National Observatory of Czech Republic

Vocational education and training in the Czech Republic 2001

This report was produced in the context of the National Observatory Network established by the European Training Foundation

European Training Foundation

The National Observatory of Czech Republic is part of a network of similar institutions in the countries of Central and Eastern Europe, the New Independent States and Mongolia

European Training Foundation

The network was established by the European Training Foundation, an agency of the European Union, which works in the field of vocational education and training in Central and Eastern Europe, the New Independent States and Mongolia, as well as the Mediterranean partner countries and territories. The content of this report is the responsibility of the author. The views expressed herein do not necessarily reflect those of the European Training Foundation.

Report on the vocational education and training system in the Czeck Republic

Editor and coordinator:
Věra Czesaná

Team of authors:
National Observatory
Věra Czesaná
Olga Strietska-Ilina
Věra Havlíčková
Zuzana Freibergová

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

Background information

The Czech National Observatory of Employment and Training was established in October 1996 on the initiative of the European Training Foundation (ETF). 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 (MoLSA) to implement the EU Phare programme on human resource development. 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 in support of the reform of public administration and is responsible for preparation for participation in the European Social Fund (ESF). The Leonardo da Vinci National Coordination Unit, the National Resource Centre for Vocational Guidance, the Pro-Active Labour Market Intervention Fund and the Social Welfare Initiative Fund all come under the auspices of the NTF.

The National Observatory itself is responsible for a number of projects. In addition to studies and activities for ETF, it publishes a yearbook, *Human Resources in the Czech Republic*; participates in an Organisation for Economic Co-operation and Development project, Transition from Initial Education to Working Life; the Leonardo da Vinci programme, Regular Forecasting of Training Needs; a European Centre for the Development of Vocational Training study on VET research in Central and Eastern European Countries; and a study on VET against social exclusion. It is also involved in the research partnership of the EU Fifth Framework programme with a project on vocational identity, flexibility and mobility in the European labour market. Other than this analytical project work, the observatory uses its expert capacity to support MoLSA in preparation for 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
Email: oli@observatory.nvf.cz

Table of contents

Authors' preface

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

The authors have used the expert secondary analysis of data available in the public domain and gathered from a number of specific research projects. To ensure objectivity, we have also drawn on studies on the Czech Republic published by the Organisation for Economic Co-operation and Development (OECD), the World Bank and the European Commission. We have moreover 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 a set of tables collected, compiled and disseminated by the ETF National Observatory Network on the basis of a common methodology.

Although some promising new projects have been launched on monitoring and forecasting skill needs, there is no systematic approach and useful data is lacking on where new job opportunities will arise in the future, what professions will be in demand, and what skills and training employers will be looking for. Studies of the development of sectors and their staff requirements are not available. All this limits our ability to objectively assess the structure of educational pathways and areas in initial and continuing vocational education and training in terms of responsiveness to the needs of the labour market.

In 1999 and 2000, the Czech Republic drafted a number of policy papers and bills as part of the reform of public administration. All these changes will have a major impact on the development of vocational education. The authors have attempted to take these documents into account, although their effects have yet to be verified.

Executive summary

In the course of the 1990s, fundamental changes took place within the Czech economy. Radical systemic changes occurred (privatisation, the liberalisation of prices and external economic relations) and preconditions were established for the workings of market mechanisms (development of a legal framework and institutions). The economic developments included several changes combining transitional and cyclical elements.

The reform of regional administration is under way. New regions, created as of 1 January 2000 at the level of NUTS 3 (nomenclature of territorial units for statistics), became operational in 2001. Regional Assemblies and Regional Councils were established as self-governing bodies with significant powers in the field of education. Eight statistical regions were set up at NUTS 2 level, comprising one to three NUTS 3 regions. Regional development strategies and operational programmes were drafted for the newly established regions in 1999 and refined in 2000. Two NUTS 2 regions, Ostrava and north-western Bohemia, were selected as pilot regions for Phare 2000 funding.

Not all the steps in the economic transition have been completed, however. Certain legislative and institutional conditions have yet to be created to improve the supervisory environment and increase the flexibility of individual markets. The rapid pace of privatisation by the voucher method, together with the lack of domestic capital, has had a negative effect on the quality of ownership structures and has resulted in the undercapitalisation and indebtedness of companies, destabilising them. Undesirable symptoms of a dual economy have appeared – Czech-owned companies with outdated technologies on the one hand, progressive developing companies with foreign capital on the other hand. Recent years have seen the speedier restructuring of companies controlled by Czech capital – thanks largely to economic recovery. Foreign direct investment has rolled in relatively steadily throughout the period. Twenty-five per cent of enterprises are controlled by foreign capital and an additional 25%–30% have some foreign input. Small and medium-sized enterprises (SMEs) represent 56% of the total labour force and play an important role in creating job opportunities.

Concerning the structure of employment, the service sector has experienced significant growth, reaching 55.4%, while agriculture fell to levels comparable with EU member states and the mining and processing industries were slimmed down. These changes are likely to continue. Unlike EU member states, low part-time employment is still typical of the Czech labour market. Unemployment has grown since 1997, reaching 9.4% at the end of 1999, and as a result of economic recovery in 2000 fell a little to 8.8% at the year end. This predicament of the labour market has particularly affected disadvantaged groups, such as people with low skills, school leavers (particularly from basic and secondary schools), Romanies and people with disabilities. Long-term unemployment rose very quickly. In 2000, those seeking work for over a year formed about 38% of the total unemployed.

The employment policy is based on a well-functioning network of labour offices and active employment measures. As unemployment rose, the scope of the tools had to be enhanced and the active measures had to be better targeted. A National Employment Plan and a National Employment Action Plan were adopted in 1999 and 2000, respectively, in conformity with EU labour market policies. In addition to broadening the range of active employment measures, they

also contain measures to promote business, raising employers' and employees' awareness of structural changes, job creation, training and equal opportunities.

Demographic development is characterised, on the one hand, by a steady shrinking of the youth age cohort entering secondary schools and, on the other, by an increase in the ageing population. These trends are expected to strengthen in the coming decade. Social and economic changes led to a dramatic fall in the birth rate in the 1990s. The total population has been decreasing since 1992.

The main features of the structure of the Czech system of initial vocational education, i.e. the main types of school, their organisation and the duration of the educational programmes they provide, are the product of a lengthy development. New types of school and new educational measures developed in the 1990s in response to the fundamental political, economic and social changes in the country have modified and extended the school system.

There are three main types of secondary school: (a) gymnasiums, offering general secondary education; (b) secondary technical schools offering upper-secondary vocational education with the Maturita leaving examination in a particular field of study; and (c) secondary vocational schools offering apprentice education in crafts and similar professions. Several types of school have been added to these traditional ones in the past decade, mainly in an attempt to merge features of the three main types. **Technical and business lyceums** bring together the wide general education of gymnasiums and the basic vocational theory of secondary technical schools. **Integrated secondary schools** offer two types of educational programme 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 **higher professional school** has also been added after 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 also improved as the number of schools has grown, increasing the density of the network but decreasing the average size of school.

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

Several trends have emerged in the Czech Republic with regard to the number of students. Although the ratio of students in general secondary schools (gymnasiums) to vocational schools, typically very much in favour of vocational schools, remains roughly the same, the numbers enrolling in vocational programmes with Maturita grew substantially in the 1990s, to the detriment of vocational courses without Maturita. However, this trend has again reversed in recent years. The average duration of education lengthened. Although drop-out rates have stayed low and without significant changes throughout secondary education with Maturita, drop-out rates in vocational education without Maturita increased.

A comprehensive reform of public administration has recently been implemented, decentralising responsibilities in education from to the level of regional self-government. The flows of finance have correspondingly changed and programmes to support 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. Certain powers of state administration delegated to the regions include, most importantly, the implementation of the Long-Term Development Plan of Education and the Education System in the Czech Republic and the allocation of public resources earmarked for education within the respective regions.

As the state administration and the regional self-governing authorities are not strictly separate (in fact they overlap), the form the development takes will depend both on the initiative and professional competence of the authorities and on their willingness to comply with ministry decisions. The Long-Term Development Plan and other framework documents define the conditions for the decision-making of self-governing bodies in education.

A more strategic approach to the development of Czech vocational education and training (VET) has been attempted over the past two years. In 2001, the National Education Development Programme was adopted by the government as a long-term strategy. The aims set out in this programme are further elaborated in subsequent documents concerning priority areas in the development of education (Long-Term Development Plan), including curricular reform, introducing information technologies into teaching, enhancing the transparency of secondary-school leaving examinations, strengthening the role of social partners, etc. These documents are still at an early stage of development, their finalisation is proceeding slowly and their implementation may be expected no earlier than five years from now. Continuing vocational education and training (CVET) has undergone major changes in the Czech Republic over the past decade, becoming highly diversified and differentiated and evolving according to supply and demand. The three main groups of CVET providers are schools, enterprises and training firms. Private institutions prevail among these providers; private money prevails in funding (by companies and individuals). Links between initial and continuing vocational education are still tenuous. Insufficiencies in the legal framework for the development of CVET continue to be criticised.

Although there are major differences among individual companies, the general development of in-house training as part of CVET slumped after a period of fast growth in the first half of the 1990s. According to the Continuing Vocational Training Survey CVTS2 in 1999, two-thirds of companies run training activities for employees. This means that 49% of employees participate in some form of training. As regards participation in company training, there is a marked difference between men (53%) and women (only 41%).

Job seekers registered with labour offices have experienced a gradual growth of retraining as part of CVET. The Ministry of Labour and Social Affairs has been investing in an Active Employment Policy (AEP) in recent years, increasing the number of people in retraining. However the proportion retraining in the total number of job seekers is still very low (only about 7%) compared with EU countries. The National Employment Plan envisages growth in continuing vocational education to promote people's employability.

Continuing vocational education and training is mainly funded from private resources (companies and other organisations), while retraining of job seekers registered with labour offices has mainly been paid for by the government. The contributions of chambers of commerce, professional associations, trade unions and regional and local authorities to the funding of continuing vocational education are negligible.

In the field of research into education, training, the labour market and employment, the structure of the institutions involved was diversified after 1989. Apart from the sectoral budgetary research institutes of the Ministry of Education, Youth and Sports (MoEYS) and MoLSA, and the Academy of Sciences of the Czech Republic, such research is carried out by universities, non-governmental organisations (NGOs) and private companies. After a steep decline in 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, although research is still undervalued. The country's research capacity in the field of CVET and adult learning is inadequate, given the high priority of the systematic development of lifelong learning.

The bulk of financial aid to the Czech Republic since 1990 has been within the framework of the EU support programme, Phare. Since it was launched, the Phare programme has undergone substantial development, from assistance with the most urgent problems towards assistance with the transition process and preparation of countries for EU accession. The Czech Republic participates in such European Community programmes as Leonardo da Vinci, Socrates and Youth for Europe. There have also been many bilateral and international donor programmes linked to education and the labour market.

1. Political and socio-economic background

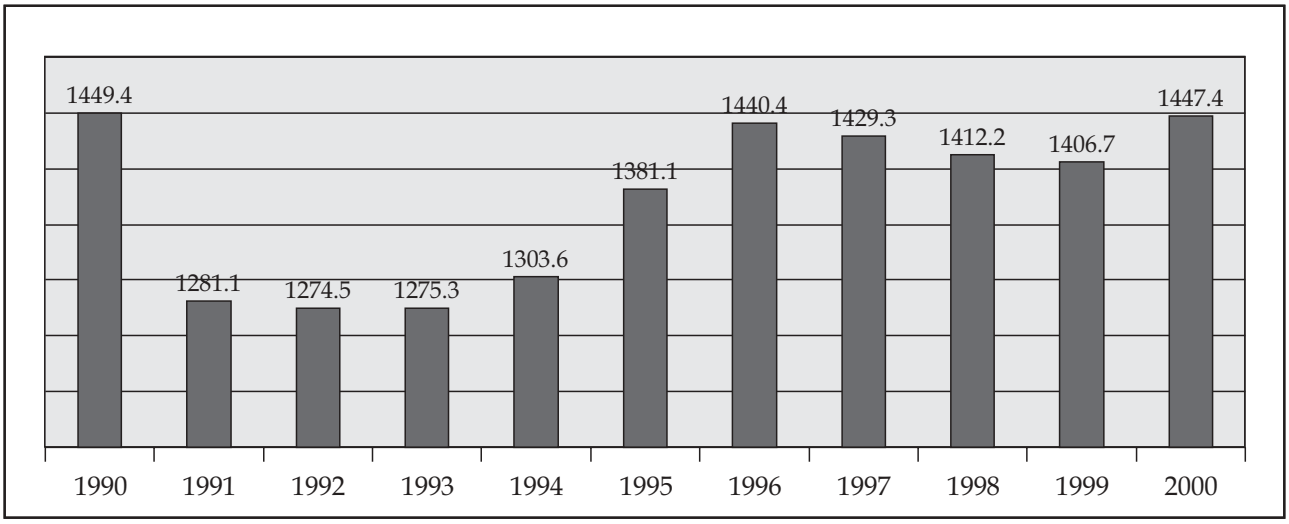
The Czech Republic is a Central European country with a population of 10,266 million, a territory of 78,864 km² and a population density of 130 inhabitants per km². The parliamentary system is bicameral. Public administration is in the process of decentralisation. Fourteen higher units of regional self-government (VÚSC) have been established and, after the regional elections, these will be in power from 1 January 2001 (the equivalent of NUTS 3). At NUTS 2 level, the Czech Republic is divided into eight statistical regions formed by VÚSC regions one to three.

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

1.1 Economic developments

In the course of the 1990s, fundamental changes been made within the Czech economy. Radical systemic steps have taken place (privatisation, the liberalisation of prices and external economic relations) and preconditions have been established for market mechanisms to operate (the development of a legal framework and institutions). The economic developments include several changes combining transitional and cyclical elements: the period 1990–92 was characterised by a transition recession followed by dynamic growth between 1993–96, cyclical stagnation and downturn in 1997–99 and an economic upturn in late 1999. Gross domestic product (GDP) increased in 2000 by 2.9% (Chart 1.1), driven by investment activities and exports.

Chart 1.1 GDP development 1990–2000



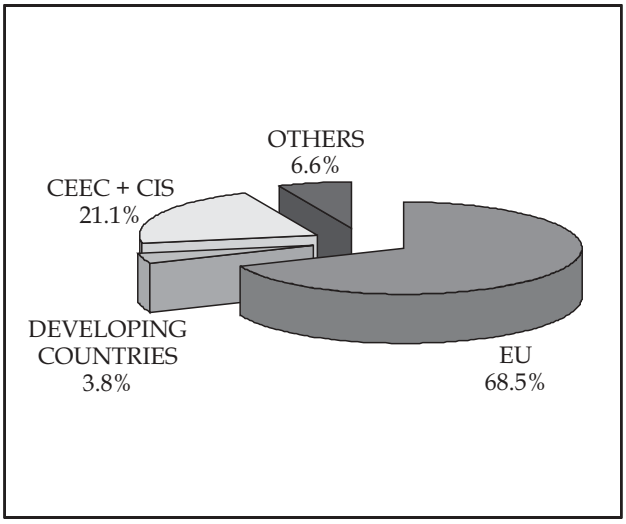
Note: GDP in CZK billions, 1995 constant prices.
Source: Key Indicators, Table 1.

In the transition period, the Czech economy opened up to the rest of the world. As the economy is small, it is strongly influenced by the world market. At present, some 66% of GDP is exported and around 68% is imported (these proportions are higher than those in Hungary and Poland).[1]

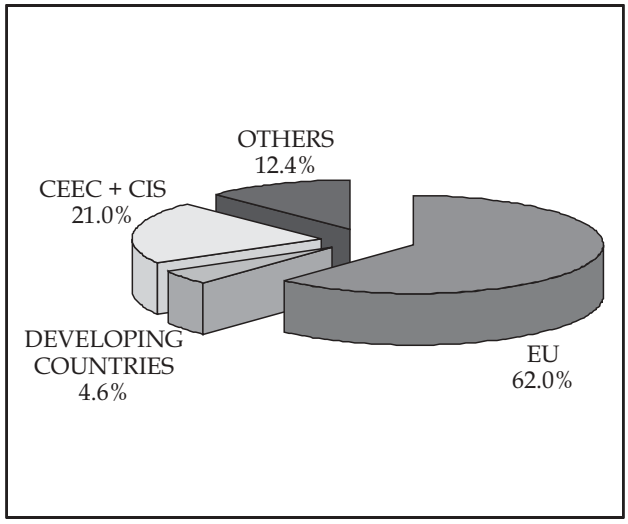
The Czech economy, from the point of view of foreign trade, has already become integrated into the EU, as the majority of its exports and imports flows to and from EU countries (Chart 1.2). (In 2000, this trade represented 68.5% of total exports and 62.0% of total imports; in both cases involving commercial exchange with Germany in particular.) This also means that **the Czech economy is strongly linked to the economic cycle of the European Union**.

Chart 1.2

Structure of exports (Q1-Q2 2000)



Structure of imports (Q1-Q2 2000)



1.1.1 Privatisation

Privatisation, as the pillar of economic reform, was carried out using both traditional methods such as sale of property and alternative methods such as voucher schemes. While there was virtually no private sector and the non-governmental sector (including cooperatives 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 for the further development of companies nor long-term owners who could, in turn, put in place better management. Most companies are therefore undercapitalised and suffer from high debts and low levels of technology.

Since 1999, after a certain delay, the privatisation of strategic companies has got under way again. The 'Czech way' has been reassessed 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 a significant stake in some 264 companies within the corporate sector.[2] These include 36 strategic enterprises, especially in the distribution network sector (energy, fuel, gas), metallurgy, chemistry, telecommunications and air transport. The NPF and the government have been relatively successful in finding suitable strategic owners, mostly from

1 *Sbornik analytickych studii pro Strategicky program socialniho a ekonomickeho rozvoje* CR [Collection of Analytical Studies for the Strategic Programme of Social and Economic Development], Czech Republic, Government Council for Social and Economic Strategy, 2000.

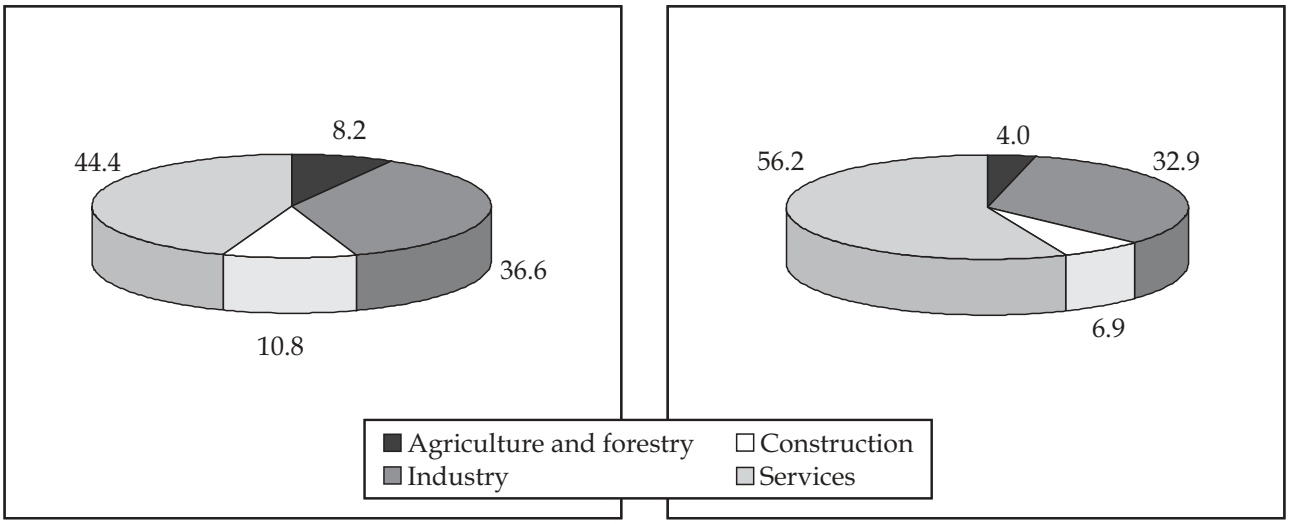
2 As of 31 December 2000. *2000 Annual Report*, National Property Fund.

abroad. In order to speed up the privatisation of large companies, some support for the restructuring of enterprises is provided through industrial programmes.

1.1.2 Restructuring

Several aspects of the structural changes to the Czech economy in transition reflect the 'hypertrophy' of resources, production and commercial structures that occurred under the conditions of a centralised economy. After 1990, a major shift took place in the proportions of various sectors of GDP – the services sector began to account for the largest share and reached 56.1% of GDP in 2000 (Chart 1.3).[3] The contribution of agriculture and forestry to GDP fell to a level comparable with EU countries. Industrial output downturn bottomed up and is now around 33%. Within the services sector, the most rapid development occurred in business services (particularly legal, consulting, advertising) which have become the second most efficient subsector of the economy, followed by trade and financial intermediation. However, financial services have been stagnant in recent years. Stagnation can also be seen in transport and communications, while public services (education, culture, health care) have increased.

Chart 1.3



Note: Measured as share in gross value added.
Source: Czech Statistical Office.

Within the broad segment of **industry**, the branch structure changed during the 1990s. Industries can be divided into three groups, according to production growth rates in the second half of the 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. These branches account for 36% of industrial production.
- branches basically stagnating. The production and distribution of electricity, gas and water fall into this group (the influence of the economic cycle is especially noticeable here), as well as the wood-working industry. These two branches account for 17.5% of industrial production.

3 Measured as share in gross value added (in current prices), Czech Statistical Office.

- branches robustly growing. These make a significant contribution 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 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.[4] On the other hand, there was a decrease in the proportion of products requiring natural resources and low-skilled labour. The tendency to specialise continued, resulting in a higher proportion of production components than final products.

As regards the **restructuring of the corporate sector,** the situation varies significantly. The Czech economy has been experiencing two types of change whereby a few companies have showed great vitality and have grown, while a considerable number of others have suffered crisis after crisis. The domestic processing sector, privatised the Czech way, is undercapitalised, ineffectual and unable to copy innovations and methodology of companies with foreign capital or to attract highly qualified human resources and top-level managers. The discrepancy between the two ownership sectors was addressed by some domestic producers by concentrating 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, affecting in turn price relations, export opportunities and salary levels, as well as opportunities for taking up 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 industry. This primarily concerns export-oriented industrial companies with foreign capital stakes (there is a direct link to the inflow of foreign investment), which can take advantage of technological, organisational and marketing innovations exploited by leading overseas companies. Routes to external markets are also being opened up and access to loans facilitated. Moreover, a number of traditional domestic companies are benefiting from the successful development of companies with foreign capital by cooperating in the production and supply of various components. In this way, the structure of Czech industry is being enriched by progressive supply networks in production and sales.

1.1.3 Information and communications technology sector development

The Czech Republic is one of the Central and Eastern European markets experiencing the most dynamic development in information and communications technologies (ICT). Investment in ITC was EUR 116[5] per capita in 1997 (followed by Slovenia, EUR 109; Hungary, EUR 81; and Estonia, EUR 75). The structure of this expenditure is approaching that in Western 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 other than hardware. Expenditure on ITC as a proportion of GDP was 2.6% in 1997 (closely behind Estonia, 2.8%, and higher than

4 For example, the proportion of high-tech products (especially electro-technology, electronics, telecommunications and computing) in total exports is increasing gradually (in 2000 by 1.2 points) and has reached 7.8%.

5 J. Zlatuška, *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*], Czech Republic, Government Council for Social and Economic Strategy, 2000.

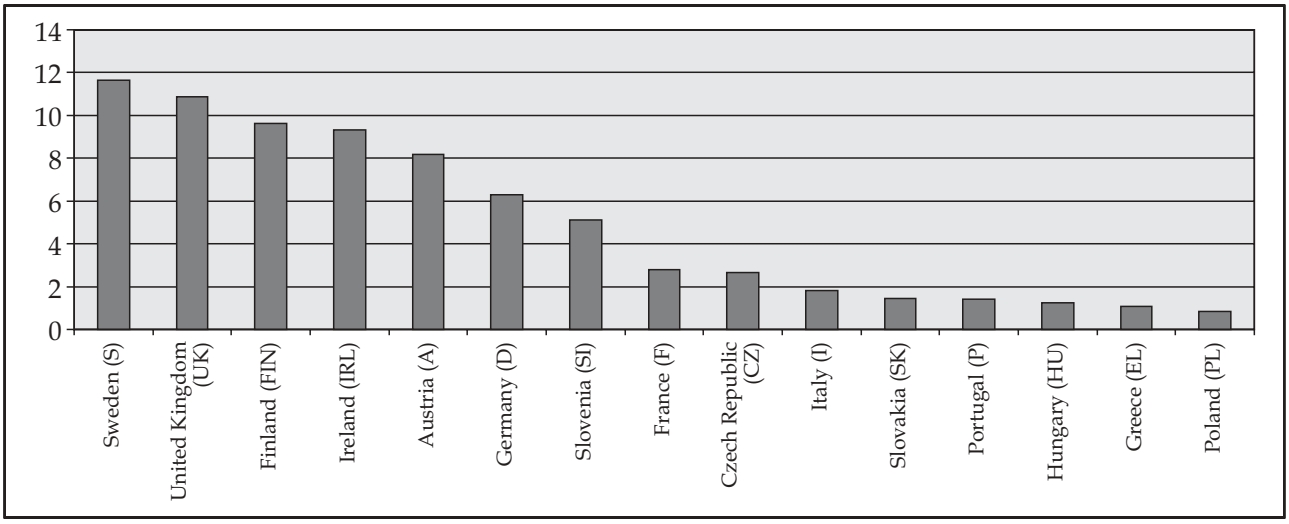
Hungary, 2%, and Slovakia, 1.9%) and 3% in 2000, which, in nominal terms,[6] is at the level of that in Western Europe and increasing every year.

Development of Internet-based networks has been considerable in the Czech Republic thanks to a decision in 1992 to build an academic network of Czech higher-education institutions entitled CESNET. At present, the country operates at least 14 international networks with over 240 Internet service providers. There has been a strong input from transnational telecommunications consortia.

The price structure of telecommunications is a major problem, as the Czech Republic is the third most expensive OECD country in terms of purchasing power parity. Fees for the use of the Internet are far higher than those in other Central and Eastern European Countries (CEECs). Stiffer competition in telecommunications and price reductions could lead to significantly wider use of the Internet and information technologies. Moreover, Czech legislation will have to 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 regulations are needed 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-commerce in the Czech Republic shows a speed of development comparable to that in the developed world. The number of secure servers is higher than in Eastern Europe although still very low in comparison with some EU countries (Chart 1.4).

Chart 1.4 Number of secure servers per 100 000 inhabitants



Note: Secure servers for e-commerce provision.
Source: SSL Server Survey, January 2001 (http://www.netcraft.com).

The number of Internet hosts in the Czech Republic 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 should bring about cheaper services, could see further expansion of Internet use.

Surveys in the Czech Republic show that the Internet is largely used in employment (over 70%), and to a lesser degree in households and schools. Internet access by the rural population is so far very limited, although such a tool could be the fastest provider of important information. According to a survey conducted in 2000,[7] only 27% of citizens and approximately half the companies located in

6 It is lower in real terms, as it is overvalued due to relatively high ICT prices in the Czech Republic.

small towns use the Internet. Obstacles to wider use include high costs of installation and operation and a low level of computer literacy (40% of the population cannot use a computer). Another obstacle to wider use of information obtained via the Internet (especially from abroad) is insufficient knowledge of foreign languages.

The development of ICT should be promoted more efficiently by government measures. State information policy is coordinated by a Government Council for State Information Policy in cooperation with the Office for State Information System. An Action Plan for State Information Policy, drawn up in 2000 for a period of two years, set out three framework programmes:

1. information literacy (Outline of State Information Policy in Education – see Section 3.1);
2. electronic commerce;
3. electronic public administration.

The programmes contain specific aims to be addressed by government bodies and individual ministries in preparing legislation, the institutional environment and measures or setting up projects in priority areas. However, insufficient financial resources have been earmarked for these purposes and, at the end of 2000, the action plan was delayed. Many ITC projects are therefore often based on private activities and initiatives. There are also numerous non-profit associations promoting the development of the Internet.

1.1.4 Small and medium-sized enterprises

Small and medium-sized enterprises have been rapidly developing in the Czech economy since the early stages of transition, that is since the '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 services, offer subsidies for creating job opportunities and promote export. SMEs have been the main driving force behind labour market flexibility, especially in the service sector. This sector has been absorbing the labour force released from industry and therefore has helped to maintain low unemployment during the initial period of economic reform. The emergence of small firms increased the demand for craftworkers.

Government support for SMEs remains insufficient. One chronic problem is deteriorating access to financial capital. Small companies also have their scope reduced through burgeoning bureaucracy (compared with other European countries) which affects them much more than large companies.[8] There is insufficient support for research and development in SMEs, which should be expanded to cover the transfer of technologies and their use in small enterprises.

At the end of 2000, SMEs[9] were employing 59% of workers in industry, construction, business, catering and services.[10] This figure is lower than the roughly 66% employed by SMEs in EU member states.[11] SMEs hold a dominant position in certain industries, both in terms of employment and

7 *Information Needs of Inhabitants of Small and Medium-Sized Sites (Rural Seats and Small Towns) and the Possibility of their Satisfaction through the Public Libraries Network* [in Czech], National Library of the Czech Republic/DEMA, a.s., 2001 <http://www.aib.sk/infos/infos2001/05.htm>.

8 A number of administrative costs are fixed irrespective of the size of the company (e.g. customs duties, construction approval, product testing, court proceedings).

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

10 As of 31 December 2000, Czech Statistical Office.

11 *Fifth Annual Report*, European Observatory for SMEs, 1997.

production (Table 1.1). The growing strength of these small and medium companies is conducive to job creation. The sector of micro-businesses (own-account workers[12]) has been growing steadily even through economic recession, and reached a 10.5%[13] share of overall employment, providing new job opportunities for some of the workers laid off by large companies. Total self-employed, including categories other than own-account workers, amounted to almost 14.2% of overall employment in 2000 (see also Section 2.2.1).

Table 1.1 Share of SMEs in overall employment and outputs, 2000

	Share in employment (%)		Share in outputs (%)	
	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
Total	**56.4**	**59.1**	**51.7**	**52.9**

Note: SMEs are defined as having 0–249 employees, including freelance entrepreneurs.
Source: Czech Statistical Office, calculations by the Ministry of Industry and Trade, 2001.

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

The dynamic development of SMEs is 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. Scarcely any small companies are focusing on the application of research findings, in particular 'spin-off' enterprises which, in many countries, constitute an important component of technical progress.

1.1.5 Foreign direct investment

Foreign direct investment (FDI) is playing an increasing role in the Czech economy. Among the other Central European transition countries, the Czech Republic is among the leaders as regards the volume of FDI per capita. In the period 1993–2000, the FDI inflow reached USD 21.4 million. The government has taken several steps in the past three years that have significantly improved the investment climate. An Act on Investment Incentives[14] has been passed and the Ministry of Industry and Trade is running programmes to support industrial zones and supplier development. Investment incentives include 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.

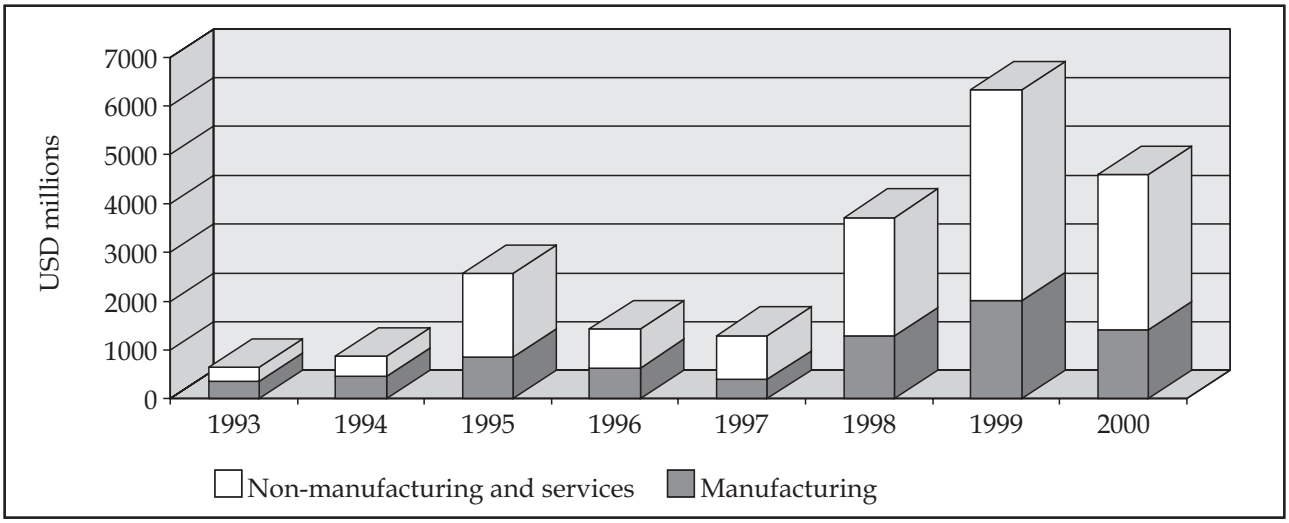
12 See Section 2.2.1.

13 As of fourth quarter 2000. *Labour Force Survey*, Czech Statistical Office, 2001.

14 Act No. 72/2000 on Investment Incentives.

As a result of investment incentives and the beginnings of economic recovery, the flow of FDI into the Czech Republic (Chart 1.5) increased by 88% in 1999, greatly outpacing the worldwide trend (CEECs registered a mere 9% increase). In 2000 the FDI inflow decreased but remained robust (USD 4.6 million).

Chart 1.5 Development of foreign direct investment (1993–2000)



Note: Until 1997, foreign direct investment data cover investments to fixed basic assets only.
Since 1998, FDI data also cover profit reinvested and other forms of capital.
Source: Czech National Bank Statistics, 2001.

The structure of FDI is quite stable. In terms of aggregate volume since 1990, the largest investor is still Germany with 23%, followed by the Netherlands with 19.3% and, after a certain gap, Austria at 12.6%.

Since 1993, most foreign investment has been allocated to trade, hotels and related services (approximately 18.7%) and the financial sector (approximately 16.6%[15]). In branches of industry, the greatest share has gone to the production transport means and electrical engineering (11.4%) and food products (5.7%). On the other hand, the level of foreign investment is low in companies within the traditional sectors such as textiles, footwear and 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[16] that of locally owned enterprises. Companies with foreign capital also tend to require a higher quality of labour force than locally owned ones.[17]

According to statistical data,[18] 24.6% of companies are currently controlled by foreign capital and it is 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.

15 Czech National Bank, statistical information, 2001.

16 *The Theory and Practice of Foreign Direct Investment*, paper from a Czech Economic Society workshop, Prague, 1999.

17 As sample surveys show, in a significant number of foreign companies (39%), highly qualified workers with tertiary education comprise over 20% of the staff (average over whole economy is around 12%).

18 *Statistical Yearbook of the Czech Republic*, p. 361, Czech Statistical Office, 2001.

Expected trends in FDI in 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 through the liberalisation of telecommunication connections and 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 Komercni Banka, the third-largest bank in Central and Eastern Europe, was expected in the first quarter of 2001.
- **Growth of investment in real estate:**
  Thanks to renewed economic growth, a further increase of FDI into real estate is expected.
- **Investment in revitalised firms and continued privatisation:**
  Continued privatisation, above all in the area of distribution networks, will bring further FDI, the first fruits of which will also bring a revitalisation programme.
- **Greenfield investment:**
  Investment in new manufacturing facilities will further increase thanks to investment incentives. Unlike previous years, the most advanced industries such as automotive components and electronics have been given a chance, as well as traditional industries such as precision engineering and textiles. Greenfield investment is also increasing through the arrival in the Czech Republic of suppliers of multinational firms. Production in Czech affiliates of companies such as Matsushita, Flextronics and Philips is already at a level that pays for their suppliers to follow them.
- **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 in so-called strategic services, such as customer support centres, R&D centres and software development centres. The government is preparing a pilot project on investment incentives for these strategic services.

1.1.6 Economic monitoring by the European Commission

As part of the admission process, the Commission undertakes periodic reviews of the Czech Republic's progress in becoming a democratic market-led economy (Copenhagen Criteria). The first of these reviews was released in November 1998 and it criticised the slow progress made by the Czech Republic in adopting the body of EU law, although acknowledging that it was moving in broadly 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 criticised the slow progress made in passing legislation necessary for harmonisation.

The European Commission review released in 2000 states the following:

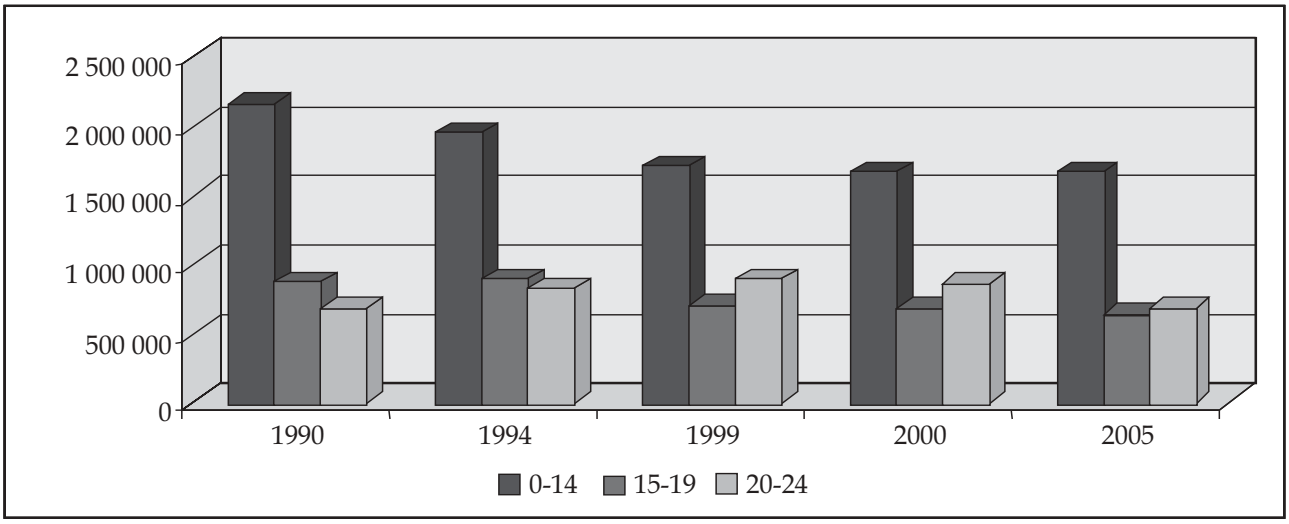
- The Czech Republic may be considered as a functioning market economy which should be capable of coping with competitive pressures inside the EU on condition that the implementation of structural reforms continues.
- Macroeconomic stability has increased. Economic growth has been restored while maintaining favourable inflation figures and external balance. Efforts are being made to enhance transparency in public funding. Progress has been made in the 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. The privatisation and restructuring of state-owned companies must be continued and corporate governance must be improved.
- Institutions must focus on the development of a favourable environment for business activities, primarily in SMEs.

1.2 Demography

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[19] due to a dramatic decline in the birth rate. The economic and social transition has had an impact on several demographic features, the most prominent being 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 (the equivalent of primary and lower-secondary level) but also, from 1994, by less students enrolling in secondary schools. Owing to demographic and other influences,[20] the number of secondary students fell to some 77% of the 1990 intake. This trend, which is likely to continue, has had an unfavourable impact on the size of schools and the efficiency of their operation. On the other hand, the decline by some 20% in the young population aged 20–24, which is expected by 2005 (Chart 1.6),[21] could have a favourable effect on education in that it will ease the pressure on universities with insufficient capacity. The number of applicants may be closer to the number of places available, access to universities will be easier for a larger part of the age group and admission proceedings will be less selective.

Chart 1.6 Population development by youth age group



Source: Key Indicators, Tables 7 and 8, 2000.

The economically active population, on the other hand, is currently increasing but will gradually slow, falling to –0.2%[22] in 2003. At the same time, the proportion of older people will grow (Chart 1.7). Compared with EU countries, where this development is more balanced, the Czech Republic will have greater difficulty in coping with the process of **population ageing**. This underlines the need to rapidly focus education on adults to a much larger degree than has been the case, in order to create an efficient system of continuing education for all generations.

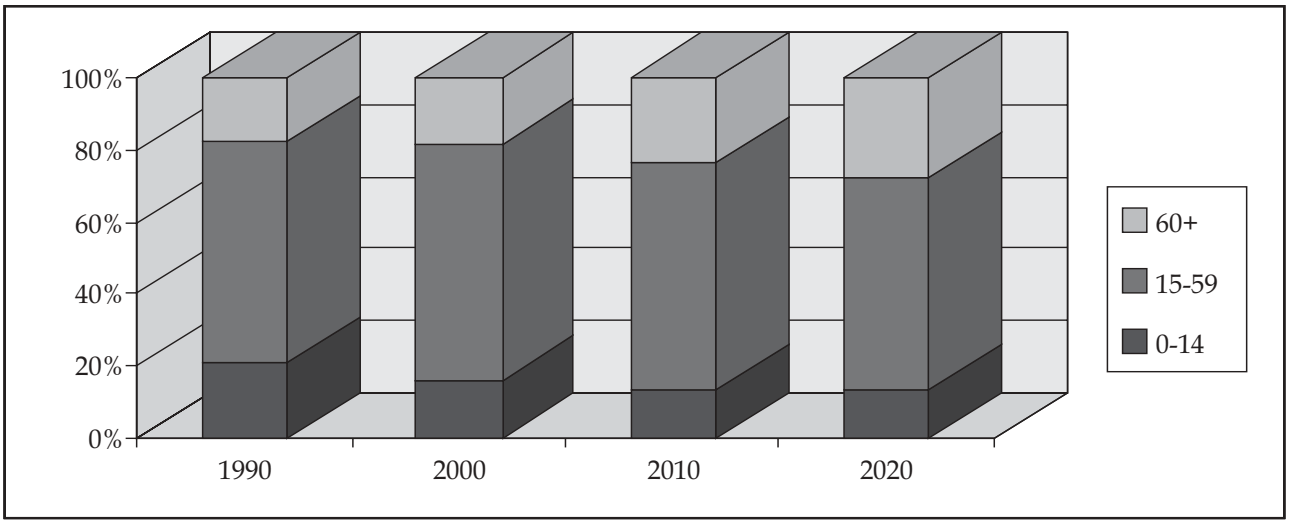
19 Key Indicators, Table 5.

20 Most importantly, the extension of basic schooling since 1996/97, Key Indicators, Table 22.

21 Key Indicators, Table 8.

22 Projections of the Czech Statistical Office, 1999.

Chart 1.7 Population development by age group (%)

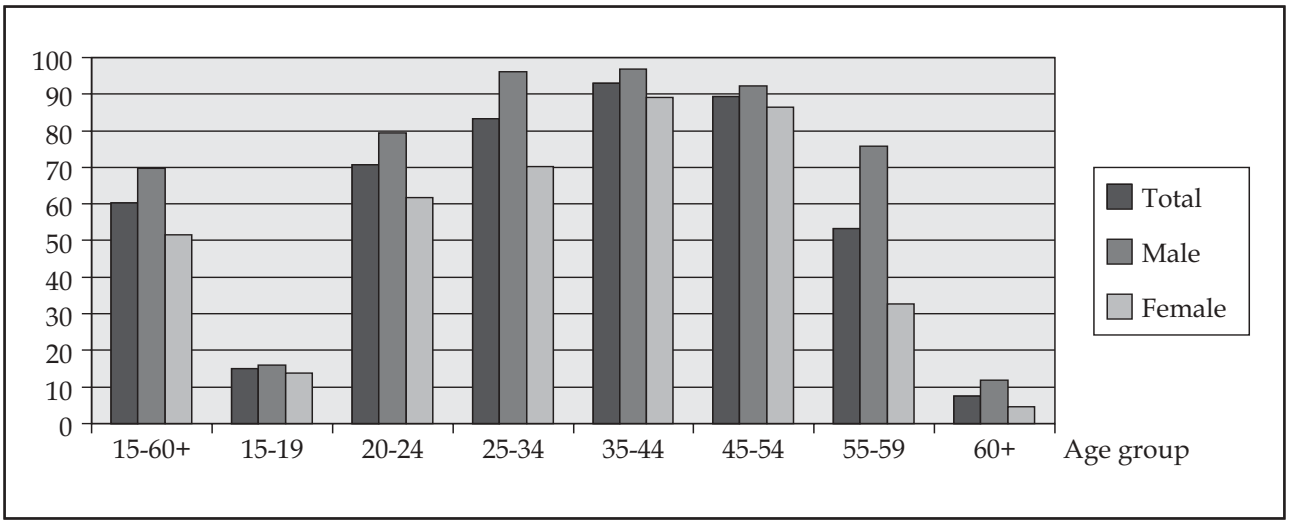


2. Labour market background

2.1 Economic activity of the population

The traditionally high **rate of economic activity** in the Czech Republic has stabilised, after a certain decline in the early 1990s, at around 61%.[23] This figure is still among the highest in Europe. Among young people the rate of economic activity is decreasing owing 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. The increasing interest of secondary students in longer Maturita courses rather than shorter educational programmes 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 and 11). Owing to the relatively low standard of living, the interest of other age groups in profit-making activities is not expected to decrease in the future – and this is also true of economic activity (Chart 2.1).

Chart 2.1 Activity rate by age group and gender in 2000 (%)



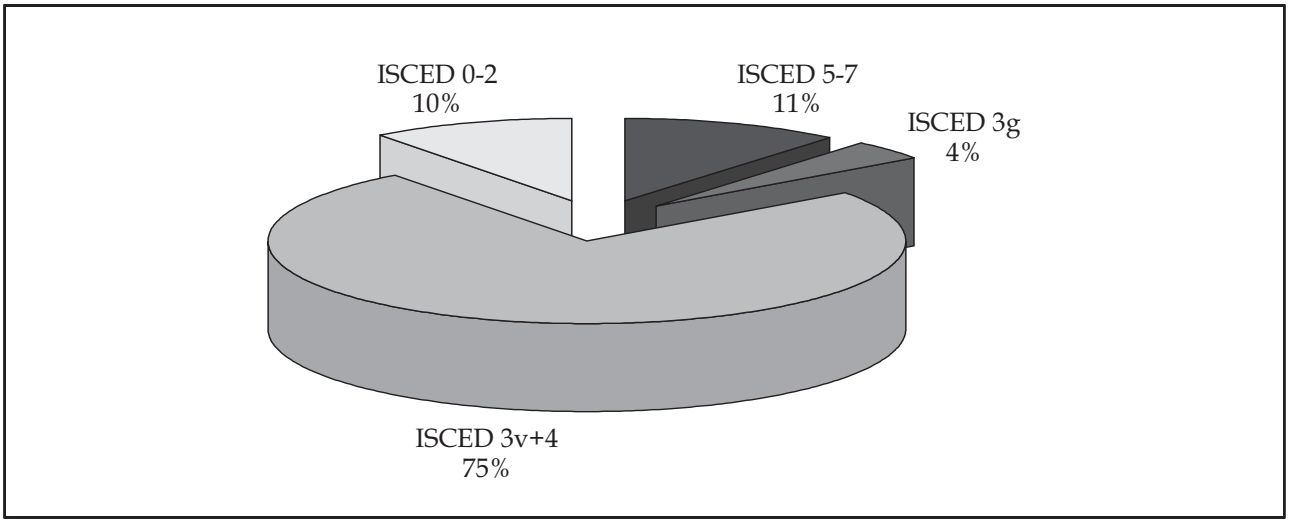
Source: Key Indicators, Table 11.

The economic activity of women remains at a relatively high level and, even at the age of active maternity, has not fallen below 60%. At age 35–55, when most women may fully concentrate on their career, some 87% to 89% of women are economically active, a rate that does not differ greatly from that of men. This rate is expected to remain relatively high. Large numbers of women who have reached childbearing age will be interested in returning to the labour market in the future. However, various programmes will have to be developed to help them to overcome difficulties in terms of qualifications and adjustment, as well as combining employment with childcare.

23 The rate of economic activity in 2000 was 60.4%, calculated as a proportion of the economically active in the population aged over 15, Key Indicators, Table 11.

The education distribution of the population is marked by a relatively higher proportion with secondary education (more than two-thirds of the population over 15 years, Chart 2.2). 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 in developed countries, particularly in those which have shot up the competitiveness scale. The Czech Republic has gradually lost its former high position as regards the proportion of the population with higher education, while comparable countries, having been increasingly competitive for several years, have overtaken it. While the country's position in terms of education structure in the oldest age group (over 50 years), has been quite good (better than Ireland and close to Finland and the Netherlands), it is almost ten points lower in the youngest age group (up to 35 years). The major deficit occurs in tertiary education.[24]

Chart 2.2 Structure of active population by educational attainment in 2000



Source: Key Indicators, Table 9.

As the change in the education structure of the population associated with overall modernisation has been much less radical than in developed countries, this has had an effect on children's opportunities for achieving higher levels of education than their parents (**educational mobility**). The probability 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 Czech Republic. This probability is among the lowest in Europe in the youngest age group. While, in OECD countries, an average of 35% of men in the youngest age group achieved a higher level of education than their fathers,[25] the figure was only 26% in the Czech Republic. Women are not faring much better. Within the youngest age group of women in OECD countries, an average of 45% of women achieved a higher level of education than their mothers,[26] compared with only 31% in the Czech Republic.

The **functional adult literacy of the Czech population**, i.e. the capacity to work actively with information and thus to apply knowledge, is showing certain peculiarities in comparison with other countries. Only a small part of the population has a very low level of functional literacy, most people have a medium level, and a relatively low proportion achieves the upper levels. Sociological surveys[27] have, however, shown disparities between levels of individual skills. Czechs have

24 Secondary International Adult Literacy Survey (SIALS), OECD National Report, 1999.

25 For comparison, the figures are 47% in Ireland and 42% in the Netherlands.

26 For comparison, the figures are 56% in Ireland, 51% in Finland, 60% in the Netherlands.

below-average standards of prose literacy, i.e. the capacity to work actively with information contained in an ordinary text. In this respect, the Czech Republic is at a relative disadvantage. On the other hand, the country is slightly above average as regards document literacy, i.e. the capacity to work with documents, questionnaires and forms. Czechs rank among the top peoples 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, radical changes in the labour market have affected the development and the structure of employment. Overall employment fell by some 10% during the recession of the first years of transition. However, the unemployment rate did not exceed 4.5% thanks to the 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 (by an average of 0.7% per annum) because of economic growth and the preservation of outdated, labour-intensive technologies. Since 1997, employment has been decreasing continuously by an average of 1.0% per annum (see Key Indicators, Table 13).

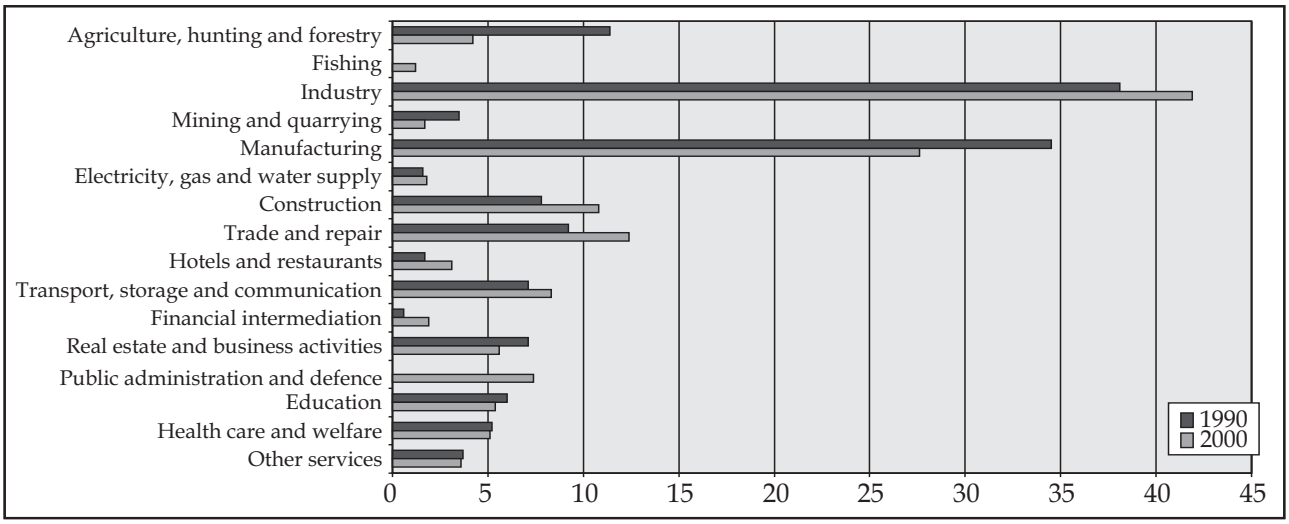
The proportion of hidden (grey) employment increased considerably during the 1990s – including illegal workers from abroad. Hidden employment is also generated by the high level of taxation and social security contributions paid by both employers and employees. This influences employment especially in the SME sector and parts of the construction and tourist sectors. Official figures for foreign employment have stabilised in recent years because of tighter work permit regulations. The number of Czech citizens working abroad has decreased significantly since the early 1990s, forming only a small group within the employment structure.

2.2.1 *Structural changes in employment*

Structural changes in the 1990s mainly occurred **at an intersectoral level**. As the primary and secondary sectors of the economy had been disproportionately large, some 366,000 agricultural employees and 580,000 industrial employees lost their jobs. On the other hand, some 355,000 jobs were created in the services sector, which had been under-represented. These structural changes took place in two waves, following the economic cycles in the recession of 1990–93 and again in 1998–2000. The agricultural and forestry sector has fallen to a level comparable with that of most EU countries. The number of secondary-sector workers has significantly decreased (especially in mining and in most manufacturing branches). By 2000 the services sector was 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 (although in the last two sectors there were signs of stagnation). However, no less important are shifts of employees between contracting and expanding branches of industry. In expanding industries such as the production of electrical goods, rubber and plastic products, motor vehicles, radios, television and communications equipment, over 20,000 jobs were created in the 1990s (Chart 2.3).

27 Secondary International Adult Literacy Survey (SIALS), OECD National Report, 1999.

Chart 2.3 Employment structure by sector of economy – 1990 and 2000 (%)

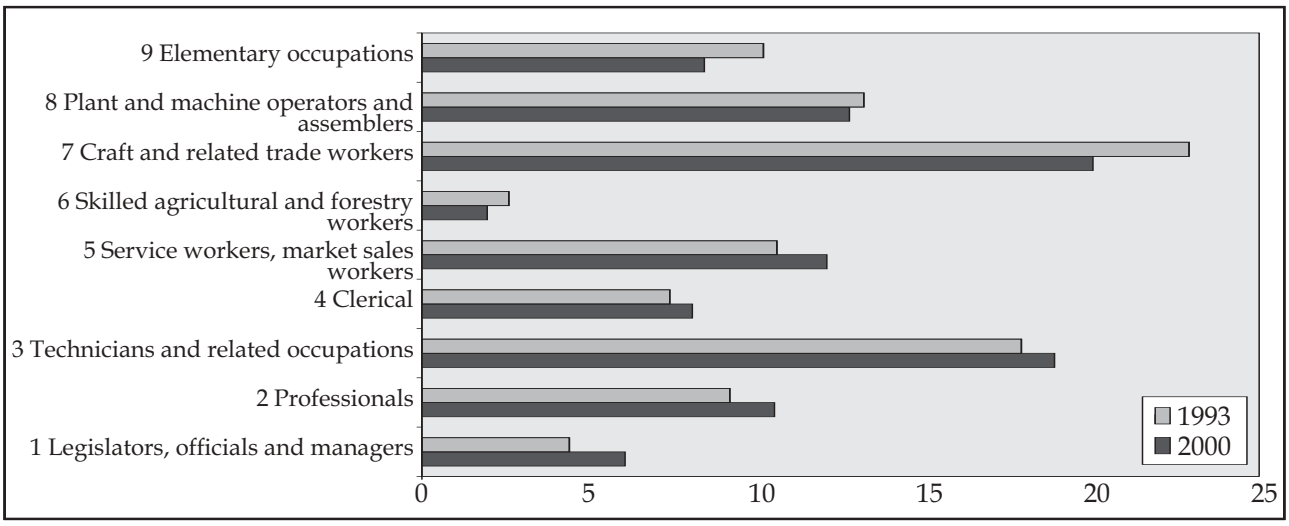


Note: In 1990, excluding defence.
Source: Key Indicators, Table 14.

Despite these major changes in the structure of the labour force, the proportion still working in industry and construction (about 40%) is excessive in that it does not comply with international standards calculated in relation to economic level or GDP per capita. The difference in the number employed in industry and construction to that of developed countries is considerable – thus there is still scope for future shifts between the industrial and the services sectors.

Following sectoral changes in the economy, important changes have also taken place in the **professional structure of employment**. In addition to quantitative changes, there have been qualitative changes concerning job content, use of technologies and labour organisation. Particularly evident is the overall decline in the proportion of people in manual jobs (a decline of over 4 percentage points between 1993 and 2000). Requirements for employee qualifications have been tightened up, and the number of job opportunities for elementary occupations have fallen by a quarter during the 1990s. Professions experiencing the most rapid growth include managers, professionals and service and market workers (Chart 2.4).

Chart 2.4 Employment structure by occupation in 1993 and 2000 (%)



Source: Labour Force Survey, Czech Statistical Office, September–November 1999.
Labour Force Survey, Czech Statistical Office, 4th quarter 2000.
National Observatory calculations.

As new jobs have been created, particularly in SMEs, the proportion employed in this sector has increased considerably (for details, see Chapter 1). While before 1989 almost all economically active people were employees, during the transition period a strong new group of **self-employed people** has emerged, primarily private entrepreneurs, owners, own-account workers and family workers. The self-employed (including members of production cooperatives and others[28]) make up 14% of the workforce, a higher figure than in many EU countries. Two different trends are reflected in the growth of this group. One is that, during periods of economic downturn and redundancies in large companies, a certain percentage of employees becomes involved in independent business activities (own-account workers) as a means of staying in the labour market. In periods of economic growth, the increase in the number of self-employed is stimulated by favourable business conditions and growing demand for production and services. The highest proportion of self-employed is in the services and construction sectors (Table 2.1). The dominant fields are those which are less demanding in terms of qualifications. A smaller proportion of activities demand high qualifications, partly because of the absence of micro-businesses using research applications (spin-off companies – see Chapter 1).

Table 2.1 Ratio of self-employed to total number of employed by type of economic activity (NACE) (%)

	1993	1996 Spring	1997 2nd Q.	1998 2nd Q.	1999 2nd Q.	2000 2nd Q.
Total	**9.0**	**11.3**	**11.8**	**13.3**	**13.8**	**14.2**
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 Survey, Czech Statistical Office, calculations by the National Observatory.

28 The **self-employed** (own business) comprise all **employers** (entrepreneurs with employees), **own-account workers** (entrepreneurs without employees), all **members** of producer's or agricultural **cooperatives** (employees of these cooperatives do not fall within this group) and **contributing family workers** (irrespective of the number of hours worked per week).

The development of the employment structure in the 1990s and projections confirm a **strong trend towards increasing labour force qualification requirements**. The employment prospects for people with low qualifications have been deteriorating. Opportunities for the low-qualified are not only being rapidly reduced by new technologies, but where the numbers remain constant (for example, in trade or catering), preference is being given to cheap foreign labour.

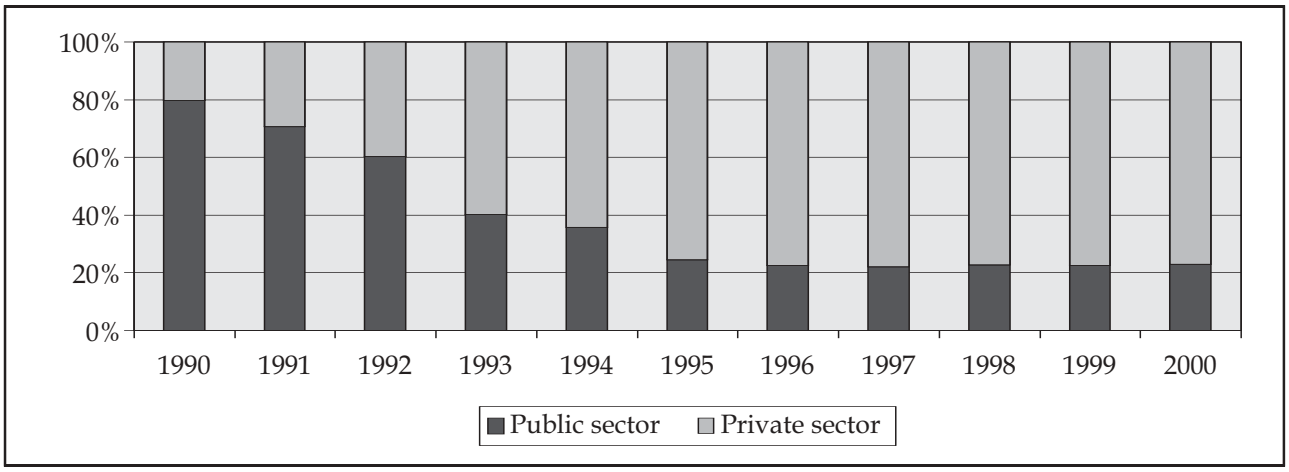
The growing proportion of self-employed suggests that the expansion of VET content by certain management and business elements (many schools have introduced innovatory programmes) has been a progressive move, ensuring graduates from these programmes a more stable position in the labour market in the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

The **increase in job opportunities** in the services and production sectors has resulted in an increased demand for more highly qualified secondary-school graduates and, in particular, for experts with a university education. Structural deficiencies already exist in terms of covering the demand for specialists in business and financial transactions, electrical engineering and communication technologies. Changes in the organisational structure of companies and the enlargement of the SME sector have created a need for managers at all levels with modern management skills. **Diminishing opportunities** in industrial production, together with investment in machinery, have cut jobs for skilled workers, particularly in traditional sectors such as metal processing, woodworking, heavy engineering, textiles, clothing and footwear.

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. Any non-state companies in the services sector or in agriculture were mainly cooperatives. The non-state sector (including cooperatives) employed some 20% of the labour force in 1990 (Chart 2.5). The very rapid pace of privatisation (for details, see Chapter 1) increased the non-state sector's share to almost 78% in 1996. As most of the original cooperatives were dissolved, the non-state sector was almost exclusively represented by private or combined-ownership companies. Privatisation slowed from 1996, however, and another radical increase in the private sector is not expected as the process has largely been completed. On the contrary, a reduction may be expected in the number of private-sector jobs in companies in the hands of domestic owners, as these companies have, so far, been half as productive as foreign-owned companies – i.e. they have twice as many employees.

Chart 2.5 Structure of employed by ownership sector in 1990–2000 (%)



Note: Private including cooperatives, 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, but rather between Czech-owned companies and those controlled by foreign capital. Foreign companies demand substantially higher qualifications in their staff (see Section 1.1.5). They can also reward their staff far better in financial terms, so that the average salaries 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 further strengthen the demand for higher qualifications.

2.2.3 *Employment opportunities for graduates from education institutions*

The position of graduates from education institutions in the labour market is very sensitive to changes in the economy and the demand for labour and therefore was affected during the transition of the Czech economy. As the overall employment rate was rising in the mid-1990s, employers were interested in hiring school graduates because of their greater flexibility and more up-to-date knowledge, including computer and language skills, in comparison with older employees. The low demand for technological change and the slow pace of restructuring of companies also contributed to this situation. As the 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.

This unwillingness is most frequently explained by the lack of practical experience of school graduates. In order to increase the chances of graduates in the labour market, various educational programmes include work placements to familiarise students with the 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 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.[29] Computer and language competencies are not yet widely required – three-quarters of school graduates stated in a survey conducted by the Czech Statistical Office (CSO)[30] that these skills were not relevant in their first job. However, employers who do require such skills are not entirely satisfied with the standard. As regards communication and cooperation within a team, and language skills, graduates from engineering, construction and business courses (mostly secondary vocational school leavers without Maturita) have most difficulty.

The methodology for measuring **unemployment among school graduates** is not fully comparable with that used for unemployment rate calculations by the CSO or MoLSA. In the case of graduates, the 'rate of failure' is monitored.[31] According to this ratio, unemployment most affects graduates from lower levels of education (particularly secondary vocational graduates without Maturita – 26%), while unemployment among graduates from higher professional schools and universities

29 *Employers's Needs and Preparedness of School Graduates for the Labour Market, a sample survey 1998–2000*, Institute for Information on Education.

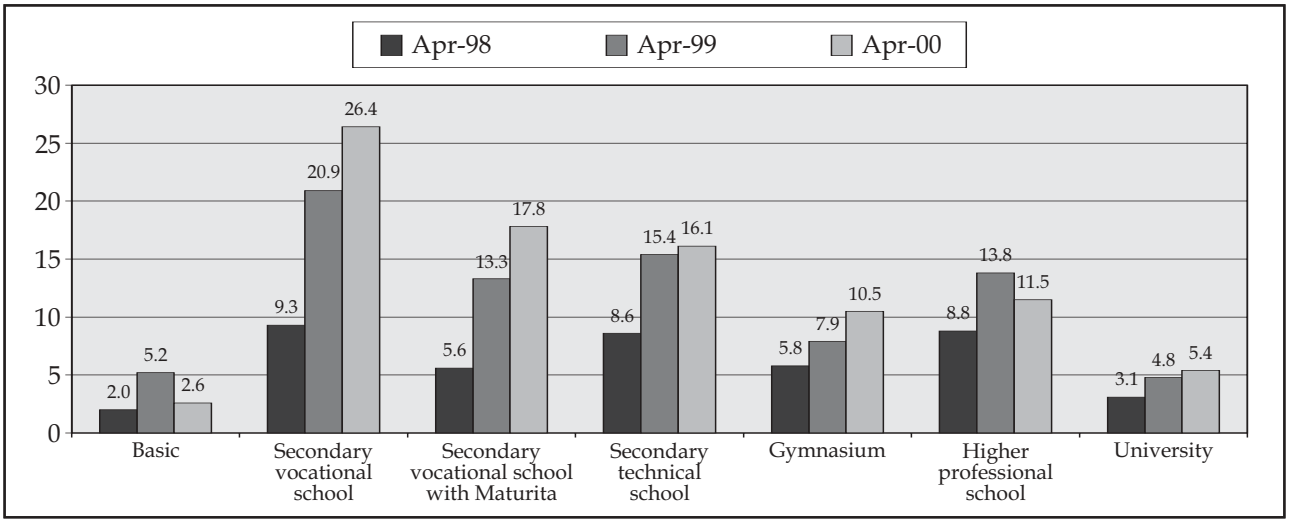
30 An ad hoc module on the situation of school graduates in the labour market in the Czech Republic, implemented by the Czech Statistical Office on the basis of EU Directive No. 1925/1999.

31 Data on school graduates monitored by MoLSA and MoEYS. Based on these data, the number of unemployed is related to the overall number of school graduates irrespective of whether they enter the labour market on graduation or continue in some form of study. The relation shows the rate of failure of graduates in the labour market or in their studies. A methodology is being prepared to obtain a more accurate calculation of the unemployment rate among school graduates.

ranges between 5% and 11% (Chart 2.6). However, this ratio is distorted in the case of basic school and gymnasium leavers as most of them continue with their studies. A certain distortion may also appear in the case of graduates from secondary technical schools with Maturita who also have direct access to tertiary education.

Unemployment among graduates from social sciences at all levels is generally lower than in engineering disciplines. This is despite the fact that, in addition to demand for experts in ITC, employers, labour offices and recruitment agencies also require many specialists in mechanical and electrical engineering (see Section 2.5). The situation for graduates from agricultural courses is unfavourable, as their numbers are still high and do not correspond with the receding importance of agriculture in the economy. Conversely, the negligible number of graduates from courses in mining and metallurgy are not strongly affected by unemployment despite the fact that these fields are being phased out, because of the very low interest in these courses. The labour market is quite rapidly absorbing graduates from courses in business and services, as well as from educational programmes combining professional competencies with entrepreneurial skills. In terms of levels of education, there is still unfulfilled demand for specialists with university degrees. The proportion of unemployed university graduates is low and related to the natural rate of unemployment.

Chart 2.6 Ratio of unemployed graduates to total graduates by type of education (%)



Source: Unemployed graduates, MoEYS, April 2000.

The length 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 months. Two-thirds of university graduates find employment shortly after graduation. Furthermore, the stability of the first job rises with level of education.[32] Approximately 70% of graduates find their **first job in the field they studied**. Some 22%[33] of graduates, however, hold jobs which do not correspond to their education, or only partially. Women experience more difficulties than men in finding appropriate employment in their field of study. Women also more often show interest in working in a different field than the one they studied. Graduates from agricultural courses most often take jobs in different fields, as the supply of jobs in agriculture is low. This is also the case of graduates from mechanical engineering and construction courses – although here the lack of interest in the discipline plays a more important role. When seeking a job other aspects are also considered,

32 An ad hoc module on the situation of school graduates in the labour market in the Czech Republic, op. cit.

33 J. Vojtěch, *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.

such as work, social and salary conditions which may be more favourable in other disciplines. Around half of graduates from professional business courses do not seek employment in their field at all, as business or management require prior practical experience. On the other hand, they have a relatively good chance of finding work as they have professional skills and the entrepreneurial skills they acquire may, after a certain time, increase their flexibility in the labour market.

Graduates experience serious difficulties in finding employment in certain regions where the overall unemployment rate is higher (northern Bohemia, northern Moravia), but also in the Brno or Olomouc regions. The most favourable area is Prague.

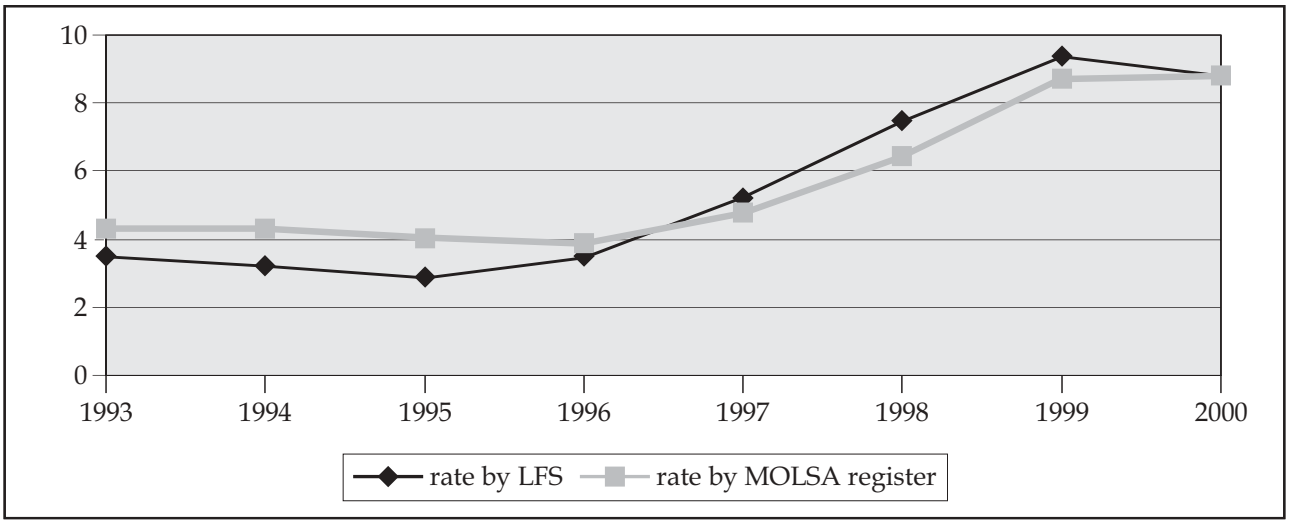
Underemployment is not, as yet, one of the pressing problems facing young people in the labour market. Part-time jobs are generally not very numerous (accounting for some 5% of total employment), which reflects the considerable rigidity of the employment structure, currently favoured even by employers. Moreover, it is illegal to conclude a temporary employment contract with a school graduate, rather than a permanent contract with common terms of notice. Although this regulation is for the social protection of young people, it demotivates employers who cannot test the qualities of a young person during a probationary period.

2.3 *Unemployment*

From 1997, the rate of unemployment increased radically and, at the end of 1999, reached 9.0% (Chart 2.7).[34] After rising in January 2000 to 9.8%, the rate gradually fell to 8.8% by the end of the year. In those regions most stricken by unemployment, the registered unemployment rate reached 15% (NUTS 2, Ostravsko 15.1%; NUTS 2, north-western Bohemia 13.8%, including the Ustecko region 16.1%.) With the exception of Prague, the relation between the regions the least and most affected by unemployment is 1:2. However, there are far larger differences between various districts within the regions, a consequence of the uneven development potential of individual territories, the accumulation of inefficient production or the phasing out of production in certain places. Differences in the unemployment rate between districts are increasing, a trend supported by the very low level of intra-regional mobility of the population. The declining regions therefore must be provided with some kind of assistance to allow greater numbers of people to cope with the loss of their original professions and retrain for new jobs. Moreover, the general level of education and labour flexibility must be improved in these regions to make them more attractive to large investors bringing modern technologies, new jobs and the social stability that will result.

34 Data for fourth quarter 1999, *Labour Force Survey*.

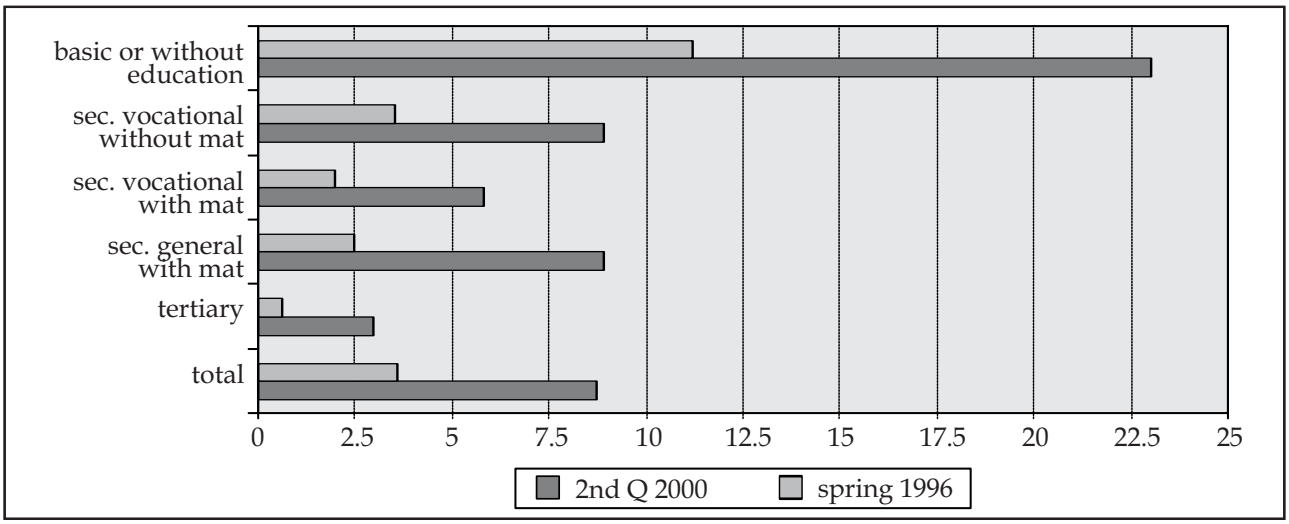
Chart 2.7 Unemployment rate (%)



Source: Key Indicators, Table 16.

Disadvantaged groups are being pushed out of the labour market and the gap between the unemployment rate in these groups and that of the average population is still widening. Groups at risk primarily include school leavers, women with small children, people with low qualifications and the disabled. While in 1993 labour offices registered 10.8% of disabled people and 12.9% of school graduates as unemployed, these proportions were 12.9% and 12.7%[35] 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 that of the average population and has reached nearly 34%.[36] This dangerous trend, a threat in terms of acceptable social and psychological development, must be prevented by establishing conditions and setting up programmes to facilitate the transfer from school to employment, promoting cooperation between schools and companies, creating jobs for school graduates and offering special training courses for young people with low qualifications (Chart 2.8).

Chart 2.8 Unemployment rates by educational attainment level



Source: Labour Force Survey, Czech Statistical Office, 2nd quarter 2000.

35 Data from MoLSA.

36 Key Indicators, Table 17.

Unlike most European countries, older people (over 55) in the Czech Republic do not suffer from high unemployment. The unemployment rate in this age group is more than 4 percentage points lower than average (see Key Indicators, Table 17). However this is not a sign of a favourable position in the labour market, because unemployment has been rising even in this group. Older people often solve their job losses by taking early retirement, as was the case in 2000 when almost 60% of new pensioners were cases of early retirement. As this is a drain on the state budget, an amendment to pension law introducing financial penalties is in 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, the figure was over 38%[37] at the end of 2000. The most frequent representatives of the long-term unemployed, other than disabled people, are young men after the completion of their education and after their military service, who have a basic education or have been trained in a manual profession. This social group represents the major problem in the long-term unemployment of men. The major problem for women in terms of long-term unemployment is in the 30–39 age group, i.e. mothers after completion of their maternity leave. Another problematic group consists of women aged 40–55 who have lost their jobs – particularly in regions with a large proportion of textile, clothing and footwear industries.

It is estimated that among the **Romany population** – which suffers from various disadvantages – the unemployment rate averages 70%.[38] Solutions to this situation require new concepts of support schemes linking, in a comprehensive manner, educational measures with those promoting employment. Various schemes for the disabled will also have to be extended. Such schemes should promote education as well as establish conditions for the employment of this group, including motivating employers to hire disabled people.

2.4 *Labour market policies*

Employment policy is implemented by labour offices in individual districts. They act as intermediaries between job seekers and employers, pay unemployment benefits, implement measures within the framework of the Active Employment Policy, provide guidance services and monitor and analyse the labour market. After the creation of the new administrative regions, 14 designated labour offices were designated to coordinate employment policy at regional level. They have no decision-making powers, however.

Instruments of the Active Employment Policy include:[39]

- 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' salaries for a certain period.
- Support for employment of disabled people, where employers are subsidised by labour offices to create new jobs in 'sheltered workshops'.

37 Data from MoLSA.

38 *Zpráva o situaci rómské komunity v ČR* [Report on the Situation of the Romany Community in the CR], Government Office of the Czech Republic, 1997.

39 *Employment Services in the Czech Republic*, Ministry of Labour and Social Affairs, 1996.

- Two types of retraining course are generally organised: specific, for professions with a definite promise of employment by the employer; and non-specific, with no guarantee of employment, where participants are trained to acquire skills to increase their chances in the labour market.
- Special attention is paid to school leavers, where employers are subsidised by labour offices to cover school leavers' salaries for a certain period. 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, implemented by labour offices from 2000, is the system of investment incentives in regions where the unemployment rate is higher than the national average. Investment incentives in the form of financial support are provided in order to create new jobs and to retrain new recruits.

Career guidance centres play a significant part in labour office activities. They assist people (especially graduates) in the choice of a career and of a suitable education institution where they could train, based on individual abilities and interests and the available information in the labour market. These services are available to anyone interested in choosing a career, perfecting, extending or changing their profession. The employees of these centres are in constant contact with education institutions in the region, monitoring offers of courses at individual schools. Special attention is paid to the final years in basic schools. The provision of career guidance, however, needs to be more tailor-made, focusing on younger students and developing complex methods of ability testing and career planning. In an attempt to meet these requirements, a new network of **diagnostic centres** has been set up[40] in all NUTS 2 regions. The centres provide psychological diagnoses and work out individual career plans, including counselling services. According to a special survey carried out at labour offices in 2001, only 27% of these offices were using the diagnostic services and cooperating with the relevant specialised centres.

Labour offices have **relatively extensive powers** in the implementation of employment policy within various legislative frameworks. They may distribute the total amount of resources for the Active Employment Policy, among other measures, depending on the needs and situation of the relevant district. On the one hand this facilitates a flexible response to developments in the regional labour market, but on the other hand there are inequalities in the activity and output of individual labour offices. Many labour offices even fail to use the existing instruments of the AEP appropriately and, conversely, some lack a broader range of AEP statutory instruments. A related problem is the non-existence of rules for evaluating labour office activities, which would have a motivating effect. Since 2000, as a consequence of the National Employment Plan (see below), the first steps towards a more targeted policy were taken. The Employment Action Plan Implementation Programmes for 2000, developed by labour offices on the basis of an analysis of district labour markets incorporating the objectives set by MoLSA, was the starting point for the implementation of AEP by labour offices.

Although basic monitoring of AEP measures is carried out, including resources spent, number of participants, etc., there is no **systematic evaluation of efficiency** of individual instruments and neither is there a system of indicators comparable in terms of methodology. Moreover, owing to the lack of relevant resources, continuous analytical work at labour offices is inappropriate and fails to provide a basis for the subsequent development of quality regional policies and a clear identification of priorities for the coming years. Such activities will however be very important in the future to fulfil the objectives of European employment policy. MoLSA is seeking to assess the efficiency of AEP implemented by labour offices and is preparing a uniform assessment system based on the data maintained by labour offices. In comparison with EU countries, where the proportion of **expenditure on AEP** reaches 3% of GDP, the Czech Republic spends only about 0.18% of GDP.[41]

40 Government Decree No. 640 of July 1999 on supportive measures for people with problems finding a place in the labour market.

41 Data for 2000, MoLSA.

Anticipated developments in the labour market require the enlargement of the spectrum of programmes within AEP, with an emphasis on preventive measures – these, among other elements, will facilitate participation in various programmes by those groups which have so far been neglected.

The employment policy in the Czech Republic is entirely based on **legal provisions**. Most activities are based on Acts No. 1/91 on employment and No. 9/91 on employment and institutions in the field of employment. These acts define employment policy tools and measures. The Employment Services Administration of MoLSA prepares ministerial orders and methodological guidelines for labour offices to standardise the use of legal provisions, particularly those concerning AEP (e.g. they stipulate who is eligible for which active employment tool or for what amount of subsidy, specify conditions for subsidising school leavers, etc.). Orders also distinguish between various districts with respect to the labour market situation.

A new Employment Act was drawn up in 2000. The act introduces some new AEP instruments and enlarges the framework for the use of the existing ones. It proposes that retraining should also be provided to those applicants who are not registered as unemployed by a labour office – formerly an obstacle to taking retraining courses for women on maternity leave and those facing 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) designed to increase the flexibility of AEP measures and to facilitate a more comprehensive approach to the problems of disadvantaged groups and of particular regions. 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 AEP budget has not yet been addressed in a systematic manner, making it impossible for them to exploit directly the opportunities provided by the Phare programme and, in the future, the European Social Fund (ESF).

The development of the **National Employment Plan** (NEP) and the **National Employment Action Plan** (NEAP) for 2001 have introduced a new approach to employment policy. These documents, which the government has adopted one by one since 1999, concentrate more on mid-term national priorities, while an important consideration in their development was to bring these priorities into 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 a high level 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 AEP measures, to improve their flexibility with regard to the needs of various groups and regions; to increase the level of AEP funding.
- To motivate people to work through increasing the income from work as against welfare and other benefits, to promote resocialisation 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 key competencies according to labour market needs and to establish links for the process of lifelong learning.

The **Joint Assessment Paper (JAP)**, the only officially agreed document between the Czech Republic and the EU, will be the basis for regular monitoring during the accession process (for more details, see Annex 1). A number of other strategic documents connected with employment issues have been prepared or are currently in preparation or awaiting approval, such as the Sectoral Operational Programme for Human Resource Development (SOP-HRD) (see Section 3.2).

2.5 *Future skill needs of the economy*

In the planned economy system in force before 1989, individual companies also planned the requirements for the qualifications of the labour force. Admission to individual types of school was adjusted to comply with these requirements, as well as 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 democratised in that the choice of education was not restricted by any administrative injunctions. Schools adjusted their supply to demand on the part of students and their parents. However, demand on the part of employers was neglected. This did not appear to be a problem in the early 1990s, as 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, structural discrepancies began to deepen between the numbers and capacities of school graduates on the one hand, and employers' ideas on the other. Forecasting qualification needs began to seem necessary to allow students, parents, schools and the providers of continuing education to make appropriate decisions.

Two projects have recently been launched which represent two possible ways of obtaining information on future qualification needs. The first, run by the Institute for Information on Education, focuses on **monitoring the demand for qualifications on the part of employers and on an analysis of the employment of school graduates**. The second, run by the Czech National Observatory, is based on a **formal model projection** using procedures applied in the Netherlands.

The first project, entitled **Employment of School Graduates: Analysis and Outlook,** was launched by the Institute for Information on Education in 1999 in cooperation with other educational research centres. Its objective is to build an information system on job opportunities for school graduates which should also provide some insight into future qualification needs. Various information sources are being monitored:

- A company survey to obtain an overview of the structure of required key competencies and demands placed by employers on new recruits, 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 on anticipated trends that should influence the development of professions and qualifications in 21 sectors. Priorities include the identification of global influences, envisaged development of technologies and changes in labour organisation. However, development characteristics acquired in this way are rather general.

- An analysis of the operations of human resource agencies which covers in particular the demand for specialists with secondary and tertiary education.
- An analysis of advertisements in the daily press and on the Internet every autumn over one month. This type of advertising is aimed at professionals with secondary and tertiary levels of education.
- Information on vacancies provided by labour offices and the results of a poll among experts at labour offices, concerned with the professions and qualifications required by the labour market. One of the labour office functions is to monitor the anticipated development of employment in various companies in the respective regions. They search for data on redundancies or recruitment, as well as on companies' interest in various professions. Based on this information, the labour offices decide on the focus of retraining courses organised in the region. The problem is, however, that company 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 outcome of the project has been published in the study, *What Do School Graduates Need to Find a Position in the Labour Market?*, which summarises the requirements for graduate competencies and provides an overview of the professions and skills needed in the labour market – as declared by the employers themselves or through labour offices, recruitment and advertising agencies.

Educational 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
- Metalworking
- Mechanical
- Seamstress
- Building construction (graduates of secondary vocational schools and secondary technical schools)

Personnel agencies:

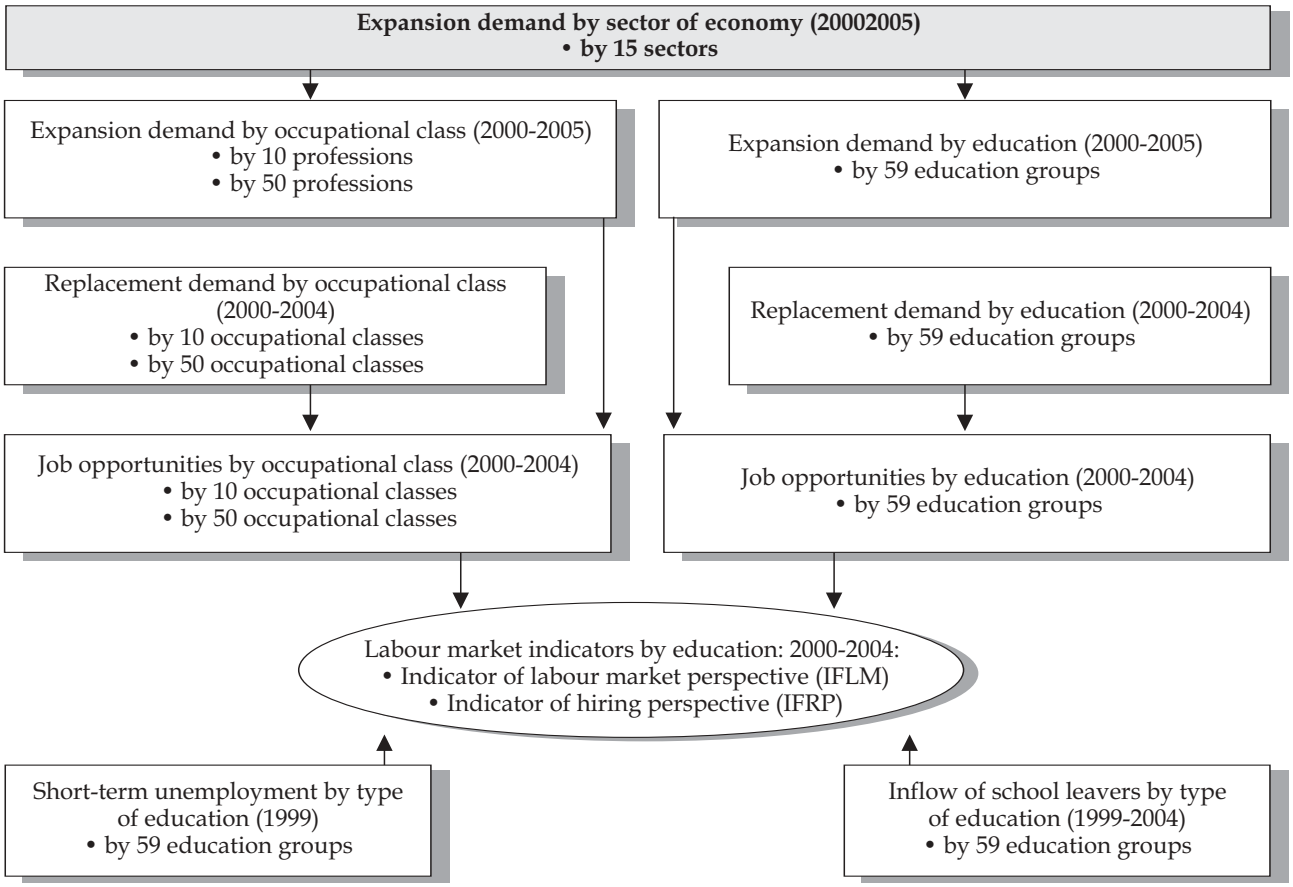
- Electrical engineering, information technology
- Trade
- Mechanical engineering and machinery
- Business and administration
- Pharmaceutical
- Building construction, geodesy
- Transport and communications
- Management in individual fields and branches
- Textile production and clothing

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

The second project is focused on a **formal projection of professions and qualifications** which is dependent on the development of the economy and trends in the professional and qualification structures of the labour market. The project, run by the National Observatory, 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 transition economy.

The result of the project should be a quantitative model for forecasting qualification needs at 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 to new jobs created as a consequence of employment growth in various sectors, and 'replacement demand' which is a consequence of the departure of employees into other sectors or leaving the labour market entirely. The model projection consists of several steps (Chart 2.9). The first step consists of the identification of demand in various sectors of the economy. The next step is to process this demand according to individual occupational groups and then to determine specific requirements for individual educational disciplines. The central block of the projection is a comparison of the results of demand projection with anticipated inputs to the labour market (both school graduates and short-term unemployed).

Chart 2.9



The model will gradually be refined and enriched using 'soft' methods, such as qualitative surveys and expert estimates. This model will be the source of regular projections to be conducted by the Research Institute of Labour and Social Affairs (RILSA). 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 with 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 supply of background information to be drawn upon by students when making their career choice, experts within the counselling system, labour offices when preparing retraining courses, schools and education institutions when adjusting programmes of initial as well as continuing education, and companies when planning their human resource development strategies.

Another important tool for anticipating qualification requirements is the **Integrated System of Standardised Working Positions** (ISSWP)[42] commissioned by MoLSA. A first version of the system was drafted on the basis of wide research in the labour market (a cooperative effort by employers, labour offices, experts, specialists) to redefine qualification requirements for individual professions or working positions (tasks). The ISSWP consists of cards describing various occupations and the standardised positions into which an occupation is broken down. The card presents a description of the activity in each standardised position, examples of the work performed, common requirements (qualification, personal, health) and a description of typical working conditions. This description is complemented by the characteristics of the relevant occupation 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 ongoing 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 friendliness are modified on an ongoing basis.

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

2.6 *Conclusions on key labour market issues and their influence on human resource development*

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

Shifts of the labour force between companies and industries

The restructuring of the economy may, for some time yet, be expected to cause extensive lay-offs in declining companies. There will therefore be strong pressure to maintain a relatively high rate of unemployment. It will be increasingly difficult for people with low qualifications to find work. On

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

the other hand, new investors report a lack of qualified labour with the necessary skills.[43] Foreign companies are beginning to change focus from cheap labour to higher requirements in education, particularly university degrees.

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

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

Processes to ensure that most employees are ready for occupational change also need to be encouraged, primarily through the development of counselling capacity and the extension of participation in all forms of continuing education.

The use of high technology

A major challenge associated with the development of the labour market is keeping pace with current globalisation trends and improving the comparative position of human resources. The proportion of sectors requiring a high level of skill is gradually growing. Exports of electrical engineering, electronics and telecommunications products are rising. Employment is also increasing in fields relating to the use of modern technologies and business services. As regards the professional structure of employment, a growing proportion of specialists classified in categories 1–5 of the International Standard Classification of Occupations (ISCO), i.e. professions requiring middle and higher qualifications, a large part of which are in engineering.

The proportion of the workforce with university degrees in the Czech Republic (for whom there is a growing demand in connection with the above-mentioned changes) is far below that in developed countries. Access to tertiary education must therefore be expanded – particularly to allow 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 teaching methods at secondary and tertiary institutions that would facilitate the search for and education of talented students.

Use of the Internet and e-business is developing relatively quickly in the Czech Republic 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 implies faster development of ICT skills in young people as well as adults. To achieve this, ICT teaching should be extended and improved at all types of school which still make little use of computer technology and which have insufficient technical facilities and teachers who lack appropriate training.

At the same time, an adequate number of computer network specialists must be trained, as their lack is beginning to show. This is suggested by the great demand for these experts on the part of companies which 'steal' the specialists and overpay them. An International Data Company 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, 37% of this demand may be unsatisfied in the next two years.[44] For this reason, in addition to the necessary expansion of initial training courses, provision must be made for the systematic development of continuing training and retraining to facilitate the acquisition of new qualifications for people trained in other fields.

43 For example, according to Czechinvest's data 39% of foreign companies which invested in the Czech Republic experienced problems recruiting staff with appropriate qualifications in the location of the investment.

44 International Data Company <http://www.idc.com> and <http://www.cisco.com/en/US/hmpgs/index.html>.

Increase in employment in small and medium-sized enterprises

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

Training provision must therefore be improved by using new methods, particularly distance learning, and by adjusting the courses to the specific needs of small and medium-sized companies. SMEs must also be encouraged to enhance their approach to HRD and counselling and to develop information channels and networks for the exchange of best practices and experience.

Entrepreneurship and the acquisition of management skills

Although Czech entrepreneurs setting up new businesses are faced with an unfavourable situation in terms of economic stability in a transition economy, the availability of capital and lack of transparency in the administrative and legislative environment, the development of entrepreneurship was very dynamic in the 1990s. This was largely because those involved were highly motivated, but they often lacked the relevant information, broader economic knowledge and management skills.

The readiness of young people to do business and their acquaintance with the market environment is improving now that entrepreneurial skills and business education are part of an increasing number of vocational and technical courses. However, these skills should be incorporated into all curricula as one of the principal components of general education. It is also important to support start-up businesses with relevant counselling and retraining services. The level of management skills must be improved through raising the standard of continuing education in this area.

Growing competition in the labour market

Competition in the labour market is getting stiffer and the situation of disadvantaged people (particularly those with low qualifications, the disabled, Romanies, young people and women with small children) is worsening, resulting in a rapid increase in the proportion of 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 six months exceeds 56%. Even in a period of economic recovery, the long-term unemployed are not absorbed by the labour market – unlike other groups of job seekers.

As regards level of education, those with basic education are most likely to remain long-term unemployed (67% of the unemployed with basic education are out of work for more than 12 months). Also at high risk of long-term unemployment are people with vocational education without Maturita. A low level of education also lessens the possibility of acquiring the new skills demanded by the labour market.

One very unfavourable phenomenon is the low involvement of the disadvantaged in retraining and continuing training. Low-skilled persons show minimum interest in education and training. Welfare benefits and their relation to the salaries of the low-skilled workforce is certainly a demotivating

factor. Nevertheless, people's interest in training may be greatly stimulated by targeted counselling and resocialisation courses. Although some steps have been taken in this direction, they are still insufficient.

Counselling services are ill-equipped to support disadvantaged people in acquiring appropriate information on 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.

The forms of continuing education should be adjusted to the needs of various groups of disadvantaged people and companies should be given stronger incentives to pay more attention to low-skilled employees and to facilitate their participation in training.

The situation of school leavers in the labour market

The situation of school leavers is more difficult that that of employees with work experience. Employers require knowledge of the working environment and stress the acquisition of the relevant skills and attitudes, such as a sense of responsibility and quality, or teamworking capacity. Language and computer skills are increasingly demanded. Greater emphasis must therefore be placed on incorporating these skills into teaching. However, the acquisition of key competencies is also affected by interactive teaching methods, which, to date, schools have only employed to a small degree. Cooperation between schools and companies is also needed so that students can learn practical skills.

Although the group of young people who leave the school system with only basic education is not large, these individuals have no chance of finding a job. The retraining provided by labour offices does not address this problem, because 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 more opportunities to re-enter the education system. The recognition of certificates obtained outside the formal education system would play 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 interregional mobility is conducive to these unfavourable trends. In declining regions it will be important 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 to 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 regional policy on employment and education.

The ageing of the workforce

The proportion of elderly citizens in the population structure is growing. Tackling the problem of an ageing population will be more demanding in the Czech Republic 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. People's willingness to invest in education from public budgets as well as private sources, and to employ the relevant effort and time, are other important aspects of the problem. It is

therefore important to develop appropriate stimuli for individuals, employers and other partners who invest in human resource development.

Existing training opportunities only partially meet the needs of adult learners. Innovative approaches (in terms of methods, content and demands on time) better suited to adults must be developed. Adult participation in education is also conditional on 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 lifelong learning

3.1 Introduction

In the first half of the 1990s, initial vocational education and training (IVET) underwent modernisation based on liberalisation principles and free initiative of schools. The education 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 lifelong learning.

Similarly, continuing vocational education and training (CVET) also developed spontaneously. The education offer was significantly expanded. However, 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, MoEYS and MoLSA increased the pressure to set up a systemic base for changes and innovations, and the issue of lifelong learning was raised. In the course of the decade various studies were undertaken which discussed the theoretical principles of lifelong learning. For example, a study entitled *Czech Education and Europe – Strategy for Accession to the European Union* was carried out in 1998, the **National Programme for the Development of Education in the Czech Republic** was accepted by the government in 2000 (**White Paper**, MoEYS), and the **Human Resource Development Strategy for the Czech Republic** drawn up in 2000 as a National Training Fund project.

The principal document in the field of education – the White Paper – addresses the concept of lifelong learning ('education for all and for life') and sets out the major tasks of education policy to support it. The first task is to lay the foundations for lifelong learning through increased participation in preschool education, raising the standard of and modernising basic education through individualised and diversified teaching, and by expanding secondary education and facilitating access to it for disadvantaged young people through developing support and evaluation systems. The second task is to develop links between learning and work, which would facilitate the transition between education, placements and employment while combining these three activities within 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 resources, primarily through tax policy, in order to raise the necessary funds for tertiary and continuing education.

The White Paper does not elaborate all the tasks in the same degree of detail as the first. For the other tasks it identifies the respective problems and indicates measures to tackle them. The White Paper also contains a section dealing with adult education, written in cooperation with the National Training Fund.

A document entitled **An Outline of State Information Policy in Education** adopted by the government in 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 an Internet connection, and integrating computer information networks into teaching. The measures concern the provision of ICT to schools and libraries as well as arrangements for the relevant training of teachers, librarians, lecturers and civil servants. The document also sets out steps to establish a favourable environment for the development of information literacy of the entire population.

Objectives of State Information Policy in Education

- To establish conditions facilitating effective and efficient introduction of ICT in teaching at basic schools, secondary schools, as well as at higher professional schools, and consequently to achieve 'information literacy' among 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, at least one room with high-quality multimedia computers in 70% of basic schools, secondary schools, as well as higher professional schools. The room should be accessible to students and teachers during as well as outwith teaching hours. Each computer room should be connected to the Internet. The remaining 30% of schools should be provided with at least one high-quality multimedia 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, as well as at higher professional schools, use ICT as a common working instrument.
- To establish conditions for effective involvement of schools in the system of lifelong learning in ICT by the end of 2005.

The programme results evaluation will take the following forms:

- Beginning 2003, the level of 'information literacy' of school leavers will be assessed in line with a set of methods to 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 lifelong learning programmes at secondary schools and universities.

An Outline of State 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 teachers' information literacy should be developed. However, the putting into practice of the plans has been considerably delayed – little progress was made in 2000 and 2001. A favourable development has been the establishment of a Coordination Centre at MoEYS consisting of external experts as well as ministry staff. The plan for the second stage aims at the continuing education of teachers and at involving schools in lifelong learning in ICT for citizens and civil servants.

The ministry has drawn up a **bill for the new Schools Act** (covering preschool, basic, secondary, higher professional and other types of education) which sets out the principles and general aims of education. It also introduces changes to the content of education and takes account of the conditions arising from the reform of public administration. As there was little accord between the bill and the objectives set out in the White Paper, the bill was rejected by Parliament and a new version is in preparation.

The **reform of public administration**, which came into effect at the beginning of 2001, extensively decentralises the governance of education. The new regional self-governing authorities (NUTS 3) take over the responsibility for setting up and running all secondary and higher professional schools. Decision-making procedures are expected to improve concerning the structure of schools in the region in relation to the availability of education, labour market needs and efficient school operations. The reform changes the **role of the Ministry of Education, Youth and Sports**, shifting its core activities towards policy development.

In order to ensure a uniform approach to the development and implementation of state education policy under decentralisation, and not to disrupt the cohesive nature of the education system, MoEYS and regional authorities have a statutory[45] obligation to develop interlinking long-term plans. The ministry develops and presents to the government a **Long-Term Development Plan of Education and the Education System in the Czech Republic** (by March of every even year) and provides methodological guidance for the development of **Regional Long-Term Development Plans of Education and the Education System**, which are drafted and finalised by the end of March of every odd year. The ministry's Long-Term Development Plan covers a period of seven to ten years while specifying measures to be implemented in the upcoming three to six years. This system leaves 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 their 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 priority aims will be supported by **Development Programmes** declared by the ministry which constitute a new instrument of programme financing and a means of linking central and regional education policies. The programmes are to be funded from both the ministry and the regional budgets.

MoEYS is currently drawing up its first Long-Term Development Plan (a working draft of the document is available). The plan sets out six principal priority aims (see box). On completion, the document should be implemented in regional policies and should influence the operation of education institutions (see also Section 3.4.7). Each priority aim contains specific measures for the upcoming period and an estimate of resources required in the form of programme financing. Complementary measures are also proposed in order to establish appropriate conditions for the implementation of these aims and to determine ways of pilot testing, monitoring progress and evaluating results. The plan also envisages integrated support from EU programmes (e.g. Socrates). A final version of the Long-Term Plan should have been completed by mid-2002.

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

Priority aims
of the Long-Term Development Plan of Education and the Education System

1. Reform and modernisation of aims and content of education.
   - Focus on aims and change in educational provision – the development and implementation of framework educational programmes, support for language teaching, raising the standards of provision at the second stage of basic school.
   - The use of information and communication technologies in the school system.
2. Management of quality in education and monitoring the operations and outcomes of education 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) introduction of a standardised national part of the Maturita examination;
   (ii) partial standardisation of the content of school ('profile') part of the final examination in vocational courses (groups of courses).
3. Development of an integrated, diagnostic, information and counselling system in education.
4. Development of non-university higher education.
5. Establishment of conditions to ensure high-quality human resources in teaching and management of education institutions.
6. Support for continuing education in the process of lifelong learning.

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

Measures
of the National Employment Action Plan 2001
relating 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 ensuring various alternative educational routes in line with the existing Schools Act.
- To establish conditions for accelerating the process towards 'computer literacy'. To extend the proposed policy to cover the adult population.
- To include the subject of 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 the continuing education of basic and secondary-school teachers.
- To propose measures to improve the 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 only the 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**[46] (for details see Section 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 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 implementing an overall concept of human resource development to strengthen the employability and competitiveness of the workforce and to foster lifelong learning.
- Promote access to training and lifelong learning for older workers.
- 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 1.

3.2 *Human Resource Development Strategy and National Development Plan priorities*

Despite significant efforts to reform education, the Czech Republic still lacks an integrated policy for human resource development, which would establish links between initial and continuing education, employment and economic development. For this reason, the National Training Fund launched a project in 2000 for the development of an HRD strategy, setting up a team of leading Czech and foreign experts.

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 standard of Czech human resources and competitiveness in the context of the globalised world economy. The strategy for Czech employees focuses on professional excellence, adaptability and ethical integrity. The strategy for Czech entrepreneurs and managers is designed to promote leadership and management skills as early as basic and secondary schooling, and to support training courses particularly in strategic, crisis and innovative management. The 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, and has received significant support from MoLSA and social partners. The project benefited from the direct participation of the Irish training and employment authority Foras Áiseanna Saothair (FAS), 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 best practice from Ireland. Steps were proposed for setting up a national Council for Human Resource Development. A proposal was also drafted for developing an Information Databank which would contain basic trends in HRD, analyses and, perhaps, HRD funding schemes, best practices and methods for implementation of HRD programmes. The databank would serve as a source of information not only for decision-making bodies at national and regional levels, but for all partner institutions and the general public.

46 Joint Assessment Paper of the Czech Employment Policy of the Czech Republic, May 2000.

3.2.1 Regional Development Plan

The Regional Development Plan, as the principal policy and programme document of the Czech Republic, also constitutes a foundation on which to build the future implementation of the policy of economic and social cohesion. Development of the plan started in 1999 and it is currently being modified and updated. Its *ex ante* evaluation was expected to take place in 2002 and the final version, after it is approved by the government, was scheduled to be forwarded to the European Commission by the end of 2002.

A significant part of the Regional Development Plan deals with the economic and social policy priorities of the Czech Republic in the pre-accession period, during which the Phare programmes ISPA (transport and environment infrastructure) and SAPARD (agricultural and rural development) will be implemented. When the country joins the EU, resources from the Structural Funds and Cohesion Funds may be utilised.

The Regional Development Plan contains a synthesis of sectoral as well as regional problems and priorities. The strategic aim formulated in the plan is the increase of GDP per capita to reach 75% of EU average before 2006. It also states that regional disparities should be prevented from deepening and the environment should be significantly improved. In an effort to achieve the strategic aim, the Czech Republic will focus particularly on upgrading qualifications and the adaptability of the labour force.

Human resource development is one of six priority lines of the Regional Development Plan:

1st line – strengthening competitiveness of industry and business services;

2nd line – development of basic infrastructure;

3rd line – human resource development;

4th line – environmental protection and improvement;

5th line – rural development and multifunctional agriculture;

6th line – development of tourism and spas.

The sequence of priorities has been derived from their position in various regional consultation papers as the NUTS 2 regions proposed them. The central position of HRD (3rd line) reflects the fact that regional representatives do not fully appreciate the importance of the human factor in developing their policies. For this reason, the development of the Sectoral Operational Programme is as important as the establishment of partnerships for HRD implementation at the regional level.

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

The priority of human resource development is elaborated in SOP-HRD, which sets out in more detail the objectives and priorities for the medium-term period 2000–06. The programme is currently being updated. In particular it should cover employability, social integration and lifelong learning. Other issues, such as civil society, health care and public administration, still need to be incorporated either in SOP-HRD or regional operational programmes. The final structure was to be determined in 2002 on the basis of the document **Policy Frame of Reference** developed by MoLSA and 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 working, enlarging the scope of retraining programmes for employees as well as economically inactive people, and improving the information literacy of employees.

Activities promoting the employment policy will concentrate on preventing the growth of long-term unemployment, the development of information and counselling services and the creation of 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 reintegration programmes, including experimental solutions. Programmes designed to address the situation of disabled people will place emphasis on a comprehensive approach combining retraining, 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. Activities will also attempt to increase the motivation of employers to recruit people from groups at risk of discrimination.

Measures designed to promote the development of the **education system** will stress links to the labour market and **lifelong learning**. Individual activities will be focused on the establishment of conditions in initial education to improve access to continuing education (key competencies, modularisation, development of tertiary education). Furthermore, the involvement of social partners in vocational education and training will be promoted as well as the development of cooperation between schools and companies, with extended counselling and information services facilitating the transition between school and employment.

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

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

3.3 Preparation for European Social Fund implementation

During the 1990s, 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 using Phare funds administered by special organisational units. Although the Phare funds were limited, they were used to support important projects. Meanwhile, experience in project management and financing using European resources was gained at both central and local levels.

The overall preparation for participation in the Structural Funds, including ESF, accelerated in 1999, when the government adopted a decision[47] 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 Czech Republic, a **National Fund** was established with the Ministry of Finance. It will store European as well as Czech finances for co-financing from the state budget, other public budgets and private resources. These finances will be managed in order to ensure programming for several years and the transfer of finances to subsequent years.

A **Sectoral Management and Monitoring Committee (SMMC) for HRD**, chaired by a MoLSA representative, was established in 1999. Its members, representatives of sectors, regions, social partners, labour offices, school associations and non-profit organisations, are appointed by the Minister of Labour and Social Affairs. The SMMC-HRD is the chief body to approve strategic documents relating to the HRD programme, final project selection and monitoring and evaluation results, as well as proposing possible changes within the Phare programme.

In January 2000, a **Department of Employment and HRD Strategy** was set up within MoLSA to deal with key activities relating to the drawing of pre-accession funds and, particularly, with preparations for the future use of ESF. In order to ensure the regional implementation of ESF and to provide for the coordination of HRD projects, **MoLSA regional offices were established in NUTS 2 regions** in the course of 2000. At the same time, new staff were hired by the central department. The staff are being trained within Phare 1999 by 45 EU experts in order to gain practical experience in ESF and related activities.

The tasks relating to Phare HRD activities at MoEYS are the responsibility of the Department of Foreign Relations and European Integration, which cooperates with MoLSA. Training of selected staff of pedagogical centres (facilities for continuing training of teachers), including ESF preparations, was to take place in 2000 and 2001 within a MoEYS development programme.

The National Training Fund has been authorised to act as an implementation agency for Phare investment programmes for economic and social cohesion – including support for HRD. The NTF will be in charge of the implementation of an ESF-type of grant mechanism and thus involved with activities within the Pro-Active Labour Market Intervention Fund (PALMIF) to develop a model for the implementation of a sectoral programme promoting employment and human resources. Operational guidelines and procedures for an HRD funding scheme financed from Phare 2000 have been drawn up.

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

Further preparations for ESF will include:

- Ensuring that Department 45 – Employment and HRD Strategy – is fully operational to perform the role of management authority. Another body should be set up which will later take over the role of payment authority.
- Verification and strengthening the capacity of the NTF as implementation agency. There are two objectives: (a) to verify and possibly modify the organisation and management structure, work content and procedures, and the systems of internal control and ITC; (b) to increase capacity by transferring existing staff and recruiting new staff and training them 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 the MoLSA Department of Employment Administration so that a legal framework may be established for the implementation of ESF programmes in HRD.
- Developing a monitoring and evaluation system including a methodology for the use of indicators and data collection. Establishing the relevant institutional background and cooperation mechanisms, setting up a coordinating role for the relevant Evaluation Working Group. This system will be verified within the Phare programme so that it is ready for ESF in line with European Commission 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 and training is broadly conceived, and at preprimary, primary and secondary levels it facilitates the participation of a large proportion of children and young people, including those with specific disabilities. The bottleneck of the system is the 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 levels) with the exception of pupils admitted to the first years of the extended gymnasium scheme (approximately 8% of the age group). These pupils leave basic school after five or seven years of attendance. Following the completion of basic schooling almost all pupils continue their education at secondary schools, usually to the age of 18 or 19.

In **upper-secondary education** there are three main types of school: gymnasiums, secondary technical schools and secondary vocational schools.[48] The system of vocational education is school-based in that it offers technical qualifications at secondary technical schools and apprenticeship training at secondary vocational schools. There is no dual system of apprenticeship in the Czech Republic. The practical training of students is an integral part of education at school, no matter whether it takes place in school workshops or in enterprises.

Other than the three main types of secondary school, integrated secondary schools and vocational training centres (International Standard Classification of Education – ISCED – level 3) were established in the first half of the 1990s as part of the reform of secondary vocational schools.

48 For further details see Section 3.4.1.2.

Non-state schools (private, enterprise or church schools) emerged in the early 1990s as a new feature of the Czech education system. They helped to create a broader spectrum of education supply and the evolution of a competitive environment. At basic-school level, there are only a few private schools attended by 1.3% of pupils. Private basic schools aim, as a rule, to provide education for 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). Most private schools operate in post-secondary education (ISCED 4) and are attended by about 33% of students.

Vertical permeability[49] is ensured by a system of educational pathways allowing students to pass smoothly from basic to other types of secondary education. In secondary education there are no dead ends from the institutional point of view, and students of gymnasiums, secondary technical, vocational and integrated schools have access by different pathways to the Maturita examination which serves as a basis for further studies. The equivalence of the Maturita taken at gymnasiums and that taken at secondary vocational and technical schools after four years of study is very important in this respect. Secondary vocational students, who usually finish three-year courses with an apprenticeship certificate, can continue with 'follow-up' courses giving them the opportunity to complete their secondary education with a Maturita. This possibility is however limited. In practice, reduced funding from MoEYS for follow-up courses does mean an educational dead end for many vocational-school graduates. Permeability at higher-education institutions is naturally limited by their existing capacities (see Section 3.4.1.4).

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

3.4.1.1 Entry to the IVET system

Applicants to schools at upper-secondary level[50] are accepted mainly on the basis of **examinations**, although a school director can now accept students without examinations on the basis of their previous studies. The content of examinations is the responsibility of schools and thus their level of difficulty varies. The most difficult and selective examinations are those at gymnasiums and secondary technical schools, for which competition is strongest.

Vocational education enjoys **high prestige** in the Czech Republic. Although part of the community, particularly in cities, considers general secondary education to be more 'elite', the demand for some areas of vocational education exceeds that for general education. This is particularly true of fields such as the arts, business, hotel management, tourist industry, catering, ITC and teaching. The prestige of vocational education shows clearly in the high percentage of young people educated in these schools, a network of which has developed largely as a response to demand.

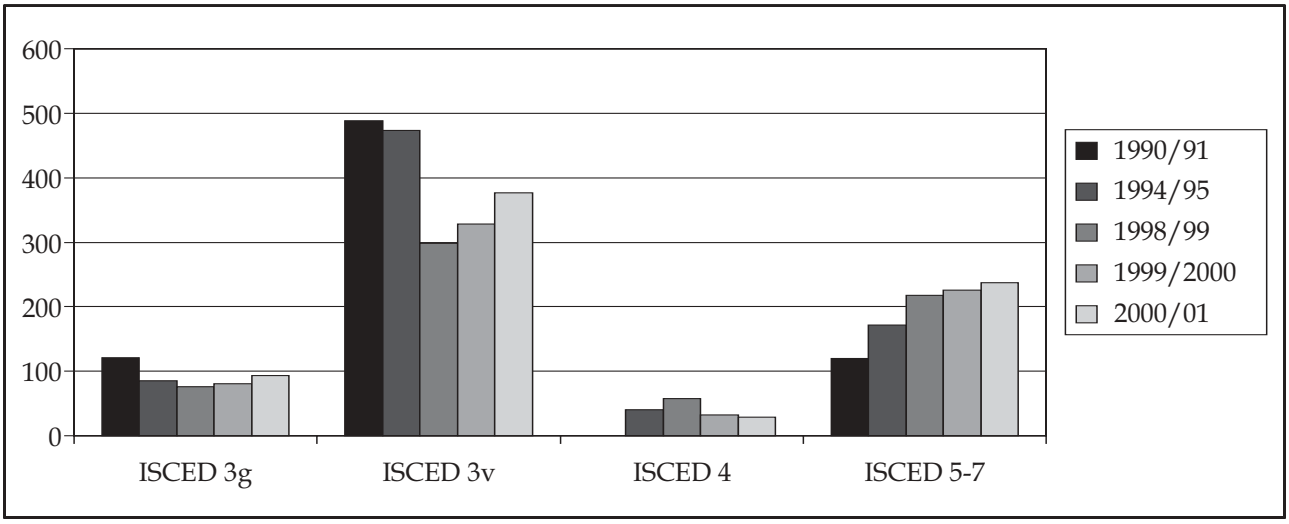
49 The vertical permeability of the education system and the variability of educational pathways are indicated by arrows on the Education System Diagram – see Annex.

50 Excluding special schools for disabled people.

Enrolment figures in upper-secondary education

At present, about 95% of graduates of compulsory basic school or lower-level gymnasium (ISCED 1 and 2) continue their education (Chart 3.1).[51] These young people enter or continue at one of the three kinds of secondary school (ISCED 3). In academic year 2000/01, about 18.5% of those entering upper-secondary education enrolled in four-year secondary general schools (gymnasiums) or continued their studies in eight-year gymnasiums, about 36.4% entered secondary technical schools (mostly four-year courses) and about 45.2% entered secondary vocational schools (mostly three-year courses).[52] The total number of students accepted on the first year 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 Number of students by type of education (thousands)



Source: Key Indicators, Table 22.

Access to vocational education

All social groups, regardless of gender, have **access to some type of vocational education**. Disabled young people are offered an education at special schools (see Section 3.4.1), of which there is a tradition in the Czech Republic. Recently however there has been a change in the approach to disabled children in which society no longer seeks to isolate them. Today, if their health allows, these children attend mainstream schools. Provision is also made, in the form of special practical schools, to special-school graduates with mental disabilities and pupils with an incomplete basic education. These are non-professional schools where students are taught in one- or two-year courses the abilities and skills for practical 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 less interest in education. The vicious circle of low social status, unemployment and insufficient training tends to pass from one generation to another. This trend is particularly strong among the Romany minority, with two-thirds to three-quarters of children attending, as most of their parents once did, schools for children with special learning needs. But these children do not suffer from mental problems; rather they are disadvantaged by insufficient knowledge of the language of instruction and a poor support network. Expert recommendations have been made to adjust the education system to allow Romany

51 Estimate.

52 Full-time study only. Source: *Country Monograph of the Czech Republic – Background Study*, Annex, Table 2.4, National Observatory, 2001.

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, employing Romany assistants in schools, promoting an individual approach to pupils, establishing flexible and transferable catch-up classes. Catch-up classes would allow Romany children to gradually overcome knowledge gaps in certain subjects and return to regular classes. A number of schools have already implemented some of these measures (particularly catch-up classes preceding basic school and the employment of Romany assistants). However, these progressive measures mainly concern 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, there are not enough support mechanisms to help these students to proceed to higher levels or at least to prevent their dropping out of school.

One step in this direction was taken by an amendment to the Education Act in force in January 2000. Unlike the past situation, graduates of special schools can now be admitted to any secondary school, provided that 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[53] (secondary vocational schools and training centres) where a considerable number 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:

- unresolved issues concerning the integration of disadvantaged pupils into mainstream schools (schools are not ready to work with them);
- the incapacity of the school system to adjust to the individual needs of disadvantaged pupils, the focus of curricula on the average pupil (very often, adjustment means only a transfer to a less-demanding programme);
- the limited scope of operations of educational counsellors in schools (they act as coordinators of various activities) – raising the issue of the necessity of a school psychologist and social worker;
- 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;
- the lack of links between the social and education systems (e.g. 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 beginning to end) – transition to employment or, possibly, continuation of education**.

53 IVET field research results, *Country Monograph*, op. cit.

Other than 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 (výu ní list) or a technical course completed by the Maturita, allowing graduates to go on to study at tertiary level.

It is a positive development that compulsory education at the **basic school** has been extended again to nine years, as this postpones the choice of secondary education that has to be made. 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, Career Choice, has only been part of the Standard of Basic Education since 1 September 1998. Most schools still do not pay enough attention to this issue and do not teach the 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 and theory clearly prevails. This makes it impossible for many pupils to use or develop their manual skills and to feel happy about their achievements, which may make them unwilling to continue their education.

A system of **professional and career guidance** (see Section 3.7) is being developed largely outside the education sector under the auspices of the Ministry of Labour and Social Affairs. The main component of the system is a network of information and counselling centres at labour offices. Career guidance has been causing certain problems as pupils of basic schools, in particular, are not guaranteed permanent counselling services directly in schools.[54] At the same time, the issue of professional orientation and career guidance in secondary education has so far been underestimated. It was only in 2000[55] 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 all secondary-school curricula. Similarly to basic education (see above), the situation at secondary schools in this respect has not changed considerably – despite several government resolutions and the fact that this requirement is one of the priorities of the National Employment Action Plan 2001.[56] Most schools fail to offer information on the labour market and professional orientation as part of their education provision.

As mentioned above, in the Czech Republic the first important choice of educational path occurs after the completion of basic school. According to empirical surveys,[57] the **success rate of this choice** (defined in terms of harmony between this choice and reality, i.e. the pupil's acceptance on 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 pupils' wishes and their choice of secondary education show, primarily in smaller towns, that they adjust their actual choice to the existing educational opportunities 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.

54 Educational counsellors who work in schools and a network of educational and psychological guidance centres that provide services associated with study and psychological problems. However they lack the capacity to help very much in career choice or the professional orientation process.

55 Government Resolution No. 325/2000.

56 National Employment Action Plan for 2001, Government Resolution No. 165/2001.

57 M. Popelkova, *Survey of Professional Orientation of 8th Grade Pupils (in Basic Schools) – Empirical Survey Report*, Prague, National Institute of Technical and Vocational Education, 1997.

Other surveys (for example TIMSS[58]), which examined in detail the relationship between certain sociological characteristics (e.g. education of parents, household facilities, etc.) and pupils' achievements, lead to the conclusion that **achievement depends strongly on the situation of 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 transfer of basic school leavers to the system of initial vocational education, it is encouraging that an overwhelming majority of young people continue to study at upper-secondary level. Moreover, the education provided by secondary schools satisfies demand in most cases, in terms of both capacities and interests of the applicants, and there is no discrimination based on region or gender. Although the degree to which demand for education is satisfied is high, it is limited to a certain extent, particularly in small towns and rural areas, due to insufficient diversity in supply.

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

3.4.1.2 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 examinations (Maturita). Gymnasiums can offer four, six or eight years of study. The curriculum gives the students a choice of 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 examination (Maturita), and sometimes also lower-level secondary vocational education without 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 their chosen specialisation. Those who have completed the four-year training programme with Maturita can continue their education at higher professional schools or universities.

The students study in about 249 educational programmes with Maturita.[59] 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 second- and third-year students. The tuition at secondary technical schools usually takes the form of regular full-time study. Mature students at these schools can also take evening classes or study through distance learning while in employment.

58 Achievement of students from the final years at upper-secondary schools in the Third International Mathematics and Science Survey (TIMSS), Prague, Institute for Pedagogical Research, 1996.

59 *Statistical Yearbook of Education 1999/2000. Performance Indicators*, Prague, Institute for Information on Education, 2000.

Secondary vocational schools (*střední odborné učiliště* – ISCED 3) usually offer apprenticeship training (in three-year and sometimes also two-year courses) with a final examination and apprenticeship certificate. They can also offer a four-year secondary vocational education programme at the end of which the students take a final examination (Maturita) which is recognised at other types of secondary school 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)[60] aimed at the acquisition of manual or practical skills. The remaining teaching time is devoted to general education and theoretical study of technical subjects.

Secondary vocational graduates can immediately look for work in the labour market, while those who have completed the three-year programme can continue to study in **follow-up courses** at the end of which they can sit the final examination (Maturita).

At secondary vocational schools, students can receive qualifications in 189 vocational education programmes (three-year courses) and in 106 Maturita education programmes.[61] 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 the Maturita, reaching on average 34%.[62] Secondary vocational schools provide both theoretical and practical training. Practical training can sometimes take place directly in companies.

Integrated secondary schools (*integrovaná střední škola*) offer both secondary technical school programmes and secondary vocational school programmes. At some integrated schools in the framework of the Phare VET Reform programme experiment (completed in 1998) a trial first-year joint grade for both types of studies has been introduced. The educational programmes are separated in the second year when 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 type of course to another. Another advantage is the availability of secondary vocational school resources for teaching technical subjects, better utilisation of equipment for technical training, lower overheads, etc. In 1999/2000 there were about 266 integrated secondary schools.[63]

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 the mentally ill) 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 proportion of special-school students in the corresponding age group is relatively stable, amounting to 3% of the age cohort.

Technical and business lyceums offer a new type of upper-secondary education programme that emerged in the 1990s. These programmes attempt to transcend the sharp borders 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 the vocational subjects that are typical of secondary technical schools. Graduates can receive a Maturita certificate and they can continue their education in colleges and universities. Because these educational programmes have so far been seen as experimental, they have not spread significantly. These lyceums, of which there are a few dozen, operate within secondary technical schools.

60 J. Vojtěch and O. Kofroňová, *Curriculum Policy after 1989 and its Impact on the Development of Educational Branches in Secondary Vocational Education*, Prague, National Institute of Technical and Vocational Education, 1996.

61 *Statistická ročenka školství 1999/2000. Výkonové ukazatele* [English Translation], Prague, Institute for Information on Education, 2000.

62 O. Kofroňová and J. Vojtěch, *Analysis of Educational Programmes in Terms of Employability of Graduates*, Prague, Tauris, 2000.

63 *Statistical Yearbook of Education*, calculations by J. Vojtěch, Prague, Institute for Information on Education, 2000.

Post-Maturita studies, once the dominant form of post-secondary education, are currently being phased out. Post-Maturita studies offered regular full-time or part-time courses for those who had completed secondary school in general studies. The full-time programmes took one or two years. The Education Act of 1995 abolished post-Maturita studies and introduced a new system of higher professional schools. 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 1999/2000, there are 166 higher professional schools teaching in approximately 181 branches.[64] The students pay a tuition fee.

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. gymnasium). There is also a long tradition of high respect for vocational educational – consequently, there is a high proportion of young people in vocational education and training. The Czech Republic is one of the European countries with the highest share of young people in VET at secondary level. However, efforts are still being made in various ways to undermine this equality. For example, the new concept of a Maturita examination with a common part (see below) gives advantage to secondary general (gymnasium) students.

There is also a tradition in the Czech education system of high 'permeability' 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[65] course. However, without specific assistance and measures it is difficult for socially disadvantaged young people to exploit the vertical 'permeability' inherent in the school system (see Section 3.4.1.1).

An entirely different situation exists as far as **horizontal** 'permeability' is concerned – i.e. the possibility of transfer between selected educational pathways. Overall, the VET system may be described as a **rigid** one, requiring a clear choice before entering the system and completion of the chosen programme before leaving it. In spite of many efforts, barriers have not been lifted between the two educational pathways (with and without Maturita – vocational programmes) in VET at secondary level. It is a major problem that if, after four years of study, students fail a final examination or the Maturita, the four years cannot be recognised in any way and, in terms of education achieved, they are considered to have completed only basic school.

To sum up, the Czech Republic **still has a linear system of educational pathways** which is not sufficiently flexible in terms of lifelong 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.

64 Ibid.

65 In 1996 about half the graduates from secondary vocational schools continued in follow-up courses. In 1999 it was only some 10%. *Statistical Yearbook of Education*, op. cit., calculations by J. Vojtěch.

Certification of outputs

In the Czech Republic, generally accepted certificates can only be obtained within the framework of the school system. The apprenticeship certificate and the Maturita certificate are recognised in the labour market as expressing a certain level of education and qualification. The graduates of higher professional schools receive diplomas (Absolutorium) indicating their field of graduation.

The issuing of certificates within the **school system** is provided for by the Schools Act and relevant MoEYS decrees. Education in schools is therefore the basis for achieving certified (recognised) levels of education. A person interested in increasing the level achieved in initial education may, within the system of continuing education ('second chance'), re-enter education institutions operating within the school system. After a slow period immediately after 1989, new opportunities for part-time studies have been developing in the past two to three 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 interlinked and therefore certificates awarded outside the school system are not formally equal.

Educational programmes within IVET 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 the Maturita certificate. Higher (professional) education is completed by the Absolutorium and the award of a diploma.

These certificates are valid nation-wide and are issued on the basis of examinations, the form of which is laid down by the law. 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 by 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 outputs and their certification are therefore the **professional responsibility of teachers**.

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

According to the proposal, the Maturita 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 examination should consist of three obligatory examinations in Czech language and literature, 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 MoEYS.

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 subjects. Directors of schools organising the examinations will decide on the optional subjects for the profile part of the Maturita. They may also decide that, particularly in VET, the optional subjects will be replaced by a comprehensive vocational examination. Directors will also determine the concept, content and form of the examinations. As

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

before, the profile part of the Maturita will 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 a related field of study, with at least five years of experience and not employed by the school where the examination is taking place.

It is expected that the common part of the Maturita will be conducted for the first time in 2004. It is envisaged that this will address the issue of comparability and transparency of results in 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 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 on the level of education achieved and about the professional capacities of applicants. As stipulated by Czech employment regulations, it is the employer's responsibility to assess whether an applicant is suitable for a job. The only exceptions are certain regulated activities and professions where qualification requirements are laid down in law and the relevant occupation may not be carried out unless these requirements are met. Overall it may be said that (bar the exceptions) there is no direct, i.e. legally binding, relationship between individual jobs (performance of certain activities or occupations) and certificates testifying to the completion of a type of vocational education.

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

On the whole, it seems that the credibility of certificates would be enhanced by employer participation in the development and implementation of examinations, so that requirements demanded from graduates would be adequate to employment needs. At the same time, it is necessary to enhance the comparability of outputs in individual fields at various schools, as the organisation of examinations is to a large degree the responsibility of individual schools. Certification in initial education is also unconnected to any continuing education implemented outside the school system. Finally, the issue of certification of skills acquired in an informal manner based on work experience has not been raised at all in the Czech Republic.

3.4.1.3 Description of 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 basic

school to nine years, enlarging and then reducing the workload of teachers and an extensive optimisation of the network of schools.

School types and numbers

Secondary and higher professional education is organised in various types of school (see Section 3.4.1.3) in line with the Schools Act and depending on the type of educational programme they provide. A school which constitutes one legal entity may also be made up of two or more school types. A typical example is that of integrated schools, which normally consist of a secondary technical school and a secondary vocational school and, possibly, a training centre. A similar situation exists 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 levels 3 and 4 (Table 3.1) – 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 1990s (particularly in the second half), the number of schools providing educational programmes of a different type has significantly increased since 1990. 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 number of secondary vocational schools and gymnasiums in 1997. Since then their number has fallen, however the **small size of schools** remains one of the most serious problems in view of the rationalisation of education and the efficient management of resources. In 1999, in spite of optimisation measures to date, secondary technical schools had on average 197 students, secondary vocational schools 294 students. The size of secondary technical schools was most reduced in the 1990s – by up to 40%.

This is also the case with higher professional schools. Despite an increase in student numbers, there are too many small schools and more than half of them have less than 150 students.[67] With so few students, it is difficult to achieve certain standards in teaching, to expand individual choice of studies and to enhance teaching specialisations.

The regional structure of the main types of school is well balanced in terms of distribution. This is the result of the planning of the school network before 1990 and its effects have persisted. The situation in Prague is an exception with a higher proportion of gymnasiums (25%) while the national average in individual regions is 20%. The national average of secondary technical schools is 47% with maximum deviations of –5% and +7%. The lowest number of secondary vocational schools is in

67 M. Karpíšek, *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.

Prague (25%), the highest in Olomouc region (40%).[68] The high proportion of gymnasiums and the small number of secondary vocational schools in the capital corresponds to the nature of economic activity and education structure of its population. It also reflects the fact that educational opportunities within the tertiary sector are concentrated there.

The demographic decline and extension of basic schooling have given rise to excessive capacity in secondary schools, capacity which could be used for continuing vocational education and retraining. In terms of quantity, forms of distance 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, the programme has been halted in view of expected changes in the system of management of education. Powers will be gradually taken over by regional offices which should be able to address these issues in a more appropriate manner, taking into consideration the availability of programmes and the needs of the relevant region as well as the 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 provided access to ICT to all students, the situation in secondary and basic schools is far less favourable. There are great differences between schools both in terms of equipment and teachers' preparedness.[69]

The number of students per 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. The situation is also unfavourable concerning software to support teaching and electronic and multimedia teaching aids. Only 15% to 30% of secondary schools have computer 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 the ICT 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.

According to surveys,[70] one of the largest groups of Internet users are students. Concerning access to the Internet, some three-quarters of users have an Internet connection at their workplace, two-thirds at home and only about a quarter at school.[71] 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 the near future, as MoEYS has drafted *An Outline of State Information Policy in Education* which envisages the rapid provision of facilities and training of teachers for ICT by 2005 (see Section 3.1).

---

68 *Annual Report on the State and Development of the Education System*, MoEYS, 1999.

69 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 on the availability of computer technology in schools.

70 The fifth round of a survey of Internet users in the Czech Republic (June–July 2000).

71 Totals exceeding 100% mean that the respondents stated more than one possibility of Internet connection.

Number of teachers

The **number of teachers** in Czech vocational schools has been influenced by the number of schools, the number of students and the student/teacher ratio. In the early 1990s, 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 1990s, the figures stagnated or fell along with the number of students. Apart from demographic reasons, the decrease in student numbers was caused by adding a year of basic schooling and dropping a year of secondary schooling. In 1999, a whole year of graduates of three-year programmes in secondary vocational schools was missing. The same thing happened in 2000 in four-year study programmes with Maturita. This steep decline in student numbers, along with an increase in teachers' workload, 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 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 between the different types of school.

In recent years, the student/teacher ratio has slightly increased (with the exception of higher professional schools) – indicated in full-time equivalent. On average, there were eight students per teacher (full time) in secondary general schools (gymnasiums) in the academic year 2000/01 (see Key Indicators, Table 24). In secondary technical and secondary vocational schools, there were also about eight students per teacher. These figures are lower than in other countries.[72] One secondary-school teacher teaches only three-quarters of a full teaching load, partly because many teachers work on an external basis.

One major problem is appropriate pay for teachers. Qualified teachers leave the education system for better-paid jobs (particularly in administrative centres and cities with higher levels of pay). As regards age distribution, the proportion of younger age groups is decreasing (Table 3.2). In 1999 more than 60% of teachers at secondary schools were over 40. The proportion of women teachers is increasing (62% at secondary technical, 58% at secondary vocational in 1995).

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

Schools and school facilities	20–29 years	30–39 years	40–49 years	50–59 years	60–69 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
gymnasiums	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 schools	13	25.7	31.7	23.3	5.5
special schools	11.8	28.4	26.7	27.7	4.7

Note: Full-time equivalent, percentage, as at 31 December 1999.
Source: Statistical Yearbook of Education, Institute for Information on Education, 1999.

72 For example, in 1995, vocational colleges in OECD countries averaged 14.2 students per teacher. *Education at a Glance*, Paris, OECD, 1997.

MoEYS' **Long-Term Development Plan 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 the 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. In addition, the position of teachers must be considerably improved and the recent tendency which has led to the departure of young teachers and an overall increase in teachers' average age must be reversed.

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, teachers' motivation to be involved in their own personal development and the development of the school, and greater attractiveness for the teaching profession. The starting points are the definition of a teacher profile, the key competencies required and the differentiation and classification of pedagogical activities. These steps form the basis for drawing up teacher training programmes at universities and continuing training programmes, and for the development of career structures and salary increases.

Student participation

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

In international comparisons, the Czech Republic scores high in the participation of upper-secondary students in education, exceeding the EU average. However, as the average duration of secondary studies is shorter and young people leave schools earlier to enter the labour market, at the age of 19 participation in education already begins to fall below the European level. This steep fall is even clearer in the 20–25 age group as the Czech Republic lags behind developed countries, particularly regarding participation of young people in tertiary education.

Drop-outs

There are no specific data available in the Czech Republic monitoring 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 figures are estimated based on the difference between the first-year enrolment and the number of graduates.

Although the proportion of drop-outs is relatively low (Table 3.3), young people who find themselves in the labour market without qualifications face serious problems. This primarily concerns those who leave basic compulsory education before the ninth year, which means that they have not completed basic education and cannot continue to further education levels. It is estimated that some 4%–5% of students are in this situation.[74] Problematic groups also include students who drop out from secondary vocational schools. Although there are no precise data it may be expected that, in many cases, these young people leave not only the school but also the education system. This

73 Calculation by J. Vojtěch, Prague, Research Institute for Vocational Education, based on data for *Statistical Yearbook of Education 1999/2000*, op. cit.

74 Estimate, Institute for Information on Education, 1999.

may be inferred from the fact that there are still 7%–8% of people with only basic education in the 25–29 age group.

Drop-outs from gymnasiums 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. gymnasium students to secondary technical schools and secondary technical students 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). Failure to complete studies at this level is not so serious compared with lower levels. Still, it may cause problems for students graduating from gymnasiums without any professional qualifications that may be required by employers.

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

Table 3.3 Estimated drop-out rates (%)

	General education			Secondary VET with Maturita			Secondary VET with qualification			Total secondary VET			Higher professional school		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
1995	–	–	–	–	–	–	–	–	–	7.4	10.4	8.7	–	–	–
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, National Observatory; 1999, Institute for Information on Education.

Although the education system provides opportunities to complete basic and secondary vocational and technical education, many young people do not make use of them. They need a specific approach and more comprehensive care, which schools are failing 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 the early identification of students at risk, and is not sufficiently inclusive to provide individualised assistance and reintegration in studies (see also Section 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 small proportion continue their studies.

After completing their secondary education with the Maturita, 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 age

group.[75.] Around 31% to 32% of recent graduates from all secondary schools went on to tertiary education[76.] – of these about 24% enrolled at universities and 9% at higher professional schools.[77]

However, it may be inferred from analyses of admission procedures that many graduates, particularly those from gymnasiums, seek admission and are enrolled to tertiary institutions in subsequent years following their graduation. Gymnasium graduates are far more successful in admission procedures 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 gymnasium graduates, 33% from secondary technical schools and 14% from secondary vocational schools (including follow-up courses). At higher professional schools, secondary technical graduates prevailed (63%), with a much smaller proportion of gymnasium graduates (28%) and of secondary vocational graduates (9%).

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

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 later on. It may be estimated (with a certain degree of inaccuracy) that the group which enters the labour market immediately consists of some 15% to 20% of gymnasium graduates, 85% to 90% of vocational-school graduates without Maturita and 70% to 80% vocational-school graduates with Maturita.[79]

Graduates who enter the labour market face various problems, including that of unemployment, depending on their field of study, the situation in the relevant regional labour market and their personal qualities (for more information see Section 2.2.3).

3.4.2 Responsible bodies

The **Ministry of Education, Youth and Sports** is the central managing body in the field of education. Until 2000 all principal powers in education, including administration, were concentrated in the hands of the ministry, which exercised these powers either directly or through school offices – branches of the ministry in individual districts (abolished 1 January 2001). Since the 2001 reform of public administration (see Section 3.4.2.1), some of the steering powers have been delegated to the regions. Currently, the main responsibilities of MoEYS are to design the concepts and strategies of government education policies, to draw up draft education bills and decrees, to ensure the standard

75 Estimate, National Observatory calculation based on data from MoEYS press release, Admission to the universities and higher professional schools, <http://www.msmt.cz/cp1250/web/80/PRIJVS.htm>.

76 MoEYS press release, Information on real numbers of participants in tertiary education in CR, 2001 <http/www.msmt.cz/cp1250/info/nas-vyzkum_uiv.htm>.

77 As 2000/01 school year is not typical because of very low number of secondary-school graduates (an entire year of secondary-school graduates is missing due to the extension of basic schooling by one year in 1996), the indicated data on graduates is reliable for the 1999/2000 year.

78 Joint press release from MoEYS and the Institute for Information on Education, *Interest in HE Studies in 2000*, 1 August 2000.

79 Calculation by J. Vojtěch, Prague, Research Institute for Vocational Education.

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

The **Council for Education Policy** was established in 1999 as a advisory and consultative body to MoEYS. The actual influence of this council has so far been limited. Its members are mainly specialists from various sectors of the education system. 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, the professional and pedagogical aspects of the school's work, the management and effective use of financial resources and personnel policies (recruitment and dismissal of 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 (school legal entities).

The **Czech School Inspectorate** (CSI) is a state body established by MoEYS to conduct inspections. The inspectors identify and assess schools' results and curricula, taking into account the valid vocational training documents (curriculum), the personal and material conditions of instruction and the efficient use of financial resources from the state budget. With greater autonomy accorded to schools, the CSI's role is shifting from administrative control to assessment activities. Moreover, every year, MoEYS proclaims a 'thematic inspection' focusing on an important aspect of the education system (for example the integration of disabled people, art education) which are the subject of cross-sectional evaluations of a sample of schools.

3.4.2.1 Public administration reform in education

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

The current reform facilitates the modernisation of the **function of MoEYS** which, even under the new circumstances, plays an important role primarily in conception, coordination, regulation and distribution tasks. The ministry's main functions are defined as follows:

- **Development of medium-term and long-term policies and strategies –** drafting the education policy and strategic planning through the Long-Term Development Plan of Education and the Education System, methodological guidance and coordination of the plan by individual regions (see Section 3.1), carrying out analyses, preparation and introduction of structural changes.
- **Curricular policy and quality assurance in education** – drawing up and continuous innovation of the State Educational Programme, Framework Educational Programmes (see Section 3.4.5), evaluation of the 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 the lay public, establishing mechanisms to facilitate participation of social partners in decision-making at the central level, international commitments, systematic communication with representatives of central and regional authorities.

- **Management, funding and legislation** – decisions concerning the financing of 'direct costs' of education including teachers' salaries (determining 'normatives', resources for various regions, allocation principles), management and implementation of innovations, provisions for financial support of priorities set out in the Long-Term Development Plan by means of 'development and innovation' programmes (see Section 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 will complete the setting up of a **regional level** of administration (which the Czech Republic did not have before), which 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 the newly established regional offices.

At the regional level, both self-governing and state administrative bodies have been set up with powers in the field of education (Chart 3.2).

(a) Self-governing bodies

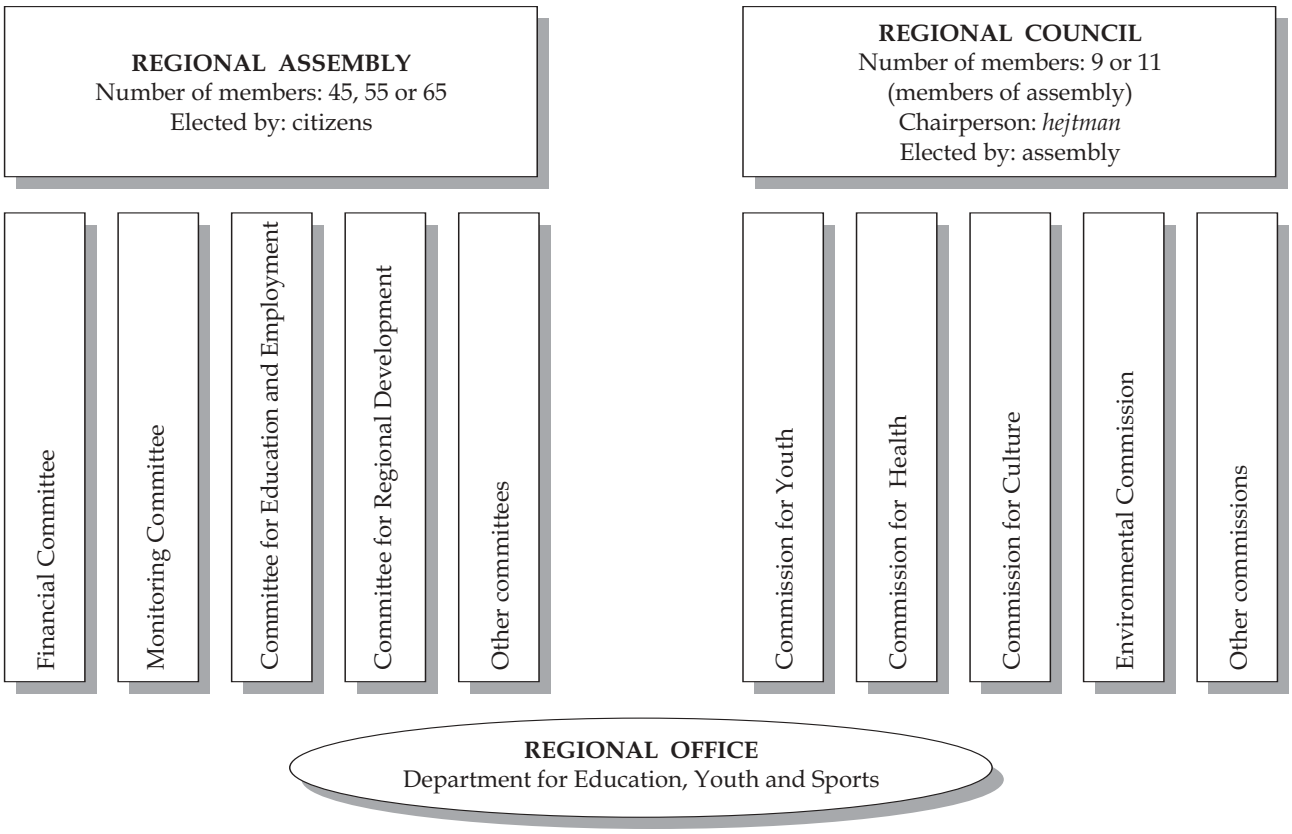
The Regional Assembly (45, 55 or 65 members, depending on the number of inhabitants in the region), which is elected by the citizens and has a decision-making function. Its powers are defined by law – those relevant to education include submitting new bills to the Chamber of Deputies and proposals to abolish legislation to the Constitutional Court, issuing generally binding regional decrees, coordinating regional development, approving the regional budget and setting up and closing down organisations within the region's administrative area. The assembly has four specialist obligatory committees, one of which is the **Committee for Education and Employment.** Other committees could be created – the total number varies from four to ten in the different region. All committees members are elected by the assembly. The composition of the Committee for Education and Employment varies between regions, the number of members usually being about ten (minimum five). The committee members are mainly members of the assembly (seven to eight persons), two to four other professionals are also nominated by the political parties. The chairperson of the committee must be a member of the assembly.

The committee comments, for example, on the network of schools and school facilities, and the structure of educational programmes and changes therein. It also submits proposals to enhance the quality of school activities organized by the region, and comments on the granting of subsidies to education, youth and sports.

The Regional Council, which is elected by the assembly and composed of assembly members (9 or 11 persons depending on the number of inhabitants in the region, and headed by a *hejtman*). The council has an executive function, providing for and supervising the management of approved resources, issuing regional regulations, etc.

The council also establishes a number of **commissions** (from 4 to 12) as advisory bodies. The commissions, normally with around ten members, are largely made up of professionals from the area (including representatives of schools, labour offices, the Regional Office) and a small number of council members. One of the commissions may be concerned with issues of youth, leisure and sports.

Chart 3.2 Organigram of regional bodies



In relation to vocational training, **direct powers of self-government** (independent jurisdiction of regional bodies) are as follows:

- Setting up and closing down schools[80] (decisions concerning a school's inclusion in the register of educational facilities are still taken by MoEYS 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 ITC centres), continuing teacher-training facilities, school facilities (out-of-school activities and meals).
- Taking decisions on the inclusion of practical training centres into the register of educational facilities.
- Taking decisions on direct financing of schools' capital costs.
- Taking decisions on increasing resources for the '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

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

- Drawing up a Long-Term Development Plan of Education and the Education System within the administrative area. In addition, the office is obliged to publish an annual report on the current situation and development prospects of the education system and schools in the region.

80 The responsibility for secondary police schools and secondary military schools remains with the Ministry of the Interior and the Ministry of Defence.

- Taking decisions about the allocation of all state financial resources to cover the 'direct' costs of education in schools set up by the respective regions. Supervision of the use of these resources.
- Allocating state financial resources to denominational schools and supervising their use.
- Appointing and dismissing members and chairpersons of examination panels for the Maturita and final examinations.
- Methodological support for schools.

As neither the council nor the assembly have their own administrative support for the professional execution of their functions, in education they rely on the Department for Education, Youth and Sports of the Regional Office, the region's state administrative body. In view of the fact that the director of the Regional Office reports to the self-governing bodies, regional self-government – in addition to its direct powers – has a certain influence on the delegated powers. This means that there is a **overlap of self-government and state administration at the regional level** (this also applies to areas of regional administration other than education). The law does not precisely stipulate which of the delegated powers are subject to approval by the self-governing bodies. In most cases the reality is that simple administrative tasks are entirely up to the respective department of the Regional Office, while the self-governing bodies require control over more complex or important issues. Consequently, important delegated powers, such as the development of the Long-Term Development Plan, the allocation of resources to schools, etc., are entirely controlled by the self-governing bodies in line with their policies (although the methodology and overall principles prescribed by the ministry must be observed). This implies that self-government influence on education in the region could be very strong. However, it is premature to make any judgement on this issue. Future developments will depend both on the capacities of regional self-government, and on the quality and nature (scope for discretional 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 and training 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 MoEYS on an annual basis. Public expenditures on education have fluctuated and in 2000 were 4.57% of GDP (Table 3.4). Although the ministry is aiming at 6% of GDP by 2010, the tendency to stagnation has not yet been reversed. Expenditure on IVET makes up approximately one-sixth of total education expenditures.[81]

Table 3.4 Share of GDP on public expenditures in education

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Share of 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

Note: Public expenditures = expenditures of MoEYS, other ministries (Ministry of Defence, Ministry of the Interior), municipalities and regions, including public expenditures on private and church schools, excluding expenditures by private institutions, students and parents.
Source: Historical Yearbook of Education, Institute for Information on Education, 1998.
Statistical Yearbook of Education, Institute for Information on Education, 2001.

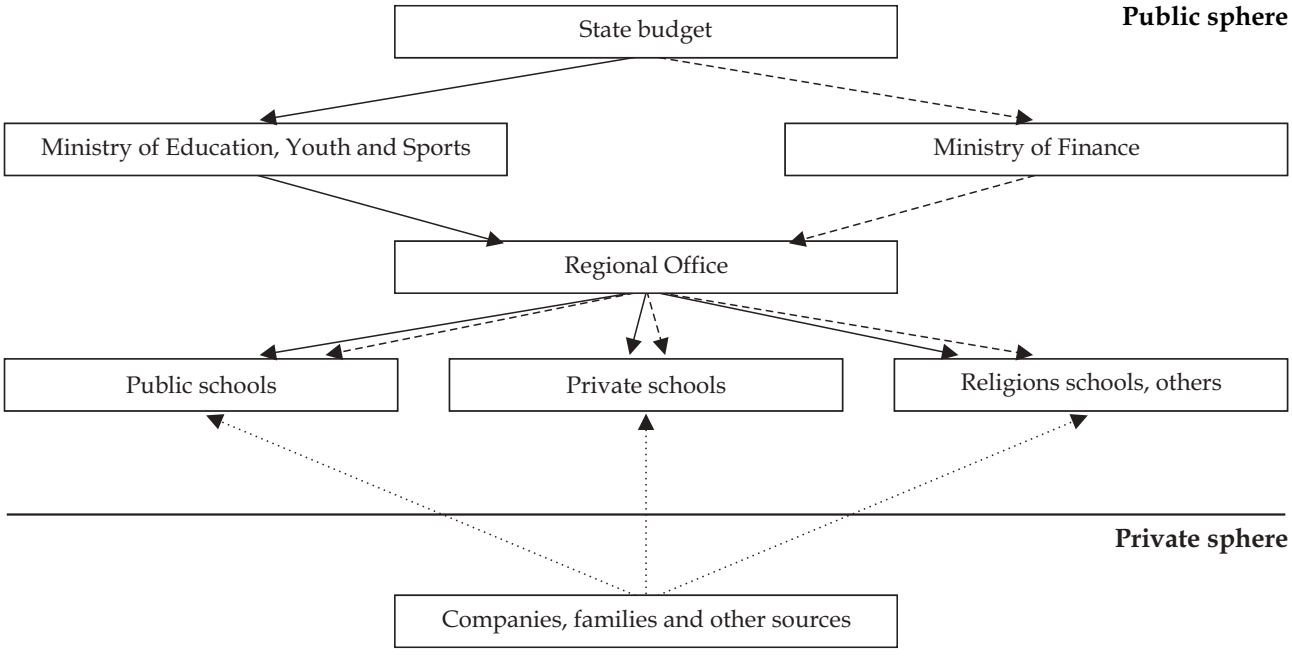
81 *Education Yearbook, Economic Indicators*, Prague, Institute for Information on Education, 2000.

IVET funding procedures (and partial sources) changed with effect from 1 January 2001, under the public administration reform. 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' salaries, textbooks and teaching aids are still provided to these offices by the state (MoEYS). However, secondary-school operating costs are covered by the regional office resources (Chart 3.3). As the ministry's powers and responsibilities will be gradually taken over by the new regional offices, the funding mechanism in 2001 is a temporary arrangement – a combination of the old and new procedures.

MoEYS allocates financial resources to regional offices (to cover teachers' salaries, 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 educational administration, a new component has been introduced in the model – **programme financing** (Chart 3.3). 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 3.3 Education funding scheme (target score from 2002)



"direct education costs" - salaries and other costs related to salaries, learning support materials and development programmes
"other education costs" - operating and investment spending
contributions from private sources

Note:
There are two major types of cost within VET financing:
- *The first type is covered from the budget of the Ministry of Education, Youth and Sports. These include funds covering the salaries of teachers and other staff, mandatory contributions (health insurance and social security), funds for teaching aids and, recently, funds for 'development and innovation' programmes. These programmes, their targets and rules, are specified by MoEYS (or possibly by other state bodies) and schools can apply to participate in specific programmes at their discretion.*
- *The second type includes 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 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 practically nil. In exceptional situations an employer may volunteer to pay for the practical training of public secondary vocational students.

As for other sources of funds, public higher professional schools are allowed to charge tuition fees. Some secondary vocational schools obtain part of their revenues by selling their own products and services. The proportion of such revenues varies significantly, as it is dependent on both the field of education and the school's initiative, but 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 has been criticised by schools, experts and the public for several years. The largest component of operating costs is that of teachers' salaries, accounting for some 70% of the total. Although this proportion is increasing, the level of teachers' pay (in VET schools it is even lower than the national average) is increasingly only slowly and this has become one of the most criticised issues in the education system.

Private schools providing VET may charge tuition fees. The state makes a considerable contribution 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 allocated to state schools (determined by MoEYS). At present, this is 60% for secondary technical and secondary vocational schools. The rate may be increased to 90% depending, for example, on a school evaluation by the Czech School Inspectorate or a labour office statement concerning the situation of graduates in the labour market, etc. Methods of funding private schools cause perpetual conflict between schools and ministry representatives.

IVET funding, largely from public sources, depends heavily on the development of the national economy 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 for the development of the Czech education system does not envisage any major changes in this respect.

Although IVET has formerly been almost fully funded by the state, and since decentralisation and the transfer of some financial responsibilities to the regions most resources still come directly from the national budget (either from MoEYS for 'direct' costs, or indirectly through regional budgets to cover capital costs), regional self-government has a real influence on the allocation of resources to individual schools and programmes. It may also decide to earmark additional resources from its budget for these purposes. However, the resources of the newly established regional self-governing bodies are still limited and do not provide much scope for a higher level of education funding.

3.4.4 Social dialogue and integration of social partners

There is no specific forum at national level for dialogue about IVET issues. If an official discussion about important IVET issues (such as draft legislation) does occur between government representatives, employers and trade unions, it takes place within the Council for Economic and Social Agreement. The council is a tripartite body set up to discuss all relevant issues (mainly economic). One of the council's working groups is focused on educational issues. As the working group is 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 not legally binding. Although proposals were put forward in recent years on creating 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 an advisory body. 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 education policy issues.

Regional tripartite bodies, **Regional Councils on Human Resource Development,** are currently being established in some of the new regions. They incorporate 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 in the regions, and to harmonise the available skills and qualifications 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. For this reason, 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 IVET activities of employers' associations vary significantly sector by sector at 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 IVET activities of professional associations also differ significantly. The Union of Car Service Stations of the Czech Republic, for example, holds student competitions (for auto mechanics) in professional skills. In recent years, the Chamber of Commerce of the Czech Republic has been the most active in terms of contact with VET schools. Its education section organises, among other events, seminars for VET school directors and arranges for participation of experts in final examinations in VET schools, etc.

Although there is some **cooperation at a local level between schools providing VET and companies**, it is often only restricted to certain aspects (e.g. the employment of graduates). The small scope of cooperation between secondary VET schools and companies is partly caused by the small part played by practical training in a real working environment. Although the proportion of practical training in secondary vocational schools is high (approximately 50%), most of the training takes place in specially equipped classrooms and school workshops rather than in companies. According to a survey conducted by the National Institute for Technical and Vocational Education (NITVE) in 2000 (Vojtěch),[82] some two-thirds of all secondary vocational 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 of companies. Some VET school directors have set up a School Council which includes company representatives as their advisory body.

As the participation of social partners in IVET is on the whole poor, the major aspects of IVET (such as curricula, the structure of fields of study, quality, funding) are primarily influenced by the education sector and only to a small extent by other sectors. The lack of legal framework for social dialogue and the integration of social partners into IVET on the one hand leaves scope for various initiatives (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.

82 PLEASE INSERT FOOTNOTE INSTEAD OF (Vojtěch) in the text. Same as No. 90?

The Long-Term Development Plan of Education and the Education System under development by MoEYS[83] proposes arrangements ensuring the involvement of employers and regional representatives in setting 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.

New curricula reforms also envisage the participation of social partners in formulating professional standards and in the development of school curricula (see below).

3.4.5 Curricular development

3.4.5.1 Curricular policy

In its basic features the **curricular policy** is still **centralised,** as all curricular documents (with the exception of textbooks) are subject to approval by MoEYS. On the other hand, the Czech Republic is one of the countries where, particularly in the first half of the 1990s, strong liberalising trends occurred which resulted in a relatively large degree of **school autonomy.** This autonomy has given rise to a certain lack of transparency in vocational training in that a great number of educational programmes were approved without due attention being 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 MoEYS requirements concerning the aims and content of VET curricula.

The Standard of Secondary Vocational Education, originally developed within the Phare VET Reform project, envisaged the implementation of a 'bipolar' 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 entire VET system, the authority to approve educational programmes prepared by schools has remained with central government. The reason for this can be seen not only in the traditionally centralised education policy, but also in the unpreparedness of school directors and teachers in vocational schools to take on new tasks without due time for preparation.

At present, efforts are being made to introduce a new balance in the distribution of powers between 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 aims at some changes in **curricular policy** where the ministry determines framework objectives and the nature of vocational education, together with **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 individual schools and should take account of the needs of the regional labour market.

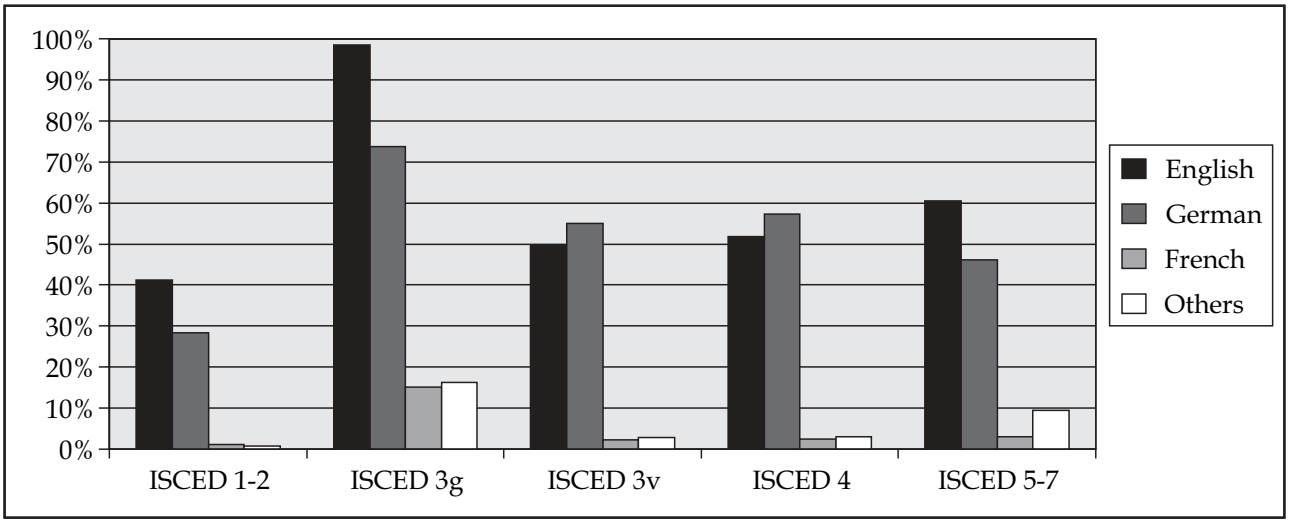
In order to facilitate the transition of graduates from school to employment, **practical training** must be part of the educational programme. While in training programmes at secondary vocational schools the proportion of practical training is large (although it often takes place only in school and may pose problems of quality), there is **negligible** practical training (in the workplace) in programmes leading to the 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 is related to the organisation of placements and practical training in companies. There is often a lack of interest and appropriate opportunities on the part of employers,

83 Second working draft, Ministry of Education, Youth and Sports, 2002.

as the issue of motivating companies to take part in vocational education remains unresolved. Consequently, even vocational training without Maturita is of a 'school' nature without any links to specific employers.

Concerning the current situation in curricular modernisation, significant improvements have been made in **foreign language teaching** (Chart 3.4), although the quality of the teaching remains low. The issue of introducing a foreign language as an obligatory subject in some training programmes without Maturita is still under discussion, as the achievements of these students have been rather unsatisfactory. In view of the requirements of lifelong learning, the Standard of Secondary Vocational Education sets out the obligation 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 a certain proportion of students still does not have access to computer technology in secondary vocational education. Improvements may be expected as a result of a massive ITC support scheme in education which has been launched by MoEYS and for which the ministry has earmarked a considerable amount of financial resources (see also Sections 3.1 and 3.4.1.3).

Chart 3.4 Students learning foreign languages in 2000/01 (%)



Source: Key Indicators, Table 25.
*Note: *without universities.*

As regards the **development of curricula,** linear programmes lasting for two, three or four years still prevail. Although a **modular structure of teaching** was tested in practice[84] within the Phare VET Reform experiment, the widespread introduction of modules is still far from being the case. The reason is that the advantages of this structure are restricted by the persistent efforts of MoEYS to modify the modular system to comply with existing legislation.[85] This trend significantly reduces the benefits of a modular system and thus only isolated modular programmes are being introduced, rather than 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, there is no quality evaluation of educational programmes and outcomes of vocational education. Evaluation in general (and this also applies to vocational education) concentrates only on study achievements in general

84 H. Kubátová et al., *Závěrečná zpráva z experimentu Phare VET* [Final Report on Phare VET Experiment], Prague, Research Institute for Vocational Education, 1998.

85 Legislative obstacles include a strictly fixed number of teaching hours per week (hindering the flexible distribution of hours in modules), regulations concerning student assessment (annual assessment based on subjects and not on mastering a module).

subjects. Evaluation of **professional competencies of graduates** is carried out by individual schools. The absence of social partners (most importantly, representatives of employers) in the evaluation process makes it impossible to assess the relevance of vocational education outcomes to the needs of employers.

3.4.5.2 Characteristics of vocational education curriculum

The **Standard of Secondary Vocational Education**[86] was adopted in January 1998 as a legally binding document which defines a national common educational base for all **newly developed educational programmes**.

The **general education component** is set to account for 45% of teaching hours in courses leading to the Maturita and 30% in training courses without Maturita. The general education part is divided into six areas (languages, social sciences, science, mathematics, creative arts and physical education). Educational goals are 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.[87] They involve communication skills, personal and interpersonal skills, problem-solving skills, numerical applications, and skills associated with the use of ITC.

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

It is clear from the above that the foundations have been laid for a systematic approach to the development of curricula for vocational education. As 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 1990s. This is one of the reasons why the draft law on education includes a requirement for the development of a **State Programme for Education** which should set out the aims and content of education provision as well as output competencies for pupils from 6 to 19 years of age (i.e. to Maturita level). On the basis of this document, **Framework Educational Programmes** for different levels of education and individual fields of vocational education are being designed.

3.4.5.3 Framework Educational Programmes

Framework Educational Programmes (FEPs) 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 FEPs will constitute a key instrument for a coherent system of vocational training in the Czech Republic. The programmes **identify the target requirements for school leavers' competencies and the corresponding content of education**. This will ensure that the education and qualifications achieved at a particular level are **comparable,** regardless of the provider.

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

86 Standard středoškolského odborného vzdělávání [Standard of Secondary Vocational Education], MoEYS, 1997.

87 R. Jezberová, *Klíčové dovednosti v kurikulu počátečního odborného vzdělávání* [Key Competencies in Initial Vocational Education Curriculum], a study within a grant assignment, Prague, Research Institute for Vocational Education, 1998.

The National Institute for Technical and Vocational Education is preparing a first set of FEPs for secondary vocational and technical education. The programmes are broken down by educational level and by branch 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).[88]

The FEPs define the requirements for general as well as professional competencies of graduates and the content of various components of the education 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. They also include a time schedule with an obligatory minimum of teaching hours for individual areas and the conditions on which the schedule may be followed. There are other guidelines to be observed in the development of the school-based curriculum: 'cross-sectional' 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 implementing FEPs and the principles for developing school-based programmes.

Differences between FEPs and the Standard of Secondary Vocational Education of 1998:

- **The FEPs concept is based on competencies** expressed by a particular aptitude of the school leaver – i.e. they are not only concerned with knowledge, but also with skills and attitudes. This concept differs from that 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 teaching subjects but according to educational components. Each component is broken down into 'content areas', which means that the requirements go **beyond 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 combining 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 with the 1998 standard.

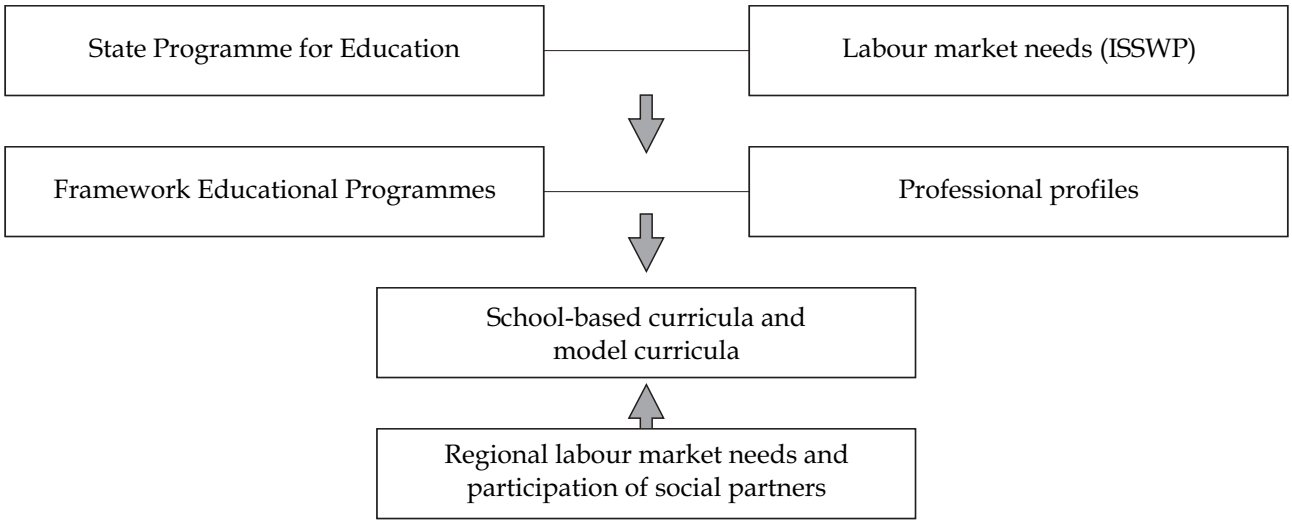
School-based educational programmes for individual disciplines must take account of the FEP for the relevant level and branch of education, as well as qualification requirements for a particular occupation. As FEPs for the levels and branches of vocational education define requirements for a number of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

These requirements must be formulated by social partners, particularly employers. The information base for the development of professional profiles will be the **Integrated System of Standardised Working Positions** (ISSWP), drawn up by 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 design of educational programmes are illustrated in Chart 3.5.

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

Chart 3.5



The Long-Term Development Plan[89] being prepared by MoEYS sets out the following tentative steps for the **design and implementation of the new curricular documents:**

- The first version of FEPs for vocational education will be put forward for discussion in the course of 2001 and 2002.
- The programmes will gradually be complemented by a set of professional profiles, the final version should be ready to be introduced from 2005/06.
- A methodology for the design of school-based educational programmes will be developed. Model educational programmes have been under development since 2001.
- 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 gradually be prepared for the introduction of the framework programmes. Best practice learned in pilot testing will be employed.
- A system for monitoring and evaluating the outcomes of education provision in line with the new documents will be developed, as well as methods for school self-evaluation.
- Development programmes will be designed in order to stimulate and financially support the activities of schools relating to the introduction of FEPs (including teacher training). The first development programmes to promote vocational education were launched in 2001.

Although the preparation of the new curricular documents has already begun, they will not be completed for four to five years. The implementation of new curricula in schools is conditional on 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 these were approved before 1989 – Act No. 29/1984 on the System of Basic and Secondary Schools (Schools Act) and Act No. 76/1978 on School Facilities. Both have been amended since 1989. Act No. 564/1990 on State Administration and Self-government of Schools was approved

89 Long-Term Development Plan of Education and Education System in the Czech Republic, second working draft, MoEYS, February 2002.

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.

Act No. 29/1984 on the Structure of Basic Schools, Secondary Schools and Higher Professional Schools (Schools Act) outlines the school system in general, presenting a framework of school types and the detailed characteristics of individual levels from basic 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, dealing with compulsory school attendance, obligatory school documentation, organisation of the school year, and 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 other types of school this is covered by the law on State Administration and Self-government of Schools.

The Schools Act as a whole was amended eight times, twice very drastically. 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 entities, and compulsory attendance was changed to nine years of basic schooling. This law also allowed the establishment of private and church schools with education equivalent to that of state schools.

In 1995 another significant amendment to the Schools Act, Law No. 138/1995, was approved. It completed the shift to nine-year basic schooling 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 disabled people, in addition to the existing vocational school a new type of 'practical school' was introduced, thus extending 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 administrative 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, etc.).

The act was amended four times, the most important changes being made in 1995 through the introduction of Law No. 139/1995 and in 2000 through Law No. 132/2000. The latter amendment stipulated the establishment of school councils as voluntary bodies with as yet rarely used powers such as, for example, the approval of an annual school report, school budget and school economic report. Law No. 132/2000 Coll., which has in principle governed the reform of public administration since 2000, has brought about the following major changes in education:

- the abolishing of school offices and transfer of 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 direct governance ('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, the 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 preschool facilities, schools and school facilities.

Act No. 76/1978, deals with school facilities. Among facilities for vocational education (other than the usual canteens, hostels and 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 an amendment in Law No. 138/1995, requiring school facilities as part of the education 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, preschool 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 schools, depending on the school type and management of resources. Every private school which is recognised by the state and has concluded an agreement with the state administration and, among other things, has prepared an annual report and provided appropriate financial accounts of the subsidies it has been allocated, is entitled to the basic 60% subsidy. The subsidy may be increased for selected schools (particularly special ones) on condition that the Czech School Inspectorate has rated the school to be at least of average standard. Another requirement is that the school's activities must not be carried out for profit.

Act No. 111/1998 on higher education codified all the significant socio-political changes that have taken place in recent years, and repealed Act No. 172/1990 on higher education in amendment Law No. 216/1993 from 1 January 1999. The new act introduced the concept of university and non-university types of higher education [§ 2(3)]. A university offers Master's degrees (*magisterské studium* – four to six years of study) and doctoral studies (three years) as well as Bachelor's degree (*bakalařské studium* – three to four years) programmes. It has the right to organise faculties with their own self-governing academic bodies. Other non-university types of higher-education establishment can also offer Bachelor's degrees but cannot be divided into faculties. Bachelor's programmes are mostly aimed at professional training but they also cover certain theoretical aspects [§ 45(1)]. Master's 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 work. 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 MoEYS.

Other than the above-mentioned laws, individual regulations, issued mainly by MoEYS on a legal basis, are still very significant for organising VET activities. Particularly important are regulations that stipulate in detail the conditions of admission to secondary schools, the organisation of secondary studies with an outline of manuals and study branches, the completion of secondary school studies, the organisation and completion of studies in higher professional schools, and the government contribution to fees at higher professional schools.

3.4.6.1 Draft new Schools Act

The new Schools Act has been under preparation since 1999. The first version was rejected by Parliament in 2001 and a new version was scheduled for 2002. The proposed law should replace four laws currently in place which provide for the respective areas of education: (1) on the system of basic schools, secondary schools and higher professional schools (Schools Act); (2) on state administration and self-government in education; (3) on funding private schools; and (4) on school facilities (education establishments). The reason is that the wording of the Schools Act is currently, in effect, the result of nine amendments to the original law passed in the 1980s (see above). The inconsistent,

patchy and disorganised nature of school legislation has led to the decision to draw up a comprehensive law covering the entire issue. However, the main impulse was the adoption of new laws which fundamentally change the exercise of public administration in the sense of decentralisation – which has a considerable affect on the management of education.

Concerning **vocational education and training,** the act suggests a range of changes. In general, it aims for greater 'permeability' in educational pathways, to extend the participation of social partners in education, to strengthen the autonomy of schools and to promote the role of strategic planning and evaluation. The promotion of three types of measure is envisaged.

(1) 'Permeability' of educational pathways within IVET

A new 'middle' level of education is being set up, achievable 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 to several related programmes, or to accept students in higher years by recognising their previous studies.

Graduates with a 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 allow 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 separate section on continuing education. In addition to various forms of adult continuing education, post-secondary vocational courses are introduced. These are designed for secondary-school leavers who have a Maturita and would like to complete their education outside the system of higher professional and university education.

The act adopts a new approach to higher professional schools, with the aim that these schools should become closer to tertiary education establishments. New self-governing bodies are being proposed – a higher professional School Council and a Collegium. There are provisions to facilitate transferability between higher professional schools and universities. Changes are also being proposed to the organisation and completion of studies at these schools, the recognition of previous education and the evaluation of the quality of higher professional programmes. (These proposals are a compromise, however, as the representatives of higher professional education would have liked to see a separate law addressing the specificities of this type of education.)

These changes address several existing problems, although only partially. The act still builds on linear educational programmes, making it impossible to create a flexible system of 'mutually permeable' educational pathways and to increase horizontal mobility between various programmes, let alone the implementation of module and credit systems.

(2) Curriculum reform and evaluation improvement

The new system of curricular development is based on multilevel basic documents for teaching or educational programmes. The ministry will draw up a national educational programme or curriculum as a basic framework within which education will be provided throughout the country, with Framework Educational Programmes for each field. The FEPs 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 Section 3.4.5).

Unlike the legislation currently in place, the new law contains general provisions for the evaluation of student achievement (school marking regulations) and evaluation of schools (also through 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 Section 3.4.1). One major problem remains the test (closed questions) of the common part of Maturita examinations which, as experiments to date 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 central Council for Education. However, the regional level of management has not been taken into consideration at all – the act 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.

The autonomy of schools is to be strengthened so that schools become legal entities. At the same time, measures are proposed to promote their evaluation and self-evaluation, such as the responsibility for drafting educational programmes and publishing an annual report.

New principles have been stipulated for the funding of schools and school facilities (direct costs of education, direct costs of services, running costs, investment costs). The sources of finance are more clearly distinguished – direct costs of education and services are covered by MoEYS, according to the type of education, discipline or service regardless of the situation of the founding body, while running costs and investment are normally covered by the founding body.

Finally, inspection duties 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 IVET

3.4.7.1 IVET strengths and weaknesses

The Czech Republic ranks among countries with a strong tradition in the sector of **secondary technical schools,** with high standards in the general education component. This allows graduates to go straight on to the tertiary sector. Some 30% of graduates[90] from secondary technical programmes with 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 have been made to the curriculum. Virtually all educational programmes have been revised, and new programmes have been developed to respond to the changed needs and interests of students as well as to different labour market needs. On the whole, however, the profile has not been broadened sufficiently in that programmes are still over-specialised and there are too many branches of education compared with other countries.

90 Expert estimate, J. Vojtěch, Prague, Research Institute for Vocational Education.

The situation is much more difficult in **secondary vocational schools,** which do not allow graduates direct entry to the tertiary education sector. Most curricula fail to include appropriate foreign language teaching or the use of computer technology. International studies show[91] that students and graduates from secondary vocational schools have a considerably lower level of general knowledge and functional literacy than graduates from programmes with Maturita.

As regards the **structure and organisation of the system,** only partial progress has been made towards flexible educational pathways. Linear educational programmes still prevail, limiting the chance to change focus or transfer to another programme in the course of studies. The new approach to curricular development allows schools to influence the curriculum based on knowledge of regional needs or the capacities and interests of students and their parents. However, this does not guarantee an opportunity to influence the course of individual educational pathways. Although various structured or moduled programmes were developed in the first half of the 1990s, they did not receive official support and were only implemented experimentally. The new Framework Educational Programmes being developed by MoEYS 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 students may not find the modular approach sufficiently attractive. In view of the VET system's traditions, it may be expected that future development will be in the direction of a limited number of broadly conceived educational programmes rather than the introduction of a modular curriculum throughout the 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 beginning to end and allowing for any modifications by the school or choice by the student. Optional subjects are only part of some 5% of educational programmes. The school system is also incapable of adjusting to the individual needs of socially disadvantaged pupils because curricula are focused on the average pupil and the scope of educational counsellors work in schools is limited.

The law provides for **gender equality** 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, some programmes are still seen as being 'for girls', especially in tertiary education.

The national evaluation system and, consequently, the **evaluation of the quality of educational programmes and the outcomes of VET** is insufficiently developed. Evaluation of the professional competencies of graduates only takes place under the authority of individual schools. The absence of social partners (particularly employers) makes it impossible to adequately assess the relevance of VET outcomes to labour market needs. The varying standards of examinations at different schools have recently given rise to the new model of Maturita, which will be subject to wide debate and experimental testing for several years. Certification within the school system is not linked to continuing education provided outside the school system. Finally, the issue of the certification of skills obtained informally, on the basis of experience, has not as yet been raised.

The **low involvement of social partners** (primarily employers and employee representatives) is a critical problem. This consists particularly of participation (or rather non-participation) in the development of educational programmes, setting examination requirements and arranging for industrial placements. The Czech Republic still lacks an institutional framework, nor is there a legislative base for social partners' participation in the development of VET. Forms of participation,

91 P. Matějů, *Funkční gramotnost dospělých. Národní zpráva z projektu SIALS* [Secondary Adult Literacy Survey, National report from SIALS Project], Prague, SoÚ AV ČR, 1998.

where it exists, have developed informally and more often 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 yet raised the issue of VET and its tasks remain of a rather general nature. The only existing structures at central level are the **NITVE**[92] **groups for educational branches** which have been set up to function as advisory bodies for curricular development in relevant VET sectors. These groups consist of school representatives and social partners, although 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 cooperation takes place at local level, where company representatives consult schools on various issues or cooperate with them in other ways.

The involvement of social partners in VET could be strengthened in future, provided that the ministry's aims concerning the curricula and evaluation of VET outcomes are successfully implemented. Moreover, decentralisation of educational administration gives scope at the regional level for stronger influence on the part of self-governing bodies, trade unions, employers and other relevant institutions.

3.4.7.2 Future government priorities in IVET

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

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 to 75%.** At the same time, the proportion of general programmes including broadly conceived vocational programmes (e.g. lyceums) should be increased 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 Educational Programmes,** based on a broad knowledge base and key competencies, and their incorporation into school educational programmes.
- To develop a **two-stage Maturita examination** in general education. (The level of difficulty that will be examined and certified can be chosen by the student.) The writing and presentation of a **final thesis** should be made part of the school (profile) part of the Maturita.
- To support the optimisation of the network of schools in favour of **multifunctional schools** providing general as well as vocational educational programmes at various levels.
- To increase the proportion of **broadly profiled** vocational educational programmes allowing transfer to the tertiary sector (such as lyceums).

92 National Institute for Technical and Vocational Education.

- To support the development of branching and multilevel programmes and to gradually introduce 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 legally provide for controlled placements in companies, for several months minimum, for each VET student;
  - to support the development of vocational and career counselling;
  - to support the development of an information system linking education with the labour market.

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

- **Curricular reform focused on the aims of education and changes in its content.** A new concept of the curriculum is that emphasis should not be placed on the absorption of as much 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 being to learn one and later two foreign languages (also an EU priority). Various new topics will be introduced, such as the nurturing of civic and democratic attitudes, professional orientation, European integration, multicultural and environmental education. These changes will be implemented via a two-level curriculum (i.e. national and school-based), while a progressive mix of educational programmes and teaching methods will be promoted (modules, project teaching). As regards VET, qualification profiles will be defined to provide clearer information to match qualification requirements. Cooperation with employers and their associations is envisaged in determining the structure of courses, setting VET objectives and proposing innovations to qualification profiles, as well as evaluating the outcomes of education and student performance.
- **The introduction of information and communication technologies in teaching.** The priority is to build an 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 receive appropriate training and plans for ICT use in schools must be supported. Conditions must also be established for schools to become centres for increasing 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, necessary in the conditions of decentralised administration of education and broader autonomy of schools. The use of standardised instruments of external evaluation is foreseen, including evaluation tools proposed within international surveys in which the Czech Republic 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 the practical part of the examination will be influenced by professional associations. Representation of social partners on examination panels will be obligatory. The objectiveness of the Maturitain secondary schools will be ensured and the examination 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 post of school psychologist, to develop standards for the provision of counselling services, to prepare a system of comprehensive diagnostic, counselling and information services at the regional level, and 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. Provision 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 a Craftworkers Master Examination should be incorporated in the training in cooperation with the Chamber of Commerce.
- **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 raising the number of students on Maturita courses, but also by improving the availability of follow-up courses for graduates of 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 cooperation with social partners) for at least three-month managed placements in companies for each student in secondary vocational education. Improving conditions for work placements and enhancing cooperation between schools and employers by concluding work placement agreements.
- **Expanding the functions of secondary technical and secondary vocational schools within adult lifelong learning.** The objective is to support the development of distance and combined educational programmes in schools in order 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 to make a distinction between shorter higher professional 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 between higher professional courses and between higher professional schools 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 continuing vocational education providers is the result of developments in the 1990s. At the beginning of this period a majority of those education institutions which were subordinated to various ministries and which, before 1989, provided CVET in the relevant sector, ceased to exist. If the institutions were not abolished, they were, as a rule, privatised and set themselves new objectives. Parallel to this development, a high number of new **private education institutions** were set up – some of which were later closed down. At present, the remaining private institutions make up one important group of CVET providers**.** This group is not homogeneous, as the providers differ in several respects (size, legal status, theme profile, quality). It includes most major educational firms, company educational facilities and agencies as well as individuals licensed to work in the field of education. The establishment of these institutions not only increased the number of CVET providers, but also expanded the offer and, most importantly, brought market principles and competition into the whole area. The market relationship between supply and demand is thus now decisive 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 provided on a commercial basis to various target groups, including retraining courses for job seekers.

Information on the **quantitative** aspect of CVET providers cannot be backed up by exhaustive 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 education establishments other than schools, is estimated at some 1,100 to 1,200. Compared with past years, their number has slightly decreased, as some (mostly small) education institutions closed down for economic reasons, where supply exceeded demand (see below). On the other hand, the number of schools providing CVET as well as IVET has slightly increased. The reason is that, due to a falling demand for IVET (fewer people in young age groups), schools expand their activities in CVET. For example, some 300 to 400 schools (mostly secondary vocational and secondary technical schools) provide retraining courses for job seekers.[93] In addition, other schools, also estimated to number 300 to 400, provide CVET programmes leading to the completion of generally recognised levels of education. The total number of CVET providers therefore amounts to 1,700–2,000.

As regards the overall scope of educational courses on offer, the results of various surveys among education providers[94] 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, as other factors are at play – the standard of living, motivation for training, availability of courses, economic and time limitations, etc. In this respect, the Czech Republic still has to catch up with the EU – as confirmed by the lower participation of the active population in CVET in comparison with EU countries.

93 Survey by the Ministry of Education, Youth and Sports, 2000.

94 Z. Palán, CVT field research results, in *Country Monograph*, National Observatory, 2001.

CVET educational programmes are vary widely, both in terms of content and duration. The longest programmes lead to the acquisition of a recognised level of education. They may be the same length as full-time programmes for young people, or one year longer – i.e. three to five years at secondary schools, most frequently three years at higher professional schools and normally five years at universities. The content of these 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,** are also very diverse in terms of content. Surveys into this type of CVET show that the content of these courses is expanding, focusing on retraining for 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 to almost 300. The length of the most frequently provided retraining courses ranges between 600 and 4,000 hours.[95]

Concerning **CVET for company employees**, data is available from the CVTS2 survey[96] carried out in 1999 using Eurostat. Approximately half of the companies offer training in their own training units, while the other half use external providers. The **most frequent providers of staff training are private 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. scope, content, providers, financing) are taken by the companies as private organisations. The main players in the training of employees are thus the companies themselves in the role of employer 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 entire field. The quality of CVET provided by schools, leading to the completion of a given level of education, is monitored (as in the case of IVET) by the Czech School Inspectorate. In order to maintain the quality of retraining courses, a Commission for Accreditation of Retraining Programmes was set up at MoEYS as early as the first half of the 1990s. When organising retraining 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 within 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 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, although surveys show a greater use of computers in CVET within 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, for two main reasons. The first reason is the **unfavourable economic situation of companies**. Their economic situation may be expected to improve in years to come and the participation of employees in CVET may increase. The second reason is the

95 Survey by the Ministry of Education, Youth and Sports, 2000.

96 Continuing Vocational Training Survey, Czech Statistical Office, 2001.

underestimation of the role of CVET in business development strategies –on the part of both managers and employees. This is demonstrated by the results of various partial surveys.

According to a survey on management of human resource development in Czech companies (Koubek, Acta oeconomica), less than half (45%) had a written HRD strategy in 1998. The proportion had increased by only 6% by 2000. The share of companies with a written overall business development strategy was considerably higher (62%). Thus about every third company surveyed had a business development strategy but no written HRD strategy.

The training of employees is one of the largest components of CVET. Although there are no national statistics on in-service training in the Czech Republic, its range was until recently estimated from various surveys. The results of the first more extensive statistical survey of this kind (CVTS2), part of a Eurostat survey, suggest that, in 1999, two-thirds of companies (67%) implemented staff development activities while one-third did not provide for any training of their employees. This means that 49% of employees participated in some form of training. Large companies make the greatest provision for employee training (54% of employees participated), SMEs make the least provision (only 21% of employees participated). There are also the usual sectoral differences (Table 3.5): sectors offering most training are the electricity and gas supply industry, transport equipment machinery, telecommunications and financial services. Companies which pay more attention to CVET include those with foreign capital investment.

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

Economic activity (CZ-NACE)	Number of enterprises	Employees of these enterprises (thousands)	Enterprises providing CVET		Enterprises not providing CVET	
			Number	Percentage of total	Number	Percentage of 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
textiles and textile products; leather and leather products	962	121	571	59.4	391	40.6
pulp, paper and paper products; publishing and printing	641	43	408	63.6	233	36.3
coke, refined petroleum products; chemicals, chemical products, synthetic fibres	1,301	161	1,024	78.7	277	21.3
leather and leather products	1,937	193	1,412	72.9	525	27.1
machinery and equipment	2,185	262	1,671	76.4	514	23.5
transport equipment	240	86	211	87.9	29	12.1
wood and wood products; furniture; recycling	1,408	92	717	50.9	691	49.1

Economic activity (CZ-NACE)	Number of enterprises	Employees of these enterprises (thousands)	Enterprises providing CVET		Enterprises not providing CVET	
			Number	Percentage of total	Number	Percentage of total
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 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 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 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; consultancy; refuse disposal; membership, cultural and 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 time spent on continuing vocational education by employees of Czech companies was on average 25 hours in 1999. This is substantially less than in EU countries where the figure ranges between 30 and 35 hours per annum. As regards participation in 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 more detailed analysis.

3.5.2.2 *Participation of the unemployed in CVET*

CVET for job seekers developed in the Czech Republic after the creation of an open market in the early 1990s and the establishment of a network of labour offices. As part of its Active Employment Policy, the Ministry of Labour and Social Affairs introduced CVET by means of **retraining courses** at the beginning of this period. These courses are organised by district labour offices in line with the instructions of MoLSA's Employment Services Administration, which also provides the finance. Retraining courses are meant primarily for job seekers, although employees at risk of losing their jobs may also attend them.

There are two main types of retraining course: **specific** and **non-specific**. The specific retraining courses are focused in terms of content on a specialised issue as described in the job the trainee has been promised. Non-specific retraining courses are more broadly conceived and focused in terms of content on certain professional activities which occur in several occupations (e.g. computer use). Retraining 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 from several days to several months.

In previous years, over 11,000 job seekers participated in retraining per year, accounting for approximately 5% of the total number of job seekers. In 1999, the MoLSA reinforced the AEP and earmarked more funds for retraining courses. As a result, **the proportion of the total number of job seekers undertaking retraining** is increasing (Table 3.6), although it is still very low compared with other European countries, reaching only some 7% in 2000.

Table 3.6 Retraining programmes in the Czech Republic

Year	Number of participants	Training course duration (months)	Expenditure (CZK millions)
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 retraining job seekers is relatively high. According to MoLSA data,[97] retraining helped a majority of the participants to find work. Some 67% were successful in their search (64% of women and 67% of youth), while a majority of participants found a job within three months of completion of their course. Those with secondary vocational education predominate among retrainees (43% – of which 34% hold a training certificate – without Maturita, and 9% with Maturita). There is also a high proportion of people with secondary technical education with Maturita. Interest in retraining is particularly strong among younger age groups (63% of retrainees are 35 years or younger).

The focus of retraining courses in terms of content varies widely. A MoEYS shows that the most frequent topics of retraining courses for manual professions included operating skills for specific

97 An analysis of employment and unemployment development in the first half of 2000, MoLSA, 2000.

construction machines and means of transport. The most frequent topics of courses other than manual were computer use, accounting, basics of business, taxes and customs duties. Few courses have a modular structure.

As the participation of the unemployed in retraining is generally low, the **participation of disadvantaged groups** is entirely insufficient. It has been shown[98] that 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 (average participation in retraining was 7% of the total number unemployed). Targeted retraining is not related to the unemployment rate in the relevant district. On the contrary, the 'creaming' effect often means that the lowest participation of disadvantaged groups in retraining courses is in districts with a high unemployment rate.

Interest in retraining and continuing education on the part of those with low qualifications is very low.[99] Counselling services and resocialisation courses which should stimulate this interest are underdeveloped. Pre-retraining, resocialisation and motivation courses only account for approximately 9% of all requalification courses.[100] 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, lack of clarity in the provision and funding of motivation courses. A higher rate of participation in retraining organised by labour offices is also hindered by the current legislation which excludes some groups from entitlement to free participation in these courses (e.g. women on maternity leave or employees at risk of losing their jobs).

It may be necessary to promote approaches which take account of the specific retraining needs of individual groups of job seekers and, at the same time, ensure comprehensive services. This means that the content of retraining courses must be tailor-made and linked to other measures likely to contribute to resocialisation and placement of the relevant person in the labour market.

3.5.2.3 Participation of individuals in CVET on their own initiative

No data are available on the number and structure of CVET participants who undergo various educational programmes on their own initiative. According to the available information, this area of CVET is **highly differentiated**. Short-term courses predominate, with a very diverse focus aimed at developing 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. They are usually paid for by the participants themselves. Language 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 given level of education. These studies are analogous to those followed by young people and, in the case of adults (mostly employed), normally take the form of part-time study or distance learning. The number of such students fell in the first half of the 1990s but in recent years has risen again. At present, the proportion of adults to 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. Apart from this traditional way of undergoing CVET, a small number of adults also take part in 'Third Age Studies' organised by universities.

98 M. Rákoczyová, and T. Sirovátka, *Analýza cílenosti rekvalifikací* [Analysis of Targeted Retraining], Research Institute, MoLSA, 2001.

99 Questionnaire survey at labour offices, Research Institute, MoLSA, 1998.

100 Ibid.

Participation of **ethnic minorities** in CVET is not separately monitored. In recent years, government and non-governmental organisations have been involved in efforts to increase Romany participation in education. Most attention is paid to promoting the participation and achievement of Romany children in IVET. Within CVET, new opportunities have arisen to complete basic education in courses provided by basic schools. Unemployed Romanies are sent to ordinary retraining courses organised by labour offices and, with the exception of pilot projects, there are no specific educational programmes for them. The efficiency of retraining among Romanies is lower than that in the majority population and it should be promoted by closer cooperation with specific prospective employers. Official documents[101] recommend that retraining courses also include the teaching of skills that Romany people do not have, although they are common within the majority population. These include, for example, the ability to swim, the lack of which stops Romany men from serving in the armed forces or police. Proposals have also been made to resume practices that were successful before 1989, where young Romany men had the opportunity, during their compulsory military service, to complete their education, enhance their social status and, at the same time, improve their chances of obtaining a permanent job even if they left the armed forces. There are other proposals, apart from retraining, to provide more courses for Romany women, teaching household skills, financial management, etc., which could complement basic education and significantly improve the social situation of Romany families.

Nationals of other countries who work in the Czech Republic (primarily from Ukraine, Slovakia and Poland) are usually in manual occupations and scarcely participate in CVET.

3.5.3 Responsible bodies

No government or non-governmental organisation at **national level** is responsible for CVET as a whole. For example, MoEYS is responsible for adult education in state schools, while MoLSA is responsible for retraining job seekers. Other ministries are responsible for CVET aimed at certain groups working in their respective sectors. For example, the Ministry of Health is responsible for CVET for physicians, the Ministry of the Interior for civil servants, and the Ministry of Defence for the armed forces. There is no CVET organisation at national level composed of representatives of various state, or possibly non-state, bodies. Several associations have been spontaneously set up at national level for certain CVET areas, 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.

Neither do any organisations have responsibility for the whole CVET area at **regional level**. For example, the responsibility for retraining job seekers is borne by labour offices, which are managed by the MoLSA Department of Employment Administration in 76 districts (plus three offices in Prague). However, the situation is expected to improve with public administration reform. Since 2001, in the 14 new administrative regions, some self-government initiatives could be seen to support and coordinate CVET development in a more strategic way, according to regional needs.

As regards bodies with responsibility for certain parts of CVET, the major role is played by individual providers and **CVET development is largely determined by market relationships between supply and demand**. This situation has advantages (e.g. flexible response to timely educational needs, competition) as well as disadvantages (e.g. the absence of a CVET strategy including development priorities, unclear legal framework, ineffectual state support for CVET).

101 Outline of government policy towards Romany community members to assist their integration into society, Government Resolution No. 599, June 2000.

In these circumstances**, decision-making powers** are to a great extent held by CVET providers. In most cases, they decide on curricula, teachers, teaching and learning methods, teaching materials and set the fees 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 given level of education, or in the case of retraining courses. In both instances, the approving authority is MoEYS. The quality of this kind of CVET programme is controlled by the Czech School Inspectorate in state schools but 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 situation is based on the fact that powers and responsibilities in CVET are unclear and that the area lacks an appropriate legal framework – which has negative implications for quality control, accreditation and certification, for example. For this reason, the strategy recommends that, for the forthcoming period, powers and responsibilities in CVET should be defined with more precision. It is proposed that MoLSA's powers should be expanded at national level to cover the entire CVET system.

3.5.4 Funding

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

Training costs are covered by both **private** and **public** (state) resources. Costs of in-service training for company employees are mainly covered by the companies themselves. There is a common practice, not provided for in any legislation, according to which CVET organised on the initiative of the employers is paid by them, while the costs borne by employees training on their own initiative is at their own expense, although the employer may contribute. No exhaustive statistical data exist on the level of corporate spending on in-service training.

Neither are 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: retraining job seekers and part-time courses provided by schools.

As regards the **funding of retraining,** the level of expenditure on retraining has risen considerably in line with the rising number of participants (almost tripling from 1996 to 2000). While in 1997 expenditure was roughly CZK 90 million, in 2000 it was CZK 346 million. Retraining is one of the most rapidly developing components of CVET. However, in spite of this development, expenditure on retraining reached only 0.02% of GDP, which is many times lower than in EU countries.[102] Financial incentives to participate in retraining do exist but specialists from labour offices claim they are not very effective, as the difference in the level of unemployment benefits for those who do and do not participate in retraining is only 10% to 20%. It is not just a matter of increasing the number of retrainees –longer retraining courses should also be organised. Only longer training can secure the more profound improvements in qualifications which may satisfy labour market requirements. At present labour offices organise longer courses only to a limited extent. One reason is that after the six-month period during which registered job seekers receive unemployment benefits, when on a retraining course they are no longer entitled to any financial contribution – receiving only a subsistence payment from the social departments of municipal offices. Participants on longer

102 In 1998, the proportion of expenditure on retraining in GDP in EU member states ranged from 0.10% (Norway) to 1.07% (Denmark). *Human Resources in the Czech Republic*, Prague, National Training Fund/Institute for Information on Education, 1999. ISBN 80-211-0325-6.

courses are thus in severe need of resources, which of course lowers the demand for such retraining, important though it may be in view of the labour market situation.

Other than the retraining of job seekers, the state pays for **CVET leading to the completion of a given level of education and provided by public VET schools** (secondary and tertiary). Funding is based on the same principles as that of IVET, i.e. rates ('normatives') are used by means of which MoEYS determines the level of contribution for one CVET student as 30% of the level set for the relevant field in IVET. This method of funding currently concerns approximately 65,000 persons, while the number of participants at secondary level (ISCED 3) is static and only accounts for about 6% of the total number of students. The numbers rise slightly at tertiary level (ISCED 5 or 6) and account for approximately 15% of the total number of students. The data on 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 CZK 27 billion in 1999 – the amount ranges between CZK 540 and CZK 810 million per annum. There are no financial stimuli for this type of CVET in the Czech Republic. An employer whose employees take a part-time course can voluntarily (in line with the Labour Code) grant them paid study leave or travel expenses.

As regards **private CVET providers**, as a rule the state contributes only to private schools. The funding mechanism is similar to that for IVET provided by private schools. In 1999, state subsidies to private schools (including denominational ones) accounted for 3.2% of total MoEYS expenditure on education. The largest cost is teachers' and lecturers' salaries.

According to the results of the CVTS2 survey, **company expenditure** on staff development in 1999 was CZK 5.09 billion, which is 1.13% of labour costs. The development of this indicator over time suggests that the trend is static or a slight increase (from 0.9% to 1.13% in six years). Although the survey involved companies employing approximately 47% of all employed people, it can be extrapolated that the expenditure of companies (and other organisations) on staff development only amounts to some CZK 11 billion per annum. Financial incentives to encourage staff development are insufficient.

Generally, based on information on CVET funding in several countries, there are two features peculiar to the Czech Republic. First, the **number of CVET funding sources is lower** than it is in, for example, West European countries – a fact which is particularly evident from the minor involvement of organisations other than ministries, companies and individuals (i.e. lack of interest on the part of municipalities and regions, professional associations, trade unions, etc.). Second, the **total expenditure on CVET is relatively lower** in the Czech Republic. 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 *National Programme for the Development of Education* (White Paper) and the *Human Resource Development Strategy*.

A persistent problem of CVET financing is the **non-existence of incentives for CVET development**. This applies both to companies and to employees/individuals. Companies may include CVET costs in their total production costs and therefore affect their corporate tax base. However, results from previous years show that this measure is not efficient enough. No incentives have been introduced by the state. The issue of financial and non-financial incentives is one of the most frequently discussed issues in the entire CVET system. There should be different types of incentives to affect various stakeholders: employers, employees/individuals, job seekers and CVET providers. These incentives (the specificities of which would 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 accords them no major role that could influence the CVET system. There are two platforms at 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 at regional nor local level do social partners have a more important role in CVET defined for them.

At national level, there are two major **associations of employers**. These are the Confederation of Industry and Transport of the Czech Republic and the Union of Employers' Associations of the Czech Republic. The Confederation of Industry and Transport has set up, as one of its commissions, a schools commission which mainly deals with topical CVET issues. The Union of Employers' Associations 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 has significant authority or responsibility in CVET. As regards **trade unions**, the most important is the Czech-Moravian Confederation of Trade Unions which brings together several unions. Its education and training department is focused primarily on CVET for trade union members and staff. The Confederation of Trade Unions only expresses its position on the CVET system and has neither powers nor responsibilities in this area. The **Chamber of Commerce of the Czech Republic** has an education and training division which has initiated and begun to implement CVET for entrepreneurs and craftworkers through courses provided by the Academy of Crafts and Services set up by the Chamber of Commerce.

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

Employers play an important role only in **compulsory CVET** for employees as representatives of certain professions. The scope and content of this training is set out in laws and other regulations valid in each sector. These professions include, for example, physicians, electrical engineers and welders. Employers are responsible for the compulsory training of their employees, which they either provide themselves or arrange it through other CVET providers. Compulsory training is always related to a specific target group and does not significantly influence the rest of the CVET system.

It is clear from the above that the participation of social partners in the development of the CVET system in the Czech Republic is restricted to a consultative function which is defined in current legislation. Activities of employers in CVET primarily take place at company level and aim to satisfy the specific educational needs of their organisations. Incentives for a greater company participation in CVET development are non-existent. At the sectoral, regional and national levels employer or trade union organisations scarcely influence the CVET system.

A promising step in this respect would be the establishment of tripartite bodies at regional level. Efforts have been made by the new self-governing regions to influence the development of human resources and educational opportunities in their areas. Some Regional Councils for Human Resource Development have already been set up – it would however be premature to assess their actual influence.

3.5.6 Curricular development

In most areas curricula have been developed **specifically for CVET.** These specific curricula are used in CVET for company employees, in retraining 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 are used only in courses leading to the completion of a given level of education.

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

The development of CVET curricula leading to the completion of education at secondary vocational, secondary technical and higher professional levels 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 comment on these proposals to MoEYS. The development of CVET curricula leading to the acquisition of a university degree is the responsibility of individual universities.

CVET curricula leading to the completion of a given 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 rare. Curricula used in other CVET areas, particularly for company employees, are as a rule tailor-made to suit the needs of users. The situation is similar for retraining job seekers.

No one institution is concerned with the modernisation of curricula for the entire CVET system. If any work on modernising CVET curricula does take place, it relates only to specific cases (mainly compulsory CVET) and specific target groups (e.g. physicians, tourist guides), and carried out 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 the evaluation and certification of knowledge gained in CVET. At present, **several types of certificate** are used.

Upon completion of CVET leading to the completion of a certain level of education, the graduate is awarded a certificate which is **recognised at national level** and has the same validity as a certificate awarded upon completion of CVET. Secondary vocational graduates receive a vocational training certificate (*výuční list*) on passing a final examination. Secondary technical graduates receive a Maturita certificate on passing the examination. At present, work is under way to modernise Maturita examinations (see Section 3.4.1). Higher professional graduates receive a certificate (Absolutorium) on passing a final examination and university graduates are awarded a university diploma if they pass the relevant examination.

Those who have completed compulsory CVET receive a certificate which testifies to successful completion. This document allows the holder to perform specific professional activities (similar to a

driver's licence). The certificate has nationwide validity but relates only to **specific professional activities** or a **specific sector**. Successful graduates of retraining courses and, as a rule, company employees who passed CVET organised by their employer, obtain a certificate which only provides **information on the completion of a course**. Specific certificates are also issued on completion of generally recognised types of CVET, such as the MBA, or TEFL certificates for proficiency in the English language). These certificates may only be issued by institutions with 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 the introduction of a uniform way of describing basic aspects of CVET (e.g. length, level) – this would enhance the transparency and mutual comparability of certificates.

3.5.8 Legislation

The current legal framework for CVET is not integrated. There is no comprehensive law covering the entire CVET system. Individual parts of the system are provided for by a range of legislation. For example, retraining is regulated by the employment law.

CVET leading to completion of a given level of education, which takes place mainly in state schools, is catered for by the Schools Act. The Schools Act of 1984 was amended several times – which is why MoEYS began drafting a **new Schools Act** in 1999. 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 covered by the Higher Education Act of 1998, amended in 2001. The amendment concerned, for example, the enlargement of CVET at higher-education institutions through study programmes for which universities (even public ones) can charge tuition fees.

The existing legal framework is **weakest where CVET for company employees** is concerned, as there is no law providing for the major aspects of in-service training in companies. The proposed strategy for further development of the Czech education system recommends that existing legislation should be improved by a more precise definition of the powers and responsibilities of state bodies, social partners, municipalities and regions, professional associations and other CVET stakeholders. In addition, clear rules should be set for CVET funding, and the processes of accreditation, certification and support for the development of a CVET infrastructure should be enhanced (information, monitoring, research, international cooperation).

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 training to various target groups in various sectors. CVET providers are fairly 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 bureacratic barriers to further expansion. The liberal legal framework also contributes to the rise and working of competition in the CVET market – thus favouring CVET development. Others strength is a long CVET tradition in some sectors (e.g. health care) and the great interest shown by young people.

Several of the **weaknesses** of CVET have been mentioned. These include, for example, unclear legislation, non-existence of efficient state incentives for CVET development, considerable dependence on the state budget for the funding of certain areas, negligible role of social partners, non-existence of integrated systems of quality assurance, accreditation, certification, etc.

The government declared **main priorities** in the CVET field in several strategic papers: National Programme for the Development of Education, National Employment Plan, National Employment Action Plan 2001. To date these represent only plans and aims for the future and implementation will take time. The following key measures are proposed in the strategy for adult education:

- 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.
- 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.
- 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).
- As regards the measures supporting CVET in terms of labour market requirements, the aim is to:
  - increase the scope of retraining within the 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 resocialisation and training programmes designed for disadvantaged groups with the aim of bringing them back into employment;
  - promote management training programmes and educational counselling programmes for new entrepreneurs, as well as retraining programmes accompanying company restructuring processes.

3.6 Links between IVET and CVET

Links between initial and continuing vocational education have been very weak and underdeveloped until now. There are two reasons for this. The first lies in the inertia of the IVET system that has not undergone progressive changes of curriculum structure, educational pathways and certification. The new requirements for lifelong updating of knowledge and skills are thus not fully respected. On the other hand, CVET development – which has taken place very rapidly and spontaneously over the past decade – was influenced by supply and demand without having a formal system framework. CVET structures have developed independently from those of IVET (with some exceptions such as part-time study for adults provided by schools, and some types of requalification course), both in their training capacities and the different content of training programmes.

In the second half of the 1990s, the issues of IVET and CVET links and of lifelong learning were raised in a more comprehensive and systemic way. A broad discussion on lifelong learning key priorities was organised under the **Lifelong Learning Memorandum consultation process** in 2001.[103] The core of the consultation process was implemented through informal workshops and discussions organised around the six key themes 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 Section 3.1). The consultation process has thus helped to focus general awareness on critical problems already addressed by the strategic documents.

Basically, these problems fall into two groups. The first relates to the existing **education system** and its inherent disadvantages (e.g. a measure of selectivity, a certain rigidity, little concern for the individual, low levels of involvement of social partners, insufficient financing and investment, 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 still not been fully developed. Its most serious weakness is the non-existence of a **comprehensive legal framework** clearly setting out the responsibilities of the main stakeholders in continuing education (the state, social partners, communities, regions, public and private institutions); fostering transferability between various forms of education, especially between initial and continuing education; and ensuring the 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**. A key step is therefore to convince both policy-makers (national and regional) and enterprise executives that education is not a matter of consumption but of investment with a high return, and that people are the most valuable asset of society and of every enterprise. The strategic documents that have recently been prepared (or are in preparation) aim at this objective and attempt to address both groups of problems.

The existing systemic mechanisms were tailored to the needs of a traditional education system. They have to be modified to respond to new needs and, even more, to cater for a new clientele.

Recommendations from the Lifelong Learning Memorandum consultation process:

- The development and implementation of an open, continuously updated **system of qualifications,** based on requirements for individual jobs and recognised by social partners, appears to be a major tool in a coherent, 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 the Integrated System of Standardised Working Positions developed by MoLSA, for example.
- Mechanisms should be created for **certification** of the relevant qualification on the basis of recognition of competencies which may have been acquired outside the formal system (informal learning) and to allow the participative involvement of social partners for the accreditation and evaluation of output qualifications.
- It is recommended that the concept of generally applicable competencies in the context of civil and working life should be introduced to all types of curricula; that proactive methods should be developed in initial education – independent work, teamwork, project teaching; that

103 The Ministry of Education, Youth and Sports (MoEYS), as the body bearing the main responsibility for the consultation process in the Czech Republic, has authorised the National Observatory to manage the consultation process.

methodological materials, support programmes and pilot projects should be developed to facilitate educational changes in a given direction.

- Educational programmes consisting of **modules as independent units** with clearly defined objectives and assessment criteria should be developed. Such modular structures facilitate assessment (certification) of partial qualifications and improve transferability between various programmes within the overall system of lifelong learning.
- In order to provide comprehensive career perspectives, educational and educational-psychological counselling must be seen as an integral part of all components of lifelong learning and should be provided in **a far more integrated form**, making greater use of the wide network of information and counselling centres at all labour offices. Counselling should be **more accessible** to potential clients. Obstacles to putting the proposed measures into practice include lack of coordination at ministry level and lack of a legislative framework clearly defining responsibilities and thus facilitating cooperation at the lower levels. Integration of counselling services in schools should be understood as part of a broader process of bringing together counselling services in cooperation with the labour and social affairs sectors.
- It is recommended that the development of educational materials for assisted and managed self-study should be fully supporting using all available technology. Only such products have a chance of being successfully used by individuals who are fully involved in economic and social activities and, for objective reasons, cannot participate in full-time studies. At the same time such courses must be provided with an effective quality assurance and quality control system.

The new strategic documents from MoEYS – the *National Programme for the Development of Education* (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 at the dawn of the information society means a profound transformation of the education system. As first principles it acknowledges three aspects of the transformation which, taken together, create a new quality:

- First, the **lifelong** aspect. This has two consequences – the **expansion of continuing education** (or adult education) catering for the needs of those who have already left school, and the **transformation of the traditional school**. The role of the school 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 is 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, the **lifewide** aspect, covering all forms of learning irrespective of the institution or setting, taking away barriers between education and society, allowing the same qualification and skills to be gained by diverse paths. The **opening of schools** points the way to offering educational services to the whole community, the participation of main stakeholders in running the institution and the system, the devolution and empowering of individual schools.
- Third, 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 the human potential available. To improve **access to education** requires not only an adequate number of study places, but also diversity of provision. **Equity** means overcoming both economic and socio-cultural differences, compensatory and remedial measures often being necessary.

This approach stresses the unity of the lifelong learning perspective and the close relationship of both main areas, initial and continuing education. At the same time it declares the need to establish a

comprehensive legal framework for the new field of continuing education, and to set up the required **systemic mechanisms** which are for the most part the responsibility of the state – such as a financing policy, a definition of responsibility of the various stakeholders, especially the 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 have developed considerably since 1989 in **two parallel mainstream systems**. Their objectives are slightly different but they have one common aim – to help young people find optimal solutions to their personal and career-related problems – i.e. the choice of an appropriate educational route, career and the specific individual issues associated with their personal and working life. One system operates under **MoEYS**, the other functions under **MoLSA**. Guidance and counselling under MoEYS focuses on educational and psychological issues, 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 MoLSA.

The existing system of counselling and guidance services under **MoEYS** has three components:

- **Institutions concerned with organisational and methodological tasks:** MoEYS, the MoEYS advisory body for educational guidance and the Educational and Psychological Institute of the Czech Republic (founded in 1994 by MoEYS). The institute publishes information on counselling services in a periodical entitled *Educational Guidance*.
- **Guidance and counselling institutions:** 101 Educational and Psychological Guidance Centres (EPGC; 96 state, four private, and one denominational), 35 newly established Special Educational Centres, one 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 help to find solutions to the educational problems of preschool children, basic school pupils and students of secondary and special schools and educational facilities within the school 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 higher-vocational and higher-education students. EPGCs are gradually being transformed to change their approach from merely establishing a diagnosis to 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 focused on the prevention of socio-pathological disorders.
- **Individual specialists working at schools:** *education guidance specialists,* newly introduced *school psychologists and school special teachers* are employed by all basic, secondary and higher professional schools and provide counselling services as part of their normal working duties. Their role in career guidance consists primarily in putting the student in contact with special guidance and counselling units. Unfortunately, the work of education counsellors at many schools is still undervalued or remains theoretical.

As one of many measures contained in the National Employment Plan, in 1999 MoEYS introduced a new subject, Career Choice, into the curriculum of all basic schools. Depending on the school, the subject might be part of the compulsory curriculum or part of non-compulsory education. Another subject, Introduction to the World of Labour, has been incorporated into the curricula of secondary and higher professional schools. The schools need to cooperate with labour offices in this respect.

In order to secure further development of the system operating under MoEYS 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 **MoLSA** was set up as an entirely new body after 1989. The national employment policy is aimed at achieving a balance between the supply of and demand for labour, the productive use of human resources and safeguarding the right to employment. This policy is implemented by:

- *MoLSA's Department of Employment Administration* which sets out and controls employment policy implemented by *labour offices*.
- The services of the network of 77 labour office *career guidance centres* are primarily focused on assisting the unemployed in tackling personal and social problems relating to their situation or difficulties experienced when (re)entering the labour market. They provide information, advice, job or retraining placements, individual and group counselling. Special attention is paid to disadvantaged unemployed persons, such as recent school graduates, those with low education, disabled people, refugees, ex-offenders, etc.
- The network of 77 labour office *information and counselling centres* specialise in career choice, primarily for young people, and provide information on educational opportunities and vocational training, educational facilities, forms of study, conditions in the labour market and services for unemployed young people. These centres also work with high-risk groups of children and young people. They offer a range of printed[104] and audiovisual[105] career information and computer programs[106] to guide the vocational choices of pupils and students, but they are also open to and sometimes used by adult clients. The Integrated System of Standardised Working Positions is under preparation for the general public <http://www.istp.cz>. The system should help to assess the general aptitudes of an individual to perform a particular type of work.

A network of 15 *diagnostic centres* was set up as a result of the Government Decree of 1999, *Measures to assist employment of individuals with difficulties finding a position in the labour market (with particular regard to members of the Romany community)*. These centres assist people with difficulties in finding employment, particularly young people, those with low qualifications or unskilled, Romanies, disabled people, elderly people and others. The aim is to strike an optimal balance between people's 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 at quite a high standard. The two government initiatives (National Employment Action Plan 2001 and Human Resource Development Strategy), supported by the European Commission, include specific

104 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.

105 *Guide to the World of Occupations*, OK Work, Pupil, BKOV.

106 Ibid.

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 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 on learning opportunities, national education and training systems, and guidance issues.

4. Management training

Before 1989, Czech managers were not really used to organising production and services and did not experience any 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 compared with European standards – as some studies show[107] – numerous shortcomings appear which reveal the weaknesses of Czech managers, particularly as regards management techniques (soft skills). The deficiencies include a lack of willingness to delegate, lack of flexibility, inability to form and lead a working team efficiently, inability to recognise priorities, focus on short-term outlook and problematic ethical awareness.

Czech managers also lack modern knowledge (hard skills) such as foreign languages and economics. The main route to the better management of Czech companies 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 the educational programmes on offer play an important role in this process. Providing students with the basics of business and economic decisions is vital to their ability to work in various management structures later on, particularly in small companies.

4.1 Educational programmes within IVET in schools

Upper-secondary schools only rarely feature the economic and business fields which would focused exclusively on management. Management training is rather included as one component of the curriculum in the form of optional subjects which may be chosen by the students of various courses. Graduates from these programmes (economics and business, business in various fields, organisation and management) face a number of problems in the labour market. According to labour offices,[108] they contribute largely to unemployment and tend to be out of work longer than other groups. The reason is that there were almost three times as many graduates from social sciences courses than technical ones, and the most popular courses in terms of student numbers are those stated above. 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. Surveys show that half of these graduates do not even seek employment in their field. It is understandable that employers refuse to accept these people for a position within their management structures, as they lack the indispensable practical experience for the management field. For this reason, management studies as the only specialisation are not very appropriate at the initial upper-secondary level. On the other hand, the development of business

107 *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. F. V. Brodbeck et al., Cultural Variation of Leadership. Prototypes across 22 European Countries, *Journal of Occupational and Organisational Psychology*, 2000.

108 *Uplatnění absolventů škol* [The Situation of School Graduates in the Labour Market], Prague, Research Institute for Vocational Education, 1999, 2000.

and management skills as a complement to other disciplines improves the prospects for one's own business activities and the opportunities for subsequent employment.

Management training provided by **higher professional schools** is generally split into two key branches: the marketing of companies (11 schools) and business economics (three schools). Twelve higher professional schools provide combined management programmes including hotel, trade, engineering, tourism, transport, sports and even electronics management, logistics, and company management and economics. There were 1,205 graduates from management disciplines at higher professional schools in 2001 and about another 60 students completed courses in human resource management. Even larger numbers of graduates may be partly included in this category, such as those from public administration, economics and accounting courses. In terms of graduate employability, similar conclusions to those in secondary education may be applied to higher professional education in these disciplines.

Of a total of 27 public and state higher-education institutions (universities), 14 (i.e. more than 50%) provide accredited courses in management. Management training in an integrated form[109] is provided by 26 faculties out of 120 (21%). Only 12 courses are at undergraduate level (Bachelor's degree) and six courses at graduate level (Master's degree). Both undergraduate and graduate programmes are provided by 22 faculties. Some faculties offer several courses. In total, there are 43 courses in the management field. 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 these specialised management courses, components of management training (one or more subjects) are found in a number of other courses. Subjects include organisation and management, human resource management, banking, accounting, quality control, 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 offers a study programme in economics and management, 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 gives a total of 1,500. There should be another 200 to 300 graduates from private schools in a few years.

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 by companies. As regards satisfaction of the demand for studies, the situation in management disciplines is similar to that in higher education in general – i.e. only about half the applicants are accepted. Graduates from the above courses are more employable compared with those from other disciplines. Company demand for specialists in these disciplines will be partially satisfied in two or three years' time, after the first graduates from private schools enter the labour market. At present, the demand for a more narrow specialisation is compensated by continuing education courses via institutions involved in adult education and consultancy agencies.

109 An overview of study programmes and fields of study at Czech higher-education institutions, *Učitelské noviny* [Teachers' Newspaper], 14 November 2000. *Jak na vysokou školu* [How to Be Accepted by an HE Institution], Centre for Higher Education Studies, 2000.

4.2 Supply of continuing education

4.2.1 Statistical data and indicators concerning lifelong learning

In view of the inappropriate level of development of the system of continuing education in the Czech Republic, no continuous monitoring mechanisms are in place. 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. The lack of information on this area constitutes one of the most serious obstacles to a coherent development of this sector of education. The existing statistics are mainly obtained from ad hoc surveys (such as the Cranfield study, studies by the National Observatory, MoEYS, CVTS2, CSO-Eurostat, Know-How Fund). Plans are due to expand the questionnaire and database used for the *Labour Force Survey* to cover continuing education.

4.2.2 Private institutions providing continuing education

Private institutions that 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 Czech Republic. They provided courses primarily in general management theory and often employed foreign agencies or lecturers.

Institutions involved in CVET offer mainly short-term courses – not long-term, comprehensive management education. They offer training in various skills and innovations, management training linked to consultancy, training linked to ISO certification, training leading to the acquisition of foreign certificates, training courses in teamwork 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 MoEYS, roughly 10% of CVET institutions focus on management. This means that the number attending courses in management disciplines may be estimated at 60,000 a year.

According to estimates based on data from various sources, some 2,500 education institutions are 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 education institutions specialising in educational activities. This decline is market-related and corresponds to the structure of learners. What is alarming however is decreasing interest in continuing training on the part of companies.

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

4.2.3 Master of Business Administration (MBA) programmes

MBA-type management training is provided by some 20 firms, according to MoEYS data. As this type of education is not provided for in current school legislation, it is qualified in the same terms as any other business activity by foreign investors. For this reason, there is no uniform educational standard in this area and courses differ in content, duration and form. There may be certain standardisation if this type of education is provided by a public higher-education institution in cooperation with a foreign university (e.g. 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. Open University in Prague). MBA studies have not yet become a common part of management education – the annual number of graduates is estimated at only 200 to 300.

4.2.4 School programmes

The role that schools play at all levels of continuing education bears little relation to its importance, as they provide only about 10%. This also applies to management education. The role of schools in continuing education should be primarily to provide longer programmes, which would be more general and focused on upgrading and completing managers' qualifications. Particular barriers to development in this area include lack of capacity, but also often the low motivation of schools and teachers to implement these programmes as part of the school's subsidiary economic activities (although existing legal provisions make this possible).

4.3 Focus of management training

Courses in management rank first among continuing training courses (12.4%), ahead of computer skills, languages, sales skills, communication and other courses (MoEYS survey, May 2001).

The supply of management programmes (and, to a certain extent, of comprehensive management education) is very varied in content and the quality is unequal. The supply includes disciplines such as management techniques, performance optimisation (which concerns managers as well as teams), the organisation and management of teamwork, communication (including negotiations, presentation, etc.), as well as management support disciplines such as human resource management, marketing, business skills, motivation, corporate culture and business ethics.

The management training on offer has recently undergone the following changes:

- from general management theory to the theory of management in specific fields (security management, foreign trade management, international transport and forwarding management, environmental management, etc.);
- from training top managers to training middle managers and supervisors. This reflects new approaches to organisation and management (flattening organisational structures, delegation of powers, 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,[110] they cooperate with a number of education institutions in the provision of external management training. Cooperation 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 cooperate with any external organisation.

Considering the increasing range of activities in **small and medium-sized enterprises**, 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 demands on managers' time. 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 as being too narrowly specialised and focused on the details of management work.

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

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. These conditions are interrelated. It is impossible to expect the development of management training in a situation where unqualified management and a lack of professional competence in management are tolerated and where continuing education is neglected. The problem is that, although permanent pressure for the improvement of the quality of the education 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 NGOs are concerned with the quality of management training:

- **The Association of Institutions of Adult Education** – this is an NGO bringing together legal entities involved in continuing education. It influences quality primarily through its ethical code, compliance with which is a condition of membership, and through its systems for the certification of lecturers and of programmes and institutions (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 (Czech Association of MBA Studies)** is attempting to accredit distance educational programmes in teaching, leading to the award of an MBA degree.

110 The survey was conducted by the Department of Adult Education and Personal Management of the Philosophical Faculty, Charles University, Prague.

- **CAMETIN** – an NGO 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 **Chamber of Commerce of the Czech Republic** – an institution that provides various services for Czech entrepreneurs and managers. It organises a range of educational and counselling events in 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 organisation. Its mission is to support the transition of the Czech economy through human resource development. In line with its mission, the NTF is and has been implementing a number of projects, some in the management training field.

It is clear from the above list that the quality and organisation of management training is the concern of many institutions. The problem lies in the coordination of their activities, the clarification of basic parameters of management training, and the specification of the content of modules that could become a basis for the unification of training. This unification would separate the simpler certification and review processes from the training provision. Barriers to the development of continuing education are its cost – both for individuals and for companies. Companies are deterred by the lack of transparency in the 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, trainers, managers and administrators

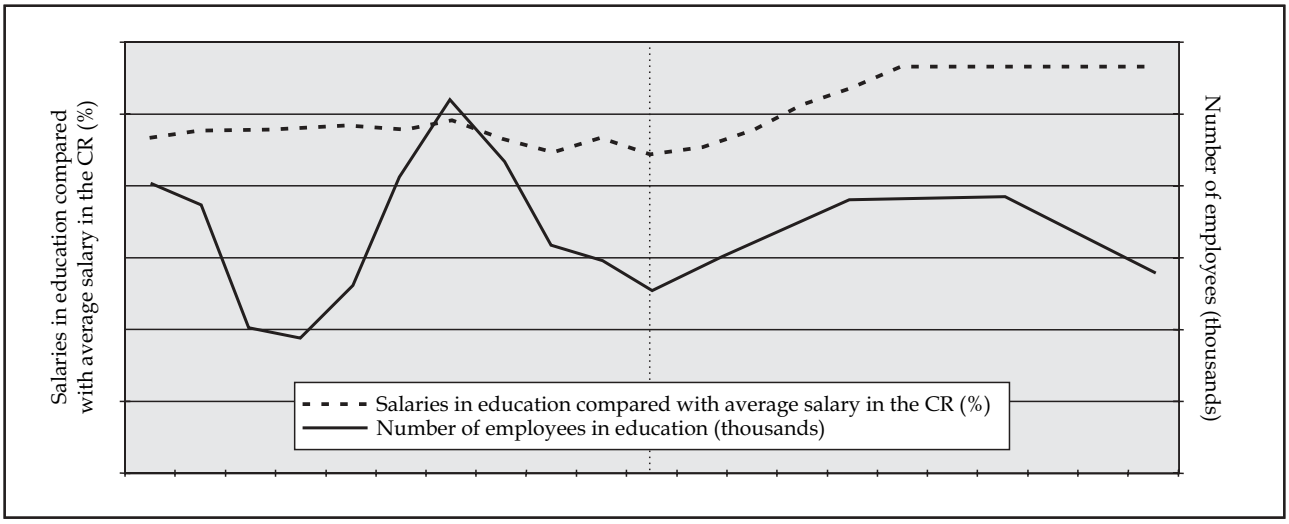
Some 50,000 of 61,000 of the secondary teachers in the Czech Republic work in vocational education as teachers or trainers. The pedagogical staff of vocational education schools are grouped into several categories according to their pedagogical activity:

- teachers: mainly concerned with teaching and tuition in general or vocational subjects;
- teachers of on-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 component 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 staff appointed for the training but do not have any pedagogical qualifications.)

The age structure of teachers in the Czech education system (including VET) is unfavourable in comparison with the EU. A high percentage (around 30%) of trained teachers do not work within the education system. The outflow of young teachers is the most alarming. The main reasons for this include dissatisfaction with the financial remuneration of teachers, particularly the salary level on first employment. The very low salary levels in Czech education, compared with other professions similarly demanding in terms of qualifications, is shown by the relation between the salary of a teacher and that of a bank clerk. While this ratio is scarcely 1:2 in the Czech Republic, in most developed countries the two salaries are either equal or the teacher's is higher.[111] Although the *National Programme for the Development of Education* (White Paper) aims to increase salaries in education to 20% above the Czech national average (by 37% for teachers), this cannot be achieved before 2007 (Chart 5.1).

111 This is true, for example, of Finland, Ireland, the Netherlands, the United States – see *World Competitiveness Yearbook*, 1999.

Chart 5.1 Salaries in education compared with average salary in the Czech Republic, number of employees in education



Source: National Programme of Education Development.

As the autonomy of schools is increasing, the decisive role of school directors is being recognised. There is an acute need to develop a comprehensive standard for the post of school director, setting out qualification requirements (Master's degree) and length of practical experience, professional and management competencies, criteria and forms of verification and evaluation of qualifications, personal qualities of applicants, and type of certification.

5.1.1 CVET trainers

As there is no information or statistics system for continuing education in the Czech Republic (see Section 3.5), **data on the number and orientation of lecturers, trainers and consultants** can only be hypothetical. Their numbers have been increasing for some time and several institutions now 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, the Association of Management Trainers and Consultants and CAMETIN. These three bodies are discussing the possibility of merging their systems. As they have only recently begun their operations there are some 100 certified lecturers and trainers, about half of whom specialise in management training. MoEYS, which is responsible for accreditation of retraining programmes in the framework of the Active Employment Policy, is not interested in the accreditation of trainers. A decree has been issued by the Accreditation Commission stipulating that the promoter of a retraining programme submitted for accreditation only has to provide a statement on the qualifications of lecturers.

School participation in the entire CVET project is about 10% of provision, with a corresponding number of teachers involved in continuing education at all levels. Schools are not very interested in this type of education, primarily due to lack of capacity but also lack of personal motivation. Salary levels in schools are below average, from CZK 70 to CZK 80 per hour, and are not expected to reach the national average until 2003 (see above) – it is understandable that this is not very motivating.

The salaries of CVET lecturers are higher, not being dependent on the scales used in schools. There are rather wide differences in remuneration – the hourly rate ranges from CZK 150 to CZK 1,000

(and over) for external lecturers (contract-based). Rates for lecturers and trainers employed by various institutions or educational and consultancy facilities is on average double that of teachers in the school sector.

5.2 Pre-service training of teachers and trainers

Qualification requirements for teachers are set out in the MoEYS decree of 1997. Teachers of general subjects must have an MA degree from a higher-education system (tertiary level – ISCED 6, 7). For teachers of vocational and technical subjects the requirements are an MA degree in a subject together with pedagogical studies. There are two possibilities for teachers of vocational and technical subjects to gain their qualifications: concurrent pedagogical studies or consecutive pedagogical studies usually taking two years at an academic level including on-site teaching practice.

Teachers of specialised subjects where no higher education exists (waiter, dressmaker, etc.) have to take a BA at a special teacher-training college or a six-term supplementary course.

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

Instructors must have followed 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 institutions (economics, engineering, agriculture, arts). They deliver vocational courses designed for teaching. As universities are autonomous, teacher training has, in recent years, undergone extensive diversification in both content and organisation.

Initial teacher training in the Czech Republic is characterised by a fragmented curriculum and inadequate links between the vocational and pedagogical-psychological components and between theory and practical training. Although a number of innovations have been introduced (primarily in the pedagogical-psychological component), there is no systematic approach to raising standards. The training of teachers of vocational subjects should be very flexible and respond to modern technologies and the labour market. In all respects teacher training thus falls short of practical demands.

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

5.3 In-service training of teachers and trainers

There is no law on the continuing education of teachers and trainers. The current legislation allows all manner 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 and the responsibility, including 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 centres, **no organisation within the education sector provides continuing education of teachers of vocational subjects in their entirety.**

Some progress has been made by 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 the 14 regional centres, there is another centre with a specific focus on the Polish minority. The centres have certain innovative elements (training courses in European integration, exchange of best practice 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. Continuing training for teachers of vocational subjects, which could help them to keep abreast of the current technology and new applications, is not provided by these centres. Also, there is little opportunity for these teachers to undergo regular internships where they could gain practical experience in current developments in the corporate sector.

Objectives of pedagogical centres activity

- To promote the 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 on new trends and methods in education, to facilitate the exchange of experience, to disseminate information on the EU.
- To provide counselling on teaching methods, to provide information on curricula, to facilitate the exchange of experience and support teachers in developing curricula.

5.3.1 Continuing training of trainers

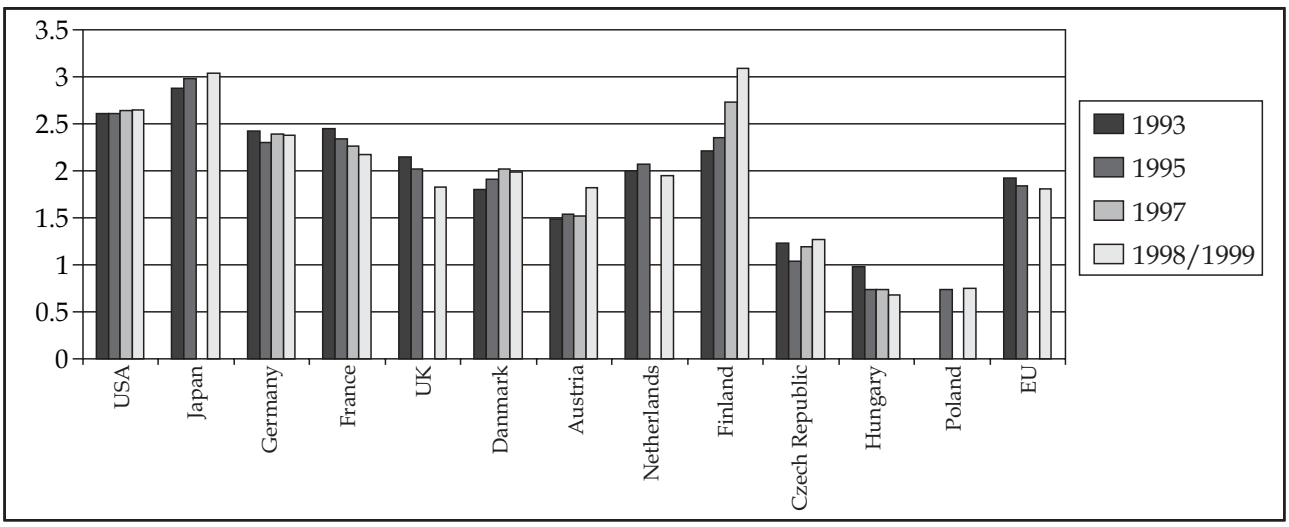
Continuing training of trainers is not implemented in a systematic way. However some training programmes are provided by the Association of Institutions of Adult Education through their distance and full-time courses. A series of study materials for distance learning has been published. This type of 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 is organised as the need arises.

6. Research in the fields of education, training and employment

6.1 *Basic information on organisation, functioning and funding*

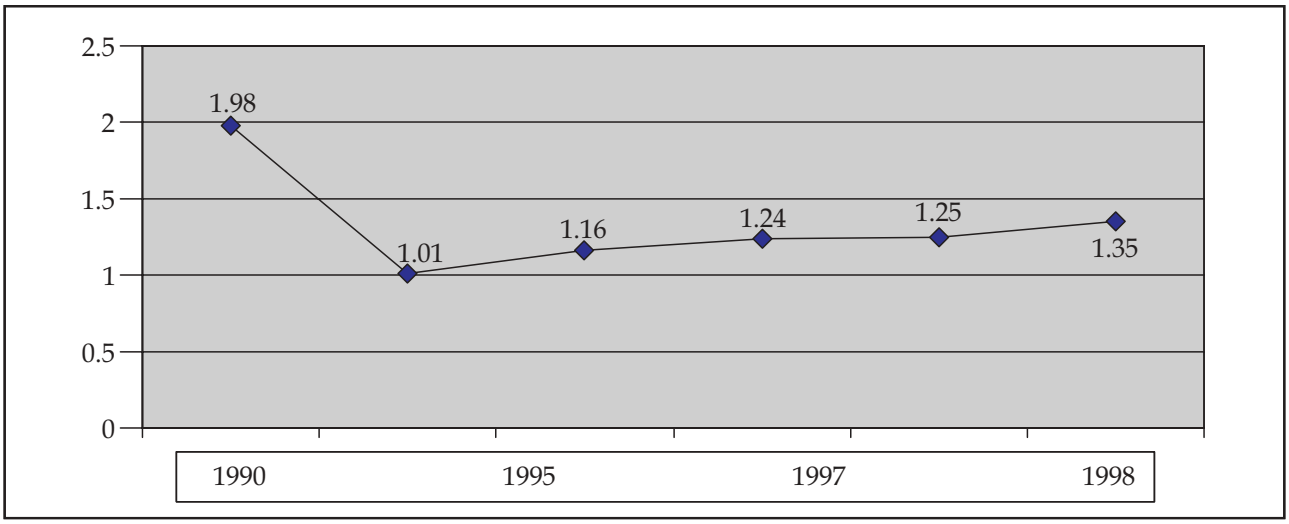
The system of research and development (R&D) in the Czech Republic has gone through significant changes since 1989. State support for R&D in the form of institutional as well as grant support was newly established. At present R&D is carried out in a broad range of organisations: the Academy of Sciences, universities, ministerial budget research institutions, private organisations, NGOs and R&D divisions of companies. In terms of funding, as in other CEECs after a steep drop in R&D expenditures between 1990 and 1995, the situation began to improve in the second half of the 1990s, although expenditures are still much lower than in advanced OECD countries (Chart 6.1). Nevertheless, the dynamics of the expenditure indicator in the Czech Republic is progressing, especially in the most recent period (Chart 6.2).

Chart 6.1 R&D expenditures as % of GDP



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

Chart 6.2 R&D expenditures as % of GDP



Source: Statistical Yearbook of the Czech Republic, CSO, 2001. National Observatory calculations.

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

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

The Grant Agency of the Czech Republic was set up under Act No. 300/1992 Coll. on State Support of Research and Development and its further amendments. It provides targeted state funding of R&D from a separate central budget on the basis of public tenders. This funding provides grants to institutions and individuals, supporting basic research and specific projects in line with government principles and priorities in the field of R&D.[112]

Further state funding of R&D is provided from the budgets of individual ministries and other bodies of the state administration. These funds are provided to budgetary research organisations in the form of grants on the basis of approved research programmes. The grants are made on the basis of public tender either for specific projects or for broadly defined priority themes under the guidance of the sectoral grant agencies of ministries. Similar support for research in the Academy of Sciences is conducted through the academy's internal grant agency. In the field of education, the primary

112 Government Resolution No. 590, Annex 2, 13 June 2001.

institutional and grant support for R&D is provided by MoEYS. Research in the employment, labour market and social cohesion fields is mainly supported from the MoLSA budget.

In accordance with Government Resolution No. 16 (5 January 2000) on National Policy of R&D in the Czech Republic, institutional subsidies for non-specified research are provided to public universities on approval by MoEYS. This support is aimed at encouraging research directly linked to the education process in which graduate students participate. This should lead to the greater involvement of universities in research activities and abolish the former division between higher-education establishments and the research function. The amount of the subsidies is defined by the Research and Development Council in the framework of the overall state budget.

In spite of many healthy changes in the R&D system since the early 1990s, the importance of preparing conceptual and strategic documents was still underestimated. State support was implemented on the basis of vaguely defined principles of government policy on R&D. This lack of strategy caused some stagnation in the development process. The continuing need for reform led to the preparation of *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.[113] The main goal of the R&D policy is to increase the outcome and efficiency of R&D in the Czech Republic, to ensure the flexible renewal of capacities, including the development of human resources, and to use these resources in fulfilling the future needs of citizens, the society and the economy. In the Czech Republic, as in other countries, the focus will be on R&D results and their potential use in all areas of society.[114]

In the initial reform period, state support for research in the field of education often relied on the initiative of researchers and institutions. While such an approach encouraged research, it lacked a comprehensive strategic approach and a research support policy. MoEYS therefore adopted the principle whereby research topics were put to open public tender. In the following period (2002), however, MoEYS took a different approach to research topics for public tender, in that the topics are not defined in advance but may be announced throughout the year. Requests on the theme selection come from ministerial departments and should be approved by the MoEYS Council of Deputy Ministers. This leaves scope for strategic planning on the part of education policy administrators as well as for research initiatives, although the latter are subject to negotiations with the ministry. The overall administrative procedure may prove to be too demanding, however, taking into account the usual time constraints of the financial year.

The MoEYS Research for State Administration programme defines priority areas in science and research, mainly in line with the concept and development of the system of lifelong learning. The major emphases of the programme are development of the 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. Priority areas also include assessment of educational outcomes, interaction between vertical and horizontal sectors of the education system, new dimensions in teacher and trainer training, modern management concepts for education institutions, further development in forecasting educational needs in interaction with the labour market, and development of information technologies for educational processes. The regional dimension attracts specific attention. MoEYS states the necessity and preference for a multiple-partnership approach to projects, including institutions outside the field of education.

Research that supports employment, labour market and social policies is funded by MoLSA. Apart from institutional support for sectoral research institutions, the ministry provides grants for

113 National Research and Development Policy of the Czech Republic, Government of the Czech Republic, Addendum to Government Resolution No. 16, 5 January 2000.

114 Ibid.

targeted research activities, mainly on the basis of public tenders. Support is given to research (including international cooperation) which assists integration with the EU, research for the information infrastructure of the ministry, and long-term continuing research into the labour market and employment, social dialogue and industrial relations, social protection, family policy, income and wages policy. The ministry has increased funding for R&D in recent years and plans further increases in the next period.

After a steep decline in R&D expenditures at the beginning of the 1990s, the situation has been steadily improving. Expenditures on research in education have increased substantially in recent years. The dynamics of this process were more intensive in education than in R&D in general (Table 6.1).

Table 6.1 Expenditures on research and development

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

Source: Statistical Yearbook of the Czech Republic, Czech Statistical Office, 1999, 2001.

6.2 *Research infrastructure and capacities*

At the beginning of the 1990s the infrastructure of R&D underwent significant changes. As the result of restructuring, rationalisation and financial constraints in the research sector, there was a sharp decrease in the 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 the private sector. The situation has been steadily improving and the number of employees involved in research in the field of education has increased substantially in recent years (Table 6.2). The dynamics of this process were more intensive in education than in R&D in general. Nevertheless, as research is still undervalued and researchers' salaries inadequate in both state and private organisations, the research sector often fails to attract young specialists.

Table 6.2 Employment in research and development sector

	1997	1998	1999	2000
R&D employees in the field of education (full-time equivalent)	3,994	4,045	4,759	5,356
	100%	101%	119%	134%
R&D employees (full-time equivalent)	23,230	22,740	24,106	24,198
	100%	98%	104%	104%

Source: Statistical Yearbook of the Czech Republic, Czech Statistical Office, 1999, 2001.

A positive development in research into education, training, the labour market and employment was the diversification of organisations involved in research after 1989. Apart from the sectoral budgetary research institutes of MoEYS and MoLSA, and the Academy of Sciences, such research is carried out by universities, NGOs and private companies.

6.2.1 Research infrastructure in IVET

Research into different subsectors and levels of initial education in the Czech Republic is mainly carried out by research institutes established by MoEYS and universities' pedagogical faculties. Other institutions which obtain funded research assignments from MoEYS are also involved.

Universities and higher-education institutions, especially pedagogical faculties, usually conduct field research in 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 with the Institute of Research and Development of Education (ÚVRŠ) (approximately 30 FT[115] employees of which about 18 are involved in research). The institute is involved in education policies, comparative pedagogy and various international projects. The Education Policy Centre, an integral part of ÚVRŠ also within the framework of Charles University, is focused on education policy and on Czech participation in international projects (especially the OECD projects Reviews of National Policies for Education and First Steps of Tertiary Education in OECD Countries).

Several research institutes are managed and financed by MoEYS. The Institute for Pedagogical Research (VÚP, 56 FT employees) analyses primary and secondary general education, in particular curricula and standards. It is also involved in the pupil achievement evaluation.

The National Institute for Technical and Vocational Education (NUOV, formerly VÚOŠ, 94 FT employees of which 61 are involved in research) is a research, advisory and coordinating institution for vocational education. The institute's activity is focused on conceptual work, occupational and educational standards, curricular innovation, certification, social partnership, and information services. It has put considerable effort into conceptualising curricula and elaborating standards to fit labour market requirements. It monitors trends and developments in groups of related occupations with the support of working groups representing social partners in various fields. In the framework of international cooperation, NUOV functions as a national UNEVOC centre (managed by UNESCO) and is involved in international (e.g. Leonardo da Vinci programme) and bilateral (e.g. Bundesinstitut für Berufsbildung/BIBB) Cooperation.

The Institute for Information on Education is a statistical and analytical centre (160 FT employees, of which approximately 17 are 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 are the *Annual Report on the State and Development of the Education System in the Czech Republic*, the *Statistical Yearbook of Education*, *SET Program* (comparing 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 OECD–INES, Eurydice, Eudises and Education Thesaurus projects.

The Centre for Higher Education Research (CSVŒ, approximately 40 FT employees, of which about 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-education institutions and coordinates international programmes (e.g. Tempus, Socrates).

115 FT = full time equivalent.

The Association of Schools of Professional Higher Education is an independent affiliation of schools involved with 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 CVET

The J. A. Komenský Academy is a training institution which provides courses for adults and young people (232 FT employees of which 13 are involved in research). The academy is involved in applied research in the fields 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 MoLSA (48 FT employees of which about nine are involved in research and analysis). NTF supports and implements analytical and strategic studies in the fields of human resource development, lifelong learning, adult training, social issues, labour market and employment. It has been responsible for the Phare VET Reform and HRD programmes, the Leonardo da Vinci programme, and the National Resource Centre for Vocational Guidance, among others. NTF provides technical and conceptual assistance to MoLSA in preparation for European Social Fund implementation. The National Observatory is an integral part of the NTF and, as its analytical section, provides applied policy research as back-up for national and international policy-makers in lifelong learning and the labour market (see also Chapter 8).

Note that research capacities in CVET and adult learning are insufficient, given the high priority of systematic development of the lifelong learning system in the country.

6.2.3 Research infrastructure in employment-related issues

The Research Institute of Labour and Social Affairs (RILSA) is the main research institution in the fields of employment, labour market and social issues (52 FT employees of which about 37 are researchers and about nine are involved in employment and labour market research). The research programme covers several main themes: reform of 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 its support for MoLSA, the institute analyses the effects of the National Employment Plan on employment trends in individual regions, maps changes in household incomes and social relations, and verifies economic aspects of individual social phenomena and social protection systems.

The Center for Economic Research and Graduate Education of Charles University, Economics Institute (CERGE-EI) is a joint workplace, associated with Charles University in Prague and the Academy of Sciences of the Czech Republic (some 100 employees of which about 30 are involved in research, including six researching 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 previously existed.

CERGE-EI reinforces the relationship of teaching and research in advanced scientific and policy-oriented economics, carrying out significant research programmes generating both theoretical and empirical studies.[116]

Both the above institutions are involved in developing the system of forecasting the country's skill needs, in close cooperation with the National Observatory (see below).

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 the National Training Fund (NO-NTF, six FT employees of which five are involved in research). The observatory provides information on the development of human resources and analyses trends in education and the labour market, skill needs assessment and forecasting at regional and sectoral levels, including development of methodology in this field (further details in Chapter 8).

The situation of graduates in the labour market is followed in the framework of an interministerial agreement between MoEYS and MoLSA. Some institutes under MoEYS and MoLSA are also involved in analysing skill needs. Note however that the current research capacities in the border area of labour market and education cannot adequately cover the need for research and policy support for employability, a learning society and an knowledge economy.

6.3 Role of international assistance

International projects supported and financed from abroad have played a significant role in the development of research into vocational education in the Czech Republic. For example, the results of the Phare VET Reform programme have been analysed in eight basic areas of VET development (curriculum, evaluation, training of teachers, cooperation with social partners, management, financing, legislation and research), the policy paper *Education for Prosperity: Towards a Learning Society*, and short-term and long-term action plans. The policy paper paved the way for further development of the overall system of education. The findings of the Phare VET programme were not fully implemented at the national scale, however, nor were they fully taken on board by legislation, and many innovations unfortunately remained at a pilot level.

Many new research products, methods and scientific contacts are made and much expertise is attained through participation in European Community programmes, such as Leonardo da Vinci, Socrates and especially the Fifth Framework Programme, in which the Czech Republic fully participates. It has been demonstrated throughout the last decade that such programmes assist not only transfer and exchange of top international expertise but also serve as laboratories of innovation. Institutions that were involved in such projects often demonstrate advanced expertise and experience. Unfortunately these programmes allow either only partial research/scientific project focus (e.g. Leonardo da Vinci), or the field of education and labour market are not priorities (e.g. Fifth 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).

116 <http://www.cerge-ei.cz/>.

Taking into account the developments at European Commission level during conceptualisation of EU programmes, greater involvement of Czech institutions in internationally funded research projects in the next period will depend on two major factors: ability to cooperate across institutions, sectors and disciplines on 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 produced significant results for analysis are a number of projects on the **situation of graduates in the labour market**. Exchange of information and data, and a joint publication on graduate unemployment are part of the 1997 agreement between MoEYS and MoLSA. MoEYS also financed thematic research on the employment of graduates of higher education, including a sample survey of graduates of all universities and faculties.

The OECD project Transition from Initial Education to Working Life, financed by MoEYS and coordinated by the National Observatory/National Training Fund, has contributed to the field by information generation and analysis, setting out the main problems and suggesting recommendations on how to overcome system deficiencies. The project also included analysis of educational pathways and a sociological survey of young people aged 20–29 – graduates of all types of school – in the labour market.

Another survey on graduate entry to the labour market (OECD–INES, Network B) and employers' opinions of school graduates was carried out by the Institute for Information on Education and the AMD agency. In addition, the Research Institute of Technical and Vocational Education analysed unemployment among secondary vocational and technical graduates on the basis of available statistics and other sources. Finally, at the beginning of 1998, MoEYS established a working group within the ministry on Employment of Graduates and the Labour Market, to exchange information on ongoing activities in the field and launch new ones. Since then an annual report on graduates in the labour market is produced as the result of data exchange between MoLSA and MoEYS.

Two other **research projects, OECD initiatives** implemented under the aegis of the National Training Fund, have substantially contributed to VET research. One of these is SIALS (*Second International Adult Literacy Survey*), which assessed the quality of human resources and the conformity between functional literacy and level of education, and defined the groups with a low level of functional literacy at risk in the labour market. The OECD project Alternative Approaches to Financing Lifelong Learning was invaluable in mapping the system of financing, including an attempt to cover gaps in the data, and in defining the barriers to lifelong learning within the system of financing.

Recent years have been marked by a number of significant research, conceptual and analytical inputs to **strategic documents for the 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 subsequent tasks, was a strategic study of human resources in the Czech Republic (*Czech Education and Europe*, 1998). The study, financed by the Phare programme, was prepared by a team of experts using background material compiled by different institutions from the human resources sector and thus highlighting the interdependent and multidisciplinary nature of the topic. The study summarised the basic principles of EU education policy and their consequences for the further development of Czech education, and analysed the development to date of all parts of the education system. Although it attempted to point out future directions and development tasks, it lacked suggestions for specific measures to achieve the defined objectives.

The findings of the above study were followed up in the *National Programme for the Development of Education in the Czech Republic*, was initiated by MoEYS and approved by the government.[117] The document is widely known as *The White Book on Education in the Czech Republic*. A wide-ranging 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 of drawing up *The White Book* to a group of specialists from universities, school administration and working teachers. The follow-up phase in 2000 attempted to incorporate the views of the public, social partners, education institutions and academics into the text. The final document presents a strategy for implementing lifelong learning for all, adapting educational and study programmes to the needs of the information society, monitoring and assessment of the quality and effectiveness of education, the openness of education institutions, the new role and professional prospects of pedagogical and academic workers, and the transition from centralised management to accountable shared decision-making.[118] The strategic objectives were further elaborated into specific measures in the Long-term Development Plan of Education and the Education System in the Czech Republic.[119] The plan, based on the analysis of educational statistics, surveys and other analytical inputs, defines general priorities for a seven- to ten-year period and specifies measures for a three- to six-year period.

Whereas the strategic documents prepared under the guidance of MoEYS deal mainly with the education system, albeit from the perspective of lifelong learning, the *Human Resource Development Strategy*[120] focuses mainly 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 Phare support. The document draws on the strategic objectives of achieving a competitive economy and therefore a skilled labour force in a global perspective. It therefore focuses on developing the functional literacy, language and ITC skills of employees, the overall upgrading of the labour force and the qualification structure of the entire population. It suggests specific measures for managing human resources at national and regional levels, including the institutional framework and mechanisms for diversification of funding for education and training. The project received support from Phare for further methodological work on human resources management at national and regional levels. A set of methodological guidelines for institutional, analytical and information frameworks were drawn up with the assistance of the Irish training and employment authority FAS in 2001.[121]

Further conceptual development of CVET was encouraged by the study *Adult Education in the Framework of Lifelong Learning* (2001). This project was initiated by MoEYS and carried out by NTF. The study analysed the infrastructure, system of financing, quality assurance, and counselling and guidance for adult education in the Czech Republic, and compared its main trends with development tendencies and motivation mechanisms in other European countries. Key recommendations were made for improvement of the system, its institutional and legal framework.

---

117 Government Resolution No. 113, 7 February 2001.

118 *White Book on Education in the Czech Republic*, English Summary, 2001 <www.msmt.cz>.

119 MoEYS, 2001, first draft.

120 *Human Resource Development Strategy for the Czech Republic*, English Summary, Prague, National Training Fund-DHV ČR, 2000.

121 *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 the Strategic Management of HRD at the National Level]; *Strategický přístup Irska k rozvoji lidských zdrojů* [Strategic Approach to HRD in Ireland], FAS-National Training Fund, 2001 <http://www.nvf.cz/strategie>.

Recent research activities have also been 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, such as a study on school graduates in the labour market[122] aimed at developing an information system for the needs of decision-making structures in education, professional counselling, student bodies, 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 cooperation with selected research institutions from EU member states and future member states. The project was to develop a system of forecasting applicable to transition economies. It therefore laid great stress on a combined quantitative and qualitative approach to forecasting. The forecasting model is expected to be operated by the Research Institute of Labour and Social Affairs based on an agreement between the relevant institutions and ministries. The model will be enriched by additional analyses specific to the regional and sectoral levels, carried out by various institutions (e.g. National Observatory). A pilot analysis of skill needs in the tourism sector of north-western Bohemia conducted by the observatory has contributed to the qualitative methodology. MoLSA will further support the development and use of the model and the implementation of the overall system of national, sectoral and regional skill needs analyses and forecasts, while the observatory will continue to be responsible for development and implementation. Results of forecasts will be used by decision-makers, social partners and counselling and guidance institutions.

Future plans include information on labour market prospects by groups of occupations as a new module in the Integrated System of Standardised Working Positions. The ISSWP system was developed by Trexima under the auspices of MoLSA. It integrates specific skills requirements with 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 high potential for future development and extended usage.

Future development of VET was the subject of an international project from the European Centre for the Development of Vocational Training (CEDEFOP) – Scenarios and Strategies for Vocational Education in Europe.[123] The Czech Republic actively participated in this project through its National Institute of Technical and Vocational Education. It has given rise to three national scenarios for the development of VET in the Czech Republic in relation to the development of the economy and the labour market, and has contributed to European scenarios of the future of VET.

In the framework of preparation for EU accession, the subject of transparency of qualifications and regulated professions gains importance. The National Institute of Technical and Vocational Education, with the support of ETF, has published a study entitled *Regulated Professions in the Czech Republic (1998–1999)*. A seminar on transparency and recognition of qualifications, organised by the institute together with the National Observatory in 1999, resulted in the publication of *Transparency and Recognition of Qualifications in the European Union* (1999). This work opened raised awareness of the existing legal framework in Europe and the minimum requirements for the institutional coordination of mutual recognition of qualifications. The institute, in cooperation with key ministries and social partners, continues to prepare the ground for introduction of the system in the Czech Republic.

122 *Uplatnění absolventů škol: analýza a výhled* [The Position of School Graduates in the Labour Market: Analysis and Outlook] Prague, Institute for Information on Education/National Institute of Technical and Vocational Education/Centre for Higher Education Research, 1999–2000.

123 *Národní zpráva z výzkumu scénáře a strategie odborného vzdělávání v Evropě*, Prague, National Institute of Technical and Vocational Education, 2001.

6.5 Current obstacles and future needs for the development of education-related research

The development of research in education, training and the labour market has been in line with overall growth in R&D. Recent education-related research has enjoyed growing support from the authorities, greater access to international funds, increase of state expenditures, greater involvement of universities, private companies and non-profit organisations. More attention has been paid to strategic thinking and conceptual development where research supported policy development. There have been some notable examples of successful cooperation between different institutes in the sector of education. International assistance as well as national support has facilitated the development of research into links between the labour market and education.

In spite of these and other positive changes, however, there have been some drawbacks. Although education-related research in the Czech Republic has a fairly broad scope, it is not sufficiently coordinated across ministries and research organisations. Sometimes, therefore, research is duplicated while other areas are not covered sufficiently. For example, assessment research is insufficiently developed. This concerns the evaluation of education, training and employment policies, and programmes and projects in this field. Some steps have already been undertaken in international programmes (e.g. valorisation report on the Leonardo I programme, *ex ante* evaluation of the *EQUAL Community Initiative*). Note however that in preparing EU accession greater emphasis will have to be put on different types and levels of evaluations to ensure relevance of programme priorities, their compatibility with national policies and strategies, and last but not least the effectiveness and efficiency of programme performance and national policies. This means the extension of evaluation capacities and support for the development of methodological expertise in this field.

The research results themselves are not always sufficiently evaluated and implemented in practice. Typically, research is linked to a project life-cycle, i.e. a one-off task without follow-up activities. But scientific results often require specific assignments to put research findings into practice.

Research capacities in CVET and adult training, as well as links between education and labour market requirements, are insufficient and need further support and development. The general lack of multidisciplinary research, linking analyses in initial and continuing VET with the labour market and socio-economic factors, is a weak point of the current research situation. Lack of multi-institutional partnerships and sometimes unnecessary rivalry between different institutions engaged in research into education is not in line with the philosophy of future research support from the European Commission, targeted at multi-institutional research consortia and larger projects of a multidisciplinary character. This needs to be taken into account by institutions involved in research in the Czech Republic.

Research and analyses at both sectoral and regional levels are underdeveloped. The limited participation of social partners and companies in research into education and training does little to facilitate research in sectors and industries. Regions often suffer from uneven research capacities. Research into education and training clearly has not been a priority for them. With the approach of the Structural Funds intervention as well as the decentralisation of state and public policies, such research at regional level will be greatly needed. It will be essential for ESF and Structural Funds programming, as well as for support for regional HRD policy-makers. It is essential to establish a transparent and open system of announcement of projects and funding of research in the regions. The greater involvement in research of universities and the private and non-governmental sectors may help to strengthen it at the regional and sectoral levels.

In spite of increased funding for research, financing is still not enough to achieve research development and competitiveness on a European scale. The role of infrastructure in research development, including ITC hardware and software, should not be underestimated. The natural limitations of the state budget in the transition period mean that alternative mechanisms of research support have to be sought (tax relief, greater involvement of the private sector, creation of specific funds for loans, subsidised information and counselling support, creation of multi-purpose research and resource centres equipped with ITC and high-tech for multiple usage by non-commercial institutions involved in research, etc.). State support for research, including education-related research, is often too widely diffused among a large number of relatively small projects and therefore lacks a concentrated approach. An over-egalitarian approach to institutional financing of education-related research can sometimes still be seen, rather than a healthy competitive spirit in the funding system. Support for research at universities and their consequent engagement in research projects is insufficient. As regards research into education and training, the bulk of support still goes to budgetary institutions of MoEYS, while universities and the non-profit and private sectors, with limited access to funds, continue to play a minor role.

The inadequate remuneration of researchers, including high-profile analysts, especially in budgetary organisations and universities, weaken research capacities and quality. Although some older data on emigration of researchers demonstrated that the risk of brain drain in the Czech Republic is low compared with other CEECs,[124] there is still a certain risk of brain waste as a result of poor salaries.[125] Furthermore, although no precise data are available, it is widely known that Czech researchers are getting older in terms of age cohorts. The sector needs to become more financially attractive to young people. The human resources in the research field also need to be strengthened, especially with regard to possession of such knowledge and skills as foreign languages, ITC, drafting of international project proposals, project management, management of research institutions, etc. If adequate attention is not paid to these issues now, a barrier may be created to effective engagement in research activities, integration into the common European research space and successful use of EU funds for R&D in the future.

In spite of the growing importance and incidence of strategic analyses in the Czech Republic, research is still not sufficiently targeted with a view to the needs of society and the economy. Further attention and wider coverage is necessary in many education and employment research fields, such as comparative analysis (cross-country, cross-regional, cross-sectoral), evaluation of systems of financing education and training at all levels to find the most efficient and motivating measures, CVET and adult training with a view to systemic and legislative changes, prospective – future-oriented – research into qualifications and skills (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, or theoretical and non-oriented research.

124 D. Bobeva, *Migration, Europe's Integration and the Labour Force Brain Drain. Synthesis Report*, European Commission, COST, 1997.

125 In contrast to 'brain drain', which involves the outflow of talent from a given territory (emigration), 'brain waste' means the outflow of researchers to less-demanding but often better-paid occupations in the private sector within the same territory.

7. International cooperation on IVET and CVET modernisation

7.1 Development of Phare assistance

Since 1990, the bulk of financial aid to the Czech Republic has been within the framework of the Phare programme. In the few years of its existence the Phare programme has undergone substantial development, from assistance with the most urgent problems and first steps towards school and university cooperation within the Tempus programme, to assistance in the transition process and preparation for EU accession.

In 1994 a Multi-year Indicative Programme was introduced in which Phare assistance priorities were formulated in accordance with the medium-term economic policy of the Czech Government. Reorientation of Phare priorities in 1994 particularly stressed the harmonisation of Czech law with the EU and cross-border cooperation, together with continuing support for the private sector, industrial and labour market restructuring, human resource development, regional support and infrastructure development. This approach was further developed in the 1995–1999 Indicative Programme with special focus on legislative integration and the implementation of the Europe Agreement.

In 1997 the Phare system of financial and technical assistance was reformed. The former demand-driven approach of beneficiary countries was replaced with an accession-driven approach for all future member states.[126] Since 1998 Phare allocation has been based on the strategy and key priorities determined in two main documents. One is the *Accession Partnership* (AP) document prepared annually by the European Commission, which identifies short- and medium-term priorities in the preparation of future member states. The other document, *National Programme for the Adoption of the Acquis* (NPAA), is prepared by the Czech Republic and outlines the accession strategy, including measures to achieve the priorities defined in the AP.[127]

In addition, since 2000 the European Commission has defined new principles for Phare support, where the move to Structural Funds determines the objectives. Thus multi-annual programming is to be adopted for 2002–06 on the basis of the National Development Plan (NDP), which anticipates the implementation of regional and sectoral programmes of Objective 1 type. The NDP includes measures compatible with European Social Fund objectives and priorities. The Sectoral Operational Plan for Human Resource Development (SOP-HRD) will serve as a key strategic document for implementation of ESF measures in the country, although it is still under discussion whether parallel HRD measures should be included in other sectoral or regional programmes. SOP-HRD is being prepared with the active participation of many partners, including ministries and sectoral institutions. An *ex ante* evaluation of the document is also planned to ensure that its priorities and objectives are in line with the needs of society and the economy, and that the plan complements and enhances national policies in employment, HRD and social issues.

126 *Programy pomoci ES Phare, ISPA, SAPARD*, Ministry of Finance, 2001.

127 *Programy pomoci ES ČR od roku 1995*, CFA, Ministry of Finance, 2000.

7.2 Important Phare programmes and their relevance to national priorities

7.2.1 National Phare support programmes

One of the first major programmes relating to HRD was the Labour Market Restructuring Programme (ECU 15.2 million since 1991) established to develop policies, institutions and instruments for the promotion of employment and the efficient functioning of employment services in offering job opportunities, counselling and guidance, and proactive labour market interventions.[128] The programme helped to develop a number of labour market analyses, an information base, and set up the Pro-Active Labour Market Intervention Fund (PALMIF) to support innovative projects at a local level. There was a significant VET component, aimed at increasing training flexibility and efficiency in order to respond to labour market developments. The programme has made a significant contribution to the government employment policy. The following projects have been organised within it: Strategic Study of Vocational Education and Training (Birks, Sinclair and Associates, 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), among others. The PALMIF Human Resource Development Programme has supported local employment initiatives and piloted innovative measures with a view to future mainstreaming in the framework of the Active Employment Policy.

The Phare VET Reform programme (ECU 4.6 million, 1994–98[129]), launched in 1993 with a strategic study,[130] has made a significant contribution to vocational education in the Czech Republic. The objectives were to contribute to long-term VET reform through new approaches to curricular development, educational standards, management, teacher training, quality control, involvement of social partners and VET financing. 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 a policy paper in late 1997, including recommendations for key areas of VET reform. On the basis of these results a background discussion policy paper was published and a broad public debate initiated.[131] A programme document, *Further Transformation Steps*, published in 1998 based on the public debate with proposals for specific short-term and long-term measures, was presented at the final conference of the VET Reform programme in September 1998. The programme did have some drawbacks. It was implemented in a policy vacuum where a general strategy for education was lacking, so there was neither consensus nor commitment to the programme on the part of key ministries. This resulted in a bottom-up tendency with high-profile performances from schools and other institutions. Such an approach did not disrupt the elaboration of the strategic programme for implementation of the reform on a larger scale,[132] but owing to the minimal commitment of MoEYS most of the pilot results have still not been mainstreamed.

---

128 *Program Phare v ČR 1990–1996*, CFA, Ministry of Finance, 1996.

129 Ibid.

130 Birks, Sinclair and Associates, *Strategic Review of Vocational Education and Training – Czech and Slovak Republics*, Prague, Phare Labour Market Restructuring, 1993.

131 *Vzdělávaním k prosperitě. Na cestě k učící se společnosti, podklad k veřejné diskusi* [Education for Prosperity, Towards a Learning Society], National Training Fund/Fragment, 1998.

132 See *From Pilot Schools to Reform Strategy, Outcomes of the Phare Programme Reform of VET*, National Training Fund/Fragment, 1997.

The programme for Renewal of the Education System (ECU 5.5 million from 1991 to 1996), was aimed at improving the quality of primary and secondary education and non-university tertiary education, extending the teaching of foreign languages, strengthening decentralised management and administration of schools, and modernisation of the entire education system. The main impact of the programme was enhancement of foreign language teaching in schools, and the reform of education programmes and school administration. The non-university sector of tertiary education was financially supported to open the way to alternative forms of higher education.[133]

The Human Resource Development Programme (ECU 7 million) was launched in 1994 when the National Training Fund was established by MoLSA. Programme activities focused in particular on the development of management training and its increased use in companies, together with management techniques for competitiveness in the European and international markets. The programme helped to improve the quality of management training, human resource management, networking of CVET providers, and the development of an information environment for training providers and HRD experts and practitioners. At the outset the National Training Fund was acting with a lack of policy strategy. As many studies have shown that support efficiency is damaged by the unsystematic development of training, NTF initiated a strategic study which resulted in a multi-level strategy and methodology for human resource development and management in the Czech Republic.[134] The project was a major step forward in designing the framework for improving HRD. Putting the strategy into practice is however subject to negotiations at policy level, active support on the part of social partners, and a number of specific legislative, institutional and budgetary steps.

The National Training Fund is also responsible for the implementation of the Phare 2000 HRD Fund grant scheme in two pilot regions (north-western Bohemia and Moravia-Silesia). The programme supports the improvement of employment and qualifications in the regions and the development of structures at central, regional and local levels for management, administration and implementation of ESF projects. Support is focused on four 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 Phare HRD programme will prepare for ESF support. Unlike previous stages, the new Phare programme has a more systematic and strategic basis, using key planning documents drawn up within the country such as the *National Development Plan, Consultation Document for HRD, Sectoral Operational Programme* and *National Employment Plan*. Phare projects will be co-financed from the newly created National Fund (the Phare 2000 HRD Fund comprises EUR 4 million from EU sources and EUR 4 million from national sources).

In addition, in the framework of Phare 2000, an Improvement of the Quality of Education for the Romany Minority project was designed with the aim of developing revised educational programmes for Romany children to enhance their integration into the Czech system of education.[135] The project assumes that teaching and learning materials will be prepared to improve multicultural education in Czech schools, and includes training of teachers to help them properly use new educational programmes.

Since 2000, ministries can benefit from the 'twinning' approach where Phare assists placement of long- and short-term experts from EU member states in the Czech Republic to provide targeted technical assistance. Such assistance comes within the framework of preparation for the implementation of EU Structural Funds. MoLSA, responsible for preparation for the European

133 *Program Phare v ČR 1990–1996*, op. cit.

134 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).

135 *Programy pomoci ES Phare*, *ISPA, SAPARD* [English Translation], op. cit.

Social Fund, benefits from the twinning projects in this area. Such an initiative not only assists the transfer of expertise but also supports key strategic, conceptual, programming and analytical documents in line with EU policies (e.g. National Employment Action Plan) and facilitates institution building and system development for ESF administration. This generally very useful initiative sometimes suffers from the lack of capacity on the part of the recipient ministry, such as no efficient and competent national counterpart or no targeted approach to assignments for EU experts. This needs to be taken into account in the design of future twinning projects.

7.2.2 *Phare multi-country programmes*

Many multilateral programmes also have a vocational education component. The Trans-European Cooperation Scheme for Higher Education (Tempus) was designed in 1990 to help partner countries reform their higher education (EUR 50.8 million allocated since 1990[136]). 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 the major contributions of the programme was the new contacts that Czech universities made with their European counterparts. The programme has had a significant impact on the transformation of higher education, improvement of education quality and introduction of new modern methods of education. Tempus projects expired in 2001. The programme activities are followed up by the EU programme Socrates (see below).

The 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 11 future member states, and Bosnia and Herzegovina at a later stage. It fulfilled its initial objectives and included an especially effective dissemination year in its final stage. In order to achieve the maximum effect, however, the programme needs to be followed up, especially in components which are not partly integrated into other programmes (e.g. Socrates), such as quality evaluation and assurance with regard to accreditation mechanisms.

The Multi-country Programme in Distance Education (1994–2000) aimed at support for the establishment and development of distance education. The programme involved 13 Phare countries where national contact points for distance education were established. It supported 45 regional centres of distance education in the countries involved. A number of studies were carried out, such as quality management and assurance of distance education, accreditation of distance education programmes, evaluation of the state of the art of technical infrastructure for provision of distance education. Three specific distance education programmes to support the integration of the future member states were prepared, and 400 tutors for distance education were trained in the various countries. The programme made a significant contribution to raising awareness and to implementing distance education in Czech legislation at the higher education level. Further expansion of distance education (including other subsectors of education) and its greater effectiveness will not be possible, however, without greater interest on the part of national policy-makers, substantial budgetary allocations from national and international sources, and an ongoing quality assurance and awareness-raising campaign.

136 Ibid.

7.3 EU programmes in education and training

The Czech Republic joined the Leonardo da Vinci Programme in autumn 1997 (programme allocation in 1997–2000: EUR 10.45 million, of which EUR 4.38 million from Phare sources).[137] Full participation in the programme involved Czech organisations in transnational projects, thereby improving the quality of both initial and continuing vocational training and broadening the scope of lifelong learning possibilities in the country. The number of Leonardo projects in which Czech vocational schools, universities, enterprises, employment services and other organisations have participated has increased rapidly, comprising 358 projects by 2001. Until the end of 2001 some 3,300 Czech young people did their practical vocational training in EU countries through *placements* and *exchanges*. In addition, 477 Czech organisations have been involved in Leonardo da Vinci pilot projects leading to new innovative teaching and learning methods, tools and products with a European dimension. The most significant contribution of these projects is the placements and exchanges, which allow participants (mainly 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 generally broaden their horizons. The pilot projects have also helped to develop new and innovative educational products and methods. The first phase of the programme (1996–99) in the Czech Republic has been evaluated in order to valorise its results.[138] The preliminary report defined a number of projects and products recommended for further support and mainstreaming. Although at the outset the programme typically lacked a policy framework for defining priorities, the evaluation showed good agreement between the programme measures and the key strategic objectives drawn up in later policy and strategic documents. In a relatively short period, the programme proved very efficient in that the quality of Czech projects were evaluated as comparable with other European countries.

In 1997 the Czech Republic also accessed another EU programme, Socrates, (programme allocation between 1997 and 2000: EUR 21.37 million).[139] This programme is aimed at cooperation in general education at all levels, including adult education and lifelong learning. Particular attention is paid to the European dimension in teaching and training of teachers. The programme has several components dealing with higher education, cooperation between all levels of education, improvement of language competencies, management in education, open and distance learning, knowledge development and raising awareness of the European Union, support for the information and data environment. The programme supports student exchanges in higher education and placements abroad for teachers and headmasters, which have contributed to the renewal of Czech education and the management of education institutions while raising awareness of Czech culture abroad. The programme results are used by MoEYS in long-term education strategy and planning.

Both of the above programmes derive from supranational priorities and objectives. With due respect to their European character and therefore the European dimension as a prerequisite to all projects, in the decentralised procedure[140] it is advisable to take into account national priorities as defined in recent strategy documents.[141] Recent experience has shown that Czech projects are highly

137 Data from the national agency of the EU Leonardo da Vinci programme.

138 *Evaluace prvního období (1996–1999) programu Leonardo da Vinci v ČR a valoriyace jeho výsledků* [English Translation], National Training Fund, 2002.

139 *Výsledky programu EU Socrates v Česku '97–99* [English Translation], Prague, Socrates office, 1999.

140 Project proposals are submitted at the national level.

141 For example, *The White Book on Education in the Czech Republic*, the National Employment Plan, the Human Resource Development Strategy for the Czech Republic, among others.

competitive at the EU level. The 'entry ticket' to the programme should not become an obstacle to the approval of more Czech projects at this level.

Another EU programme, Youth for Europe (since 2000, Youth) supports exchange activities for young people outside school and in their leisure time. Results are particularly positive with regard to the development of participants' language competencies, communication and organisation skills and the support for new contacts across Europe. The programme is a key supplement to the MoEYS youth subsidy policy.

7.4 Bilateral assistance

Many other bilateral and international donor programmes linked to education have focused on the transfer of expertise, modernisation and system development, introduction of new technologies and new methods. Since 1990, governments of the advanced states have provided the newly emerged democratic countries with support aimed at transition to a plural society and market-oriented economy, consolidation of democratic government, respect for human rights, and EU integration. Such support has been in the form of economic, scientific, social, technological, cultural and educational cooperation. In the framework of bilateral cooperation, the bulk of support was provided as technical assistance, mainly training, study visits, consulting services, project preparation, etc.

Individual bilateral support programmes derive from the respective aid programmes of individual donor countries. The extent to which these programmes take into account the specific strategic objectives in education, training and HRD in the Czech Republic in the relevant period depends on a number of factors in donor countries and therefore cannot be assessed. In many instances, however, the announcement and approval of a bilateral project is subject to consultation within the relevant ministries and other authorities, thus ensuring their general relevance to the strategic objectives of the Czech Republic.

Bilateral assistance to the Czech Republic in 1990–99 was actively carried out by 16 states. Since 1997 some countries (e.g. Austria, Germany, Sweden, Switzerland and the United States) gradually withdrew on the grounds that the Czech Republic had already completed its social and political transition. Currently the following countries are active in the provision of bilateral support: Belgium, Canada, Denmark, France, Israel, Italy, Japan, the Netherlands, Spain, Taiwan and the United Kingdom.[142]

Bilateral assistance to support initial and continuing vocational education has been provided at several levels: to central government, the regions, local authorities and organisations. Donors vary in nature: ministries, foreign offices or financial aid divisions of Western governments, and various funds (e.g. British Know-How Fund, Austrian ECO Fund). As the Ministry of Finance of the Czech Republic is in charge of coordinating bilateral assistance at the national level only, i.e. in the framework of intergovernmental agreements, other elements of bilateral assistance tend to be uncoordinated. It is very difficult to estimate the impact of bilateral assistance, as records of projects are unsystematic and unsatisfactory. Most bilateral projects were targeted towards specific objectives and target groups, but the dissemination of outcomes and follow-up programmes were not explicitly part of them. Results and impact are thus only evaluated within individual projects, so no conclusions can be drawn for the human resources sector in general. Such evaluation could be the subject of a specific (and major) project, which could also recommend specific measures for

142 *Bilaterální programy pro Českou republiku*, [English Translation], Ministry of Finance, 2000.

implementation and mainstreaming of the results achieved so far through bilateral and international assistance.

7.5 Importance and relevance of EU funding

It is estimated that between 1990 and 2001 approximately EUR 149.87 million (some 15% of EU support) was allocated to human resources and social components, including Tempus and other EU programmes (both 'entry ticket' and Phare contributions).[143] Although support for the human resources sector was not a major priority for EU assistance and received much lower allocations than, for example, infrastructure investments, private sector support or regional development, it still benefited significantly. Although the ratio of funds allocated in the framework of EU assistance to national public expenditures on education is insignificant (estimated as 0.73% of public expenditures for the same period), the importance of this assistance should not be underrated.

EU assistance has been a major motivator of the reform process and the modernisation of education and training, as well as the main instrument for the transfer of expertise, modern and innovative methods, technologies and products. However, its impact and efficiency was compromised by the general policy vacuum – lack of strategic documents in education and training, lack of consensus and commitment to mainstreaming the results at policy level, especially in the initial phase of Phare assistance. Under these circumstances, EU assistance programmes largely relied on the bottom-up approach, which was useful but sometimes insufficient. Another significant weakness of EU assistance was that sometimes knowledge, experience and systems were directly transferred from abroad without adjustment of these elements, or even verification of their relevance, to the specific institutional, legislative or cultural environment of the country. Lack of thorough *ex ante* analyses, including labour market components, feasibility and absorption capacity of the environment, contributed to the lack of awareness of the relevance of the assistance and of mainstreaming opportunities. Phare assistance, especially in the early stages, failed to successfully involve national experts and policy-makers in the design and implementation of programmes. In some cases this led to lack of commitment to programme outcomes.

The major shake-up in national policy at the end of the 1990s may make a significant difference to the systemic provision and relevance of national and international funding. This development should be seen as a crucial challenge as well as a major opportunity for adequate planning and administration of EU assistance.

7.6 Further options and priority areas for future support

Whereas the initial phase of Phare assistance was marked by a general lack of strategic and conceptual planning, the current situation is totally different. There is a major push from the European Commission to draw up numerous planning documents in preparation for ESF implementation. Unfortunately this generally positive development is devalued by the fact that programming is rushed in order to meet often unrealistic deadlines. This has a triple negative effect: (1) such planning suffers from lack of prior analysis and therefore lacks a thorough grounding in fact; (2) inadequate time is devoted to the negotiation process, leading to a lack of consensus among

143 The financial contribution from bilateral assistance cannot be estimated owing to the lack of reliable data.

major partners; (3) poor-quality planning documents often result. More attention should be paid to the harmonisation of programming documents and national policies to make them complementary and contributory to the overall strategy of social and economic development (e.g. Phare programming/national policies in education and employment; sectoral programmes/regional programmes).

In addition, the country still lacks adequate expertise for drafting planning documents with prior analyses and evaluations, as well as the culture of the partnership approach across ministries and sectoral institutions. Czech promoters, lacking project design and implementation skills, are not yet prepared to implement larger ESF projects. These factors have to be taken into account and it is recommended that a training and counselling component should be incorporated in assistance programmes at all levels.

The Czech Republic, like other CEECs, has no tradition or culture of evaluating policies, programmes and projects (whether nationally or internationally funded), resulting in few follow-up actions or valorisation of pilot results. Such tasks should become an integral part of planning. It is crucial to consolidate the achievements of past reforms to obtain maximum benefit from what is already in place. Valorisation of Phare programmes can also be very useful in preparation for ESF.

The HRD component needs a more systematic approach to programming and allocation of funds, which can contribute to the development of lifelong learning for all, promote employability, and stimulate the role of social partners in education and training. Support should be given to such projects as modular training, a credit transfer system and a unified qualification system in IVET and CVET; awareness-raising and start-up to develop a system of accreditation of prior learning; enhancement of counselling, guidance and the information environment with regard to lifelong learning and mobility of labour in Europe; support for quality management and quality assurance in IVET and CVET; and the development of special training courses in accordance with the demands of the labour market .

8. Role of National Observatory

The **National Observatory of Employment and Training** was established in 1996 as an analytical unit within the National Training Fund, under the auspices of the European Training Foundation (ETF) and with the approval of MoEYS, MoLSA and the Ministry of the Economy. In its early years the observatory, as part of a network of similar institutions in CEECs, predominantly focused on activities commissioned by the ETF. These activities particularly included the development of VET monitoring in relation to the labour market. The observatory gradually enlarged the scope of its projects through cooperation with national and international partners and clients. At the national level, the primary client is MoLSA. The observatory also cooperates with MoEYS, the Ministry for Regional Development, regional authorities and employment services, social partners, and research and statistical institutions. It has actively cooperated with OECD and CEDEFOP; it has implemented projects in the Leonardo da Vinci and Fifth Framework programmes. It functions under the guidance of a Steering and Advisory Committee composed of representatives of MoLSA, MoEYS, regional employment services, a human resource specialist representing the private sector, the Czech-Moravian Confederation of Trade Unions and the Union of Employers' Associations.

The observatory currently has a staff of six, including a research assistant and a financial officer. An additional senior expert and a junior researcher were foreseen for 2002 because of the increased volume of activities in preparation for ESF and other urgent analytical tasks. The **qualifications and expertise of the current team** cover the areas of initial and continuing education, the labour market, vocational guidance, sociology and economics. This interdisciplinary approach is an advantage in the implementation of analytical projects as well as coordination of working teams. The observatory has developed **a pool of cooperating experts and institutions** from research, higher education, statistics, state and public administration, employment services, social partners, private sector, NGOs, regional and local authorities, and independent experts. Currently some 200 experts are included in the pool, facilitating a very flexible supply of professional teams according to specific project needs.

The work of the observatory can be divided into two types – **regular activities** and **analytical projects** designed to address specific research issues. Recent development demonstrate that some one-off analytical projects become incorporated into the regular activities of the observatory.

8.1 Regular activities of the observatory

The observatory collects, analyses and regularly updates information on the VET system in the Czech Republic, publishing the results as a *Country Report on VET*. The report includes selected indicators (**Key Indicators**) supplied to the ETF on an annual basis for comparative analysis. The indicators concern the economic activity of various groups of the population, participation in education, drop-outs from education, and public and private funding of education, among others. As a member of the Network of National Observatories, the Czech National Observatory provides Czech bodies with information on systems of vocational education in associate countries. Public interest, however, lies rather in comparisons with the advanced EU and OECD countries. This

information can normally be obtained within project activities (see below). Unfortunately the observatory does not possess sufficient funding and capacities for regular translation and dissemination of such information.

In 2000 the National Observatory redesigned its major activities in order to provide support for MoLSA and other institutions in policy development and analyses in **preparation for the implementation of the European Social Fund.** This change was in line with the new focus of assistance to pre-accession countries provided by the ETF. The observatory supports the development of programming and assessment papers in preparation for accession to the EU. For example, it annually coordinates comments by major national institutions on the ETF document *Review of Progress in Vocational Education and Training Reform in the Czech Republic*. The observatory also contributes to the report on progress in the implementation of conclusions of the Joint Assessment Paper, which is jointly approved by MoLSA and the European Commission. It has also developed a number of background materials on VET for this report. The observatory cooperated with MoLSA in the development of other analytical and policy documents within Phare/ESF programming, particularly the Sectoral Operational Plan for Human Resource Development (SOP-HRD). It also participated in the working group on the National Employment Action Plan 2002.

The most recent change in National Observatory activities, however, is from direct participation in drafting programme documents towards evaluation analyses. For example, an *ex ante* evaluation for the *EQUAL Community Initiative* was made in 2001. More evaluation activities were scheduled for 2002, such as *ex ante* evaluation of the updated SOP-HRD and of the Single Programming Document for the ESF Objective 3 Prague, setting up an evaluation framework for the National Employment Action Plan 2001, and continuation of evaluation activities for the *EQUAL Initiative*.

8.2 Analytical and research projects

The observatory has undertaken a wide range of studies analysing VET with a view to improving its relation to labour market needs. The list of projects below is not exhaustive but gives typical examples of observatory activities.

The European Training Foundation has supported a number of projects. For example, The Role of Social Partners in VET (1998) outlined the current situation in the Czech Republic with a particular accent on the legal framework and organisational structure of social partnership in various areas of VET, and the objectives that derive from the special role of social partners in relation to qualification requirements and VET financing. The project on Continuing Vocational Education and Training in the Czech Republic (1999) analysed barriers to the development of CVET, including in-company training, the market for training providers, donor initiatives and CVET as part of the Active Employment Policy. The Education and Training against Social Exclusion (2000-2001) project was initiated by the ETF in partner countries of Central and Eastern Europe. It analysed population groups at risk of social exclusion and assessed policy measures in employment and education.

As regards labour market analyses, the National Observatory implemented a two-year OECD project, The Transition of Young People from School to Employment (1997–99). In line with OECD methodology, the project verified the level of participation of young people in education and employment, length and success rate of studies, types of certificate, links between studies and work placements and conditions in the labour market for school leavers. The analysis included an extensive sociological survey among school leavers. Their educational and career paths and the nature of the problems they experience entering the labour market were scrutinised. The project on

State Employment Policy and Services with Regard to Education Policy (MoLSA, 1999) was 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 ESF measures was carried out for the ETF project on Country Monographs (2000–2001). The assessment supports the implementation of The National Employment Plan, identifies problems and proposes solutions within the context of updating the Joint Assessment Paper prepared jointly by the Ministry of Labour and Social Affairs and the European Commission.

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-NTF, 1999
- *Forecasting Skill Needs: Methodology Elaboration and Testing*, NO-NTF, 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-NTF, 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
- *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-NTF, 1999
- *Education and Training against Social Exclusion: Czech Republic*, NO-NTF, 2000 <http://www.nvf.cz/observatory/index_gb.htm>
- 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*, Luxembourg, CEDEFOP, 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 in the Czech Republic], NO-NTF, 2001 <http://www.nvf.cz/equal/cz/dokumenty/evaluace.pdf>
- 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, 2001 ttp://memorandum.nvf.cz/dokumenty/zprava.doc
- *Country Monograph of the Czech Republic – Background Study*, NO-NTF, 2001
- *Human Resources in the Context of Regional Development: Company Skills Survey in Selected Industries of North West Bohemia*, NO-NTF, 2002

The National Observatory also participates in the preparation of a yearbook, *Human Resources in the Czech Republic*. The first edition (1999, Phare), prepared in cooperation with the Institute for Information on Education, aimed to cover major trends in 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. The observatory is currently seeking support from national and EU sources to continue the work on the next issue of the yearbook.

An ongoing three-year research project, Professional Identity: Flexibility and Mobility in the European Labour Market (FAME) (2000–03, Fifth Framework programme) 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 the Czech Republic, Estonia, France, Germany, Greece, Spain and the United Kingdom.

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, 1998–99). The analysis was based on a survey of company recruitment and redundancy of employees of specific qualification levels and professions. The implementation of HRD policy in companies as well as their cooperation with schools was covered. The results of the survey were compared with the supply of educational opportunities and the anticipated profile 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 a company skills survey in selected industries of north-western Bohemia (NUTS 2). Key structural and qualitative characteristics of the regional economy influencing the supply and demand of skills were analysed. The project included a detailed survey in 155 regional companies in five industries: chemistry; energy; environment and waste processing; IT and telecommunications; glass, porcelain and ceramics. The survey sought to identify the skills of the workforce as a factor affecting company economic performance, the capacity of companies to identify skill shortages and their effects, and their willingness to design and implement measures to address skill shortages.

Based on the experience gained from analytical projects in skill needs analysis, the National Observatory was the first Czech institution to initiate a project designed to fill the gap in forecasting the 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 using the experience of countries where such systems are already in place. The project included a comparison of the existing information which could be used to forecast skill needs, a model for regular projections, proposals for improving the existing information system and the possible introduction of new monitoring and forecasting instruments. The project worked with both qualitative and quantitative methods, for example a qualitative survey of qualification needs in the tourism sector in the north-west region of the Czech Republic was carried out. The project resulted in recommendations for decision-makers and the relevant expert institutions.

Finally, the National Observatory is actively engaged in international expert and thematic networks. For example, 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) (2002–04, Fifth Framework programme), where the observatory coordinates the work on issues of transition to the market economy and accession to the EU. The observatory regularly disseminates its findings from international, national and regional workshops, seminars and conferences, to the maximum extent possible given its limited staff and intensive work programme.

8.3 Further opportunities

During the six years of its existence, the National Observatory has successfully fitted into the field of research and analysis in the Czech Republic. Beginning in the well-established institutional framework for IVET research, and despite some competitive pressure at the outset, the observatory has succeeded in finding a niche. It has filled the gap in research into links between the labour market and education, HRD and CVET, as well as policy-oriented analyses in the employment and training fields. The observatory does however need to strengthen its capacities and funds to upgrade its public relations activities, dissemination of results, translation of findings into Czech (and into English in the case of national projects) and publication. Nowadays its 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 employment and training fields; (3) international cooperation. The observatory is currently a fully sustainable institution, whose future development is not dependent on funding from the ETF. The coming period will be crucial, however, as the institutional framework will develop with regard to the national management of HRD, sectoral and nationwide analysis of changing qualification and skill needs, and evaluations of EU and national policies. Furthermore, future support for research from the European Commission and CEDEFOP will be subject to multiple-partnership cooperation in the form of research networks and consortia of institutions. How successfully the observatory can integrate and adjust to these developments will determine its future achievements.

9. Conclusions: challenges and further needs

After a period of rather spontaneous development since 1999, intensive work on **legislative and policy documents** has been under way. This should provide for more systematic conditions for further education reforms. These documents include the *National Programme for the Development of Education* (White Paper) which was approved by the government in early 2001, and the *Human Resource Development Strategy, National Employment Plan*, and *National Employment Action Plan.* Implementation of these programmes will still require a major effort.

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 falling behind, losing credits and, given the length of studies, a lot of time. If students do not complete the whole of a learning programme and pass the final examinations, they do not receive credit for the part they did complete. There is no shorter programme leading to another (i.e. second) Maturita. Students cannot extend their specialisation and obtain 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 lacks provision 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 *State Information Policy in Education* in 1999.

The prevailing preference for specialisation within secondary technical and vocational education results in a **low proportion of general secondary education** (gymnasiums), which remains at the level of 18% to 19% of all students. There is an extensive range of courses within secondary vocational education and training. Certain steps to address this imbalance were initiated in 1998 through the introduction of a smaller number of broadly conceived fields of study and a Standard of Secondary 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. As the standard is only being followed by a small number of schools, however, the new Education Act envisages the development of a National Programme for the Development of Education which will set out requirements for objectives, content and output competencies for pupils at basic and secondary schools. This would provide a legislative basis for 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 legislation will be passed by Parliament, how quickly these programmes can be introduced to schools and whether appropriate conditions (in terms of teaching and technology) can be established.

Separate educational pathways with limited possibilities of transfer 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 needs to be integrated in a major overhaul.

Although a government decree stipulated the implementation of **Career Choice** as a subject in all basic and secondary schools in the country, schools did not receive sufficient support and only a few have introduced the subject and modified their curricula. The **career guidance** system still provides fragmented information rather than complete counselling services. Educational counsellors in schools focus more on pedagogical or behaviour problems and they have no capacity to play any role in career counselling or in preventing drop-outs. The career guidance system will have to broaden the scope of its activities and provide clients with tailored counselling to cover the whole range of training, work-related and social issues.

A broader range of learning programmes and growing school autonomy make it hard for job seekers and employers to find their way in the system. The system also impedes the comparison of outcomes and quality of schools. Although a number of individual evaluations have been conducted, there is **no comprehensive system of assessing educational programmes** based on defined learning objectives and ensuing criteria and tools. The current evaluation methods rely mainly on pedagogical criteria rather than placement of graduates in the labour market. Schools do not gather systematic information on the success of their students in the labour market.

Lack of links with the labour market is a major flaw of the Czech school system. There are no links between educational standards of vocational schools and professional standards; while 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 ineffectual and random that most graduates enter the labour market with little knowledge of the work environment. In many cases, students do not have skills to handle modern technology as they only have access to obsolete technical equipment in vocational schools. With some exceptions, schools are not involved in the placement of their graduates. With this in mind, legislation is required to allow other ministries and social partners to shoulder their share of responsibility and become involved in decisions on the development of education, its management and funding. A system should be set up to increase the involvement of companies in vocational education and forge school/company links. **Lack of practical experience among teachers** is another reason for poor contacts between the worlds of education and work. Unfortunately, in-service training of teachers does not eliminate the problem. Greater involvement of social partners in curricular development, evaluation of education results and final exams is 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 private institutions were set up (these are very small in terms of study places), the number of applicants is still twice as high as those admitted to the first year. This is despite the considerable demand from the labour market for specialists with university degrees. It is particularly desirable to expand the supply of shorter non-university courses. The diversification of higher professional schools, a number of which on meeting the required standards could provide this type of higher education, is not progressing. In addition to legislative prerequisites, raising the standards 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 lack of cooperation with the business sector.

Within the reform of public administration effective from 2000, **decentralisation of educational administration** is gradually being implemented. All secondary and higher professional schools are administered by regional self-governing authorities which will also allocate resources to schools (including budgetary resources). Regional authorities are to determine the structure of schools in the respective regions in line with the needs of the labour market. Regions are to develop a long-term plan for the education system every two years and prepare annual reports. The role of MoEYS is to define educational aims, declare development programmes and lay down various financial

standards and rules for funding. Such a change of governing structures places a great demand on managers and executive staff of both the newly established regional self-government (with little experience in educational administration) and MoEYS.

There is no systematic base for **continuing education** in the Czech Republic, although this area rapidly developed in the 1990s. But such spontaneous development is not sustainable without an efficient CVET system. Despite the extensive supply of programmes, the quality of continuing education is insufficient, educational firms are often small and ineffectual and the proportion of universities and various vocational schools providing CVET is low. There are no legislative and regulatory mechanisms to ensure the relevant systemic linkages within CVET. The various steps which need to be undertaken are: (1) define the responsibilities and powers of the major players in the development of continuing education (state, employers, trade unions, municipalities and regions, professional associations); (2) lay down rules for the funding of major parts of continuing education; (3) establish mechanisms for quality assurance, accreditation and certification; and (4) set up support systems and infrastructure.

In the **strategic documents currently under preparation**, many aims are drafted that should gradually eliminate most of the above-mentioned weaknesses and problems of the education system. However, the pace of reform, the right conditions, and the active approach of education institutions and other partners are critical for their successful implementation. One promising current reform is that of public administration in education, which could create more active cooperation between the ministry, the regions and the schools and thus accelerate positive changes in education.

Annexes

Annex 1. Acronyms and abbreviations

AEP	Active Employment Policy
COST	European Cooperation in the Field of Scientific and Technical Research
CSI	Czech School Inspectorate
CSO	Czech Statistical Office
CSVŒ	Centre for Higher Education Research
CVET	Continuing vocational education and training
ESF	European Social Fund
FEP	Framework Education Programme
GDP	Gross domestic product
HRD	Human resource development
ISCED	International Standard Classification of Education
ISCO	International Standard Classification of Occupations
ISSWP	Integrated System of Standardised Working Positions
IVET	Initial vocational education and training
JAP	Joint Assessment Paper
LFS	Labour Force Survey
MoEYS	Ministry of Education, Youth and Sports
MoLSA	Ministry of Labour and Social Affairs
MRD	Ministry for Regional Development
NACE	EU Classification of Economic Activities
NEP	National Employment Plan
NEAP	National Employment Action Plan
NITVE	National Institute for Technical and Vocational Education
NPF	National Property Fund
NTF	National Training Fund
NUOV, formerly VÚOŠ	National Institute of Technical and Vocational Education
NUTS	Nomenclature of territorial units for statistics
PALMIF	Pro-Active Labour Market Intervention Fund
PES	Public employment services
RASES	Government Council for Social and Economic Strategy
RIVE	Research Institute for Vocational Education
RILSA	Research Institute of Labour and Social Affairs
RIVE	Research Institute of Technical and Vocational Education
SOP	Sectoral Operational Programme
ÚIV	Institute for Information on Education
ÚVRŠ	Institute of Research and Development of Education
VÚP	Institute for Pedagogical Research
VÚSC	Vyšší územně správní celek (higher unit of regional self-government)

Annex 2. Bibliography

OECD Main Science and Technology Indicators, Paris, Organisation for Economic Co-operation and Development, 1998.

OECD in Figures, Paris, Organisation for Economic Co-operation and Development, 2001.

1. *Labour Market and Employment in the Czech Republic*. Background study.
2. Act No. 29/1984 Coll., on the System of Basic, Secondary and Higher Vocational Education (Schools Act), as amended by Law Nos. 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*. Background study for Organisation for Economic Co-operation and Development (OECD). Prague, 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 CR in 1996 and 1997]. Prague, Czech Statistical Office, 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, Czech Republic, 1999.
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 1993–1996]. Czech National Report.
8. *Comparative Research: Learning Society*. Prague, Rapid-Dema, s.r.o., 1997.
9. *Continuing Vocational Training*. Prague, Czech Statistical Office, 2001.
10. *Country Monograph of the Czech Republic – Background Study*. Prague, National Observatory/National Training Fund, 2001.
11. *Czech Info Phare*, European Commission Delegation, CFA, January 1996.
12. *Časové řady trhu práce* [Time Series Statistics of the Labour Market]. Ministry of Labour and Social Affairs, Czech Republic, 1999.
13. *Časové řady základních ukazatelů statistiky práce* [Time Series of Key Indicators of Employment Statistics], Prague, Czech Statistical Office, 1999.
14. Database, OECD Centre for Co-operation with the Economies in Transition Register. Bilateral Cooperation Unit, Ministry of Finance, Czech Republic.
15. *Employment and Unemployment in the Czech Republic as Measured by the Labour Force Sample Survey.* Quarterly. Prague, Czech Statistical Office, 1996, 1997, 1998, 1999.
16. *Employment Services in the Czech Republic*. Ministry of Labour and Social Affairs, Czech Republic, 1996.
17. *Employment Statistics, Ministry of Labour and Social Affairs*. Bulletin. Prague, Czech Statistical Office, 1999.
18. *Employment Statistics, Ministry of Labour and Social Affairs*. Bulletin. Prague, 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. *Analíza 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*. Prague, Faculty of Natural Sciences, Charles University, 1996.

22. *Indicatives Programmes 1/1995*. Brussels, European Commission, 1995.

23. *International Strategic Human Resource Management*. Cranfield University (UK), Price Waterhouse, 1994.

24. *Joint Assessment of the Economic Policy Priorities of the Czech Republic*. Government of the Czech Republic/European Commission, August 1999.

25. *Klíčové ukazatele, Key Indicators, Czech Republic*. Prague, National Observatory, 1989, 1993–1998.

26. Kofroňová, O., Vojtěch, J., *České odborné školství v evropské perspektiv* [Czech Vocational Education in the European Perspective]. In: *Czech Education in the 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 CR – 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]. Ministry of Education, Youth and Sports, Czech Republic, 1994.

30. *Lidské zdroje v České republice, 1999* [Human Resources in the Czech Republic, 1999]. Prague, National Training Fund, 1999.

31. *Main Economic and Social Indicators, Czech Republic, No 8*. Prague, Research Institute of Labour and Social Affairs, 1996.

32. *Mzdy zaměstnanců za rok 1996, 1997, 1998* [Wages of Employees in 1996, 1997, 1998]. Prague, 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*, Prague, National Training Fund/National Observatory, October 1997.

34. *Nezaměstaní absolventi škol na trhu práce* [Unemployed School Graduates in the Labour Market]. Ministry of Labour and Social Affairs, Czech Republic, 1996.

35. *Nezaměstnaní absolventi škol – duben 1999* [Unemployed School Graduates – April 1999]. Ministry of Education, Youth and Sports, Czech Republic, 1999.

36. *Okresy v České Republice v roce 1995* [Districts in the Czech Republic in 1995]. Prague, Czech Statistical Office, 1996.

37. *Partnership for Change*, pp. 15–16, 18. Prague, USAID in the Czech Republic, 1997.

38. *Phare in the Czech Republic*. Prague, ReproMedia, 1994.

39. *Phare Programme Database*. Centre for Foreign Assistance, Ministry of Finance, Czech Republic.

40. *Phare Programme in the Czech Republic*. Ministry of the Economy, Czech Republic, 1995.

41. *Programme and Contract Information 1995*, Multi-Country and Cross-Border Programmes No. 1. European Commission, 1995.

42. *Projekce obyvatelstva* [Demographic Projection]. Prague, Czech Statistical Office, 1995.

43. *Reviews of National Policies for Education*. Czech Republic, Organisation for Economic Co-operation and Development, 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 3.3.1991]. Prague, Czech Statistical Office, 1991.

46. *Statistical Yearbook of the Czech Republic*, Prague, 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]. Ministry of Labour and Social Affairs, Czech Republic, 1998, 1999.

49. *Statistika aktivní politiky zaměstnanosti* [Statistics of Active Employment Policy]. Ministry of Labour and Social Affairs, Czech Republic, 1996, 1997, 1998, 1999, 2000, 2001.

50. *Statistika uchazečů o zaměstnání a volných pracovních míst* [Statistics of Job Seekers and Vacancies], monthly. Ministry of Labour and Social Affairs, Czech Republic, 1996, 1997, 1998, 1999, 2000, 2001.

51. *Structure of Earnings – Survey 1996*. Prague, 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 1997–1998]. 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 1995–1996]. 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. Prague, National Training Fund, 1997.

57. *Transition from Initial Education to Working Life*. Organisation for Economic Co-operation and Development, Czech Republic, 1997.

58. USAID projects database. US Agency for International Development, American Embassy, Czech Republic.

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. Prague, 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]. Prague, 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]. Prague, Research Institute of Technical and Vocational Education, 1998.

64. *Vývoj obyvatelstva v České republice* [Demographic Development in the Czech Republic]. Prague, Czech Statistical Office, 1997, 1998, 1999.

65. *Vývojová ročenka školství* [Retrospective Yearbook of Education]. Prague, 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]. Prague, National Training Fund, 2001.

68. *White Paper on Education and Training – Teaching and Learning – Towards the Learning Society*. Brussels, 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 May 1995.

70. *A World Bank Country Study – Czech Republic toward EU Accession*. World Bank, Washington, D.C., 1999.

71. Zásady regionální politiky *vlády ČR* [Principles of Regional Development Policy of the Government of the CR]. Ministry for Regional Development, Czech Republic, May 1997.

72. *Zpráva o situaci rómské komunity v Č* [Report on the Situation of the Romany Community in the CR]. Government Office of the Czech Republic, 1997.

73. *Zpráva o stavu vzdělávání dospělých v ČR, návrh materiálu pro poradu vedení MŠMT*; [Adult Education in the Czech Republic], Draft Report. Ministry of Education, Youth and Sports, Czech Republic, April 1997.

Annex 3. Joint Assessment Paper priorities – state of progress in IVET, CVET and PES

JAP priorities	Reflection in Czech documents	State of progress
Initial vocational education and training (IVET)		
Section 3.3: Proceed with IVET reform in a more strategic perspective.	*National Programme for the Development of Education* (White Paper) (MoEYS) *Human Resource Development Strategy for the Czech Republic* (NTF)	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 Section 2.1.2). The documents have not as yet passed 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. These plans are however insufficiently coordinated either between various ministries (particularly 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.
Section 3.3: Increase the involvement of the social partners in IVET and CVET, in particular through encouraging links between schools and enterprises.	NEP (MoLSA) *Human Resource Development Strategy for the Czech Republic* (NTF)	Although the policy documents mentioned above stress the role of social partners, their involvement in IVET development has been insufficient. The Czech Republic still lacks an institutional framework and there are no legal provisions or measures to motivate social partners to become involved in VET development. Any participation of social partners 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.
Continuing vocational education and training (CVET)		
Section 3.3: Reinforce links between IVET and CVET with a view to implementing an overall concept of human resource development to strengthen employability and competitiveness of the workforce and to foster lifelong learning.	*Human Resource Development Strategy for the Czech Republic* (NTF) White Paper (MoEYS)	At the policy level this aspect is addressed particularly in the *Human Resource Development Strategy*. Other policy papers within the education sector still concentrate only on IVET. IVET and CVET continue to develop 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 interlink in certain cases where cooperation occurs between schools, labour offices, municipalities and companies (schools provide retraining or leisure courses for adults).

JAP priorities	Reflection in Czech documents	State of progress
Section 3.3: 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 recent years.	No progress was achieved. The training and lifelong learning of older workers is not supported by specific measures.
Section 3.1: Encourage enterprises to create more training opportunities for people with low skills.	Neither the policy documents nor legislation approved in recent years deal with encouraging 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 only trained in exceptional cases.
Public employment services (PES)		
Section 4: Coordination 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 Czech Republic (Government) Act No. 72/2000, on Investment Incentives	In spite of plans to improve coordination between the tax and the benefits systems, there has been little progress in this respect. The level of taxation of income from work is high, particularly 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 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 receiving unemployment benefit. 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.

JAP priorities	Reflection in Czech documents	State of progress
Section 4: Promotion of occupational and geographical mobility.	NEP (MoLSA) NEAP for 2001 (MoLSA)	Regional mobility within the Czech Republic is significantly restricted by the distorted 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. 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 lifelong 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. The Labour Code should be fundamentally revised.
Section 4: Review of the pensions system from an employment perspective.	Conception of MoLSA for 2000 and 2001 (Government Decrees No. 399/99, 482/00 respectively)	The pension system needs to be reformed for economic reasons. The government has approved its own policy which is based on a gradual adjustment of the existing 'pay as you go' system of financing. Unfortunately, this policy does not enjoy a broader consensus with other political partners. Since the mid-1990s, the retirement age limit has been increasing. In spring 2001, conditions for 'premature' retirement were tightened up. However, there are still insufficient links to income from work and the system is not very flexible.
Section 4: Strengthening of the public employment service to support a policy shift towards prevention.	NEP (MoLSA) NEAP for 2001 (MoLSA) New draft law on employment (MoLSA)	The share of Active Employment Policy measures in 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 AEP (requalification courses also for persons threatened by unemployment, counselling to be officially recognised as an active instrument, more measures for disabled people, 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). This proposed legislation was originally meant to address the issue of institutional arrangements of employment services – an issue on which there is currently wide debate. However, a new proposal is expected to be developed.
Section 3.2: Efficient delivery system and continuous evaluation of the implemented programmes should be improved.		Although the active labour market policy measures are monitored, continuous evaluation of their results is lacking. There are no policy measurable target specifications or evaluation methodologies.

JAP priorities	Reflection in Czech documents	State of progress
Section 3.4.2: Improvement of the existing labour market delivery mechanism in particular strengthening local offices. 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 on which there is currently wide debate. However, it is likely that a separate bill will be drawn up. A cooperation approach to programme design was used by MoLSA in preparing NEP and NEAP, but the actual involvement of other partners in programme implementation is low.

Tables

These tables were prepared as requested by the European Training Foundation. The data format, structure and methodology for data collection were defined by ETF common to all future member states. The Czech National Observatory, in cooperation with partner institutions responsible for collecting statistics, has provided data where available. Blanks in the tables mean that data are not available in the standard format and/or cannot be derived from other statistics.