plans more evaluation activities in 2002, such as ex-ante evaluation of the updated *SOP HRD*, ex-ante evaluation of the Single Programming Document for the ESF Objective 3 Prague, elaboration of the evaluation framework for *The National Employment Action Plan 2001*, and continuation of evaluation activities for the *EQUAL Initiative*.

### **Analytical and research projects**

The Observatory has undertaken a wide range of studies analysing VET in terms of improving its links to labour market needs. The list of projects mentioned below is not exhaustive and represents rather illustrative examples of activities of this institution.

European Training Foundation supported a number of projects. For instance, the project entitled *The Role of Social Partners in VET* (1998) provided an outline of the current situation in the CR and assessed particularly the following: the legal framework and organisational structure of social partnership in the CR in various areas of VET, and objectives that derive from the special role of social partners in relation to qualification requirement and financing of VET. The project *Continuing Vocational Education and Training in the CR* (1999) analysed barriers to the development of CVET in the CR, including in-company training, the market of training providers, initiatives of donors, and CVET as part of active employment policy. The project entitled *Education and Training against Social Exclusion* (2000-2001) was initiated by the ETF in partner countries of Central and Eastern Europe. It analysed the situation of groups of population at risk of social exclusion and assessed the measures of policies in the areas of employment and education.

As regards labour market analyses NOET implemented a two-year OECD project designed to analyse the factors which are important in the process of *Transition of Young People from School to Employment* (1997-1999). In line with international OECD methodology the project verified the level of participation of young people in education and employment, the length and success rate of studies, the types of certificates, the links between studies and work placements and the conditions in the labour market for school leavers. The analysis included an extensive sociological survey among school leavers. The school leavers' educational and career paths and the nature of problems they experience entering the labour market were

scrutinised. *The State Employment Policy and Services with Regard to Education Policy* (MoLSA, 1999) was a project designed to assess the education system and the position of school leavers in the labour market. It concentrated on the structure of the education system and its “permeability”, the factors affecting immediate as well as long-term unemployment of school leavers and the links between initial education and the labour market.

Assessment of institutional capacities in the public and private sectors in initial and continuing education and employment services in view of the implementation of state employment policy and the ESF measures was done in the framework of the project *Country Monograph* (2000-2001, ETF). The analysis supports the implementation of *The National Employment Plan*, the identification of problems and the formulation of proposals for their solution within the context of updating *The Joint Assessment Paper* prepared jointly by the Ministry of Labour and Social Affairs and the European Commission.

NOET participated in preparation of the periodical publication *Human Resources in the Czech Republic*. The first edition (1999, Phare) was prepared in co-operation with the Institute for Information on Education. Its aim was to cover the main trends in the areas of lifelong learning, the labour market, functional literacy and motivation mechanisms for education in the Czech Republic and to compare these trends with developments in other countries. NOET currently seeks support from national and EU sources to continue the work on the next issue of the periodical.

An on-going three-year research project *Professional Identity: Flexibility and Mobility on the European Labour Market - FAME* (2000 – 2003, EC 5<sup>th</sup> Framework) examines the educational, market, global development and corporate factors affecting flexibility and mobility of the labour force and the behaviour of companies and employees in Germany, Great Britain, France, the Czech Republic, Estonia, Greece and Spain.

#### Examples of National Observatory publications

- Analysis of VET and Institutional Development in the Ostrava Region, NO-NTF, 1999
- Forecasting Education and Training Needs in Transition Economies: Lessons from the Western European experience, NO-NVF, 1999
- Forecasting Skill Needs: Methodology elaboration and testing, Prague, NO-NVF, 2002
- Forecasting Training Needs in the Hotel, Catering and Tourism Sector: A comparative analysis of results from regional studies in three European countries; contribution to the article in *Training and Employment*, CEREQ Quarterly, 42/1-3/2002
- Key Indicators: Vocational Education and Training in Central and Eastern Europe, ETF, Czech version NO-NVF, 1998, 1999, 2000
- Human Resources in the Czech Republic 1999, NTF-ÚIV, 1999
- Modernisation of Vocational Education and Training in the Czech Republic, ETF, 1999 edition
- Transition from Initial Education to Working Life: National background report for OECD, NTF-NO, 1997
- Overview of Continuing Vocation Education and Training in the Czech Republic, NO-NTF, 1999
- Proceedings from the Seminar on the Role of Social Partners in the Development of Qualification Standards and in the Financing of VET, NO-NTF, 1998
- Tertiary Education in the Czech Republic, working paper, 1997
- VET System in the Czech Republic: Recent changes, challenges and reform need, NO-NVF, 1999
- Education and Training against Social Exclusion: Czech Republic, NO-NTF, Prague, [http://www.nvf.cz/observatory/index\\_gb.htm](http://www.nvf.cz/observatory/index_gb.htm), 2000;
- Research on Vocational Education and Training at the Crossroads of Transition in Central and Eastern Europe: Comparative analysis of eleven countries; in: 2nd Report on VET Research in Europe, CEDEFOP, Luxembourg: Office for Official Publications of the European Communities, 2001;
- Evaluace ex-ante evropské iniciativy EQUAL v České republice (Ex-ante Evaluation of the European Initiative EQUAL), National Observatory NTF, <http://www.nvf.cz/equal/cz/dokumenty/evaluace.pdf>, 2001
- Konzultační proces k Memorandu o celoživotním učení - Česká republika: Závěrečná zpráva (Consultation Process on the Memorandum of Lifelong Learning - Czech Republic: Final Report), NO - MoEYS, Prague, <http://memorandum.nvf.cz/dokumenty/zprava.doc>, 2001;
- Country Monograph - Background Study: Czech Republic, working document, NO-NTF, 2001
- Human Resources in the Context of Regional Development: Company skills survey in selected industries of North West Bohemia, forthcoming, NO-NVF, Prague 2002;

The National Observatory has also been active in analyses of regional skill needs in cooperation with regional institutions. A pilot study *Qualification Requirements and*

*Institutional Development in the Ostrava region* (NUTS 2) was designed to analyse the situation in the region (ETF, 1998-1999). The analysis was based on a company survey as regards recruitment and laying off employees of specific qualification levels and professions. The implementation of HRD policy in companies as well as their cooperation with schools was surveyed. The results of the survey were compared with the supply of educational opportunities and the anticipated structure of school leavers in relation to the economic development of the region. At the same time the absorption capacity of the region was analysed with regard to its preparedness for future participation in projects financed from the European Social Fund.

Another regional project *Human Resources in the Context of Regional Development* (ETF, 2001) involved company skills survey in selected industries of North West Bohemia (NUTS II). In the framework of the context analysis key structural and qualitative characteristics of the regional economy influencing the supply of and demand for skills were analysed. The project included a detailed survey in 155 regional companies in five selected industries: chemistry, energy, environment and waste processing, IT and telecommunications glass, porcelain and ceramics. The survey aimed at identification of skill characteristics of the workforce as a factor affecting company economic performance, the capacity of companies to identify skill shortages and their effects, the approach of companies to design and implement measures addressing the skill shortages.

Based on the experience gained from the implementation of the analytical projects in the area of skill needs analysis, NOET was the first institution in the CR to initiate a project designed to fill the gap in the area of forecasting qualification needs of the labour market. The project *Forecasting Training Needs: Comparative Analysis, Elaboration and Application of Methodology* (“LABOURatory”) (1999 - 2001, Leonardo da Vinci) was designed to develop basic forecasting methodology with the use of experience of countries where such systems are already in place. The project included a comparison of the existing information which may be used to forecast skill needs, a design of a model for regular projections, proposals for improvement of the existing information system and for possible introduction of new monitoring and forecasting instruments. The project worked with both qualitative and quantitative methods. In the framework of the project NOET conducted a qualitative survey of qualification needs in the sector of tourism in the North-West region of the CR. The project resulted in recommendations for decision-makers and the relevant expert institutions.

NOET is actively engaged into international expert and thematic networks. For instance it is a member of the thematic network Towards the European Society –Challenges for Education and Training Policies and Research Arising from the European Integration and Enlargement (EURONE&T) (2002-2004, EC 5<sup>th</sup> Framework), where the NOET coordinates the work of the domain on issues of transition to the market economy and accession to the EU. The Observatory regularly disseminates its findings from the international, national and regional workshops, seminars and conferences, although the limited staff capacities and the very intensive work programme do not allow to do it to a sufficient extent.

### **Further opportunities**

During six years of its existence the National Observatory has successfully incorporated into the field of research and analysis in the Czech Republic. It started to work in the environment of well established institutional framework for research into initial VET. In spite of some competitive pressures at the beginning of its existence, NOET managed to find a niche for its functioning. It has successfully filled in the gap in research into links between labour market and education, HRD and CVET areas as well as policy oriented analyses in the field of employment and training. NOET however needs to strengthen its capacities and funds to keep more attention to its public relations activities, dissemination of results, translation of findings

into Czech (and vice versa - into English in case of national projects) and publication. Nowadays NOET's main activities are organised around three major areas: 1) analyses and anticipation of skill needs and skill shortages, 2) evaluation of policies and programmes in the field of employment and training, 3) international cooperation. The National Observatory is currently a fully sustainable institution, whose future development is not dependent on funding from the ETF. The coming period however will be crucial for NOET, as the system and institutional framework will develop with regard to national management of HRD, sectoral and nation-wide analysis of evolution of qualifications and skill needs, and evaluations of EU and national policies in the CR. Furthermore, the future support to research from the side of the EC and CEDEFOP will be a subject to multiple partnership cooperation in the form of research networks and consortia of institutions. That how successfully the Observatory proves to integrate in and to adjust to those developments, shall determine its future achievements.

## 9. Conclusions: challenges and further needs

After a period of rather spontaneous development since 1999 onwards intensive work on **legislative and policy documents** has been under way. This should provide for more systemic conditions for further education reforms. These documents include *The National Programme for the Development of Education* (so-called *White Paper*) which was approved by the government in early 2001, and *The Strategy for Human Resource Development in the CR*, *National Employment Plan*, *National Action Employment Plan*. Implementation of those programmes will still require major efforts.

The **structure of the secondary education system** is still rather inflexible, does not allow students to combine learning programmes, and makes it difficult to transfer from one type of school to another without backward move in the education path with the loss of part of the credit and, given the length of studies, a lot of time. If students do not go complete the whole learning programme and pass the final examinations, they do not receive credit for the part they completed. There is no shorter programme leading to another (i.e. second) Maturita. Students cannot extend their specialisation and get an apprentice certificate once they have obtained their Maturita from a secondary technical or a secondary vocational school.

Learning in schools is still **overburdened by encyclopaedic knowledge** and hardly provides for the building of desirable attitudes, skills and knowledge. The introduction of information and communication technologies in schools and, particularly, their use in teaching, is still lagging behind despite the adoption of the *National Information Policy* in education in 1999.

The prevailing preference for specialisation within secondary technical and vocational path of education results in a **low proportion of general secondary education** (*gymnázia*) which remains at the level of 18-19% of all students. There is extensive number of courses within secondary vocational education and training. Certain steps to address this situation were initiated in 1998 by means of the introduction of a smaller number of broadly-conceived fields of study and the Standard of Vocational Education. The Standard provides for a relatively high proportion of general education (between 30 and 45%), puts emphasis on key competencies and, within the vocational part of the curriculum, defines a general-vocational common core for a group of courses. However, the standard is only being complied by a small number of schools. This is why the bill for the new education act envisages the development of a *National Programme for Education* which will set out requirements for objectives, content and output competencies for pupils at basic and secondary schools. This can provide a legislative basis for so-called “Framework Educational Programmes” for individual fields of education which will include a broad common core (foreign languages, ICT, environmental education, key competencies). The questions remain of when the bill will be passed by the Parliament and how quickly these programmes can be introduced to schools and whether appropriate conditions (in terms of teaching and technology) can be established.

Separated educational pathways with limited transfer possibilities highlight the importance of, and the responsibility behind, the initial choice. The information system covering the labour market, educational pathways, quality of schools and career counselling will therefore need to integrate and undergo major improvements.

Although the Governmental Decree stipulated the implementation of **career choice** into the curricula in all basic and secondary schools in the Czech Republic, schools did not receive sufficient support in this regard, and only a small part of them has introduced it and modified their curricula. The **career guidance** system still provides rather fragmental information than complex counselling services. The educational counsellors in schools are focused more on

pedagogical or behaviour problems and they have no capacity to play any role in carrier counselling or in drop-outs prevention. The career guidance system would have to broaden the scope of their activities and provide their clients with tailored counselling that would cover the whole complex of their training, work-related and social issues.

Broader range of learning programmes and growing school autonomy make it hard for seekers and employers to find their way in the system. They also impede comparable outcomes and comparable quality of schools. Although a number of individual evaluations was conducted, there is **no comprehensive system in place to assess educational programmes** based on defined learning objectives and ensuing criteria and tools. The currently used evaluation methods rely mostly on pedagogical criteria rather than placement of graduates on the labour market. Schools do not gather systematic information on the success of their students-leavers in the labour market.

**Lack of links with the world of labour** is a major flaw of the Czech school system. There are no links between educational standards of vocational schools and professional standards; the industry is insufficiently involved in setting goals and determining the content of education and does not regularly participate in quality control, final examinations, innovations in education, etc. Contacts between schools and companies are so weak and random that most graduates enter the labour market without the necessary knowledge of the work environment. In many cases, students do not have skills to handle modern technology as they can use only obsolete technical environment in school for vocational practices. Normally schools are not involved in the placement of their graduates (only with some exceptions). With that in mind, it is necessary to promote legislation that will enable other ministries and social partners to shoulder their share of responsibility and be involved in decisions about the development of education, its management and funding. A system needs to be set up to increase the involvement of companies in vocational education and forge school-company ties. **Lack of practical experience among teachers** is another reason for weak contacts between the worlds of education and work. Unfortunately, in-service training of teachers does not eliminate the problem. The aims concerning higher involvement of social partners in curricula development, evaluation of education results and final exams are envisaged in the newly prepared Long-Term Development Plan.

The **bottleneck of the Czech education** system is **tertiary education**. Although the number of universities has increased as a number of private institutions were set up (they are very small in terms of the number of study places), the number of applicants is still twice as high as the number of those admitted to first years. This is despite the fact that the demand of the labour market for specialists with university degrees is considerable. It is particularly desirable to expand the supply of shorter non-university courses. Diversification of higher professional schools, a number of which upon meeting the required standards could provide this type of higher education, is not showing progress. In addition to legislative prerequisites, the raising of standards of a number of these institutions will have to be supported by special targeted programmes. Another problem is the quality of universities, their low level of involvement in research and a low degree of cooperation with the business sector.

Within the reform of state administration effective from 2000, **decentralisation of the governance of the education system** is gradually implemented. All secondary and higher professional schools are administered and are in charge of the set up by regional self-governing authorities which will also allocate resources to schools (including budgetary resources). Regional authorities determine the structure of schools in the respective regions in line with the needs of the regional labour market. Regions will develop a long-term plan for the development of the education system every two years and prepare annual reports. The role of the Ministry of Education defines educational aims, declares development programmes and lays down various financial standards and rules for funding. Such a change of governing structures puts a great demand on managers as well as executive staff of both the newly



established regional self-government (with little experience in the governance of education) and the Ministry of Education.

The system base for **continuing education** in the Czech Republic is missing, although this area rapidly developed in the 1990s. However such spontaneous development cannot be sustainable without an efficient CVET system. In spite of the extensive supply of programmes, the quality of continuing education is insufficient, educational firms are often small and weak and the proportion of universities and various vocational schools providing CVET is low. There are no legislative and regulatory mechanisms, which would ensure the relevant systemic linkages within CVET. Individual steps which need to be undertaken: 1) responsibilities and powers of the most important players in the development of continuing education have to be defined (the state, employers, trade unions, municipalities and regions, professional associations), 2) rules for the funding of major parts of continuing education have to be laid down, 3) mechanisms for quality assurance, accreditation and certification have to be established, and 4) support systems and infrastructure need to be established.

In the **strategic documents that are currently under preparation**, there are drafted many aims that should gradually eliminate most of the above mentioned weaknesses and problems of the education system. However, the pace of reform, relevant conditions, active approach of education institutions and other partners are critical for their successful implementation. One could be mentioned as promising, the current reform of public administration in education could create a more active co-operation between the ministry, regions and schools that could speed up the positive changes in education.

## 1. List of Acronyms and Abbreviations

|        |  |
|--------|--|
| AEP    | Active Employment Policy   |
| CSI    | Czech School Inspektorate  |
| CSO    | Czech Statistical Office   |
| CVET   | Continuing vocational education and training   |
| ESF    | European social fund   |
| FEP    | Framework Education Programme  |
| GDP    | Gross domestic product   |
| HRD    | Human Resource Development   |
| ISCED  | International Standards Classification of Education                                      |
| IVET   | Initial vocational education and training  |
| JAP    | Joint Assessment Paper   |
| LFS    | Labour Force Survey  |
| LO     | Labour Office  |
| LTDEES | Long-Term Development Plan of Education and Education System                             |
| MoE    | Ministry of Education, Youth and Sports  |
| MoLSA  | Ministry of Labour and Social Affairs  |
| MRD    | Ministry for Regional Development  |
| NACE   | General Industrial Classification of Economic Activities within the European Communities |
| NEP    | National Employment Plan   |
| NEAP   | National Action Employment Plan  |
| NOET   | National Observatory of Employment and Training  |
| NUTS   | Nomenclature of Territorial Statistical Units  |
| NVF    | National Training Fund   |
| SOP    | Sectoral Operational Programme   |
| VÚSC   | Vyšší územně správní celek (Higher unit of self-government region)                       |

## 2. Bibliography

1. Background study on Labour Market and Employment in the Czech Republic,
2. Act No. 29/1984 Coll., on the system of Basic, Secondary and Higher Vocational Education (School Act), as amended by Law No. 171/1990 Coll., 522/1990 Coll., 134/1993 Coll., 190/1993 Coll., 331/1993 Coll., 49/1994 Coll., 256/1994 Coll., and 138/1995 Coll.
3. Alternative Approaches to Financing Life Long Learning, Czech background study for OECD, National Training Fund, 1999
4. *Analýza a aktualizovaná prognóza makroekonomického vývoje ČR v roce 1998 a 1999*; Analysis and Updated Prognosis of Macro-economic Development of the Czech Republic in 1996 and 1997, Czech Statistical Office, Prague, 1999.
5. *Analýza vývoje zaměstnanosti a nezaměstnanosti v první polovině roku 1999*; Analysis of Employment and Unemployment Development in the First Half of 1999, Ministry of Labour and Social Affairs.
6. Birks, Sinclair and Associates Ltd., Strategic Review of Vocational Education and Training - Czech and Slovak Republics, Prague, Phare, Labour Market Restructuring, 1993.
7. *Budoucnost vzdělávání dospělých v Evropě - Eurodelphi 1993-1996*; Future of Adult Education in Europe - Eurodelphi 1993-96, Czech National Report.
8. Comparative Research: Learning Society, Rapid-Dema, s.r.o., 1997.
9. Continuing Vocational Training, Czech Statistical Office, 2001
10. Country Monograph – Background report, National Observatory, 2001
11. Czech Info Phare, EC Delegation, CFA, January 1996.
12. *Časové řady trhu práce*; Time Series Statistics of the Labour Market, Ministry of Labour and Social Affairs, 1999.
13. *Časové řady základních ukazatelů statistiky práce*; Time Series of Key Indicators of Employment Statistics, Czech Statistical Office, 1999.
14. Database OECD CCET Register, Bilateral Co-operation Unit, Ministry of Finance of the Czech Republic.
15. Employment and Unemployment in the Czech Republic, as measured by the Labour Force Sample Survey, (quarterly) Czech Statistical Office, 1996, 1997, 1998, 1999.
16. Employment Services in the Czech Republic, Ministry of Labour and Social Affairs, Prague 1996.
17. Employment statistics, Ministry of Labour and Social Affairs, Bulletin Czech Statistical Office, 1999
18. Employment statistics, Ministry of Labour and Social Affairs, Bulletin Czech Statistical Office, 1999
19. From Pilot Schools to Reform Strategy, Outcomes of the Phare Programme Reform of Vocational Education and Training, Prague, 1997.
20. *Analýza rozvoje odborného vzdělávání a institucionálního rozvoje v ostravském regionu, pracovní verze*; Analysis of Vocational Education and Training and Institutional Development in the North Moravia Region, Report, Czech National Observatory
21. Human Resources Development Report, Czech Republic 1996, Faculty of Natural Sciences, Charles University, Prague 1996
22. Indicatives Programmes 1/1995, European Commission.
23. International Strategic Human Resource Management, Price Waterhouse, Cranfield University, 1994.
24. *Joint Assessment of the Economic Policy Priorities of the Czech Republic*, Government of the CR, European Commission, August 1999
25. *Klíčové ukazatele, Key Indicators, Czech Republic, Czech National Observatory, 1989, 1993 – 1998*
26. *Kofroňová, O. - Vojtěch, J. : České odborné školství v evropské perspektivě*; Czech Vocational Education in European Perspective, in: Czech Education in European Perspective, Prague, Pedagogical Faculty, Charles University, 1996.
27. *Kofroňová, O. - Vojtěch, J.: Integrované střední školy. Analýzy empirického šetření pro projekt grantové agentury ČR Proměny českého školství v evropské perspektivě*; Integrated Secondary Schools. Analysis of Empirical Survey for the Project of the Granting Agency of the Czech Republic- Changes in the Czech School System in the European Perspective, Prague, 1995.

28. *Koncepce rozvoje odborného vzdělávání ve středním školství. Souhrnná zpráva o řešení grantového úkolu*; Conceptual Framework of Development of Vocational Education in the Secondary School System. Summarising report on the realisation of grant assignment, Prague, Research Institute of Technical and Vocational Education, 1991.
29. *Kvalita a odpovědnost*; Quality and Accountability, Prague, Ministry of Education, Youths and Sports, 1994.
30. *Lidské zdroje v České republice, 1999*; Human resources in the Czech Republic, 1999; National Training Fund, 1999
31. Main Economic and Social Indicators, Czech Republic, No 8, Research Institute of Labour and Social Affairs, Prague 1996.
32. *Mzdy zaměstnanců za rok 1996, 1997, 1998*; Wages of Employees in 1996, 1997, 1998, Czech Statistical Office, 1997, 1998, 1999
33. National Report on the Role of Social Partners in Development of Vocational Education and Training in the Czech Republic, NTF, National Observatory, Prague, October 1997.
34. *Nezaměstnaní absolventi škol na trhu práce*; Unemployed School Graduates on the Labour Market, Ministry of Labour and Social Affairs, 1996.
35. *Nezaměstnaní absolventi škol – duben 1999*; Unemployed School graduates – April 1999, Ministry of Education, Youth and Sports, 1999
36. *Okresy v České Republice v roce 1995*; Districts in the Czech Republic in 1995, Czech Statistical Office, 1996.
37. Partnership for Change, USAID in the Czech Republic, Prague 1997, pp. 15-16, 18.
38. Phare in the Czech Republic, ReproMedia, Prague, 1994.
39. Phare Programme Database, Centre for Foreign Assistance, Ministry of Finance, Czech Republic.
40. Phare Programme in the Czech Republic, Ministry of Economy of Czech Republic, Prague, 1995.
41. Programme and Contract Information 1995, Multi-Country and Cross-Border Programmes No. 1, European Commission.
42. *Projekce obyvatelstva*; Demographic Projection, Czech Statistical Office, 1995.
43. Reviews of National Policies for Education, Czech Republic, OECD, 1996.
44. *Ročenka vzdělávání dospělých '95*, Yearbook of Adult Education '95, Czech Institute for Adult Education, 1998
45. *Sčítání lidu, domů a bytů k 3.3.1991*; Population Census of the Czech Republic, Czech Statistical Office, 1991.
46. Statistical Yearbook of the Czech Republic, Czech Statistical Office, 1994, 1995, 1996.
47. *Statistická ročenka školství, výkonové ukazatele*; Statistical Yearbook of Education, Institute for Information on Education, 1996, 1997, 1998, 1999, 2000.
48. *Statistická ročenka trhu práce v ČR*, Statistical Yearbook of the Labour Market in the CR, The Ministry of Labour and Social Affairs, 1998, 1999
49. *Statistika aktivní politiky zaměstnanosti*; Statistics of Active Employment Policy, Ministry of Labour and Social Affairs, 1996, 1997, 1998, 1999, 2000, 2001.
50. *Statistika uchazečů o zaměstnání a volných pracovních míst*; Statistics of Job Seekers and Vacancies, Ministry of Labour and Social Affairs, (monthly) 1996, 1997, 1998, 1999, 2000, 2001.
51. Structure of Earnings - Survey 1996, Czech Statistical Office, 1997.
52. Study on Continuing Vocational Education and Training in the CR, Czech National Observatory, 1998
53. *Školství v pohybu, výroční zpráva o stavu a rozvoji výchovné vzdělávací soustavy v letech 1997-1998*; Education in Transition, Annual Report 1997-98, Prague, Institute for Information on Education, 1999.
54. *Školství v pohybu, výroční zpráva o stavu a rozvoji výchovné vzdělávací soustavy v letech 1995-1996*; Education in Transition, Annual Report 1995-96, Prague, Institute for Information on Education, 1996.
55. The Cranfield Project on European Human Resource Management, results of the survey, 1995 - 96, University of Economics, Prague, 1997
56. Transition from Initial Education to Working Life in the Czech Republic, Background Report, NTF, 1997.
57. Transition from Initial Education to Working Life, OECD Country Note: the Czech Republic, 1997.
58. USAID projects database, American Embassy in CR.
59. *Uspokojil v roce 1997/98 náš vzdělávací systém poptávku po VŠ studiu?*, Did our education system satisfy the interest in higher education?, Press release, Institute for Information on Education, 1998

60. *Věkové složení obyvatelstva v České republice v roce 1996*; Age Structure of the Population of the Czech Republic in 1996, Czech Statistical Office, 1997.
61. *Viceník, P. Nástin koncepce žádoucích změn v ukončování studia a přípravy na povolání ve středních školách ve vztahu k vývoji koncepcí vzdělávání a přípravy na povolání*; Conceptual Outline of Necessary Changes in School Graduation and Vocational Training, Prague, Research Institute of Technical and Vocational Education, 1996.
62. *Vojtěch, J. - Kofroňová, O. : Kurikulární politika po r. 1989 a její odraz ve vývoji oborů přípravy ve středním odborném školství*; Curriculum Policy after 1989 and its Impact on the Development of Educational Branches in Secondary Vocational Education, Prague, Research Institute of Technical and Vocational Education, 1996.
63. *Vojtěch, j. Vývoj proporcí počtu žáků v systému vzdělávacích cest středního a vyššího vzdělávání, 1989 – 1997, Odborné vzdělávání – analýzy a informace*, Development of proportions of numbers of students in the system of educational pathways of secondary and higher education, Research Institute of Technical and Vocational Education, 1998
64. *Vývoj obyvatelstva v České republice*; Demographic Development in the Czech Republic, Czech Statistical Office, 1997, 1998, 1999.
65. *Vývojová ročenka školství*, Retrospective Yearbook of Education, Institute for Information on Education, 1997
66. *Vzděláváním k prosperitě. Na cestě k učící se společnosti, podklad k veřejné diskusi*; Education for Prosperity, Towards a Learning Society, *Fragment*, 1998
67. *Vzdělávání dospělých v rámci celoživotního učení*, Adult Education in the Framework of LifeLong Learning, National Training Fund, 2001
68. White Paper on Education and Training: Teaching and Learning, Towards the Learning Society, the European Commission, 1995.
69. White Paper on Preparation of the Associated Countries of CEE for Integration into the Internal Market of the Union, adopted by the European Commission on 3.5.1995.
70. *A World Bank Country Study – Czech Republic toward EU Accession*, the World Bank, Washington, D.C. 1999.
71. *Zásady regionální politiky vlády ČR*; Principles of Regional Development Policy of the Government of the Czech Republic, Paper of the Ministry of Regional Development, May 1997.
72. *Zpráva o situaci rómské komunity v ČR*, Report on the situation of the Roma minority in the CR, Government Office 1997
73. *Zpráva o stavu vzdělávání dospělých v ČR, návrh materiálu pro poradoví vedení MŠMT*; Adult Education in the Czech Republic, Draft Report, Ministry of Education, Youth and Sports, April 1997.

## **ANNEXES**

**The Joint Assessment Paper priorities – state of the progress in IVET, CVT and PES**

| <b>JAP priorities</b>  | <b>Reflection in the Czech documents</b>  | <b>State of Progress</b>   |
|--|---|--|
| <b>Initial Vocational Education Training (IVET)</b>  |   |  |
| <p><u>Section 3.3:</u><br/>Proceed with IVET reform in a more strategic perspective</p>  | <p>- National Programme for the Development of Education (White Paper) – (MoEYS)</p> <p>- Strategy for the Development of Human Resources in the CR - (NTF)</p> | <p>A number of policy documents have been developed which show the strategies of IVET development in relation to the needs of the labour market and society as a whole (see chapter 2.1.2). The documents have not as yet been appropriately projected into legislation, nor have they been incorporated in a system of specific measures for implementation. This is why IVET reform is based on ad hoc measures, although these are prepared with the knowledge of strategic plans. There is still the problem that these plans are not sufficiently coordinated either between various ministries (particularly the MoEYS and MoLSA), or between various levels of governance. The implementation of these strategies is further complicated by the reform of public administration whereby important powers within IVET governance are being taken over by regional authorities. The issue of coordination of strategic development plans is not yet clear and there may be different developments in various regions.</p> |
| <p><u>Section 3.3:</u><br/>Increase the involvement of the social partners in IVET and CVET, in particular through encouraging links between schools and enterprises</p>   | <p>- NEP (MoLSA)</p> <p>- Strategy for the Development of Human Resources in the CR – (NTF)</p>   | <p>Although the policy documents mentioned above stress the role of social partners, their involvement in IVET development has been insufficient. The CR still lacks an institutional framework and there are no legal provisions or measures which would motivate social partners to get involved in VET development. Participation of social partners, if there is any, has been rather informal - promoted by means of various projects more often at regional or local levels as partnerships of schools and companies. At the central level, a Council for Educational Policy was set up as an experiment to operate as an advisory body to the Minister of Education. However, social partners on the Council have no specific powers or responsibilities.</p>   |
| <b>Continuing Vocational Training (CVT)</b>  |   |  |
| <p><u>Section 3.3:</u><br/>Reinforce links between IVET and CVET with a view to implement an overall concept of human resource development to strengthen employability and competitiveness of the workforce and to</p> | <p>- Strategy for the Development of Human Resources in the CR – (NTF)</p> <p>- White Paper (MoEYS)</p>   | <p>At the policy level this aspect is addressed particularly in the Strategy for the Development of Human Resources, other policy papers within the sector of education still concentrate only on IVET. IVET and CVET continue to develop more as two separate systems with varying rules and there are as yet no legislative or practical conditions for their integration. This causes problems particularly in terms of certification and qualifications. IVET and CVET do become interlinked in certain cases where cooperation occurs between schools, labour offices, municipalities and companies (school provide retraining or leisure courses</p>   |

|  |  |   |
|--|--|---|
| foster lifelong learning   |  | for adults).  |
| <u>Section 3.3:</u><br>Promote access to training and lifelong learning for older workers.   | The promotion of access to training and lifelong learning for older workers is not mentioned in the policy documents and legislation approved in last years.               | No progress was achieved. The training and lifelong learning of older workers is not supported by specific measures.  |
| <u>Section 3.1:</u><br>Encourage enterprises to create more training opportunities for people with low skills.   | Neither the policy documents nor legislation approved in last years deal with encouraging of enterprises to create more training opportunities for people with low skills. | No progress was achieved. People with low skills belong to the groups of employees who are trained exceptionally only.  |
| <b>Public Employment Services (PES)</b>  |  |   |
| <u>Section 4:</u><br>Co-ordination between tax and benefit systems in order to provide greater incentives for people to work and for enterprises to provide employment opportunities | Pre-Accession Programme for the Economy of the CR (Government)<br><br>Act No. 72/2000, on Investment Incentives  | In spite of plans to improve coordination between the tax and benefits system, there has not been major progress in this respect. The level of taxation of income from work is high, particularly that in the form of mandatory social security contributions, and the government does not plan to decrease it. Certain progress could be made as regards the motivation of low-paid categories of population to work, if the amendment to the law on social need proposed by the MoLSA is passed. The proposal provides for a more favourable setting of welfare benefits for citizens who work at the same time. Similarly, the draft proposal for a new law on employment contains certain elements which increase motivation to work among those who are on unemployment benefits.<br><br>As regards employers' motivation to create jobs, the most important document is the law on investment incentives, which gives certain advantages to investors. The advantages depend on the rate of unemployment in the respective region. The incentives also include contributions to employers for the creation of new jobs and retraining of employees. |
| <u>Section 4:</u><br>Promotion of occupational and geographical mobility   | - NEP (MoLSA)<br>- NEAP for 2001 (MoLSA)   | Regional mobility within the CR is significantly restricted by the deformed housing market. The existing regulation of rents in most rented housing does not promise any major changes in the near future. The government plans to deregulate rents very slowly. It employs certain instruments to support the construction of apartment blocks. There are efforts to concentrate such construction to regions afflicted by higher levels of unemployment.<br><br>The problem of professional mobility is closely linked to the level and quality of education which should be influenced by the transformation of the education system   |



|  |  |  |
|--|--|--|
|  |  | and the creation of the life-long learning system (see above). The lower level of profession mobility also results from the nature of the Labour Code which is not conducive to flexible forms of employment. In the coming years, the Labour Code should be amended in a principal manner.  |
| <u>Section 4:</u><br>Review of the pensions system from an employment perspective  | Conception of the MoLSA for 2000-2001 (governmental decree No. 399/99, 482/00 resp.) | It is necessary to reform the pension system for economic reasons. The government has approved its own policy which is based on a gradual adjustment of the existing “pay as go” system of financing. Unfortunately, this policy does not enjoy a broader consensus with other political partners. Since mid 1990s, the retirement age limit has been increasing. In spring 2001, conditions for so-called “premature” retirement were hardened. However, there are still insufficient links to income from work and the system is not very flexible.  |
| <u>Section 4:</u><br>Strengthening of the public employment service to support a policy shift towards prevention   | - NEP (MoLSA)<br>- NEAP for 2001<br>- New draft law on employment (MoLSA)            | The share of active employment policy measures on the total employment policy costs has recently increased (from 25% in 1999 to 36% in 2000). Moreover, there could be a certain shift towards more active instruments of employment policy on the basis of a new draft law on employment. Its principles, which are currently being discussed by the government, include enlargement of the scope of instruments within active employment policy (requalification courses also for persons endangered by unemployment, counselling should be officially recognised as an active instrument, more measures for disabled, etc.). Although labour offices have a considerable degree of freedom in implementing the existing law, it is difficult to respond to regional needs in a flexible manner. The new law should provide for such flexibility (pilot innovation measures, targeted programmes).<br>This proposed legislation was originally meant to address the issue of institutional arrangements of employment services – an issue about which there is currently a broad discussion. However, it is likely that there will be a new proposal the development of which has not yet begun. |
| <u>Section 3.2</u><br>Efficient delivery system and continuous evaluation of the implemented programmes should be improved   |  | The active labour market policy measures are monitored however the continuous evaluation of their results is missing. There is a lack of policy measurable targets specification and there is also lack of evaluation methodology.   |
| <u>Section 3.4.2:</u><br>Improvement of the existing labour market delivery mechanism in particular strengthening local offices.<br>Cooperation with other actors in the labour market | - NEP (MoLSA)  | The new draft law on employment was originally meant to address the issue of institutional arrangements of employment services – an issue about which there is currently a broad discussion. However, it is likely that there will be a separate bill the development of which has not yet begun.<br>Cooperation approach to programme design was used by MoLSA in preparing NEP and NEAP. However the real involvement of other partners in programme implementation is weak.   |



## TABLES

**Table 1. GDP**

| Specification                              | 1990    | 1991    | 1992    | 1993    | 1994    | 1995    | 1996   | 1997   | 1998   | 1999   | 2000   |
|--|---------|---------|---------|---------|---------|---------|--------|--------|--------|--------|--------|
| Total (in national currency) <sup>1)</sup> | 1449,4  | 1281,1  | 1274,5  | 1275,3  | 1303,6  | 1381,1  | 1440,4 | 1429,3 | 1412,2 | 1406,7 | 1447,4 |
| Per capita in USD based on exchange rate   | 3366,0  | 4212,5  | 4367,7  | 4233,6  | 4380,4  | 5040,9  | 5148,0 | 4376,0 | 4252,0 | 3955,0 | 3653,0 |
| Per capita in USD based on PPP             | 11211,0 | 10357,0 | 10579,0 | 10851,0 | 11335,0 | 12308,0 | n.a.   | n.a.   | n.a.   | n.a.   | n.a.   |
| Changes over the preceding year (%)        |         |         |         |         |         |         |        |        |        |        |        |
| total                                      |         | -11,6   | -0,5    | 0,1     | 2,2     | 5,9     | 4,3    | -0,8   | -1,2   | -0,4   | 2,9    |
| in public sector                           |         |         |         |         |         |         |        |        |        |        |        |
| in private sector                          |         |         |         |         |         |         |        |        |        |        |        |
| per capita                                 |         |         |         |         |         |         |        |        |        |        |        |

Source: Czech Statistical Office

Notes: <sup>1)</sup> CSK/CZK bn, 1995 constant prices. For 1996 -1999: date range revised by Czech Statistical Office, 2000: preliminary data

**Table 2. Selected state budget expenditures <sup>1)</sup> (realised) - as % in total state budget expenditures**

| Specification                 | 1994    |          |        | 1998    |          |        | 1999    |          |        | 2000    |        |        |
|-------------------------------|---------|----------|--------|---------|----------|--------|---------|----------|--------|---------|--------|--------|
|                               | mil CZK | MEUR     | %      | mil CZK | MEUR     | %      | mil CZK | MEUR     | %      | mil CZK | MEUR   | %      |
| Science <sup>2)</sup>         | x       | x        | x      | x       | x        | x      | x       | x        | x      | x       | x      | x      |
| Education                     | 54 152  | 1589,9   | 10,44  | 62 752  | 1 735,4  | 8,38   | 69 988  | 1 897,7  | 8,86   | 70 247  | 1 973  | 8,09   |
| Higher education              | 7 395   | 217,1    | 1,43   | 12 672  | 350,4    | 1,69   | 11 056  | 299,8    | 1,40   | 11 471  | 322    | 1,32   |
| Health care                   | 79 649  | 2 338,5  | 15,36  | 119 687 | 3 309,9  | 15,99  | 124 139 | 3 366,0  | 15,71  | 130 635 | 3 668  | 15,04  |
| Social welfare and other exp. | 15 364  | 451,1    | 2,96   | 18 346  | 507,4    | 2,45   | 19 715  | 534,6    | 2,50   | 20 232  | 568    | 2,33   |
| State administration          | 42 446  | 1 246,2  | 8,18   | 40 910  | 1 131,4  | 5,46   | 46 088  | 1 249,7  | 5,83   | 49 654  | 1 394  | 5,72   |
| Public safety <sup>3)</sup>   | 29 077  | 853,7    | 5,61   | 34 750  | 961,0    | 4,64   | 38 149  | 1 034,4  | 4,83   | 41 349  | 1 161  | 4,76   |
| Social security (insurance)   | 120 376 | 3 534,2  | 23,21  | 231 305 | 6 396,7  | 30,90  | 249 437 | 6 763,5  | 31,57  | 270 438 | 7 594  | 31,14  |
| Total expenditures            | 518 664 | 15 228,8 | 100,00 | 748 618 | 20 702,9 | 100,00 | 790 175 | 21 425,6 | 100,00 | 868 541 | 24 390 | 100,00 |

Source: Ministry of Finance

Notes: <sup>1)</sup> Consolidated general government expenditures = state budget + social security + extra budgetary accounts + local budgets

<sup>2)</sup> Expenditures on science and research are included in the other individual items

<sup>3)</sup> Including juridical system and fire safety system

Exchange rate in 2000: EUR=35,61

**Table 3. Average gross wage per sections (average wage= 100)**

|                                      | 1990         | 1994       | 1998       | 1999       | 2000       |
|--------------------------------------|--------------|------------|------------|------------|------------|
| Sections                             | <b>total</b> |            |            |            |            |
| <b>Total</b>                         | <b>100</b>   | <b>100</b> | <b>100</b> | <b>100</b> | <b>100</b> |
| Agriculture, hunting and forestry    | 109,6        | 85,1       | 78,9       | 75,8       | 76,2       |
| Fishing                              | 132,7        | 105,1      | 99,3       | 93,1       | 88,3       |
| Industry                             | 103,8        | 99,9       | 101,4      | 100,2      | 100,6      |
| Mining and quarrying                 | :            | 126,8      | 125,3      | 124,0      | 123,3      |
| Manufacturing                        | :            | 96,2       | 98,3       | 97,0       | 97,6       |
| Electricity, gas and<br>water supply | :            | 118,8      | 124,1      | 126,6      | 127,0      |
| Construction                         | 109,9        | 110,6      | 103,3      | 101,0      | 100,4      |
| Trade and repair                     | 85,8         | 91,6       | 101,9      | 101,3      | 104,5      |
| Hotels and restaurants               | 81,3         | 87,5       | 76,5       | 75,6       | 76,9       |
| Transport, storage and communication | 104,6        | 98,7       | 108,1      | 107,7      | 110,1      |
| Financial intermediation             | 102,0        | 175,2      | 181,0      | 181,7      | 188,7      |
| Real estate and business activities  | 96,7         | 107,4      | 111,9      | 112,3      | 111,7      |
| Public administration and defence    | 100,4        | 120,7      | 103,1      | 107,8      | 103,4      |
| Education                            | 88,1         | 91,7       | 84,2       | 87,6       | 83,6       |
| Health care and welfare              | 92,6         | 93,9       | 85,1       | 89,4       | 87,0       |
| Other services                       | 77,4         | 84,2       | 85,5       | 84,8       | 84,6       |

Data source: Labour Statistics: Time series of basic indicators (1948-1998), Czech Statistical Office 1999 + recent data of CzSO

Notes: - public sector: all employees

- private sector: enterprises with 100 or more employees for 1990, enterprises with 25 or more employees for 1994, enterprises with 20 or more for 1998 and 1999

**Table 4. Population- (as at the end of the year, in thousands)**

| Years | Total    | Population density per sq.km. |
|-------|----------|-------------------------------|
| 1990  | 10302215 | 130,6                         |
| 1994  | 10333161 | 131,0                         |
| 1998  | 10289621 | 130,5                         |
| 1999  | 10278098 | 130,3                         |
| 2000  | 10266546 | 130,2                         |

Source: Age structure of the Population, Czech Statistical Office

Note: Data for 1990 are from the Census in 1991

**Table 5. Natural increase per 1000 inhabitants**

| <b>Years</b> | <b>Total</b> |
|--------------|--------------|
| 1990         | 1,4          |
| 1994         | -10,8        |
| 1998         | -19,0        |
| 1999         | -20,3        |
| 2000         | -18,1        |

Source: Age structure of the Population, Czech Statistical Office

Note: Data for 1990 are from the Census in 1991



**Table 6. Working and non-working age population**

| Specification  | 1990     | 1994     | 1998     | 1999     | 2000     |
|--|----------|----------|----------|----------|----------|
| Total  | 10302215 | 10333161 | 10289621 | 10278098 | 10266546 |
| Pre-working age  | 2164436  | 1948024  | 1751471  | 1707205  | 1664434  |
| urban areas  |          |          |          |          |          |
| rural areas  |          |          |          |          |          |
| Working age  | 6299937  | 6525924  | 6674198  | 6697935  | 6706893  |
| urban areas  |          |          |          |          |          |
| rural areas  |          |          |          |          |          |
| Post-working age   | 1837842  | 1859213  | 1863952  | 1872958  | 1895219  |
| urban areas  |          |          |          |          |          |
| rural areas  |          |          |          |          |          |
| Population of non-working age per 100 persons of working age | 63,5     | 58,3     | 54,2     | 53,5     | 53,1     |

Source: Age structure of the population, Czech Statistical Office, Data for 1990 are from the Census in 1991

Note: Male and female working age is 15-59

**Table 7. Population by gender and age groups**

| Years        | TOTAL    |         |         |
|--------------|----------|---------|---------|
| Age groups   | Total    | M       | F       |
| <b>TOTAL</b> |          |         |         |
| 1990         | 10302215 | 4999935 | 5302280 |
| 1994         | 10333161 | 5020464 | 5312697 |
| 1999         | 10278098 | 5001062 | 5277036 |
| 2000         | 10266546 | 4996731 | 5269815 |
| <b>0-14</b>  |          |         |         |
| 1990         | 2164436  | 1108049 | 1056387 |
| 1994         | 1948024  | 998161  | 949863  |
| 1999         | 1707205  | 875214  | 831991  |
| 2000         | 1664434  | 853867  | 810567  |
| <b>15-19</b> |          |         |         |
| 1990         | 870412   | 445045  | 425367  |
| 1994         | 888050   | 453378  | 434672  |
| 1999         | 699532   | 358096  | 341436  |
| 2000         | 682333   | 348835  | 333498  |
| <b>20-24</b> |          |         |         |
| 1990         | 685485   | 350650  | 334835  |
| 1994         | 820709   | 419781  | 400928  |
| 1999         | 889266   | 453171  | 436095  |
| 2000         | 852548   | 435295  | 417253  |
| <b>25-34</b> |          |         |         |
| 1990         | 1367565  | 695448  | 672117  |
| 1994         | 1352618  | 689987  | 662631  |
| 1999         | 1511823  | 772142  | 739681  |
| 2000         | 1557811  | 794909  | 762902  |
| <b>35-44</b> |          |         |         |
| 1990         | 1649488  | 828898  | 820590  |
| 1994         | 1527969  | 768583  | 759386  |
| 1999         | 1384591  | 701238  | 683353  |
| 2000         | 1371158  | 695240  | 675918  |
| <b>45-54</b> |          |         |         |
| 1990         | 1210144  | 595171  | 614973  |
| 1994         | 1451954  | 716978  | 734976  |
| 1999         | 1593529  | 788593  | 804936  |
| 2000         | 1607282  | 796416  | 810866  |
| <b>55-59</b> |          |         |         |
| 1990         | 516843   | 244635  | 272208  |
| 1994         | 484624   | 230202  | 254422  |
| 1999         | 619194   | 297797  | 321397  |
| 2000         | 635761   | 305457  | 330304  |
| <b>60 +</b>  |          |         |         |
| 1990         | 1837842  | 732039  | 1105803 |
| 1994         | 1859213  | 743394  | 1115819 |
| 1999         | 1872958  | 754811  | 1118147 |
| 2000         | 1895219  | 766712  | 1128507 |

Source: Age structure of the population, Czech Statistical Office, data for 1990 are from the Census in 1991

**Table 8. Population forecast by age**

| Age groups | 2000      | 2005      | 2010      | 2015      | 2020      |
|------------|-----------|-----------|-----------|-----------|-----------|
| total      |           |           |           |           |           |
| 0-14       | 1 665 302 | 1 491 044 | 1 400 104 | 1 412 977 | 1 380 387 |
| 15-19      | 682 347   | 643 867   | 573 793   | 455 402   | 470 953   |
| 20-24      | 853 119   | 684 783   | 646 882   | 577 335   | 459 737   |
| 25-34      | 1 557 380 | 1 726 721 | 1 550 522 | 1 347 158 | 1 241 924 |
| 35-44      | 1 371 661 | 1 381 584 | 1 563 501 | 1 731 049 | 1 557 759 |
| 45-54      | 1 608 287 | 1 456 283 | 1 351 508 | 1 359 426 | 1 536 162 |
| 55-59      | 635 780   | 785 631   | 755 496   | 644 245   | 651 462   |
| 60+        | 1 893 792 | 2 076 786 | 2 401 724 | 2 672 839 | 2 799 644 |

Source: "Projekce obyvatelstva České republiky do roku 2030"  
(Population Forecast till 2030), Czech Statistical Office

Note: The intermediate variant of projection is used

**Table 9. Active population by age groups and educational attainment (in thousands)**

| ISCED level  | 1994   |       |      |       |                  |       | 1999   |       |      |       |                  |       | 2000   |       |      |       |                  |       |
|--------------|--------|-------|------|-------|------------------|-------|--------|-------|------|-------|------------------|-------|--------|-------|------|-------|------------------|-------|
|              | Total  | 5-7   | 4    | 3g    | 3v <sup>1)</sup> | 0-2   | Total  | 5-7   | 4    | 3g    | 3v <sup>1)</sup> | 0-2   | Total  | 5-7   | 4    | 3g    | 3v <sup>1)</sup> | 0-2   |
| <b>Total</b> |        |       |      |       |                  |       |        |       |      |       |                  |       |        |       |      |       |                  |       |
| 15-60+       | 5147,9 | 509,7 | N.A. | 203,7 | 3750,7           | 683,3 | 5218,2 | 569,1 | N.A. | 192,0 | 3935,5           | 521,6 | 5186,1 | 581,2 | N.A. | 195,4 | 3872,8           | 536,7 |
| 15-19        | 312,8  | 0,4   | N.A. | 8,6   | 227,8            | 75,9  | 146,6  | 0,1   | N.A. | 5,0   | 114,0            | 27,5  | 103,3  | 0,1   | N.A. | 3,3   | 72,1             | 27,8  |
| 20-24        | 568,2  | 13,6  | N.A. | 39,9  | 480,0            | 34,7  | 636,8  | 17,2  | N.A. | 30,2  | 551,3            | 38,1  | 616,8  | 18,3  | N.A. | 25,5  | 529,4            | 43,7  |
| 25-34        | 1137,9 | 143,9 | N.A. | 44,5  | 861,2            | 88,3  | 1244,4 | 139,8 | N.A. | 64,9  | 961,0            | 78,8  | 1279,5 | 147,1 | N.A. | 67,7  | 982,1            | 82,6  |
| 35-44        | 1453,4 | 159,0 | N.A. | 49,4  | 1040,3           | 204,5 | 1290,8 | 170,3 | N.A. | 36,6  | 961,9            | 122,1 | 1280,8 | 170,6 | N.A. | 38,8  | 951,2            | 120,1 |
| 45-54        | 1264,1 | 126,6 | N.A. | 50,7  | 877,6            | 209,2 | 1419,5 | 155,2 | N.A. | 40,9  | 1030,5           | 192,8 | 1430,4 | 162,6 | N.A. | 46,0  | 1016,9           | 204,9 |
| 55-59        | 238,0  | 29,9  | N.A. | 5,5   | 164,1            | 38,2  | 325,2  | 53,5  | N.A. | 10,0  | 222,5            | 39,2  | 335,0  | 49,3  | N.A. | 10,4  | 235,4            | 39,9  |
| 60+          | 173,5  | 36,4  | N.A. | 5,0   | 99,7             | 32,3  | 154,8  | 33,0  | N.A. | 4,4   | 94,3             | 23,2  | 140,3  | 33,4  | N.A. | 3,6   | 85,7             | 17,6  |

Source: Labour force survey, Czech Statistical Office

Note: ISCED 4 is included in ISCED 3v group

1) including ISCED 4 level and including higher professional schools

**Table 10. Activity rate by age groups and educational attainment (as % of the given group in total)**

| ISCED level  | 1994  |      |      |      |                  |      | 1999  |      |      |      |                  |      | 2000  |      |      |      |                  |      |
|--------------|-------|------|------|------|------------------|------|-------|------|------|------|------------------|------|-------|------|------|------|------------------|------|
|              | Total | 5-7  | 4    | 3g   | 3v <sup>1)</sup> | 0-2  | Total | 5-7  | 4    | 3g   | 3v <sup>1)</sup> | 0-2  | Total | 5-7  | 4    | 3g   | 3v <sup>1)</sup> | 0-2  |
| <b>Total</b> |       |      |      |      |                  |      |       |      |      |      |                  |      |       |      |      |      |                  |      |
| 15-60+       | 61,6  | 81,0 | N.A. | 53,5 | 73,6             | 30,4 | 61,0  | 79,6 | N.A. | 49,0 | 72,0             | 26,3 | 60,4  | 79,1 | N.A. | 49,0 | 72,0             | 25,9 |
| 15-19        | 34,8  | .    | N.A. | .    | .                | .    | 20,5  | .    | N.A. | .    | .                | .    | 15,0  | 68,0 | N.A. | 13,7 | 74,6             | 4,9  |
| 20-24        | 71,4  | 81,9 | N.A. | 37,3 | 77,7             | 64,0 | 70,0  | 78,0 | N.A. | 25,9 | 79,1             | 51,5 | 70,8  | 74,4 | N.A. | 22,1 | 80,8             | 56,8 |
| 25-34        | 84,6  | 86,2 | N.A. | 74,7 | 86,1             | 75,2 | 83,7  | 85,9 | N.A. | 74,3 | 85,3             | 70,8 | 83,4  | 85,5 | N.A. | 73,3 | 85,1             | 71,0 |
| 35-44        | 93,9  | 96,6 | N.A. | 92,8 | 95,2             | 86,5 | 93,2  | 96,5 | N.A. | 93,2 | 94,3             | 82,2 | 92,9  | 96,6 | N.A. | 93,2 | 93,8             | 82,7 |
| 45-54        | 88,6  | 97,4 | N.A. | 90,2 | 90,2             | 78,1 | 89,2  | 97,3 | N.A. | 89,6 | 90,4             | 78,2 | 89,4  | 97,7 | N.A. | 92,5 | 90,5             | 78,5 |
| 55-59        | 49,2  | 78,5 | N.A. | 45,2 | 55,0             | 28,3 | 54,1  | 84,5 | N.A. | 56,6 | 57,7             | 29,1 | 53,3  | 77,6 | N.A. | 48,4 | 58,3             | 28,7 |
| 60+          | 9,3   | 32,3 | N.A. | 9,8  | 11,8             | 3,8  | 8,3   | 25,3 | N.A. | 8,3  | 10,0             | 3,1  | 7,4   | 25,3 | N.A. | 6,7  | 9,2              | 2,3  |

Source: Labour force survey, Czech Statistical Office

Note: Symbol '.' denotes unreliable estimate

1) including ISCED 4 level and including higher professional schools

**Table 11. Activity rate by gender and age groups (as % to given group in total)**

|              | 1994  |      |      | 1999  |      |      | 2000  |      |      |
|--------------|-------|------|------|-------|------|------|-------|------|------|
|              | Total | M    | F    | Total | M    | F    | Total | M    | F    |
| <b>Total</b> |       |      |      |       |      |      |       |      |      |
| 15-60+       | 61,6  | 71,4 | 52,6 | 61,0  | 70,6 | 52,1 | 60,4  | 69,8 | 51,6 |
| 15-19        | 34,8  | 37,5 | 32,1 | 20,5  | 22,8 | 18,1 | 15,0  | 16,0 | 13,9 |
| 20-24        | 71,4  | 85,2 | 56,9 | 70,0  | 78,9 | 60,8 | 70,8  | 79,4 | 61,8 |
| 25-34        | 84,6  | 96,9 | 71,8 | 83,7  | 96,6 | 70,1 | 83,4  | 96,0 | 70,1 |
| 35-44        | 93,9  | 96,9 | 90,9 | 93,2  | 96,5 | 89,9 | 92,9  | 96,8 | 89,0 |
| 45-54        | 88,6  | 91,8 | 85,5 | 89,2  | 92,4 | 86,0 | 89,4  | 92,3 | 86,6 |
| 55-59        | 49,2  | 73,0 | 27,7 | 54,1  | 76,9 | 32,9 | 53,3  | 75,8 | 32,6 |
| 60+          | 9,3   | 14,7 | 5,7  | 8,3   | 12,8 | 5,3  | 7,4   | 11,8 | 4,5  |

Source: Labour Force Survey, Czech Statistical Office

**Table 12. Employed persons by ownership sector (in thousands)**

| <b>Specification</b>         | <b>1990</b> | <b>1991</b> | <b>1992</b> | <b>1993</b> | <b>1994</b> | <b>1995</b> | <b>1996</b> | <b>1997</b> | <b>1998</b> | <b>1999 3)</b> | <b>2000 3)</b> |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------|----------------|
| TOTAL                        | 5387,1      | 4889,3      | 4766,1      | 4773,9      | 4806,6      | 4939,7      | 5000,8      | 4916,7      | 4832,8      | 4739,1         | 4645,0         |
| Public sector <sup>1)</sup>  | 4288,9      | 3448,7      | 2869,5      | 1916,0      | 1721,7      | 1209,1      | 1121,6      | 1090,0      | 1090,3      | 1010,0         | 1066,1         |
| Private sector <sup>2)</sup> | 1098,2      | 1440,6      | 1896,6      | 2857,9      | 3084,9      | 3730,5      | 3879,2      | 3826,8      | 3742,5      | 3729,1         | 3578,9         |

Source: Labour Statistics - Time series of basic indicators (1948-1998), Czech Statistical Office 1999 + recent data of CzSO

Note: Employment in civil sector, as of 31 of December in each year

1) Public sector = state and community ownership sector

2) Private sector = non-state ownership sector (private + co-operatives + associations, churches and political parties + mixed ownership.  
Including owners and self-employed

3) Estimation

**Table 13. Employed by sections of economy (in thousands)**

| <b>Specification</b>                           | <b>1993</b> | <b>1994</b> | <b>1995</b> | <b>1996</b> | <b>1997</b> | <b>1998</b> | <b>1999</b> | <b>2000</b> |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Total  | 4873,5      | 4926,8      | 4962,6      | 4972,0      | 4936,5      | 4865,7      | 4764,1      | 4731,6      |
| Agriculture, hunting and forestry <sup>1</sup> | 321,6       | 284,6       | 264,1       | 250,4       | 229,8       | 217,8       | 200,7       | 190,2       |
| Fishing <sup>2</sup>                           | 53,4        | 53,3        | 61,6        | 54,9        | 54,6        | 49,2        | 46,6        | 50,5        |
| Industry                                       | 1669,1      | 1626,6      | 1620,9      | 1597,7      | 1550,3      | 1519,9      | 1468,8      | 1429,4      |
| Mining and quarrying                           | 125,7       | 99,3        | 97,3        | 90,1        | 88,9        | 85,8        | 77,2        | 70,4        |
| Manufacturing                                  | 1444,4      | 1429,1      | 1421,6      | 1407,4      | 1369,5      | 1340,8      | 1307,8      | 1281,5      |
| Electricity, gas and water supply              | 98,9        | 98,2        | 102,0       | 100,2       | 92,0        | 93,3        | 83,7        | 77,5        |
| Construction                                   | 423,9       | 451,7       | 455,4       | 467,5       | 480,9       | 472,0       | 443,2       | 439,0       |
| Trade and repair                               | 510,3       | 589,1       | 618,6       | 639,6       | 658,7       | 645,5       | 640,6       | 612,9       |
| Hotels and restaurants                         | 148,9       | 149,4       | 153,9       | 155,6       | 166,2       | 169,2       | 157,4       | 156,3       |
| Transport, storage and communication           | 388,1       | 370,3       | 381,8       | 388,2       | 381,6       | 378,1       | 371,0       | 373,2       |
| Financial intermediation                       | 68,1        | 81,3        | 91,5        | 94,8        | 96,6        | 99,7        | 98,8        | 99,6        |
| Real estate and business activities            | 219,6       | 241,6       | 245,4       | 256,1       | 251,9       | 248,4       | 256,5       | 266,0       |
| Public administration and defence              | 308,4       | 322,4       | 302,3       | 310,6       | 320,6       | 322,8       | 336,5       | 342,9       |
| Education                                      | 315,0       | 310,6       | 309,2       | 311,8       | 306,4       | 289,0       | 286,7       | 298,9       |
| Health care and welfare                        | 282,1       | 279,0       | 283,0       | 273,0       | 272,4       | 267,7       | 276,6       | 290,7       |
| Other services                                 | 165,2       | 166,9       | 174,8       | 171,8       | 166,6       | 186,3       | 180,8       | 182,0       |

Source: Labour Market in the Czech Republic (Labour Force Survey), Czech Statistical Office

<sup>1</sup> without forestry

<sup>2</sup> with forestry



**Table 14. Employment structure by sections of economy (in %)**

| Sections of economy                            | 1990 <sup>1</sup> | 1993 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|--|-------------------|------|------|------|------|------|------|------|
| Total employment = 100%                        |                   |      |      |      |      |      |      |      |
| Agriculture, hunting and forestry <sup>2</sup> | 11,4              | 6,6  | 5,3  | 5,0  | 4,7  | 4,5  | 4,2  | 4,0  |
| Fishing <sup>3</sup>                           |                   | 1,1  | 1,2  | 1,1  | 1,1  | 1,0  | 1,0  | 1,1  |
| Industry                                       | 38,1              | 34,2 | 32,7 | 32,1 | 31,4 | 31,2 | 30,8 | 30,2 |
| Mining and quarrying                           | 3,5               | 2,6  | 2,0  | 1,8  | 1,8  | 1,8  | 1,6  | 1,5  |
| Manufacturing                                  | 34,5              | 29,6 | 28,6 | 28,3 | 27,7 | 27,6 | 27,5 | 27,1 |
| Electricity, gas and water supply              | 1,6               | 2,0  | 2,1  | 2,0  | 1,9  | 1,9  | 1,8  | 1,6  |
| Construction                                   | 7,8               | 8,7  | 9,2  | 9,4  | 9,7  | 9,7  | 9,3  | 9,3  |
| Trade and repair                               | 9,2               | 10,5 | 12,5 | 12,9 | 13,3 | 13,3 | 13,4 | 13,0 |
| Hotels and restaurants                         | 1,7               | 3,1  | 3,1  | 3,1  | 3,4  | 3,5  | 3,3  | 3,3  |
| Transport, storage and communication           | 7,1               | 8,0  | 7,7  | 7,8  | 7,7  | 7,8  | 7,8  | 7,9  |
| Financial intermediation                       | 0,6               | 1,4  | 1,8  | 1,9  | 2,0  | 2,0  | 2,1  | 2,1  |
| Real estate and business activities            | 7,1               | 4,5  | 4,9  | 5,2  | 5,1  | 5,1  | 5,4  | 5,6  |
| Public administration and defence              | 2,0 <sup>3)</sup> | 6,3  | 6,1  | 6,2  | 6,5  | 6,6  | 7,1  | 7,2  |
| Education                                      | 6,0               | 6,5  | 6,2  | 6,3  | 6,2  | 5,9  | 6,0  | 6,3  |
| Health care and welfare                        | 5,2               | 5,8  | 5,7  | 5,5  | 5,5  | 5,5  | 5,8  | 6,1  |
| Other services                                 | 3,7               | 3,4  | 3,5  | 3,5  | 3,4  | 3,8  | 3,8  | 3,8  |

Source: Labour Force Survey, Czech Statistical Office

In 1990, Labour statistics -Time series of basic indicators

Note: <sup>1</sup> In 1990, structure of employment in the civil sector. For period 1993-1999, employment in the whole economy including non-civil sector

<sup>2</sup> without forestry

<sup>3</sup> including forestry

**Table 15. Employed by educational attainment and gender (in thousands)**

| Specification                         | 1991*  |        |         | 1994   |        |         | 1998   |        |         | 1999   |        |         | 2000   |        |         |
|---------------------------------------|--------|--------|---------|--------|--------|---------|--------|--------|---------|--------|--------|---------|--------|--------|---------|
|                                       | Total  | Males  | Females | Total  | Males  | Females | Total  | Males  | Females | Total  | Males  | Females | Total  | Males  | Females |
| Total                                 | 5373,8 | 2811,2 | 2562,6  | 4926,8 | 2758,9 | 2167,9  | 4865,7 | 2756,9 | 2108,8  | 4764,1 | 2694,4 | 2069,7  | 4731,6 | 2675,7 | 2055,9  |
| ISCED 5-7 <sup>1)</sup>               | 511,6  | 317,4  | 194,2   | 500,9  | 328,7  | 172,2   | 532,4  | 330,5  | 201,9   | 552,1  | 341,0  | 211,1   | 564,9  | 346,8  | 218,0   |
| ISCED 4                               | x      | x      | x       | -      | -      | -       | -      | -      | -       | -      | -      | -       | -      | -      | -       |
| ISCED 3<br>(vocational) <sup>2)</sup> | 3430,3 | 1946,9 | 1483,4  | 3613,2 | 2121,1 | 1492,1  | 3682,6 | 2161,4 | 1521,2  | 3625,4 | 2122,5 | 1502,9  | 3571,9 | 2097,8 | 1474,1  |
| ISCED 3 (general)                     | 215,7  | 73,4   | 142,3   | 193,4  | 72,0   | 121,4   | 190,0  | 70,7   | 119,2   | 174,3  | 59,8   | 114,5   | 177,9  | 62,2   | 115,7   |
| ISCED 0-2                             | 1216,5 | 473,6  | 742,9   | 619,3  | 237,0  | 382,3   | 460,8  | 194,2  | 266,5   | 412,3  | 171,1  | 241,2   | 417,0  | 168,9  | 248,1   |

Source: 1994, 1998, 1999 - Labour Market in the Czech Republic, Labour Force Survey, Czech Statistical Office

1991 - Population Census data

\* Methodological differences between Population Census and LFS data

Note: 1) Without graduates of higher professional schools

2) Including graduates of higher professional schools (ISCED 5) and including ISCED 4

**Table 16. Registered unemployment and unemployment by LFS**

| Specification                           | 1990 | 1991 | 1992  | 1993  | 1994  | 1995  | 1996  | 1997  | 1998  | 1999  | 2000  |
|---|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| <b>register data</b>                    |      |      |       |       |       |       |       |       |       |       |       |
| unemployed (in thousands) <sup>1)</sup> |      |      | 128,9 | 185,2 | 166,5 | 153,0 | 186,3 | 286,9 | 386,9 | 487,6 | 457,4 |
| unemployment rate (in %) <sup>1)</sup>  |      |      | 2,6   | 3,5   | 3,2   | 2,9   | 3,5   | 5,2   | 7,5   | 9,4   | 8,8   |
| <b>LSF - ILO definition</b>             |      |      |       |       |       |       |       |       |       |       |       |
| unemployed (in thousands)               |      |      |       | 220,0 | 221,2 | 208,1 | 201,5 | 248,3 | 335,7 | 454,1 | 455,0 |
| unemployment rate (in %)                |      |      |       | 4,3   | 4,3   | 4,0   | 3,9   | 4,8   | 6,5   | 8,7   | 8,8   |

Source: Registered unemployment, Ministry of Labour and Social Affairs

Note: 1) As of 31. 12

**Table 17. Unemployment rate by age groups**

| Specification | Total |      | 15-19 |      | 20-24 |      | 25-29 |      | 30-34 |      | 35-44 |      | 45-54 |      | 55-59 |      | 60+  |      |
|---------------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|------|------|
|               | 1999  | 2000 | 1999  | 2000 | 1999  | 2000 | 1999  | 2000 | 1999  | 2000 | 1999  | 2000 | 1999  | 2000 | 1999  | 2000 | 1999 | 2000 |
| Total         | 8,7   | 8,8  | 31,8  | 33,6 | 13,6  | 14,2 | 9,7   | 9,4  | 9,3   | 9,3  | 7,0   | 7,1  | 6,3   | 6,9  | 4,7   | 5,2  | 5,3  | 4,1  |
| Males         | 7,3   | 7,3  | 29,4  | 30,2 | 12,8  | 14,5 | 6,6   | 6,5  | 6,2   | 6,0  | 5,5   | 5,6  | 5,6   | 5,9  | 4,7   | 5,2  | 4,3  | 3,2  |
| Females       | 10,5  | 10,6 | 35,0  | 37,6 | 14,7  | 13,8 | 14,4  | 13,7 | 13,3  | 13,6 | 8,6   | 8,7  | 7,1   | 8,0  | 4,5   | 5,2  | 6,9  | 5,6  |
| Urban areas   |       |      |       |      |       |      |       |      |       |      |       |      |       |      |       |      |      |      |
| Rural areas   |       |      |       |      |       |      |       |      |       |      |       |      |       |      |       |      |      |      |

Source: Labour Market in the Czech Republic, Labour Force Survey, Czech Statistical Office

**Table 18. Share of unemployed persons in the total population for the same level of educational attainment**

| ISCED level | 1994  |     |      |                  |     |     | 1999  |     |      |                  |     |     | 2000  |     |      |                  |     |     |
|-------------|-------|-----|------|------------------|-----|-----|-------|-----|------|------------------|-----|-----|-------|-----|------|------------------|-----|-----|
|             | Total | 5-7 | 4    | 3v <sup>1)</sup> | 3g  | 0-2 | Total | 5-7 | 4    | 3v <sup>1)</sup> | 3g  | 0-2 | Total | 5-7 | 4    | 3v <sup>1)</sup> | 3g  | 0-2 |
| Total       | 2,6   | 1,4 | N.A. | 2,7              | 2,7 | 2,9 | 5,3   | 2,4 | N.A. | 5,7              | 4,5 | 5,5 | 5,3   | 2,2 | N.A. | 5,6              | 4,4 | 5,8 |
| males       | 2,6   | 1,5 | N.A. | 2,3              | 2,7 | 3,9 | 5,1   | 2,0 | N.A. | 5,1              | 3,8 | 7,4 | 5,1   | 1,8 | N.A. | 5,0              | 3,4 | 8,0 |
| females     | 2,7   | 1,3 | N.A. | 3,1              | 2,7 | 2,3 | 5,5   | 3,0 | N.A. | 6,3              | 4,9 | 4,5 | 5,5   | 2,8 | N.A. | 6,3              | 4,9 | 4,6 |
| urban areas |       |     |      |                  |     |     |       |     |      |                  |     |     |       |     |      |                  |     |     |
| rural areas |       |     |      |                  |     |     |       |     |      |                  |     |     |       |     |      |                  |     |     |

Source: Labour Market in the Czech Republic, Labour Force Survey, Czech Statistical Office

Note: Including ISCED 4level and including higher professional schools

**Table 19. Unemployed by duration of unemployment (in thousands) 1999**

| duration of unemployment |       |                      |               |                |                 |                          |                     |
|--------------------------|-------|----------------------|---------------|----------------|-----------------|--------------------------|---------------------|
|                          | Total | 3 months<br>and less | 4-6<br>months | 7-12<br>months | 13-24<br>months | 25<br>months<br>and more | average<br>duration |
| Total                    |       |                      |               |                |                 |                          |                     |
| 15-19                    | 46,7  | 12,2                 | 10,9          | 13,8           | 7,1             | 1,2                      |                     |
| 20-24                    | 86,7  | 21,2                 | 17,0          | 22,4           | 15,7            | 7,4                      |                     |
| 25-29                    | 62,1  | 11,7                 | 11,0          | 16,3           | 12,0            | 9,1                      |                     |
| 30-34                    | 55,8  | 8,6                  | 9,3           | 14,0           | 12,5            | 9,8                      |                     |
| 35-44                    | 89,8  | 15,2                 | 14,2          | 18,8           | 19,1            | 20,2                     |                     |
| 45-54                    | 89,8  | 15,4                 | 13,8          | 18,2           | 17,5            | 23,0                     |                     |
| 55-59                    | 15,2  | 2,6                  | 2,6           | 3,9            | 2,9             | 3,1                      |                     |
| 60+                      | 8,1   | 0,9                  | 1,1           | 2,2            | 1,9             | 1,1                      |                     |

Source: Labour Force Survey, Czech Statistical Office

Note: The difference between total number of unemployed and the sum of the individual groups by duration of unemployment is number of persons with non indicated status

**Table 19. Unemployed by duration of unemployment (in thousands) 2000**

| duration of unemployment |       |                      |               |                |                 |                          |                     |
|--------------------------|-------|----------------------|---------------|----------------|-----------------|--------------------------|---------------------|
|                          | Total | 3 months<br>and less | 4-6<br>months | 7-12<br>months | 13-24<br>months | 25<br>months<br>and more | average<br>duration |
| Total                    |       |                      |               |                |                 |                          |                     |
| 15-19                    | 34,7  | 8,3                  | 7,0           | 9,3            | 7,4             | 1,7                      |                     |
| 20-24                    | 87,6  | 16,8                 | 14,2          | 17,9           | 22,0            | 13,5                     |                     |
| 25-29                    | 63,6  | 10,8                 | 7,9           | 14,3           | 15,0            | 12,3                     |                     |
| 30-34                    | 55,7  | 7,6                  | 7,6           | 11,6           | 13,5            | 13,4                     |                     |
| 35-44                    | 90,8  | 11,2                 | 10,9          | 16,2           | 20,9            | 29,4                     |                     |
| 45-54                    | 98,9  | 12,2                 | 11,6          | 18,0           | 23,9            | 31,7                     |                     |
| 55-59                    | 17,5  | 2,2                  | 2,5           | 4,5            | 4,2             | 3,7                      |                     |
| 60+                      | 5,7   | 0,8                  | 0,8           | 1,2            | 1,7             | 0,4                      |                     |

**Table 20. Unemployment rate of graduates**

|  | 1998   |           | 1999   |           | 2000   |           |
|--|--------|-----------|--------|-----------|--------|-----------|
| After completion of the school                   |        |           |        |           |        |           |
| Educational attainment                           | 1 year | 2-3 years | 1 year | 2-3 years | 1 year | 2-3 years |
| ISCED 5-7 <sup>1)</sup>                          | 1,4    |           | 6,6    |           | 7,9    |           |
| ISCED 4  | x      |           | x      |           | x      |           |
| ISCED 3 v - secondary technical                  | 5,3    |           | 19,2   |           | 21,1   |           |
| ISCED 3v - secondary vocational with Maturita    | 3,6    |           | 14,8   |           | 26,7   |           |
| ISCED 3v - secondary vocational without Maturita | 5,2    |           | 20,1   |           | x      |           |
| ISCED 3 (general)                                | 3,6    |           | 11,1   |           | 15,6   |           |
| ISCED 0-2  | x      |           | x      |           | x      |           |

Source: Unemployed graduates, Ministry of Education, Youth and Sports, 1999

Notes: The methodology used for this table is different in comparison to the similar table in KI 1999.

Unemployment rate of graduates = registered unemployed graduates in April current year to the whole number of previous year graduates (including those continuing in education)

1) Higher education only

**Table 21. Participation of unemployed graduates in LM active measures, by educational attainment**

| Specification        | Total | Training and retraining | subsidised works (number of persons) |                            |   |   |   | job placement |
|----------------------|-------|-------------------------|--------------------------------------|----------------------------|---|---|---|---------------|
|                      |       |                         | Public                               | Vocational experience jobs | x | x | x |               |
| <b>1994</b>          |       |                         | <b>6 583</b>                         |                            |   |   |   |               |
| ISCED 5-7            |       |                         |                                      |                            |   |   |   |               |
| ISCED 4              |       |                         |                                      |                            |   |   |   |               |
| ISCED 3 (vocational) |       |                         |                                      |                            |   |   |   |               |
| ISCED 3 (general)    |       |                         |                                      |                            |   |   |   |               |
| ISCED 0-2            |       |                         |                                      |                            |   |   |   |               |
| <b>1998</b>          |       |                         | <b>9 323</b>                         |                            |   |   |   |               |
| ISCED 5-7            |       |                         |                                      |                            |   |   |   |               |
| ISCED 4              |       |                         |                                      |                            |   |   |   |               |
| ISCED 3 (vocational) |       |                         |                                      |                            |   |   |   |               |
| ISCED 3 (general)    |       |                         |                                      |                            |   |   |   |               |
| ISCED 0-2            |       |                         |                                      |                            |   |   |   |               |
| <b>1999</b>          |       |                         | <b>10 945</b>                        |                            |   |   |   |               |
| ISCED 5-7            |       |                         |                                      |                            |   |   |   |               |
| ISCED 4              |       |                         |                                      |                            |   |   |   |               |
| ISCED 3 (vocational) |       |                         |                                      |                            |   |   |   |               |
| ISCED 3 (general)    |       |                         |                                      |                            |   |   |   |               |
| ISCED 0-2            |       |                         |                                      |                            |   |   |   |               |



**Table 22. Structure of school system by type of schools<sup>1)</sup>**

| <b>Schools by ISCED level</b>   |                   |         |            |              |        |            |              |        |            |             |        |            |              |        |            |
|---------------------------------|-------------------|---------|------------|--------------|--------|------------|--------------|--------|------------|-------------|--------|------------|--------------|--------|------------|
|                                 | 0-2 <sup>2)</sup> |         |            | 3 general    |        |            | 3 vocational |        |            | 4           |        |            | 5-7          |        |            |
|                                 | Total             | Public  | Non-public | Total        | Public | Non-public | Total        | Public | Non-public | Total       | Public | Non-public | Total        | Public | Non-public |
| <b>number of schools</b>        |                   |         |            |              |        |            |              |        |            |             |        |            |              |        |            |
| 1990/91                         | <b>12 371</b>     | 12 367  | 4          | <b>230</b>   | 229    | 1          | <b>1 080</b> | 1 076  | 4          | <b>0</b>    | 0      | 0          | <b>31</b>    | 31     | 0          |
| 1994/95                         | <b>12 069</b>     | 11 789  | 280        | <b>355</b>   | 279    | 76         | <b>1 683</b> | 1 366  | 317        | <b>316</b>  | 261    | 55         | <b>309</b>   | 259    | 50         |
| 1998/99                         | <b>12 009</b>     | 11 700  | 309        | <b>360</b>   | 280    | 80         | <b>1 490</b> | 1 147  | 343        | <b>621</b>  | 482    | 139        | <b>212</b>   | 149    | 63         |
| 1999/2000                       | <b>11 957</b>     | 11 615  | 342        | <b>349</b>   | 279    | 70         | <b>1 432</b> | 1 110  | 322        | <b>537</b>  | 408    | 129        | <b>203</b>   | 142    | 61         |
| 2000/01                         | <b>11 710</b>     | 11 403  | 307        | <b>351</b>   | 280    | 71         | <b>1 442</b> | 1 129  | 313        | <b>465</b>  | 358    | 107        | <b>212</b>   | 144    | 68         |
| <b>students (in thousands)</b>  |                   |         |            |              |        |            |              |        |            |             |        |            |              |        |            |
| 1990/91                         | <b>1 630,3</b>    | 1 629,7 | 0,6        | <b>121,1</b> | 121,0  | 0,1        | <b>488,0</b> | 487,8  | 0,2        | <b>0,0</b>  | 0,0    |            | <b>119,2</b> | 119,2  | 0,0        |
| 1994/95                         | <b>1 433,9</b>    | 1 416,0 | 17,9       | <b>85,7</b>  | 77,3   | 8,4        | <b>473,1</b> | 415,8  | 57,3       | <b>40,2</b> | 34,8   | 5,4        | <b>171,4</b> | 158,4  | 13,0       |
| 1998/99                         | <b>1 518,0</b>    | 1 496,1 | 21,9       | <b>76,5</b>  | 68,7   | 7,8        | <b>298,7</b> | 262,7  | 35,9       | <b>57,8</b> | 41,1   | 16,7       | <b>217,7</b> | 206,8  | 10,9       |
| 1999/2000                       | <b>1 486,9</b>    | 1 466,9 | 20,0       | <b>80,4</b>  | 72,5   | 7,9        | <b>327,9</b> | 291,6  | 36,3       | <b>32,7</b> | 21,6   | 11,1       | <b>225,2</b> | 214,5  | 10,7       |
| 2000/01                         | <b>1 452,7</b>    | 1 433,3 | 19,4       | <b>93,2</b>  | 83,6   | 9,5        | <b>376,5</b> | 330,0  | 44,5       | <b>28,5</b> | 18,9   | 9,7        | <b>236,7</b> | 225,1  | 11,5       |
| <b>graduates (in thousands)</b> |                   |         |            |              |        |            |              |        |            |             |        |            |              |        |            |
| 1990/91                         | <b>120,3</b>      | 120,3   | 0,0        | <b>27,5</b>  | 27,5   | 0,0        | <b>136,0</b> | 135,9  | 0,1        | <b>0,0</b>  | 0,0    | 0,0        | <b>21,7</b>  | 21,7   | 0,0        |
| 1994/95                         | <b>150,6</b>      | 149,2   | 1,4        | <b>19,1</b>  | 18,2   | 0,9        | <b>119,8</b> | 109,2  | 10,6       | <b>8,7</b>  | 7,3    | 1,4        | <b>28,4</b>  | 24,9   | 3,5        |
| 1998/99                         | <b>140,1</b>      | 137,8   | 2,3        | <b>21,4</b>  | 19,3   | 2,1        | <b>62,9</b>  | 53,0   | 9,9        | <b>21,7</b> | 15,7   | 6,0        | <b>31,4</b>  | 31,3   | 0,1        |
| 1999/2000                       | <b>143,4</b>      | 140,8   | 2,6        | <b>12,0</b>  | 10,8   | 1,3        | <b>48,7</b>  | 43,6   | 5,1        | <b>14,6</b> | 9,9    | 4,7        | <b>37,2</b>  | 34,4   | 2,8        |
| 2000/01                         | <b>140,2</b>      | 137,6   | 2,6        | <b>23,2</b>  | 21,1   | 2,0        | <b>92,2</b>  | 81,7   | 10,5       | <b>5,1</b>  | 3,0    | 2,1        | <b>x</b>     | x      | x          |

Note: 1) without the schools governed by the Ministry of Interior, the Ministry of Defence, the Ministry of Justice

Schools providing two or more ISCED level programmes are counted according to the relevant number of provided ISCED programmes (for example: two level gymnasium is counted as two schools -one school at ISCED 2 level and one school at ISCED 3 level)

2) graduates ISCED2 only

**Table 23. Schools by school governing authority<sup>1)</sup>**

| Specifications | 1990/91 <sup>2)</sup> |  |  | 1994/95 |  |  | 1998/99 |  |  | 1999/2000 |  |  | 2000/01 |  |  |
|----------------|-----------------------|--|--|---------|--|--|---------|--|--|-----------|--|--|---------|--|--|
|                |                       |  |  |         |  |  |         |  |  | 0         |  |  |         |  |  |

|   | schools          | students             | graduates           | schools | students | graduates | schools | students | graduates | schools | students | graduates | schools | students | graduates |
|---|------------------|----------------------|---------------------|---------|----------|-----------|---------|----------|-----------|---------|----------|-----------|---------|----------|-----------|
| <b>Primary and lower-secondary - ISCED 1-2<sup>3)</sup></b> |                  |                      |                     |         |          |           |         |          |           |         |          |           |         |          |           |
| State administration  | 969              | 79 228               | 10 149              | 972     | 95 260   | 14 223    | 1 471   | 105 817  | 22 307    | 1 389   | 100 484  | 24 720    | 1 259   | 91 864   | 20 267    |
| Local government  | 3 955            | 1192 606             | 110 118             | 4 307   | 1030 526 | 134 959   | 4 166   | 1085 559 | 115 534   | 4 145   | 1073 621 | 116 025   | 4 087   | 1057 647 | 117 324   |
| Organisations:  | 0                | 0                    | 0                   | 0       | 0        | 0         | 0       | 0        | 0         | 0       | 0        | 0         | 0       | 0        | 0         |
| social  | 0                | 0                    | 0                   | 0       | 0        | 0         | 0       | 0        | 0         | 0       | 0        | 0         | 0       | 0        | 0         |
| religious   | 1                | 394                  | 0                   | 31      | 3 791    | 380       | 47      | 6 756    | 730       | 53      | 6 234    | 811       | 44      | 6 577    | 911       |
| Other private   | 3                | 178                  | 0                   | 153     | 8 526    | 1 010     | 172     | 9 891    | 1 548     | 174     | 9 372    | 1 814     | 142     | 8 368    | 1 698     |
| <b>Upper-secondary general - ISCED 3</b>                    |                  |                      |                     |         |          |           |         |          |           |         |          |           |         |          |           |
| State administration  | 229              | 121 046              | 27 512              | 267     | 76 072   | 17 930    | 270     | 67 496   | 18 535    | 269     | 71 330   | 10 166    | 269     | 81 900   | 20 707    |
| Local government  | 0                | 0                    | 0                   | 12      | 1 339    | 318       | 10      | 1 207    | 594       | 10      | 1 612    | 589       | 11      | 1 735    | 435       |
| Organisations:  | 0                | 0                    | 0                   | 0       | 0        | 0         | 0       | 0        | 0         | 0       | 0        | 0         | 0       | 0        | 0         |
| social  | 0                | 0                    | 0                   | 0       | 0        | 0         | 0       | 0        | 0         | 0       | 0        | 0         | 0       | 0        | 0         |
| religious   | 0                | 0                    | 0                   | 58      | 2 336    | 234       | 63      | 3 713    | 621       | 17      | 2 800    | 394       | 18      | 3 310    | 709       |
| Other private   | 1                | 60                   | 0                   | 15      | 6 186    | 678       | 17      | 4 068    | 1 516     | 53      | 5 058    | 892       | 53      | 6 202    | 1 322     |
| <b>Upper-secondary vocational – ISCED 3</b>                 |                  |                      |                     |         |          |           |         |          |           |         |          |           |         |          |           |
| State administration  | 1 076            | 487 794              | 135 929             | 1 353   | 413 572  | 108 846   | 1 139   | 261 117  | 52 632    | 1 101   | 289 938  | 43 452    | 1 119   | 327 842  | 81 541    |
| Local government  | 0                | 0                    | 0                   | 13      | 2 190    | 362       | 8       | 1 600    | 392       | 9       | 1 704    | 99        | 10      | 2 135    | 183       |
| Organisations:  | 0                | 0                    | 0                   | 0       | 0        | 0         | 0       | 0        | 0         | 0       | 0        | 0         | 0       | 0        | 0         |
| social  | 0                | 0                    | 0                   | 0       | 0        | 0         | 0       | 0        | 0         | 0       | 0        | 0         | 0       | 0        | 0         |
| religious   | 1                | 20                   | 53                  | 19      | 2 033    | 455       | 15      | 1 283    | 253       | 18      | 1 649    | 183       | 18      | 2 028    | 367       |
| Other private   | 3                | 140                  | 28                  | 298     | 55 259   | 10 191    | 328     | 34 654   | 9 638     | 304     | 34 653   | 4 936     | 295     | 42 501   | 10 085    |
| <b>Post-secondary non-university- ISCED 4</b>               |                  |                      |                     |         |          |           |         |          |           |         |          |           |         |          |           |
| State administration  | 0                | 0                    | 58                  | 261     | 34 777   | 7 349     | 481     | 41 115   | 15 655    | 407     | 21 628   | 9 916     | 358     | 18 877   | 2 997     |
| Local government  | 0                | 0                    | 0                   | 0       | 0        | 0         | 1       | 32       | 10        | 1       | 19       | 15        | 0       | 0        | 0         |
| Organisations:  | 0                | 0                    | 0                   | 0       | 0        | 0         | 0       | 0        | 0         | 0       | 0        | 0         | 0       | 0        | 0         |
| social  | 0                | 0                    | 0                   | 0       | 0        | 0         | 0       | 0        | 0         | 0       | 0        | 0         | 0       | 0        | 0         |
| religious   | 0                | 0                    | 0                   | 1       | 23       | 0         | 1       | 62       | 24        | 1       | 28       | 28        | 1       | 42       | 0         |
| Other private   | 0                | 0                    | 0                   | 54      | 5 337    | 1 383     | 138     | 16 591   | 5 943     | 128     | 11 022   | 4 652     | 106     | 9 633    | 2 100     |
| <b>Higher- ISCED 5-7</b>                                    |                  |                      |                     |         |          |           |         |          |           |         |          |           |         |          |           |
| State administration  | 31 <sup>4)</sup> | 119200 <sup>5)</sup> | 21663 <sup>5)</sup> | 259     | 158 432  | 24 869    | 149     | 206 789  | 31 300    | 142     | 214 536  | 34 408    | 144     | 225 140  | x         |

|                  |   |   |   |    |        |       |    |       |     |    |       |       |    |       |   |
|------------------|---|---|---|----|--------|-------|----|-------|-----|----|-------|-------|----|-------|---|
| Local government | 0 | 0 | 0 | 0  | 0      | 0     | 0  | 0     | 0   | 0  | 0     | 0     | 0  | 0     | x |
| Organisations:   | 0 | 0 | 0 | 0  | 0      | 0     | 0  | 0     | 0   | 0  | 0     | 0     | 0  | 0     | x |
| social           | 0 | 0 | 0 | 0  | 0      | 0     | 0  | 0     | 0   | 0  | 0     | 0     | 0  | 0     | x |
| religious        | 0 | 0 | 0 | 12 | 853    | 183   | 11 | 1 560 | 353 | 13 | 1 608 | 304   | 13 | 1 603 | x |
| Other private    | 0 | 0 | 0 | 38 | 12 099 | 3 320 | 52 | 9 318 | 552 | 48 | 9 293 | 2 510 | 55 | 9 926 | x |

Notes: 1) without the schools governed by the Ministry of Interior, Ministry of Defence, Ministry of Justice

2) In 1990/91, in some cases, data on religious and private schools is not available separately (it is included in the number of state schools).

3) Number of graduates is relevant for ISCED 2 only

4) without schools provided post maturita non-university programmes

5) including students and graduates of post maturita non-university programmes

**Table 24 a. Selected educational indicators in 1998/99**

| Specifications     | Schools <sup>1)</sup> | Students | Teachers (full-time employed) | Teacher/student ratio |
|--------------------|-----------------------|----------|-------------------------------|-----------------------|
|                    | thousands             |          |                               | %                     |
| Total              | 13,6                  | 2 168,6  | 142,0                         | 7%                    |
| ISCED 0-2          | 12,0                  | 1 518,0  | 97,4                          | 6%                    |
| ISCED 3 general    | 0,4                   | 76,5     | 5,5                           | 7%                    |
| ISCED 3 vocational | 1,5                   | 298,7    | 19,9                          | 7%                    |
| ISCED 4            | 0,6                   | 57,8     | 3,8                           | 7%                    |
| ISCED 5-7          | 0,2                   | 217,7    | 15,4                          | 7%                    |

Note: without the schools governed by the Ministry of Interior, Ministry of Defence, Ministry of Justice

1) Schools providing two or more ISCED level programmes in one institution are counted according to the relevant number of provided ISCED programmes (for example: two level gymnasium is counted as two schools – one school at ISCED 2 level and one school at ISCED 3 level)

**Table 24 b. Selected educational indicators in 1999/00**

FULL-TIME

| Specifications     | Schools   | Students | Teachers (full-time employed) | Teacher/student ratio |
|--------------------|-----------|----------|-------------------------------|-----------------------|
|                    | thousands |          |                               | %                     |
| Total              | x         | 2157,9   | 142,7                         | 7                     |
| ISCED 0            | 6,2       | 297,2    | 24,7                          | 8                     |
| ISCED 1-2          | 5,8       | 1189,7   | 74,1                          | 6                     |
| ISCED 3 general    | 0,4       | 80,8     | 6,2                           | 8                     |
| ISCED 3 vocational | 1,4       | 327,9    | 21,6                          | 7                     |
| ISCED 4            | 0,5       | 32,7     | 2,1                           | 7                     |
| ISCED 5-7          | 0,2       | 225,4    | 13,9                          | 6                     |

Note: without the schools governed by the Ministry of Interior, Ministry of Defence, Ministry of Justice

**Table 24 c. Selected educational indicators in 2000/01**

FULL-TIME

| Specifications     | Schools   | Students | Teachers (full-time employed) | Teacher/student ratio |
|--------------------|-----------|----------|-------------------------------|-----------------------|
|                    | thousands |          |                               | %                     |
| Total              | x         | 2187,5   | 147,8                         | 7%                    |
| ISCED 0            | 6,178     | 288,2    | 23,9                          | 8%                    |
| ISCED 1-2          | 5,532     | 1164,5   | 72,0                          | 6%                    |
| ISCED 3 general    | 0,351     | 93,2     | 7,3                           | 8%                    |
| ISCED 3 vocational | 1,142     | 376,5    | 28,4                          | 8%                    |
| ISCED 4            | 0,465     | 28,5     | 1,2                           | 4%                    |
| ISCED 5-7          | 0,212     | 236,7    | 15,0                          | 6%                    |

Note: without the schools governed by the Ministry of Interior, Ministry of Defence, Ministry of Justice

**Table 25 a. Obligatory education of foreign languages in 1998/99**

| Years<br>Foreign<br>Languages | Total<br>(thousands) | in % of school students |                    |                       |         |             |
|-------------------------------|----------------------|-------------------------|--------------------|-----------------------|---------|-------------|
|                               |                      | ISCED 0-2*              | ISCED 3<br>general | ISCED 3<br>vocational | ISCED 4 | ISCED 5-7** |
| English                       | 699220               | 36%                     | 89%                | 54%                   | 38%     | 96%         |
| French                        | 47115                | 1%                      | 13%                | 3%                    | 0%      | 58%         |
| Spanish                       | 6711                 | 0%                      | 3%                 | 1%                    | 0%      | 4%          |
| German                        | 657473               | 32%                     | 67%                | 66%                   | 55%     | 75%         |
| Russian                       | 8254                 | 0%                      | 2%                 | 1%                    | 1%      | 3%          |
| Italian                       | 1637                 | 0%                      | 1%                 | 0%                    | 0%      | 0%          |
| Others                        | 17826                | 0%                      | 10%                | 1%                    | 0%      | 8%          |

Notes: without the schools governed by the Ministry of Interior, Ministry of Defence, Ministry of Justice

All data about daily study only

\* ISCED 1-2 (data about ISCED 0 are not available)

\*\* without universities

**Table 25 b. Obligatory education of foreign languages in 1999/00**

| Years<br>Foreign<br>Languages | Total<br>(thousands) | in % of school students |           |                    |                       |         |            |
|-------------------------------|----------------------|-------------------------|-----------|--------------------|-----------------------|---------|------------|
|                               |                      | ISCED 0                 | ISCED 1-2 | ISCED 3<br>general | ISCED 3<br>vocational | ISCED 4 | ISCED 5-7* |
| English                       | 724958               | x                       | 39,5%     | 74,8%              | 53,1%                 | 37,5%   | 72,5%      |
| French                        | 34666                | x                       | 1,4%      | 10,9%              | 2,5%                  | 0,0%    | 3,9%       |
| Spanish                       | 7259                 | x                       | 0,2%      | 2,4%               | 0,6%                  | 0,0%    | 3,5%       |
| German                        | 639568               | x                       | 30,8%     | 54,9%              | 64,7%                 | 54,6%   | 55,8%      |
| Russian                       | 7825                 | x                       | 0,2%      | 1,6%               | 1,2%                  | 1,3%    | 2,3%       |
| Italian                       | 1550                 | x                       | 0,0%      | 0,5%               | 0,2%                  | 0,0%    | 0,2%       |
| Others                        | 18708                | x                       | 0,5%      | 7,7%               | 1,3%                  | 0,0%    | 7,7%       |

Notes: without the schools governed by the Ministry of Interior, the Ministry of Defence, the Ministry of justice

All data about daily study only

\* without universities

**Table 25 c. Obligatory education of foreign languages in 2000/01**

| Years<br>Foreign<br>Languages | Total<br>(thousands) | in % of school students |           |                    |                       |         |            |
|-------------------------------|----------------------|-------------------------|-----------|--------------------|-----------------------|---------|------------|
|                               |                      | ISCED 0                 | ISCED 1-2 | ISCED 3<br>general | ISCED 3<br>vocational | ISCED 4 | ISCED 5-7* |
| English                       | 785699               | x                       | 41,3%     | 98,6%              | 49,7%                 | 51,8%   | 60,6%      |
| French                        | 37420                | x                       | 1,1%      | 15,1%              | 2,4%                  | 2,4%    | 3,1%       |
| Spanish                       | 8944                 | x                       | 0,2%      | 3,9%               | 0,6%                  | 0,7%    | 2,9%       |
| German                        | 632278               | x                       | 28,4%     | 73,7%              | 55,0%                 | 57,3%   | 46,1%      |
| Russian                       | 9115                 | x                       | 0,2%      | 2,3%               | 1,2%                  | 1,2%    | 1,8%       |
| Italian                       | 1235                 | x                       | 0,0%      | 0,5%               | 0,1%                  | 0,1%    | 0,3%       |
| Others                        | 18222                | x                       | 0,3%      | 9,6%               | 1,0%                  | 1,1%    | 4,4%       |

Notes: without the schools governed by the Ministry of Interior, the Ministry of Defence, the Ministry of justice

All data about daily study only

\* without universities

**Table 28: Population by age (14-25 year olds)**

| Years                 | Males   | Females | Total   |
|-----------------------|---------|---------|---------|
| 14 year olds          | 66 984  | 63 695  | 130 679 |
| 15 year olds          | 68 265  | 65 289  | 133 554 |
| 16 year olds          | 68 658  | 65 533  | 134 191 |
| 17 year olds          | 69 020  | 65 646  | 134 666 |
| 18 year olds          | 70 737  | 67 979  | 138 716 |
| 19 year olds          | 72 155  | 69 051  | 141 206 |
| 20 year olds          | 77 361  | 73 281  | 150 642 |
| 21 year olds          | 85 943  | 82 045  | 167 988 |
| 22 year olds          | 88 739  | 85 338  | 174 077 |
| 23 year olds          | 90 359  | 87 041  | 177 400 |
| 24 year olds          | 92 893  | 89 548  | 182 441 |
| 25 year olds          | 95 121  | 92 360  | 187 481 |
| Total 14-25 year olds | 415 819 | 397 193 | 813 012 |

Data source: Age structure of population in CR, Czech Statistical Office, 2001

Note: As of 31st December 2000

**Table 29: Enrolment in education/training (14-25 year olds)**

**ISCED 2,3**

|                       | General Education <sup>1</sup> |         |         | Basic Vocational              |         |         | Sec. VET with mat. exam |          |          | Sec. VET with qual. |         |         |
|-----------------------|--------------------------------|---------|---------|-------------------------------|---------|---------|-------------------------|----------|----------|---------------------|---------|---------|
| Years                 | Males                          | Females | Total   | Males                         | Females | Total   | Males                   | Females  | Total    | Males               | Females | Total   |
| Years                 | MgenEd                         | FGenEd  | TGenEd  | MBasVoc                       | FBasVoc | TBasVoc | MBSVTech                | FBSVTech | TBSVTech | Mappr               | Fappr   | Tappr   |
| 14 year olds          | 65263e                         | 62907e  | 128171e |                               |         |         | 0e                      | 0e       | 0e       | 45e                 | 25e     | 70e     |
| 15 year olds          | 25137e                         | 24316e  | 49453e  |                               |         |         | 21155e                  | 25617e   | 46661e   | 20797e              | 12524e  | 33468e  |
| 16 year olds          | 10010e                         | 16675e  | 26685e  |                               |         |         | 27815e                  | 32561e   | 60424e   | 28979e              | 16249e  | 45136e  |
| 17 year olds          | 7419e                          | 15598e  | 23017e  |                               |         |         | 31398e                  | 35941e   | 67570e   | 26697e              | 13984e  | 40237e  |
| 18 year olds          | 6621e                          | 9466e   | 16087e  |                               |         |         | 15798e                  | 22501e   | 38130e   | 10407e              | 6704e   | 17502e  |
| 19 year olds          | 2275e                          | 3101e   | 5376e   |                               |         |         | 1112e                   | 1358e    | 2469e    | 1467e               | 844e    | 2310e   |
| 20 year olds          | 70e                            | 96e     | 165e    |                               |         |         | 510e                    | 592e     | 1102e    | 562e                | 336e    | 899e    |
| 21 year olds          | 3e                             | 4e      | 7e      |                               |         |         | 260e                    | 314e     | 574e     | 225e                | 135e    | 359e    |
| 22 year olds          | 1e                             | 1e      | 1e      |                               |         |         | 71e                     | 94e      | 165e     | 0e                  | 0e      | 0e      |
| 23 year olds          | 0e                             | 0e      | 0e      |                               |         |         | 0e                      | 0e       | 0e       | 0e                  | 0e      | 0e      |
| 24 year olds          | 0e                             | 0e      | 0e      |                               |         |         | 0e                      | 0e       | 0e       | 0e                  | 0e      | 0e      |
| 25 year olds          | 0e                             | 0e      | 0e      |                               |         |         | 0e                      | 0e       | 0e       | 0e                  | 0e      | 0e      |
| Total 14-25 year olds | 116798e                        | 132164e | 248962e |                               |         |         | 98118e                  | 118978e  | 217096e  | 89179e              | 50801e  | 139980e |
|                       | daily study only               |         |         | included in General Education |         |         | daily study only        |          |          | daily study only    |         |         |



**Table 29: Enrolment in education/training (14-25 year olds) - (continuation)**  
**ISCED 2,3**

|                       | Post/Sec. Voc. Tech. <sup>2</sup> |          |          | Higher Education <sup>3</sup> |         |         | All education/training |         |         |
|-----------------------|-----------------------------------|----------|----------|-------------------------------|---------|---------|------------------------|---------|---------|
| Years                 | Males                             | Females  | Total    | Males                         | Females | Total   | Males                  | Females | Total   |
| Years                 | MPSVTech                          | FPSVTech | TPSVtech | Mhed                          | Fhed    | THEd    | MAET                   | FAET    | TAET    |
| 14 year olds          | 0e                                | 0e       | 0e       | 0e                            | 0e      | 0e      | 65308e                 | 62933e  | 128241e |
| 15 year olds          | 0e                                | 0e       | 0e       | 0e                            | 0e      | 0e      | 67090e                 | 62458e  | 129583e |
| 16 year olds          | 0e                                | 0e       | 0e       | 0e                            | 0e      | 0e      | 66803e                 | 65486e  | 132244e |
| 17 year olds          | 22e                               | 18e      | 39e      | 15e                           | 2380e   | 2395e   | 65551e                 | 67920e  | 133258e |
| 18 year olds          | 2641e                             | 2154e    | 4795e    | 3805e                         | 7536e   | 11342e  | 39273e                 | 48361e  | 87857e  |
| 19 year olds          | 2163e                             | 1745e    | 3908e    | 17175e                        | 15468e  | 32643e  | 24191e                 | 22515e  | 46706e  |
| 20 year olds          | 1049e                             | 37e      | 1086e    | 20860e                        | 19009e  | 39869e  | 23051e                 | 20071e  | 43121e  |
| 21 year olds          | 48e                               | 0e       | 48e      | 19914e                        | 17595e  | 37508e  | 20449e                 | 18047e  | 38496e  |
| 22 year olds          | 3e                                | 0e       | 3e       | 11158e                        | 9740e   | 20898e  | 11232e                 | 9835e   | 21067e  |
| 23 year olds          | 0e                                | 0e       | 0e       | 6114e                         | 5198e   | 11312e  | 6114e                  | 5198e   | 11312e  |
| 24 year olds          | 0e                                | 0e       | 0e       | 3861e                         | 3246e   | 7107e   | 3861e                  | 3246e   | 7107e   |
| 25 year olds          | 0e                                | 0e       | 0e       | 2607e                         | 2189e   | 4796e   | 2607e                  | 2189e   | 4796e   |
| Total 14-25 year olds | 5925e                             | 3954e    | 9879e    | 85509e                        | 82360e  | 167869e | 395530e                | 388257e | 783787e |
|                       | daily study only                  |          |          |                               |         |         |                        |         |         |

Data source: Institute for Information on Education

Notes:

As of 31st December 2000. If not specified, the data refers to full time students only.

e = estimation

<sup>1)</sup> ISCED 2 and ISCED 3

<sup>2)</sup> ISCED 4 - Data involves students of Follow up courses (after 3 year apprenticeship programme).

<sup>3)</sup> Higher vocational schools (ISCED 5) + Higher education institutions (ISCED 5,6). Full time and part time study.

**Table 30: Enrolment in education/ training at the upper secondary level (ISCED 3)**

| General Education |         |        | Sec. VET with mat. exam |         |        | Sec. VET with qual. |         |        | Total Sec. VET |         |        | Total Sec. Education (ISCED 3) |         |        |
|-------------------|---------|--------|-------------------------|---------|--------|---------------------|---------|--------|----------------|---------|--------|--------------------------------|---------|--------|
| Males             | Females | Total  | Males                   | Females | Total  | Males               | Females | Total  | Males          | Females | Total  | Males                          | Females | Total  |
| mgened            | fgened  | tgened | mvocet                  | fvocet  | tvocet | mvoqua              | fvoqua  | tvoqua | msec           | fsec    | tsec   | mtot                           | ftot    | ttot   |
| 36246             | 57639   | 93885  | 102912                  | 126620  | 229532 | 102298              | 58143   | 160441 | 205210         | 184763  | 389973 | 241456                         | 242402  | 483858 |

Data source: Institute for Information on Education

Note: As of 31st December 2000. Full time students only