



***Economic Growth Strategy
of the Czech Republic***

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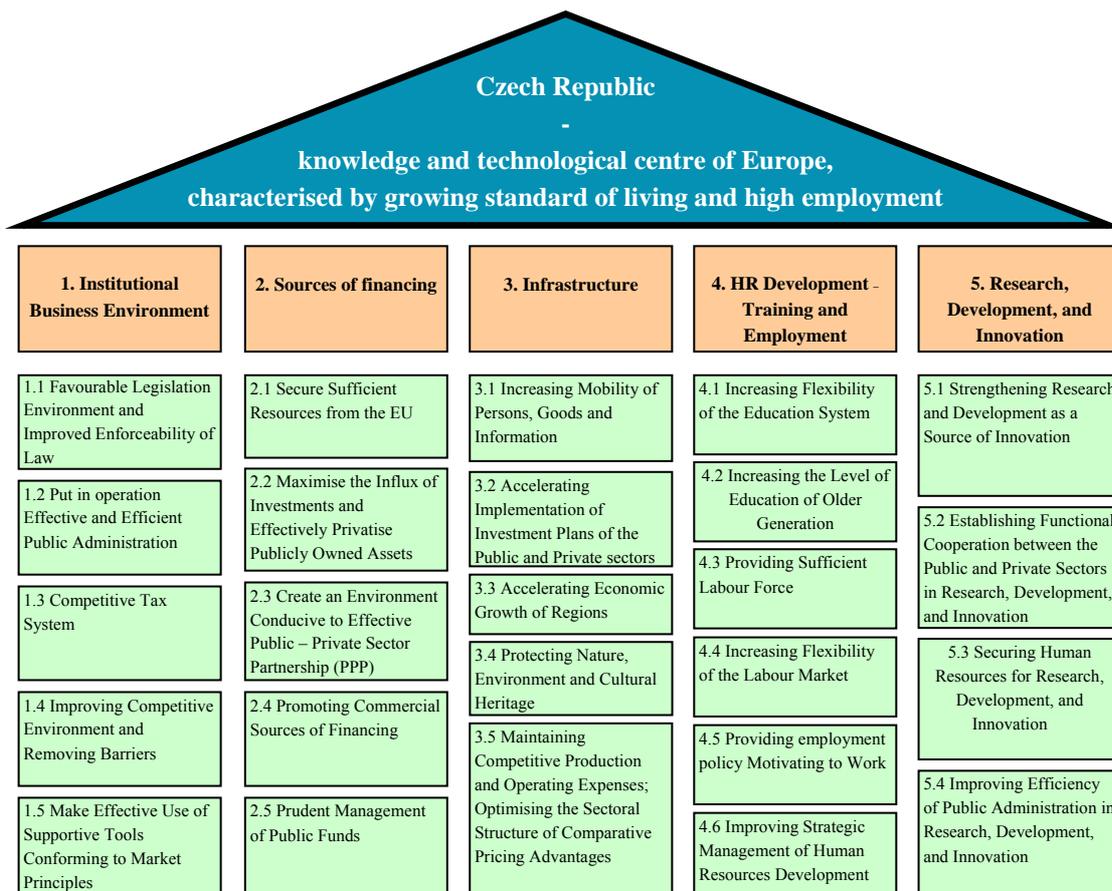
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CZECH REPUBLIC - KNOWLEDGE AND TECHNOLOGICAL CENTRE OF EUROPE, CHARACTERISED BY GROWING STANDARD OF LIVING AND HIGH EMPLOYMENT.

The objective of the Economic Growth Strategy is to bring the Czech Republic as near as possible to the economic level of the developed EU member states while respecting the principles of sustainable development. The country may reach the EU average level measured by GDP per capita in 2013.

To attain that goal the Czech Republic should focus public-sector means in support of products and services characterised by high added value, and make the business environment more attractive in order to induce efficient local companies to remain and new foreign ones to arrive. The resulting new jobs will then positively influence the standard of living of the population.



Introduction

Objectives of Economic Growth Strategy

The Economic Growth Strategy of the Czech Republic (EGS) elaborates the Czech Republic Strategy for Sustainable Development, taking into account the objective of the other two pillars of sustainable development, and comprises three main tasks. The first involves setup of priorities for co-ordination of economic policy up to 2013 and directing assistance from the EU funds in the period 2007 - 2013. The second task is to create for clients of the state sector - citizens, entrepreneurs and corporations - the optimum conditions for their economic activities. To this end it will be necessary to inform the public and individual businesses about the EGS priorities to improve their expectations. And the third task is to contribute to maximum efficiency in directing limited public means in areas of direct intervention.

Focus of the Strategy

EGS is a strategy of priorities and, as such, does not and cannot resolve or deal with all problems and deficiencies.

Several areas exist that affect, directly or indirectly, international competitiveness of economic subjects regardless of their size or number of employees. The legislative network, the tax system and regulatory measures imposed by the public sector on businesses constitute the rules of the game that apply in a given economy. The ease with which businesses access financial funds and their price affect the ability of undertakings to modify or expand existing or initiate new activities and, consequently, the speed of their reaction to changing market environment. The level of transport, information, real estate, energy, water and other infrastructure materially influences the cost of production and services and very often ranks among main inputs. The overall level of education and the structure of skills codetermine competitiveness of a country and its appeal to individual types of business. No business can dream of being competitive without an adequate number of workers possessing the necessary training and skills, available at the given place of business. We consider practical utilisation of R&D results and the ability to innovate products and services to be of fundamental importance for productivity of labour and, consequently, for the standard of living. The ability of the state sector to influence the conditions in the above areas differs substantially - from setting up rules to the role of an almost monopolistic provider of services and means.

Accordingly, the Economic Growth Strategy focuses on five priority areas - pillars that constitute the foundations on which competitiveness of the Czech economy rests. They include the following: Institutional Business Environment,

Sources of Financing, Infrastructure, Human Resource Development - Training and Employment, and Research, Development, and Innovation, in the order in which they underlie one another - from the relatively broad Institutional Environment for business to the highly specialised Research, Development and Innovation.

As a superstructure spanning the above five pillars the Economic Growth Strategy focuses on growth-promoting measures that direct the Czech Republic towards areas and services characterised by high added value, resting on a highly skilled workforce and actively utilising its competitiveness. Moreover, the Strategy strives to utilise and further develop the existing competitive advantages of the Czech Republic.

Economic Growth Strategy and Regional Policies

In addition to sectoral approaches the EGS will work towards balanced regional economic development, focusing on activation of insufficiently utilised potential and on support extended to individual regions as well as on aid to economically weak territories that would be otherwise unable to manage by their own means the forthcoming changes in economic and social structure. The objective here is to overcome the existing trend of increasing inter-regional disparities and prevent the formation of new imbalances in sectoral and regional economic structures, that would otherwise require additional and massive remedial measures in the future. Balanced regional development ranks among horizontal principles and as such is reflected in all five priority areas defined in this Strategy.

EGS satisfies the objectives of the Lisbon Strategy (see Chapter 1.3 below) and reflects the most recent attitude of the EU towards harmonisation of objectives of regional EU policies with the objectives of the Lisbon Strategy in conformity with the following principles:

- respect for specific features of regions and co-operation with regions in selection and specification of priorities of regional development,
- maximum utilisation of development potential of regions in the area of human resources, based on specific characteristics of individual regions,
- overcoming regional differences by strengthened territorial cohesion and integration of individual regions,
- utilising comparative advantages of individual regions to support the objectives of this Strategy,
- enhancing territorial flexibility on the labour market without inducing any dramatic changes in national settlement structure to check the trend leading to

depopulation of small communes, and forestalling adverse impacts of spontaneous urban development of major towns and cities,

- improving the state of the environment, restoration of landscape and regional traditions both from the point of view of sustainable development and as an important source underlying economic growth within global dynamic segments - tourism, economical utilisation of cultural heritage, revival of old manufacturing tradition, etc.,
- creating on both local and regional levels favourable environment for drawing funds within the European regional policy.

The fundamental principles of regional policies are laid down, in conformity with EGS, in the Regional Development Strategy. From the point of view of regional development the Economic Growth Strategy should influence preparation of the National Development Plan of the Czech Republic for the period 2007 - 2013, the follow-up programming documents (operational programmes) and other strategic documents related to regional policies at both national and regional levels as a part of updated or newly created developmental strategies for individual regions.

Economic Growth Strategy in the Context of Czech Economic Policy

EGS is based on the superior Czech Republic Strategy for Sustainable Development. EGS should then serve as the fundamental document for other partial or encompassing economic concepts and policies. Newly created concepts of this type should be harmonised with the EGS, and existing documents should be updated accordingly. With regard to encompassing documents both the 2005 - 2008 National Programme of Reforms and the 2007 - 2013 National Development Plan of the Czech Republic will be based on EGS as an important underlying source.

The philosophy of EGS is based on a synergy of the five pillars and should be perceived accordingly. As individual pillars are interconnected at all levels, none of them is expendable; the Strategy should be construed as an integral whole.

The Economic Growth Strategy operates at four levels of detail. In addition to the fundamental vision these comprise the following:

- Pillars: five fundamental priority areas (level two in Chapter 3)
- Objectives: results necessary for satisfying the vision (level three in Chapter 3)
- Tasks: partial milestones en route to Objectives (level four in Chapter 3)
- Tools: are used to fulfil tasks (recommendations in Chapter 3).

While Pillars, Objectives and Tasks of EGS jointly constitute the strategic framework for strengthening competitiveness of the Czech economy and its focus on high-added-value production and services, tools represent specific recommendations and detail the route that the economic policy should follow.

Fulfilment of the Economic Growth Strategy

Fulfilling the priorities incorporated in the EGS after its adoption will require three fundamental inputs: efficient management of the process in its entirety, appropriate financing, and partnership with the private sector.

Financing is of particular interest in a situation where the Czech Republic must comply with the Convergence Programme. The principles underlying financing, essentially based on reallocation of resources in favour of individual priorities incorporated in the Economic Growth Strategy and preference of co-financing from EU funds over national programmes are described in more detail in Chapter 5 below.

The process of EGS implementation must be managed effectively, using progressive principles of good governance at local, regional and national levels alike. Efficiency of process management will be reflected in optimisation, strengthening and rationalisation of state administration, in conformity with the needs of absorption capacity of the resources made use of in achieving the objectives of the Strategy.

In fulfilling the objectives of the Strategy partnership with the private sector will become an important driving force. Practical aspects of its implementation will respect the attitude adopted by the European Union, based on a broad and inclusive principle of partnership on local, regional, inter-regional and national levels.

CHAPTER 1 **Czech Republic in a Globalised World and in the European Union**

1.1 Opportunity for the Czech Republic

Progressive economic environment opens unexpected vistas to all citizens of free countries. Never before have economic opportunities been so wide, diverse and deep. The economic horizon now encompasses almost the entire planet. Regions for a long time exempted from the locale of fundamental economic processes now increasingly participate in worldwide division of labour. Thanks to globalisation they now can offer labour, goods and services to all. As a result anybody can satisfy their needs by choosing not from an offer restricted to a certain place, region or economic area, but from a worldwide offer.

This expansion now applies practically to all types of activity. Products of labour and capital exceedingly lose indication of origin. Today, goods and services are not primarily the product of a given country; instead, they are exceedingly represented by marks, labels or standards. True, people buying products of certain mark continue to assign them a place of origin, but the products are in fact manufactured primarily at locations that offer - in addition to the mandatory standard of quality - also low cost with regard to transportation, capital, or labour.

Developing technologies ruthlessly remove national borders. Progressive means of transport enable goods to be conveyed on enormous distances, on a massive scale and with minimum unit cost (disregarding for the moment damage to health and the environment). Products of labour exceedingly lose their material character. The ever-increasing proportion of intellectual work and progressive means of communication essentially wipes off national and supranational borders. A centre providing telephone services can be located at the other side of the globe without the customer noticing any change in quality. Progressive manufacturing units and even high-performance research centres are being established in regions recently considered backward. It is increasingly difficult to decide in which country a given product actually originates and where the corresponding tax is to be levied.

The contemporary financial sector enables one to mobilise and transfer funds extremely rapidly. Financial markets react to incoming data almost immediately. Any essential information is reflected in prices and allocation of resources. The volume of financial transactions, their incidence, diversity and complexity continue to expand. In addition to the traditional core banking the role of capital markets including collective investing is permanently increasing. The capital managed by pension funds grows dramatically. Financial products become ever more sophisticated. Financial

markets exhibit a tendency to integration both with regard to type and territory. Demanding clients require a single centre to administer all payments, savings and investments, assurance and insurance, retirement funds etc. in a universal manner available anywhere the world over.

Never before has the worldwide offer of goods and services been so diversified, extensive and available. It is apparent that the huge rise in consumption has adverse effects on the environment and in the long run will be limited by availability of raw materials. Economic growth must not be accompanied with damage to the environment. We therefore stand up for the concept of sustainable development.

The other risks mostly bear social character. These are obviously political risks since freedom, democracy or national identity are not values existing autonomously, without effort of us all. Society must guard these values and prevent them from being abused in a power struggle, in the interests of ideology or economy. Democratic institutions must protect civil rights without discrimination. Equality before law and equal access to fundamental conveniences such as education and assistance in sickness or poverty rank among incontrovertible values of modern European society.

Globalisation as an objective and irreversible process is the result of technical and social progress, and in this respect economic isolation is an anachronism. There is no doubt that economic globalisation offers enormous opportunities just to our country since it possesses the essential prerequisites. We live in a democratic society and are members of formations like the UN, OECD, EU, NATO, WTO, IMF, WB, and EBRD that ensure our security and offer a broad and strong economic space. In practically all areas we have implemented standards securing our comparability and compatibility with other countries. In reward we reap good prerequisites for high attractiveness to foreign investors, stable economic growth and high export potential of the Czech economy.

We cannot count extraordinarily rich raw material resources or capital among our fundamental assets. We can thus rely only on our labour, and Czech labour has been highly appreciated worldwide as highly skilled, adaptable, persevering and disciplined. Flexibility and adaptability in unexpected situations are other undisputed assets of our workers. Forbearance in wage matters and cultured collective bargaining rank among our less appreciated but still very important values.

Despite the good results and the existing optimistic projections we cannot rest on our laurels. Progressing global competition might turn around our existing relative advantages. Yesterday's success and innovations can become tomorrow's fatalities and a source of future backwardness. Czech Republic must further increase the rate of catching up with progressive trends in all areas. The Lisbon Strategy of

strengthened economic growth, combined with respect for the requirements concerning environmental protection and maintained social cohesion, constitutes a general key to bolstering our competitiveness.

Major changes will be necessary in our institutions. Czech law must be made more lucid, more transparent and more predictable for the user. Enforceability must cease to be formal and the time of enforcement proportional to the relevance of the subject matter at hand. Considerable attention must be paid to informal institutions. A typical Czech problem remains the relatively high degree of tolerance to violation of standards persisting at all levels. In addition to repressive measures attention should therefore focus on education to legal consciousness, creation of and compliance with ethical codes of conduct. People should learn that respect for law and observance of obligations pay and that short-term benefits are paid dearly by the increased risk for specific subjects and the country as a whole.

Focus on cheap labour is no key to economic growth. Increasing differences in wages between skilled and unskilled labour are a worldwide trend. While the latter is subject to enormous competition from new regions, demand for top-quality work increases at the same high rate as its price. To cope with this trend one has to raise the quality and availability of education and eliminate all forms of discrimination in this area.

Special attention should be devoted to lifelong learning and tertiary education. Motivation must be promoted also in this respect. To a much higher extent the system of university financing must reflect the quality of education and the rate of assertion of the graduates on the labour market. One can hardly disregard the fact that demand for some graduates is enormous while unemployment looms high for others, or that the average salaries of graduates from similar schools differ considerably.

Although we can be in general satisfied with the quality of our primary and secondary schools, the ability of the education system to develop creativity must be further promoted. Language skills constitute another weak point. In addition to standard language learning, students should be offered a possibility to study abroad.

Experience tells that people capable of working in international teams, with a high level of theoretical knowledge and able to process information, are never endangered by unemployment and, moreover, are regularly paid the highest salaries. A high proportion of highly skilled experts is a prerequisite for launching progressive technologies and active participation in efficient research. Without active support extended to research one can hardly think of economic development and, consequently, of further progress in the education system, as these are two equally important facets of the same process. Increasing the weight of research in a

country's product thus becomes a tool facilitating implementation of innovations in both manufacture and education.

Attractiveness of a country for economic activities depends on a number of factors. In addition to stable institutional environment and supply of highly skilled labour they include competitiveness in the area of all components of cost, including taxes. The Czech Republic has recently adopted fundamental measures in this area. Their impact must be further evaluated and new routes to increased motivation for work identified. Equally important, all systems of public finance must be stabilised and an optimised form of the pension system identified.

All methods leading to interconnection of local and international markets must be sought if the Czech Republic is to succeed in international competition. Timely accession to the common European currency is an important step in this direction. All barriers to trade that still separate our market must be also dismantled. A sophisticated, open market constitutes a major instrument for achieving rapid growth and high employment; all types of entrepreneurial structures easily find their place on a market of this type. In addition to the presence of major world companies, increased attention should focus on small and medium-sized enterprises as an important source of employment and innovation.

Social consensus constitutes a valuable benefit in the Czech Republic. Maintaining it in the next stage of economic development ranks among major objectives of economic policy. A delicate balance in both social welfare and industrial law is involved. Reinforcement of motivating elements is very important here but cannot operate to the detriment of the fight against poverty and social exclusion. Similarly, the unavoidable loosening of some outdated elements in labour relations cannot be replaced by blanket dissolution of elementary rights of the employees.

Development of sustainable transportation systems and information technologies is a prerequisite for dynamic development. Attractiveness of a country is to a considerable extent given by the standards it is able to offer in this area. Transport and IT can offer new opportunities to problem regions that were previously unable to assert themselves.

Within a long-term and efficient partnership between businesses, the state administration authorities and the relevant interest groups it is desirable to apply the principles of corporate social responsibility. These involve primarily creation of adequate conditions for highly effective management and control of the firm, combined with respecting the existing legal framework and fair trade; effectively satisfying the needs and requirements of consumers; identification and integration of social and environmental aspects in the everyday decision-making process; investing in professional development of employees and creating suitable working conditions conducive to health and safety at work.

Appropriate environmental policy that creates suitable conditions for innovation, development of new technologies and market, increased competitiveness based on the principle of more effective utilisation of resources and new investment opportunities constitutes an important prerequisite for dynamic economic development. The environmental technology market has experienced a dynamic growth recently; employment in the eco-industry has risen and in some rapidly growing economies (e.g. in Asia and Latin America) demand for environmental technology capable of improving material and energy efficiency has been growing. The Czech Republic must be able to make full use of these opportunities to assert its products on the global markets.

The modern world offers unparalleled opportunities to the Czech Republic. One should not be afraid of them, but welcome them and consider them a challenge to be managed actively. The submitted strategy constitutes a list of selected measures to be undertaken jointly by the government and the private sector on our route to increased prosperity. Naturally, the strategy is neither comprehensive nor final. The strategy merely indicates the selected direction.

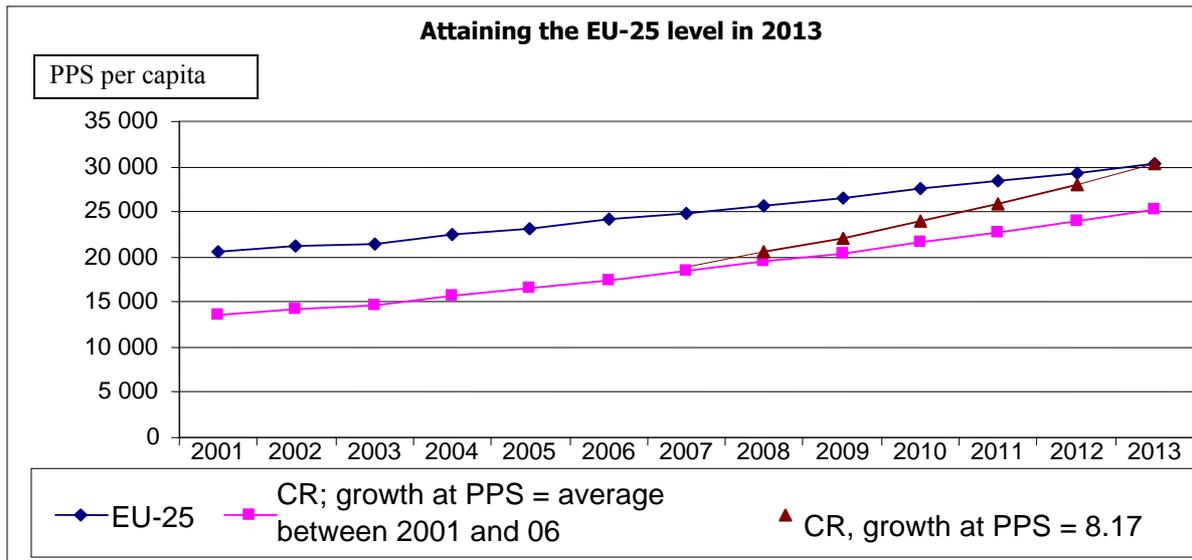
The Czech Republic faces a magnificent opportunity. We have at our disposal all prerequisites for making full use of it. To do so we need more motivation, education and skilled labour as well as appropriate social and legal security. There are no objectives we are unable to reach. If we start out on that journey we can compete fairly with everyone.

1.2 Main Objective: Attaining the Level of EU-25 by 2013

One of fundamental objectives underlying the measures proposed in the Strategy is for the economic performance of the Czech Republic significantly to approach the mean level of the 25 EU member states (referred to hereinafter as "EU-25") in 2013. Provided the growth-promoting measures proposed in the Strategy are implemented the Czech Republic will be indeed able - in the absence of significant adverse external effects - to reach 100% of the EU-25 average level in 2013.

The GDP per capita, expressed within the Purchasing Parity Standard (PPS), is an indicator suitable for comparing economic level of various countries, since it respects the existing differences in the prices of goods and services. Measured by that indicator the Czech Republic reached 70.1% of the EU-25 level in 2004. Eurostat predicts that the level reached in 2006 should be 72.6%. To reach 100% of the EU-25 average expressed in PPS in 2013 the Czech GDP expressed in fixed prices should grow between 2006 and 2013 at 6% a year. This calculation expects that between 2006 and 2013 the EU-25 economy will grow at the same annual rate as between 2001 and 2006 and the rate of inflation in EU-25 will vary at around 2 per cent.

Assuming that the mean GDP of EU-25 expressed at PPS will continue to grow at 3.33% annually as in the period 2001 - 2006, to reach 100% of the EU-25 level the Czech GDP expressed in PPS must grow at 8.17% annually, i.e., at a rate by approximately 2.8 percentage points higher than in the period 2001 - 2006. And just the growth of 8.17% a year, expressed at PPS, would correspond to an annual growth of 6.0% expressed at fixed prices, assuming that the annual rate of inflation in EU-25 will be around 2%. The following chart depicts the required acceleration in the rate of growth.¹



Source: 2001 - 2006 data: Eurostat; 2007 - 2013 - our own calculation

True, a 6% growth in GDP is an ambitious objective, but attainable in the Czech Republic provided all measures enclosed in the submitted Strategy are implemented and in the absence of any significant adverse external effects influencing the Czech Republic prior to 2013.

Considering the structure of the Czech GDP and its development we see that investments and export constituted the main sources of growth over the last years. Compared with other countries the contribution of personal consumption to GDP was low and has continued to decrease.² Although net export will obviously continue to

¹ The figures up to 2006 are actual data and the Eurostat predictions, respectively. The period between 2007 and 2013 in the entire 2001- 2013 series constitutes an extrapolation of the average growth as attained prior to 2006. The series covering only the period 2007 - 2013 depicts the rate of growth necessary for reaching 95% of the EU-25 level.

² In 2004 the contribution of personal consumption to GDP was 49.7%; the corresponding EU-25 figure was 58.2% of GDP. The proportion of the government expenditures in purchased goods and services also decreased somewhat and amounted to 22.8% of GDP in

grow and the proportion of investments will also remain high, personal consumption should become the main driving force behind future growth in order to achieve gradual approximation of the standard of living to that in developed countries.

The relatively high rate of unemployment ranks among factors that have previously hampered a rise in personal consumption. Resolving this problem would constitute a substantial growth-promoting factor. To this end the Strategy proposes measures aimed at increasing mobility of the workforce, enhancing its qualification or reinforced motivation through the tax system and the system of social benefits.

Macroeconomic stability constitutes an important factor prerequisite for kick starting and maintaining a high level of economic growth. At present the area of public finance constitutes the main potential source of instability in the Czech Republic, as it has for several years generated deficit in excess of the Maastricht criteria imposed on accession to the Eurozone. Moreover, the state budget deficit is of structural character and, accordingly, without fundamental reform one can hardly expect that it will be reduced substantially and the rising public debt arrested. Continuing budget deficits at the existing or even higher levels and a growing public debt would endanger accession of the Czech Republic to the Eurozone and, moreover, could induce the central bank to raise the interest rate with the ensuing adverse impact on both consumption and investments. Thus, reforms aimed at elimination of the fiscal imbalance will be needed to secure medium-term and long-term economic growth. A pension reform in particular must be started as soon as possible. It is true that in its initial stages some of the envisaged variants will have a negative effect on the state budget, but the reform as such is unavoidable for ensuring fiscal equilibrium over a long time horizon while maintaining acceptable standard of living of the retirees.

Resolving the issue of continuing budget deficits is prerequisite for accession to the Eurozone, currently envisaged in 2010.³ Prior to the accession a certain degree of real convergence must be attained to avoid the risk that the monetary policy of the European Central Bank will be either overly restrictive or overly expansive for the Czech Republic. Attention should be also paid to setting the exchange rate correctly.

2004 (the EU-25 average was 20.8%). The contribution of investment to GDP has remained constant at a level considerably higher than in EU-25: in 2004 it reached 27.2% (the EU-25 average was 19.6%). Net export experienced the most dynamic growth over the last four years; its negative balance dropped from -3.1% of GDP in 2000 to -0.4% of GDP in 2004. Over the same period export denominated in € grew by 64.7% (import grew by a mere 45.3% over the same period).

³ In this connection the Strategy fully conforms to the Strategy for EURO Accession.

Undervaluation would de facto represent transfer of a certain part of national assets abroad, while overvaluation could complicate the situation of Czech exporters. Provided the above prerequisites are met, accession to the Eurozone would further spur on growth, in particular through the positive effect on foreign investments and foreign trade of the ensuing exchange rate stability.

In connection with accession to the Eurozone one should pay attention to the stability of the European currency itself, since international economic relations of the Czech Republic are not restricted to the Eurozone. The common currency has not so far suffered from excessive instability but there are certain risks that should be kept in mind, the main of them comprising the budgetary deficits generated by individual member states, which subsequently exercise pressure on increased issue and subvert confidence in the currency. Stress must be therefore laid on maintaining fiscal discipline in all member states.

1.3 Czech Republic as a Component of EU and the Lisbon Strategy en route to Enhanced Competitiveness

In attempting to accelerate economic growth the Czech Republic is not alone. Already in March 2000, at the Lisbon meeting of the European Council, EU representatives promulgated an extremely ambitious objective: by 2010 make the EU the most competitive, knowledge-based⁴ region in the world, capable of achieving sustained growth, offering more top-quality jobs and capable of reaching social consensus. What has become known as the 'Lisbon Strategy' also aims at raising the average annual rate of economic growth to 3% by 2010 and creating additional 20 million jobs. At its subsequent meetings⁵ the European Council gradually detailed the strategy and incorporated social and environmental aspects. Satisfying the needs of the current generation without detriment to the well-being of future generations is a common goal.⁶

It however became apparent that it is not easy to set objectives of economic policy intended to meet a triad of objectives simultaneously. From the point of view

⁴ A knowledge-based economy creates added value by making use of knowledge and not merely of manual production, and stresses education and utilisation of scientific knowledge to spur its overall competitiveness.

⁵ Stockholm (March 2001) and Gothenburg (June 2001).

⁶ The principle of sustainable development.

of economic policy the relations between three objectives - economic, social and environmental - are competitive rather than complementary, at least in the short run.

In 2004 the European Commission established a high-level working team, headed by the former Dutch Prime Minister Wim Kok, to assess the topical extent of fulfilment of the Lisbon Strategy. The issued report stated that the principle of the strategy is essentially correct and the problem lies in an excessive number of priorities and the ensuing inability to meet them all.

The discussion that took place at the beginning of 2005 resulted in the Lisbon Strategy having been redrafted; the new wording was approved by the European Council in March 2005. Growth and employment remain the two principal objectives. A material prepared by the European Commission⁷ speaks in clear and unequivocal words: "Renewed growth is vital for prosperity". We need a dynamic economy to fulfil our social and environmental ambitions.

In this endeavour Europe should become a place more attractive for investors and jobs, and the adopted policies must therefore enable businesses to create more and better jobs. Moreover, Europe must focus consistently on knowledge and innovation as fundamental prerequisites for economic growth.

According to the revised Lisbon Strategy attaining environmental objectives and social parameters goes hand in hand with attaining economic growth (and thus creation of jobs).

In support of the Lisbon Strategy objectives, in March 2005 the European Council has obliged member states to prepare national reform programmes (the so-called Lisbon programmes) to reflect the specific conditions of individual countries. The member states have been invited to prepare the first National Reform Programme in autumn 2005. The National Reform Programmes will be valid for three years and may be revised upon amendment to the underlying national policies. An economic growth strategy is to become the fundamental underlying material for preparation of the National Reform Programme of the Czech Republic.

The proposed Economic Growth Strategy of the Czech Republic is a strategy prepared by a country that treasures European values and is aware of the fact that EU membership has contributed to its competitiveness and improved its position in the global economy. Our philosophy is based on the Lisbon Strategy envisaging enhanced economic growth and reduced unemployment. The Czech Republic assesses realistically its current position among the EU member states and strives to achieve convergence at the level of the most developed ones. The country is also

⁷ Working together for growth and jobs - A new start for the Lisbon Strategy.

aware of its competitive advantages established both in distant and recent past and is determined to utilise them in full to strengthen its competitiveness and increase the standard of living of the population. At the same time the Czech Republic acknowledges its drawbacks and is set to remedy them.

■ | CHAPTER 2 | ■ | Starting Points and Targets

2.1 Starting Points and Targets in Institutional Business Environment

The Czech Republic faces a number of problems connected with inadequate legislative environment and poor enforceability of law. The judiciary is unable to achieve rapid justice in courts, since courts work very slowly and their efficiency is poor. Legal regulations are often too complicated, frequent amendments complicate the system still more rather than improving its quality. Civil, commercial and labour law is subject to outdated regulations that often fail to reflect the needs of properly functioning economy. The legislative process lacks an analysis of consequences of the newly passed regulations on the business environment; as a result, new norms are enacted without taking into account whether they do improve the existing situation or whether their benefits, if any, are not outweighed by excessive cost.

Despite certain recent improvements, establishing a business remains too complicated a process in the Czech Republic. Bankruptcy constitutes a more serious problem still, since the existing bankruptcy and composition act fails to fulfil the envisaged function - bankruptcy proceedings drag on endlessly and the recovery is often excessively low. A corruption environment - or what is perceived as such by the general public - is excessive and adversely affects confidence in the state and its functioning.

Internal reorganisation of the judiciary is long overdue - accountability of the judges must be reinforced. To make the judicial system more transparent the civil code must be recodified and contract law consolidated. In connection with establishment of new businesses all existing registration acts must be consolidated at a single centre to simplify the start of a business as much as possible. Adoption of a new bankruptcy law is highly desirable to speed up the process, reinforce the role of the creditors and the market effects. Evaluation of the impact of newly adopted legislation on the economic environment should be institutionalised as a part of the legislative process. Elimination of corruption would enable normal functioning of the market, contribute to reduced transaction costs and increase confidence in the state and its functioning.

The quality of public services is very often inadequate; there is substantial space for increased efficiency and performance. Lack of adequate co-ordination has adverse effects on cost and on attitude to the users. Communication among state administration authorities is unsatisfactory (inter alia because of insufficient co-ordination between individual information systems). The result is that administration

burden is shifted to businesses and citizens. The concept of e-government was inadequately advanced and utilised in state administration - communication by means of IT is insufficient both inside and outside the administration. Independent external audits, implementation of the client system and improved co-ordination between institutions and in their attitude to the users would improve both the quality and performance of the public service.

After its launch in 1993 the tax system of the Czech Republic has gradually become excessively complicated; a simplification would be highly desirable (in particular with regard to the Income Tax Act). The tax quota, measuring merely the ratio of taxes and custom duties to GDP, is not excessively high in international comparison. The contributions to the mandatory social and health insurance are relatively high, however, and so is thus their proportion in the overall tax revenue. The generally low level of income and the high level of existing social and health care based on extensive solidarity result in a substantial percentage of levies in the gross income. In international comparison the income tax burden is high especially for the low-income brackets, and constitutes a barrier to increased employment/reduced unemployment. The Czech tax system also lacks certain motivating elements that might attract international firms and retain local subjects. Some taxes are also construed in a manner ensuring that the corresponding revenue is lower than the associated administration cost. Moreover, taxes fail to motivate a number of economic subjects to behave in a manner friendly to the environment.

An environmental tax reform that would shift responsibility for remedying damage to the environment to the perpetrator is therefore desirable. For the tax system to fulfil its role effectively its administration must not represent excessive burden imposed on the payer, and interpretation must be uniform across the entire economy. Parameters of the tax system should also make the country an attractive destination for local and foreign firms alike.

Czech competitive environment is not efficient owing to the existence of local oligopolistic and monopolistic structures. Businesses must sustain considerable administrative burden during incorporation and thereafter; the registration and incorporation system is outdated. Complex legislation constitutes another reason restricting entrepreneurial activities. To improve the competitive environment conditions must be created conducive to its desirable development and in justified instances the existing monopolistic and oligopolistic structures should be weakened in a targeted way. Competitiveness of Czech businesses should be respected in environmental legislation.

Competition between states and regions often justifies various forms of public support extended to individual businesses. Czech Republic should concentrate its efforts also in this area; indirect forms of support (like, e.g., support extended to

associations of firms and universities, stress laid on training and skills of the workforce) are advisable. In addition to support extended to foreign investors small and medium-sized enterprises should not be left out. Public support should also focus on a limited number of selected segments where the Czech Republic might prove to be competitive. It is also desirable to improve co-ordination of promotional measures and presentation of the Czech Republic abroad and to beef up the efficiency of enhancing the Czech interests in the globalised world economy.

2.2 Starting Points and Targets in Sources of Financing

The strained public finances threaten that insufficient public funds will be available to co-finance "European" projects. Moreover, considering the projected substantial rise of funds allocated to structural and cohesion policies more resources will be clearly needed for co-financing. Poor awareness of local entrepreneurial and other subjects of possible utilisation of resources from direct Community programmes prevents their more extensive utilisation. In the following programming period 2007 - 2013 the Ministry of Finance estimates the incoming funds for structural and cohesion policies to be approximately 160 billion CZK a year, more than five times the present total. Appropriate allocation of finances from the structural funds to areas with the highest multiplicative effect will accelerate GDP growth by several percentage points.

Creation of a legislative framework for Public - Private Partnership (PPP) constitutes an opportunity that would enable one to make more extensive use of this potential in co-financing projects defrayed by European funds. The necessary legislation is in the pipeline and so is the methodology for realisation of PPP projects. The latter might facilitate realisation of public projects, reduce the price of operation during the entire term, and improve the quality of services just thanks to private sector participation. If properly set PPP projects can serve as projects earmarked for co-financing and, accordingly, the government might make use of "private" funds to raise the rate of absorption of financial contributions from the EU funds. In a period characterised by increased pressure on public budgets this method may enable implementation of projects in public interest that the government would otherwise have to abandon for lack of funds.

The relatively high influx of foreign direct investment will slacken in the future with both diminishing competitive edge compared with developed countries and continuing competition in the field of investment incentives. Production that has recently arrived at the Czech Republic exhibits lower added value than would be normally warranted by the potential of the Czech economy, a fact that does not contribute to increased competitiveness on globalised world markets. No differentiation of the provided support according to preferred sectors is in place. Appropriate structuring of investment incentives could stimulate investment in preferred areas characterised by high added value, thus increasing the level of desirable investments in science and research. Influx of investments in science and research can accelerate the transition to a knowledge-based economy. Increased extent of participation of local investors will enable us to equilibrate the balance of trade since profit could be reinvested in the Czech Republic, or invested abroad and subsequently repatriated.

The capital market does not perform its task to secure sources of financing, although the recent trends (development of collective financing, the first primary issue in 2004) is a reason for cautious optimism. Strengthened capital market as a source of capital for firms is desirable as the Czech Republic economy has been financed mostly by debt, a fact that limits investment activities.

An excessive proportion of public outlays continues to go to mandatory expenditures, restricting the potential of active fiscal policies and dedicated, growth-related expenditures. Interconnection between public expenditures and the corresponding types of income is insufficient (tax levied on roads - investments in transport infrastructure; environmentally oriented excise taxes - investments necessary to improve the state of the environment and protect public health). In this connection and in conformity with the reform of the pension system now being prepared we consider especially important direct interconnection between income from a pension insurance scheme and pension-related expenditures, and separation of finances earmarked for pensions from the state budget. Efforts devoted to improvement of tax collection efficiency should continue.

In the next period an audit of expenditures must be definitely undertaken and the results used to reduce the proportion of mandatory and quasi-mandatory expenditures and to enhance directness of the increased proportion of active instruments of fiscal policy.

The health care system must be stabilised and the pension system reformed since they constitute a direct long-term threat to balanced public finance.

2.3 Starting Points and Targets in Infrastructure

At the beginning of the 1990s the Czech Republic possessed the most developed infrastructure among all new Central European economies, and managed to maintain its leading position even now, thanks to massive investments in infrastructure by both the public and private sectors. The existing situation is still far from optimal. The Czech Republic has acceded to the club of the most developed European countries where different rules apply. Within the restricted time period between 2005 and 2013 implementation of the proposed measures would enable the needs of economic growth in infrastructure to be saturated fully in some areas and significantly improved in others.

Thanks to its geographical location the Czech Republic can become a transport and logistics crossroads of Central and Eastern Europe. This potential however implies the attached risk of substantial damage to transport infrastructure, the environment and public health as a result of high load on the transport infrastructure due to transit, mostly transit by road. The international airport Prague - Ruzyně experienced important development over the past fifteen years. While some 1.5 million passengers passed its gates in 1991, in 2005 the airport will handle more than 10 million passengers. The Ruzyně airport has thus outperformed the Warsaw and Budapest airports and has even gained ground on its main Central European rival, Vienna. Provided the Ruzyně airport manages to implement the envisaged investments it might take over the leading position of Vienna and become the main hub for Central and Eastern Europe. None of the other transport sectors could boast of similar achievements. Czech economy struggles with problems concerning maintenance, modernisation and development of transport infrastructure. One half the Czech regions are not connected to the international motorway network, motorway construction seriously lags behind the plan, and the date of completion of the base network is being permanently postponed. Modernisation of the road infrastructure is too slow. Only 45% of main roads exhibit optimum parameters; ring roads or optimised thoroughfares are still missing in tens of towns and communes at the main roads. Traffic congestion in cities and at backbone motorways and main roads adversely influence businesses, the environment and public health. The ominous situation in maintenance and modernisation of roads is mostly attributable to a lack of finances. Railway and waterborne transport continue to lose out to road transport. According to statistics collected by the Ministry of Transportation, during the last fifteen years the proportion of haulage transportation output in railway and waterborne transport combined to transport by road dropped from 60 : 40 to 25 : 75. Passenger transport exhibits similar unfavourable trends. Support extended to public passenger transport is not always used effectively and economically. Integrated passenger transport systems are operated on very restricted territories.

According to statistics collected by the Ministry of Transportation the proportion mass / individual transport changed from 80 : 20 at the beginning of the 1990s to the current 50 : 50 and continues to drop. Persistent deficiencies in transport infrastructure and transport systems impair mobility of goods and persons and considerably reduce the growth potential of the country.

The position of the Czech Republic in telecommunications is relatively favourable. Expenditures directed to information and telecommunications technologies as a proportion of GDP are higher in the Czech Republic than the EU average. The country has a dense network of metallic cables and a high number of cellular radio transmitters. Full digitisation of the telephone network has been completed in recent years. The Czech Republic also has a high penetration of optical cables save the access networks and connections. The Czech Republic compares favourably with the most developed countries in mobile telephony - the proportion of handset owners is close to saturation. The situation with the fixed telephone network is less favourable, though, owing to defective regulation that slows down technical development and also because of insufficient pressure of alternative operators. Compared with developed countries the Czech Republic also lags behind in the transition to digitised TV and radio transmission and in implementation of third-generation mobile telephony networks.

Internet connection remains inadequate. In the last two years the situation has improved somewhat with regard to dial-up connection, but the Czech Republic seriously lags behind the developed countries in the area of broadband connection, which deserves the highest attention in order to catch up the upcoming, progressive technology trends. In no other aspect is the growth of knowledge-based economy more closely related to infrastructure than just in broadband Internet connection. Creation of conditions for implementation of progressive infrastructure based on optical fibres and other modern technologies constitutes an important challenge for the state policy as well as a non-recurring opportunity. High-speed transmission of data, audio and video information offers considerable potential for teleworking, a feature of considerable importance for employment, transport and the environment. Electronic education, known as e-learning, can expand and facilitate access to education, in particular consistent adult education, so important for development of the knowledge-based society. Revolutionary Internet applications will make life easier for, and raise the productivity of, both companies and individuals who will save time and energy for professional and leisure activities.

The domestic energy sector exhibits some strong points, but also weaknesses in the form of rising prices and increasing dependence on foreign primary resources. On the one hand, electrification and gasification exhibits adequate territorial coverage as well as satisfactory technological level and reliability. On the other hand,

the demand GDP creation imposes on energy, especially on electric power, is still almost twice as high in the Czech Republic than the EU average. The situation is least acceptable in this respect in transportation, industry and construction. It is nevertheless gratifying that domestic prices of electric power, gas and heat remain competitive compared with the situation in Western Europe. The ongoing liberalisation of the market in energy threatens to be accompanied with rapid unification of prices across Europe and the ensuing loss of a competitive edge so far enjoyed by the Czech consumer-goods industry.

The water management system will soon face growing price pressure as well. At present the price of water and the sewage charges do not represent an excessive burden for producers and the general population, but they continue to rise as a result of the unavoidable investments in new water purification and waste water treatment plants ensuing from approximation to European standards.

Infrastructure however comprises not only line structures and utility lines but real estate in general. Here we shall pay attention only to the housing sector and the industrial real estate sector. In the former the state has played both a negative and a positive role. The state housing policy in support of own housing has been a distinct success. Building saving, support extended to mortgages, low inflation and competition between banks have set in motion housing construction. In 2004 alone the building societies granted loans devoted to housing needs of nearly CZK 40 billion. The situation with mortgage banks is more favourable still; according to data presented by the Ministry for Regional Development they provided mortgage credit of more than CZK 68 billion on 2004. The role played by the state in rented housing is very different, though. By persisting regulation the state has raised the level of market-based, non-regulated rental and, on the other hand, has reduced in a highly undesirable way mobility of the population. With regard to industrial real estate the state, together with the regional self-governing authorities and, in particular, municipalities, is engaged in preparation of new industrial zones. This policy has proved highly successful. Tens of foreign and local industrial enterprises that substantially contribute to GDP creation, employment, labour productivity and export, have found their stamping grounds in industrial zones put in operation mostly by municipalities with considerable state support.

2.4 Starting Points and Targets in Human Resource Development

To be successful en route to long-term competitiveness on international markets the Czech Republic must have a skilled, adaptable and mobile workforce. To that end suitable conditions must be first created and restrictive barriers removed from the labour market. A system of social protection capable of motivating people to work will be equally important. These priorities will be fulfilled inter alia by creation of a strategic system of management of human resource development operating on both national and regional levels.

In the Czech Republic there is a high proportion of people with secondary education. Most people work in the secondary sector (38.6% in 2003). Investments in high-added-value production, research and development and services continue to rise, together with demand for employees with tertiary education. Increasing the general level of education is thus a condition sine qua non for increasing competitiveness.

Industry and the accompanying production and services play the role of an important employer. This relatively narrow area brings about the risk of high unemployment - e.g., due to a massive transfer of some production areas farther east. The education system must thus create conditions necessary for acquisition of skills that would assist people in rapid re-training for a new profession.

Language skills, ability to work with information, mastering and utilisation of information and communication technology underlie success on the labour market. Deepening managerial skills and team co-operation are important for people with advanced vocational training and university education. Programmes of further education must be adapted to the needs of the middle-aged and older generations to enable them to achieve harmony in their professional, study and personal life. Acknowledgement of informal education will also bring about a change for the better. Re-training programmes must be adapted to serve the needs of this group of the unemployed.

The Czech population grows old. Calculations undertaken by the Czech Statistical Office show that by 2015 the proportion of employable people is expected to drop by 7%. The difference between demand and supply on the labour market differs among individual regions and is assisted by the low mobility of the population. The regulated housing market apparently plays an important and negative role in this area. Some psychological factors might also play a role, including low willingness of the Czech population to move around. In connection with short-term commuting, factors like poor transport infrastructure and transport attendance and the cost of commuting play an important role. The state may contribute to increased mobility on

the labour market by appropriate housing policies, deregulation of the housing market, improved transport infrastructure, development of public transport means, and preferences offered to commuters. The situation on the labour market is further complicated by outflow of some skilled and highly skilled young people abroad. It is important to create in the Czech Republic attractive environment that would prevent young people from seeking jobs abroad. Workforce depletion can be also countered by motivating foreign experts to remain in the Czech Republic.

Flexibility of the labour market not only increases employment but constitutes an important element in support of businesses. To enhance labour market flexibility and availability of labour it is therefore advisable to improve working conditions and reduce the level of taxation of the low-income groups. The social welfare system continues to be abused despite all adopted remedial measures. Programmes serving disadvantaged persons must be therefore defined strictly, or the conditions that govern claiming social benefits tightened. The social welfare system itself must be simplified and co-ordination between all components improved to prevent abuse and ensure that funds remain for those who really need them. This will prevent needless waste of funds and time of staff of labour offices and municipal social departments.

Changes in the Active Employment Policy (AEP) are also necessary. Co-operation between local providers of certain job types must be improved. A high proportion of AEP funds is earmarked for job creation, known to be a less efficient form. On the other hand, re-training programmes are mostly short-term and their usefulness is dubious. AEP targeting should be improved and aimed the most endangered and disadvantaged groups like, e.g., women who care of children below 15 years of age, unemployed with elementary or primary vocational education⁸, and fresh graduates. A systematic and independent assessment of AEP impact will improve efficiency of the invested funds and increase the quality of the underlying services.

The area of human resource development is poorly co-ordinated in the Czech Republic. More attention should be devoted to acquisition, analysis and interpretation of data concerning the rate of success of measures incorporated in the employment policy and education as well as their use in subsequent governmental decisions. The Competencies Act should delimit in more detail the powers of individual central administration authorities also in the area of adult education in order to improve co-ordination at both national and regional levels.

⁸ After the effective date of the new Education Act No 561/2004 Sb., persons with secondary education and a certificate of apprenticeship.

Effective co-ordination and management play a very important role in human resource development. The Czech Republic must not blunder away the chance to obtain contributions from the European structural and cohesion funds between 2007 and 2013 and must at the same time fulfil the fiscal obligations specified in the Convergence Programme. Accordingly, own resources must be secured at the national level to enable sufficient co-financing for funds available from the EU. The Czech Republic must set forth its own priorities for drawing funds from the European Social Fund. It must be also assessed whether the state administration authorities are prepared for the implementation process, and transfer of relevant experience already gained clarified upon possible changes occurring within the state administration.

2.5 Starting Points and Targets in Research, Development and Innovation

Permanent regeneration of competitiveness in production and services constitutes the fundamental condition underlying economic growth; it requires continuous preparation and implementation of technical, technological, organisational, commercial and other innovations of all types. These can only originate in adequately structured and sufficiently financed research and development (R&D) favouring innovation.

Permanent regeneration of competitiveness is thus made conditional on adoption of changes and realisation of supporting measures in the following areas:

- creation of functioning co-operation between the public and private sectors,
- securing human resources for R&D and innovation,
- improved performance of the civil service in R&D and innovation,
- strengthening R&D as a source of innovation.

The amounts the Czech Republic spends on R&D lie considerably below the EU average (in 2003: CR 1.3% of GDP compared with EU-15 average of 1.9% GDP).⁹ Public support is directed mostly to research, which behaves more or less like basic research and produces to a very small extent knowledge that might be effectively utilised in new products, technologies and services. Similarly to the other new EU member states the Czech Republic lags behind substantially in the number of patents applied for and granted, both with the national patent office (Czech Industrial Property Office) and other major patent offices (European Patent Office, USA, Japan). Copyright and industrial property protection is underestimated, experts - and very often also funds - are missing. To a certain extent drawing funds from European sources also languishes. The reason is underestimation of the demanding preparation of suitable projects; moreover, processes involved in granting support are often overly complicated and exceed the time and financial capacity of small and medium-sized enterprises.

Participation of subjects utilising results of R&D in preparation of conceptual documentation (strategies, policies) and of research programmes and in their solution is clearly insufficient. Co-operation in research and development in networks and clusters remains underestimated. A distinctly unsound stability of structure is

⁹ Source: Analysis of the State of Research and Development in the Czech Republic in 2004 and a Comparison with the Situation Abroad; Czech Government Office, December 2004.

typical of R&D organisations (units). The structure of foreign institutions reacts more rapidly to establishment and development of new areas and directions of research and to changing needs of users of R&D results.

The relatively rapidly rising annual contributions directed to R&D in the Czech Republic represent a positive aspect. Between 1998 and 2003 these rose at the annual rate of 6.2% (while only by 4.3% annually in EU-15 and by 4.0% in EU-25).¹⁰ Also the relatively high proportion of private resources in the overall R&D expenditures is a positive feature (51.4% in 2003), substantially higher than in Poland (31% in 2003) and Hungary (29.7%), and comparable to Austria (40.8%) and The Netherlands (51.8%). One can reasonably expect that the launch of the uniform European patent might improve the number of Czech patent applications and granted patents. A certain improvement in the attitude of central administration authorities to implementation of indirect tools in support of R&D and innovation has been discerned recently.

Co-operation of universities and institutions of the Czech Academy of Sciences with businesses is inadequate owing to the existing substantial differences in organisation and style of financing and management. A system of effectively operating institutions dealing with transfer of R&D results is absent. Two-directional mobility of experts between the private and public sectors faces almost insurmountable barriers. Issues of social and health care of experts fluctuating between the two sectors remain unsolved. Suitable motivating tools are also absent. A relatively high proportion of public funds earmarked for R&D is directed in support of research plans and projects in which participation of the private sector is not mandatory.

The private sector, the state administration and R&D institutions mostly agree on establishment and support extended to effective functioning of so-called technology platforms that have already proved their worth in a number of EU member states. Specific measures are expected to promote the interest of the public sector - so far insufficient and rather formal, the R&D institutions and enterprises in mutual collaboration.

Human resources represent one of fundamental problems in R&D. Compared with EU-15 the number of graduates of scientific and technical university courses aged 20 to 29 is considerably smaller in the Czech Republic. Their number in highly competitive countries is much higher still than the EU-15 average. The situation in the Czech Republic may be also influenced by the smaller proportion of all university graduates in this age bracket. Czech graduates of scientific and technical university

¹⁰ Eurostat, Statistics in Focus, 26/2005, 24 February 2005.

courses lack knowledge in the field of copyright and industrial rights protection, and their entrepreneurial attitudes have never been supported and developed. Education of managers - specialists in R&D, innovative processes and business - continues to stagnate. The age structure of R&D experts is a serious problem.

Initiatives undertaken by some major industrial enterprises, which strive to improve the level of university graduates and contact the universities to create joint centres for preparation of graduates already during the study and thereafter, are considered positive. The rapidly rising expertise of graduates in information and communication technologies (ICT) and the gradually improving language skills also rank among favourable prerequisites for improvement.

The relatively low efficiency of state administration in the field of R&D in the Czech Republic has a number of reasons. The Czech system of public support extended to R&D is substantially less centralised than is the case in most other OECD countries; here where the support is distributed among 22 headings of the state budget, while elsewhere it is concentrated in a much smaller number of budgetary headings (2 or 3) with competencies unequivocally specified.

Creation of conceptual documents (strategies and policies) is still underestimated. Documents are compiled in many different ways, in different formats and at a different level of detail. Co-ordination of individual policies also leaves much to be desired.

Increasing awareness across the political spectrum of the fact that public support given to R&D should be overhauled is a positive factor, and is further strengthened by the results obtained in assessing the R&D and innovation policies of other EU member states.

A draft 'National Innovation Policy of the Czech Republic for the Period 2005 - 2013', prepared together with the EGS, specifies in more detail and justifies individual measures in the field of R&D and innovation as listed in EGS, identifies the sponsors of individual measures, the deadlines and indicators for assessing success. The Government dealt with the draft National Innovation Policy on 7 July 2005.

■ | CHAPTER 3 ■ | Fulfilling the Vision

3.1 Institutional Business Environment

3.1.1 Favourable Legislation Environment and Improved Enforceability of Law

Legislative environment and enforceability of law rank among persistent problems in the Czech Republic. The judiciary is unable to fulfil its main task - secure justice before the courts expediently. The Czech Republic even faces actions before the European Court of Human Rights. Unless fundamental changes are implemented the judiciary will remain a bottleneck in an otherwise functioning market economy.

The transaction costs of the society are further raised by continuing amendments to fundamental legal regulations and codes and adoption of new, poorly co-ordinated regulatory measures. In addition to these transaction costs that harass businesses the costs incurred in connection with establishing and dissolving a business constitute a separate bothersome chapter.

The act enacted recently in collaboration between the government and the opposition aims at a substantial simplification and facilitation of the incorporation process. Other equally desirable changes involve the number of data items entered in the Companies' Register and the number of filed documents, since the Czech commercial law is excessively stringent in this respect. Multiple registration steps necessary in connection with establishment of a corporation also complicate matters.

More serious than the barriers that block establishment is the bankruptcy and composition proceedings; compared with the rest of Europe these are excessively protracted and fail to fulfil their actual purpose.

Fighting corruption is a separate topic. Corruption destroys the system of values in the society, ruins effective economy and discriminates in favour of some people to the detriment of others. The state has to fight this depravity with all its might.

3.1.1.1 Improved Enforceability of Law

Czech courts are slow and ineffective and citizens do not trust them. Insufficient number of judges is not a problem - the number of judges per thousand inhabitants is the highest in the Czech Republic among comparable countries. The problem lies in court management. Judges have to deal with an excessively broad agenda that does not in fact fall within their remit and could be easily handled by

appointed court officials. Quality is another problem - instances where a superior court refers a case back are too frequent for comfort. Judges have no incentive to work better.

The judiciary system is ripe for reorganisation that will transfer to court officials a part of work currently entrusted to judges. Judges must be made more accountable - by enhanced disciplinary liability or according to a newly introduced disciplinary deadline for adopting decisions in fact. Courts should serve citizens. Changes must be pursued vigorously and rapidly to improve and speed up the decision process in the judiciary.

RECOMMENDATIONS:

- *Reorganise the judiciary without delay by transferring to court officials a part of work currently entrusted to judges and enhance accountability of judges for the attained results.*
- *Reduce the formal character of decisions adopted by courts, in particular within the appellate procedure.*

3.1.1.2 Civil Recodification

Long outdated regulations that fail to reflect the needs of smooth functioning of the Czech economy still apply in civil, commercial and labour law. Far-reaching amendments should be adopted to these key areas of civil law and, at the same time, contract law should be unified to govern business and non-business relations within a new, amended civil code. The commercial code should not contain provisions referring to contracts but only those related to corporations and co-operatives and some other partial issues. This concept would make the system of law more lucid and remove unjustified duplicity.

With regard to establishment and incorporation as well as in connection with the enacted amendments to commercial law the obligations imposed on entrepreneurs by the Czech legal system should not go beyond those incorporated in community law. Especially in the commercial law rules should be made as simple as possible to prevent Czech commercial law from getting to the periphery of interest. A new labour code should reflect the need of increased flexibility of labour relations, in particular by enhancing the freedom of contract.

RECOMMENDATIONS:

- *Recodify civil, commercial and labour law by conceiving them as progressive legal norms.*
- *Reduce the requirements currently imposed on entrepreneurs in all instances where they go beyond those contained in the acquis.*

- *In the newly conceived labour law promote the freedom of contract.*

3.1.1.3 Companies' Register

Establishing a business is complicated by multiple registration for natural and juridical persons alike. Registration acts must be unified under a single authority, if possible using a single form.

Compared with other OECD countries establishment of a firm is a slow process. According to the World Bank¹¹ establishment of a firm lasts 40 days and requires 10 procedures in the Czech Republic, while in developed countries it is a matter of several days and some 5 procedures. The situation should improve substantially in connection with an amendment to the commercial code in effect since 1 July 2005. The amendment has introduced a registration principle - the registry court in essence examines only the formal and not material essentials of a filed application and, if it fails to make the entry within a specified period the entry is deemed to have been made. Entries are also facilitated owing to the introduced forms containing mandatory schedules. The registry court is not entitled to request any additional data or documents.

Also after the above amendment functioning of the companies registers should be monitored and the incorporation process assessed to minimise the administrative burden on businesses with legal certainty preserved. As already mentioned, alleviation of requirements currently imposed on the volume of entered data items and the number of attached documents would be another highly desirable modification. The associated agenda could be at the same time transferred from the judges to appointed court officials supervised by the judges.

RECOMMENDATIONS:

- *Alleviate the requirements imposed on the volume of data items entered in the Companies' Register and the number of attached documents filed.*

3.1.1.4 Enact a New Bankruptcy and Composition Act

According to statistics collected by the World Bank in 2004 bankruptcy proceedings in the Czech Republic lasted up to 9.2 years on the average and creditors obtained no more than 16.8% of the owed amounts.¹² Compared with the OECD average (1.7 years and 72.1%) the above figures are dismal and

¹¹ World Bank, Doing Business.

¹² World Bank, Doing Business.

disproportionately raise the creditors' risk. The ensuing premium for that risk must be then paid also by entities that will be never subject to bankruptcy proceedings.

The Czech Republic clearly needs a new bankruptcy and composition act conforming to market principles. Decisions of commercial character, primarily decisions concerning the method adopted to resolve the bankruptcy, must be entrusted to the creditors, i.e., the holders of claims upon the assets of the insolvent debtor, always while preserving equality of all creditors.

The new act should also forsake the rule referring to restricted satisfaction offered to preferred creditors that are at present entitled to only 70% of the proceeds from the encashed security, a fact that induces them to demand excessive security in negotiations concerning the credit. With regard to the provisions concerning trustee in bankruptcy, an appropriate extent of regulation must be stipulated by imposing specified qualification requirements, and the decision appointing the trustee again entrusted to the creditors.

Such an act conforming to market principles, if enacted, will shorten and increase the efficiency of bankruptcy proceedings.

RECOMMENDATIONS:

- *Enact a bankruptcy and composition act enhancing the role of creditors and securing a higher role of the market during bankruptcy proceedings.*

3.1.1.5 Public-Law Modification of Business Activities

To function properly the business environment must be governed by a uniform concept and the ensuing institutional arrangement. A codification of the public-law modification of businesses, enacted to substitute the existing Trade Licensing Act, interrelated with a new commercial code, would lay down a uniform legal framework governing all areas of business. Other modifications will then follow to set forth in more detail rights and obligations in specific areas. A regulation will be then enacted governing organisation of public administration in these areas and containing both material and procedural provisions.

A fundamental requirement concerns a change in how the right to carry out business is perceived. Licensed trade will continue to constitute the basic form of business. Licences to individual lines of business will not be granted. A licensed entrepreneur can undertake any free business. An entrepreneur- or a co-operating subject - wishing to carry out business activities in handicraft and regulated trades would be obliged to meet additional, mostly qualification requirements. An audit will be however necessary in the latter trades in order to reduce their number. Free-lance professions with professionals organised in chambers will be subject to the existing regulations, only harmonised with the now code.

With regard to public-law arrangement of business establishment a considerable simplification is clearly desirable. Naturally, establishment of a new business must be registered to enable subsequent checks and enforcement of public-law obligations, but the ensuing administrative burden must be minimised. At the start of business the entrepreneur should devote all his/her attention to business plan realisation, not to fulfilment of administrative chores.

RECOMMENDATIONS:

- *Create a new, public-law framework encompassing business activities.*
- *Simplify to the maximum extent possible the start of a business, in particular for activities that do not require fulfilment of additional qualification requirements.*

3.1.1.6 Analysis of Impacts of New Legislation

In developed countries regulation has become an important factor influencing the economy and its competitiveness. Although a certain level of regulation is clearly necessary and desirable, each regulatory measure brings about specific costs, both direct financial expenditures and requirements imposed on human resources and time. The objective must not be to create the maximum amount of regulatory measures; important is their quality and effectiveness as well as acceptability of the associated price that the businesses must pay. In creating new legislation it is therefore advisable to take into account and publish the results of Regulatory Impact Assessment (RIA). This will certainly bring about increased cost to be borne by the state, but compensated for by regulatory measures of increased quality and by higher transparency of the legislation process. Incorporation of RIA in the legislation process fully conforms to OECD and EU recommendations as well as to positive experience already gained in a number of European countries.

RECOMMENDATIONS:

- *Implement a transparent process for assessing the impacts of new legislation and publish the obtained results - the government will refuse to deal with materials without the results of RIA attached.*

3.1.1.7 Eradicate Corruption

Corruption is perceived as a major problem. According to a ranking list published by Transparency International the Czech Republic assumes one of the last places among developed countries (in 2004 CR ranked 51st together with Trinidad and Tobago and Salvador; from among the EU member states only Slovakia and Latvia (57th place) and Poland (67th) trailed us). Although the list is a mere indicator of corruption and does not necessarily reflect the real situation, the result still shows

that a substantial part of the population loses confidence in proper functioning of the civil service.

Fighting corruption must become one of government priorities. The state must attempt to eliminate risk processes, both by changing the processes themselves and by enacting appropriate legislation. Liability of civil servants for their work and transparency of their activities must be stressed.

Although this document does not explicitly recommend implementation of provocation processes, they can be definitely considered a tool that, when implemented properly, could raise the probability of a recourse and, consequently, reduce the incidence of corruption and the extent to which it is perceived. Changing in a fundamental way the perception of "advantages" of corruption is the only long-term strategy leading to its elimination.

RECOMMENDATIONS:

- *Introduce new regulations governing conflict of interest.*
- *Systematically eliminate opportunities for corruption behaviour and the corresponding risk processes in public administration, e.g., by implementing elements of e-government, cutting back excessive regulation or specifying binding deadlines for administrative acts.*

3.1.2 Put in Operation Effective and Efficient Public Administration

The quality of public administration ranks among the most important non-financial factors influencing the business environment. Increased quality and effectiveness of public administration, combined with simplified communication between the state administration authorities and the private sector by extensive use of information technology, is a reliable route towards accelerated economic growth.

3.1.2.1 Increasing Public Administration Effectiveness

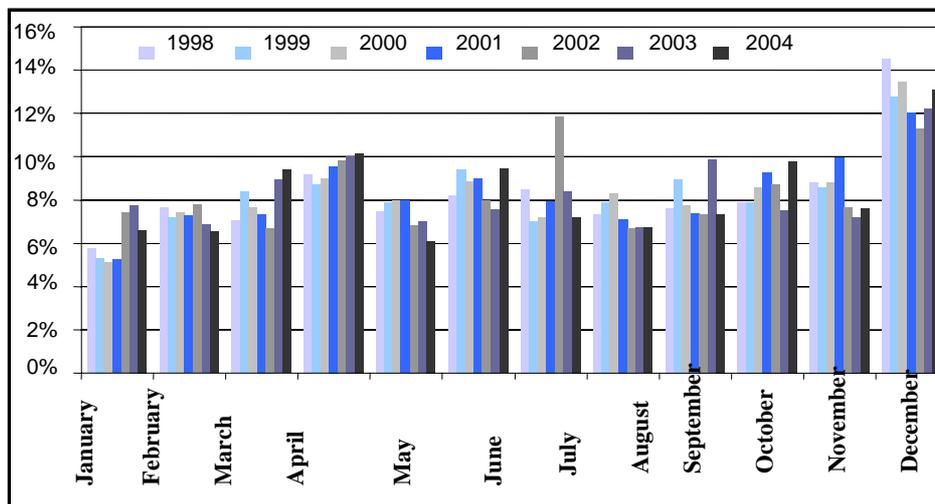
To secure improved level of services provided to the general public effectiveness of services in the public sector should increase permanently. Independent studies indicate that the number of civil servants in state administration is excessive and the powers and responsibilities are not always clearly defined.

External audits (dealing with organisation, functioning, processes and information), entrusted to consultancies not interconnected in any way with the audited office and, accordingly, capable of assessing its activities from an outsider's point of view, may meet the requirements on increased effectiveness of state administration.

An audit should map the existing processes, identify those that are essential for fulfilling the mission of the audited unit and differentiate them from processes that can be transferred to state agencies. The audit should also determine the optimum organisational and process arrangement of the audited subject and the corresponding number of employees.

Ineffective utilisation of budgetary means is a commonly encountered problem. Exceeded budget often serves as an argument for increased future allocation of funds; on the contrary, in case of savings there is real risk that the relevant institution will be allocated less money next year. The expenditures always reach a maximum in December as institutions strive to draw down all allocated funds (see the chart below).

Proportion of state budget expenditures in individual calendar months, 1998 - 2004



Source: Ministry of Finance of the Czech Republic

To enhance fiscal discipline a system of fiscal targeting was adopted, resting on two pillars securing the budgetary process: (i) legally binding medium-term nominal ceiling expenditures imposed on the central government and (ii) a policy based on utilisation of higher-than-scheduled budgetary income to reduce the deficit more rapidly. An enacted amendment to the Budgetary Rules Act moderates the general trend comprising increased expenditures at the year's end. To a certain extent administrators of individual budgetary headings can transfer savings to the next fiscal year; some expenditures also exhibit periodicity in excess of one year.

While a private enterprise above a certain size has a central procurement department, no such thing exists in state administration. The absence of centralised ordering results in uncoordinated purchases and eliminates possible quantity discounts. Poor transparency of purchasing favours corruption.

RECOMMENDATIONS:

- *In all state administration bodies implement audits (dealing with organisation, functioning, processes and information) entrusted to independent consultancies. On the basis of the obtained results consider possible transfer of suitable activities to state agencies.*
- *Implement a uniform, centralised procurement system for all state administration authorities, combined with stringent anti-corruption measures.*

3.1.2.2 Increasing Quality of Civil Service and Efficiency of Civil Servants

Small and medium-sized enterprises in particular considered poor quality of civil service a material barrier to business. The client approach is still not a substantial element in public administration.

In a number of offices the relevant issue is the expertise and effectiveness of the staff. The relationship between quality of work and the corresponding compensation should be strengthened for individual officers and departments or offices in their entirety. Transparency of the rules that govern selection of top managers for apolitical public institutions or commercial subjects with state influence should be increased. Their selection should be based exclusively on professional quality and personal characteristics.

To improve state administration and implement the client approach the feedback between users and providers or public sector services should be reinforced and used as a tool in controlling the quality of public administration. Fulfilment of the above requirement should be combined with increased quality of permanent education of the staff.

RECOMMENDATIONS:

- *Modify the system of compensation in the civil service and strengthen the relationship between compensation and performance. Introduce compliance with the budget and quality of services rendered as the decisive criteria.*
- *Reinforce the feedback between users and providers of public services (lodging complaints, sanctions, quality checks).*
- *Improve the quality of education of civil servants.*

3.1.2.3 Promote Electronic Communication with State Administration Authorities and the e-Government Concept

Extensive electronic communication with the state would benefit the state administration bodies and private subjects alike as it is faster, cheaper and constrains corruption. Inadequate awareness of the potential of electronic signature on the part of users, misgivings about security of information so shared, relatively higher acquisition costs and insufficient range of state administration services offered online all restrict its broader use. Another barrier is poor co-ordination in launching information systems in public administration. Databases and systems are unable to communicate with one another. A businessman thus visits many offices and provides identical or similar information repeatedly. The ideal target state would be such where the businessman is able to deal with all standard issues including, say, incorporation of the company, via a computer from his or her office.

The enormous spectrum of information stored at individual offices is not available via Internet or is not updated on a timely basis. This then increases the cost and time necessary for recovery.

RECOMMENDATIONS:

- *Adopt measures to make electronic signature less expensive.*
- *Adopt measures in support of electronic communication between citizens/businesses and the civil service. Motivate financially utilisation of electronic communication with the state by financial (e.g. by condoning a fee) and other ways (e.g. by extending the deadline thanks to the ensuing time savings, etc.)*
- *Ensure compatibility of information systems via centralised procurement and development.*
- *Publish maximum amount of information on the web free of charge.*

3.1.2.4 Share Data Inside the State Administration System

An effective civil service can be hardly imagined without a possibility to share data by interconnection of the currently isolated registers. Reduced cost of registration and procurement of documents by businesses will be a welcome by-product. For the same reason it would be advisable to create a new register of state debtors (taxes, mandatory social and health insurance) administered by financial offices. The register might replace the existing certificate of no indebtedness that has a minimum informative value anyway. The struggle against grey economy will be thus reinforced and the administration connected with documenting zero indebtedness reduced.

RECOMMENDATIONS:

- *Interconnect individual, currently isolated public administration registers.*
- *Implement a new register of state debtors.*

3.1.3 Competitive Tax System

There is no need to conceive the tax system of the Czech Republic in a manner ensuring that it competes with other countries by means of low taxes. Individual components of the tax system should however assist general competitiveness of the country.

A tax system and its parameters can be set in a way that make the country an attractive place for domestic and foreign companies, can also serve as an efficient tool mitigating adverse environmental effects and assist the activities of economically active subjects. To be effective its administration must not represent an excessive burden on state administration, the state budget and individual businesses, and its interpretation must be the same across the economy.

3.1.3.1 Support Economic Growth by the Structure of Taxes

International comparison has shown that the Czech Republic is the country with the lowest tax quota equal to 21.6%. This however does not hold true for the composite tax quota.¹³ The reason is the highest proportion of the compulsory social and health care insurance contributions in overall tax revenues (43.9%) among the EU member states. The low level of earnings and the high degree of social and health care based on extensive solidarity are thus reflected in considerable burden imposed on wages and salaries.¹⁴

The amount of mandatory contributions levied on wages and salaries represents a barrier to creation and expansion of jobs. In conformity with the topics dealt with in the chapter entitled Human Resource Development it would be advisable to adopt measures that would prevent the rates of the compulsory social and health care insurance levies from becoming a factor reducing competitiveness. It would be also advisable gradually to introduce a ceiling on the assessment base for both types of insurance, equal to three times the average wage. These measures will

¹³ Tax quota is calculated as the proportion of tax revenues and customs duties in GDP. Composite tax quota is the proportion of tax revenues, customs duties and mandatory social and health insurance in GDP.

¹⁴ Research Institute of Labour and Social Care: Cost of Labour, 2004.

assist in maintaining competitive price of labour also with increasing wages and, consequently, standard of living.

In the long run, once the structural reforms have been implemented, the Czech Republic should continue to monitor its composite tax quota, taking into account in particular the developments in the neighbouring countries, to secure international competitiveness of the Czech tax system.

RECOMMENDATIONS:

- *Make use of the implemented environmental tax to reduce the rate of direct tax (in conformity with the process of tax-related competition within the EU).*
- *By changes in income tax of natural persons support economically active citizens.*
- *Prevent the rate of social and health care insurance contributions from becoming a factor reducing competitiveness.*
- *Set a ceiling on the assessment base for the mandatory social and health care insurance contributions, equal to at first five times, later on four times and finally three times the average wage.*
- *Monitor the composite tax quota and modify it as required.*

3.1.3.2 Improve the Incentive Elements in the Tax System

The Czech tax law is hardly acceptable to the parent companies of international holdings and sometimes even underlies considerations about Czech companies moving abroad. The capital influx associated with operation of a parent company in the given territory often induces countries to create an environment attractive for holdings.

Decisions adopted by companies about the place of business are also affected by the value-added tax. This involves, e.g., determination of a sufficiently flexible system of taxation in connection with movement of goods (adopting a sufficiently flexible arrangement of consignment stocks). Creating conditions for efficient co-operation between firms by means of outsourcing, where activities may be shared through collective VAT-payer registration, would be also very beneficial. Reducing demands on cash flow and administration of (especially small) enterprises by implementing a regime of concessions applicable to doubtful claims is another important step.

Willingness to reinvest and the ensuing continued development of firms in the Czech territory can be boosted through a system where the income tax is minimised if profit is reinvested; tax is only levied at the moment when profit is distributed among partners (see e.g. Estonia). After a period characterised by capital influx into the Czech Republic a system should be sought where funds do not leave the country

but are ploughed back instead. In view of the systemic character of such a change a detailed analysis including international comparisons should be first undertaken.

RECOMMENDATIONS:

- *Modify the taxes levied on holding companies to make them more acceptable and motivate holdings to settle down in the Czech Republic and, at the same time, to support Czech companies willing to expand abroad (in conformity with an analysis of conditions underlying activities of holding companies in the Czech Republic (material prepared by the Office of the Czech Government and the Ministry of Finance)).*
- *Beef up competitiveness of the country through a value-added tax system.*
- *By means of the tax system motivate companies to reinvest profit in the Czech Republic.*

3.1.3.3 Undertake an Environmental Tax Reform

Activities of quite a few economic subjects adversely affect the environment and public health, thus increasing the cost the society incurs in connection with necessary remedial measures. Products and technologies friendly to the environment suffer a competitive drawback compared with polluting products and technologies that for many years benefited from various state allowances and subsidies. It is thus necessary and just to levy effective taxes on polluters and pass a corresponding degree of liability for remedial measures to the subjects whose gainful activities have actually caused the damage.

Identification and quantification of such negative externalities is necessary before they can be restrained. From the point of view of decisions adopted by economic subjects the most suitable approach is to combine taxation at the input (e.g. fossil fuels) and at the output (e.g. electric power consumption). An environmental tax reform might affect in a desirable manner fundamental structural problems of the Czech economy and significantly promote economic growth. A reform that in part shifts tax levied on labour to tax levied on energy and raw consumption can reduce not only the energy demand of production and, accordingly, the carbon dioxide emissions and production of waste (including hazardous waste), but also the cost of labour and thus unemployment. An important reform of the tax system in its entirety is involved and co-ordination between individual resorts will be necessary.

RECOMMENDATIONS:

- *Undertake an environmental tax reform (fiscally neutral) respecting environmental principles, based on quantification of adverse effects on the*

environment; amendment to the Excise Tax Act No 353/2003 Sb.; Act No 589/1992Sb., 'On Social Care and Health Care Insurance and Contribution to the State Employment Policy'; the Mandatory Public Health Care Insurance Act No 48/1997 Sb.; and many other Acts.

3.1.3.4 Effective Administration and Uniform Interpretation of Taxes

Enhanced co-operation between tax administration authorities and the taxpayer is necessary if tax administration is to be improved and confidence of the public in state administration increased. Division of *onus probandi* (the burden of proof) between the tax administration authority and the taxpayer should be shifted and improved.

In order to reduce the associated cost, tax administration should increasingly focus on instances where tax avoidance could represent a substantial loss to the state budget. Increased specialisation of individual financial offices could enhance both co-operation between the tax administration authority and the taxpayer and efficiency of tax administration.

Together with increased efficiency and expertise of the tax administration authorities remuneration of the corresponding officials should be beefed up.

Fundamental differences in interpretation of the same issue by two or more financial offices constitute a major problem. Invariable character of tax rules over a prolonged time period must be therefore secured along with their uniform interpretation through improved methodical management of financial office managers. Increasing inclination of the Czech tax administration authorities to what is known as 'client-friendly approach' will help small and medium-sized enterprises in particular.

Enhanced transparency of tax law will significantly and positively influence the business environment in its entirety, an issue important also in international context.

RECOMMENDATIONS:

- *Modify the principles governing tax proceedings by respecting the principle that the objective is not to collect maximum amount of tax at any price but rather to establish, correctly and comprehensively, determine and fulfil all tax obligations.*
- *Improve the division of *onus probandi* between the taxpayer and the tax administration authority by shifting it from the taxpayer to the tax administrator.*
- *Shift the focus of tax control to instances that might have a significant impact on the state budget.*

- *Initiate specialisation and concentration of financial offices (including customs offices) in order to improve efficiency of tax administration.*
- *Improve remuneration of tax administration officials (in particular in departments responsible for tax control and enforcement). Subsequently improve remuneration of officials in other, similar offices (e.g., social security administration offices).*
- *Improve methodical management of financial offices aimed at uniform interpretation of tax regulations.*
- *Ensure that financial offices construe tax regulations consistently and uniformly.*

3.1.4 Improving Competitive Environment and Removing Barriers

3.1.4.1 Support Extended to Competitive Environment

Some sectors of the economy do not function effectively because of contorted environment. In particular, unbalanced demand and supply in some segments may enable creation of local oligopolies or monopolies. In justified instances the public sector can correct these failures to a certain extent by targeted attenuation of monopolies and oligopolies or by creating and enforcing rules and conditions conducive to a competitive environment.

Instances where the state is owner and regulator simultaneously constitute a clear conflict of interest. It is then necessary to privatise the sectors where private ownership will reduce costs or improve the services rendered. The state must also secure equal access of all competitors to infrastructure controlled by a monopoly (e.g. the Czech Railways).

In addition to efficient legislation effectiveness of operation of supervisory and regulatory authorities must be also improved (ERÚ - Energy Regulatory Office, ČTÚ - Czech Telecommunications Office, ÚOHS - Office for Protection of Economic Competition) in a manner ensuring that the adopted decisions do not strengthen monopolistic or oligopolistic tendencies but secure just and fair competitive environment.

RECOMMENDATIONS:

- *Privatise the remaining majority stakes owned by the state in "monopolistic" firms in those instances where privatisation will reduce costs or increase the quality of services rendered.*
- *Promote competitive environment - this must be the motto theme of all regulatory authorities, in particular those active in network areas (ERÚ, ČTÚ).*

- *Fight against adverse effects on competitive environment of public support - exemptions are possible in connection with support lent to economic growth or in instances of public interest.*

3.1.4.2 Simplify Access to Public Service in Connection with Business Establishment

At present entrepreneurs have to communicate with and visit various offices and institutions. This is so when establishing a business, but holds true also afterwards. Entrepreneurs are encumbered by administrative burden coming from many sources and comprising no end of forms issued - and also quite often modified - by various institutions.

Establishing a business is complicated by triple registration for natural persons (issuance of a trade licence, tax registration and social security registration). A fourth registration is necessary for juridical person (in connection with the incorporation proper).

Considering the present state of information technology this process is obviously obsolete. Public administration should be able to collect the fundamental data at a single place - the other authorities could then receive the data by electronic means (see part 3.1.2.4, Data sharing in public administration).

To achieve this objective all registrations should be merged into a single office and all data summarised in a single form. Unification of registration acts required by various authorities (internal revenue, trade licensing offices, social security administration) will result in a substantial reduction of administration and increased efficiency of state administration.

The changes also aim at a replacement of preliminary checks (from the tabletop) by ex post checks (onsite). The number of controls should be reduced and co-ordination improved so that they represent only the absolutely necessary nuisance. Once the registration agenda of individual institutions is consolidated, their control and enforcing functions could be also centralised at the minimum number of places.

RECOMMENDATIONS:

- *Introduce centralised contact places; these will represent the only points of contact and serve standard communication between entrepreneurs and the public administration both upon business establishment and afterwards.*
- *Unite the registration agenda of individual offices, thus reducing the administration necessary for establishing a business.*
- *Unite the control and enforcement functions of individual institutions.*

- *Shift focus from preliminary to ex post control, accompanied by reduced number of better co-ordinated checks.*
- *Unite or at least approximate forms used by various state administration authorities. Forms should reflect the fact that the state already has various information concerning the given business at its disposal. The governing principle should be that information once provided will be shared and not requested repeatedly. Forms should be available in both printed form and on the web, where they can be filled in on-line.*

3.1.4.3 Reduce the Administration Burden Imposed on Entrepreneurs

Excessive administration often represents a substantial item in the cost of individual businesses. Its reduction would enable the entrepreneur to utilise the saved funds to create actual value, thus increasing the performance of the economy. The requirements imposed by legal regulations on information and reporting duty must be therefore reduced. The burden imposed on businesses must be similarly reduced by removing duplicities in the legal system. Stress shall be laid on data sharing across the state administration in its entirety.

Many European countries reduce the administration burden and the issue is being dealt with by the EU and the OECD. Thus, The Netherlands has stated that reducing the burden by 25% increases GDP by 1.5% and labour productivity by 1.7%. Denmark has pointed out that each reduction of burden by 1 million kroner increases the performance of national economy by 2.7 million kroner.

Administration burden should be evaluated according to the so-called standard cost model already successfully applied in a number of countries like, e.g., The Netherlands, Sweden, Slovenia and Denmark, more recently in Great Britain. The OECD selected it recently as the most suitable approach, and the European Commission recommends it with some minor modifications.

RECOMMENDATIONS:

- *Analyse legal regulations by means of the so-called standard cost model to establish the size of administrative burden imposed on businesses.*
- *By amending the appropriate regulations reduce the burden by at least 20%.*

3.1.4.4 Harmonise Environmental Protection with Support Extended to Competitiveness of Czech Enterprises

Environmental legislation is in some instances needlessly complicated and difficult to implement, in other instances it exceeds the level of EU regulations and,

accordingly, may reduce the competitiveness of Czech firms now operating under conditions of common market, and can also adversely affect decisions of potential investors. Justified interest in efficient environmental protection should be reconciled with the actual potential of the Czech economy. Already at the beginning of the 1990s Czech enterprises massively invested in environmental protection and new requirements must be prevented from having liquidating consequences.

RECOMMENDATIONS:

- *Identify problem areas of environmental legislation with regard to business environment. Reconcile the interests of environmental protection with support extended to competitiveness of Czech firms.*
- *Optimise administrative requirements imposed by legal regulations on Czech enterprises in the area of environmental protection while respecting the standards laid down by the EU and the principles underlying the necessary environmental tax reform (cf. part 3.1.3.3).*

3.1.5 Make Effective Use of Supportive Tools Conforming to Market Principles

Competition intensifies not only among firms but among states and regions as well. In addition to improving the institutional environment the latter often lend various forms of public support to business activities of local and foreign firms. Such practices obviously contradict free competition but are necessary at present owing to the attitude adopted by neighbouring countries.

The state should create conditions conducive to business. Prerequisite is tuning up the budgetary framework and long-term perspectives of economic policy in a manner that would enable businesses to decide in the most stable environment imaginable. While the conditions for foreign investors and major enterprises have improved in recent years, the problems with access to public services that small and medium-sized enterprises (SME) encounter persist. Access to capital of newly established companies is inadequate. One should take into account that SMEs create sound business environment and increase market dynamics, employ most people released from big firms, thus acting as a factor stabilising the economy, adapt more readily to market fluctuation, and fill up market gaps. All the same, owing to their small economic strength SMEs have inferior access to capital, information and consulting services, and their position in competition for public contracts is weaker.

It is clearly necessary to continue lending support to foreign investors and major companies, but more attention should focus on support extended to the

business, competitiveness and export potential of small and medium-sized enterprises.

3.1.5.1 Intensify and Enhance Targeting of Support Extended to Small and Medium-sized Enterprises (SME)

Small and medium-sized business constitute the foundation base of sound economy, represent 99% of all firms, and significantly participate in employment.¹⁵ The European Charter for Small Enterprises, to which the Czech Republic has acceded, specifically lays down among its priorities in connection with support extended to small businesses improved access to progressive technologies, followed by access to capital, in particular for top-quality firms. According to studies undertaken by OECD one of the main problems encountered by SMEs is their isolation. The above recommendations also include implementation of a system of market-compatible public tools in support of businesses.

The Czech Republic as a relatively small economy must select its priorities carefully. The country and its regions in particular cannot be competitive in a broad range of production and services. Thus, one must select, at national and regional levels alike, areas in which European and worldwide competitiveness could be achieved, and then select firms incorporated in a chain of production or service, sectors exhibiting a growth potential where we have adequate potential for further growth thanks to a concentration of research, production, education and supporting activities. These should be supported and developed by allocation of funds from EU sources and the state budget. On the national level these include the following:

- traditional Czech industrial sectors exhibiting growth potential (electronics, precision engineering, the car industry, chemistry and plastics in particular, environmental technologies)
- hi-tech production areas (microelectronics/semiconductors, biotechnology and pharmacy, optoelectronics)
- hi-tech services (information and communication technology, software development, strategic services - shared services centres, expert and research centres, repair centres)

The Ministry of Industry and Trade, in collaboration with individual regions, has been working on a National Cluster Study, aimed at identification of competitive areas exhibiting export potential on regional and national levels. Using the results of

¹⁵ Czech Statistical Office: Statistical Bulletin of the Czech Republic 2004.

regional surveys a comprehensive study of Czech industrial structure will be undertaken as a basis of planning programmes within the structural funds for the next planning period.

At present the support extended to businesses has the form of direct (grant schemes for SMEs, guarantees for a bid in a tender, credit a favourable rate of interest) or indirect tools. The latter include stimulated development of sectoral groupings (clusters), support extended to development of human resources, creation and regeneration of industrial zones, and support extended to development of high-quality and financially accessible consulting services for SME. The Czech Republic lags behind specifically in utilisation of indirect tools for supporting businesses. Resources should be therefore focused on areas like the following:

- support to association of firms and universities to solve joint innovative and developmental projects;
- supporting access to high-quality consulting and information services offered at a reasonable price. The objective is to make available services that the SME currently find too expensive. The idea is not merely to inform entrepreneurs but to offer affordable, high-added-value and high-quality services. The Czech Republic lags behind especially in implementation of the best management practice. The National Register of Consultants currently in preparation may represent a possible solution;
- supporting free-of-charge access to information databases operated by the state to control the activities of entrepreneurs;
- focus on training and skills of labour. Extensive utilisation of results of R&D in the form of concrete innovation, and utilisation of new technologies to modernise and restructure production are of fundamental importance for economic growth and enhanced competitiveness. Stress should be therefore laid on education and training of labour. Employees have to follow the requirements ensuing from technical progress and innovation. Public support should facilitate access to new forms of training offered to entrepreneurs and employees.

Start of business remains the weakest point and a bottleneck preventing SMEs from gaining ground. Support extended to technology-oriented new firms will increase competitiveness of national economy. Transfer of information from the academia to SMEs must be ensured. Both the state and the regions should continue supporting an environment conducive to efficient and immediate interrelation between research and development at universities and, on the other hand, business activities, and continue creating conditions for successful development of start-up firms by investing in incubators and technology parks. The consulting activities in

particular should be supported and venture capital funds involved. The state should create a suitable environment, inter alia by state intervention.

The Czech Republic lags behind in the amount of funds devoted to fundamental research and applied R&D. The situation is critical in connection with SMEs. It is however obvious that shortened investment cycle and precipitate development of new technologies will change the future character of manufacturing in a fundamental way - and SMEs are superior here owing to their higher flexibility.

RECOMMENDATIONS:

- *Terminate the present system and orientation of programmes in support of SMEs in 2007; in the new period change focus and the implementing structure in conformity with current conditions and priorities of the Economic Growth Strategy, topical strategies and EU programmes. Make the new programme independent of public budget savings.*
-  ¹⁶ *Improve the quality of statistical data referring to businesses active in individual regions by expanding the activities of the Czech Statistical Office in this area, in particular by focusing on regional data concerning the performance of industrial and services sectors.*
- *Identify areas in which the Czech Republic and its regions are competitive and to these then direct attention - in preparation of a programme for the period 2007 - 2013 take the areas listed above and the results of the National Cluster Study as the underlying base.*
-  *Direct financial support in a balanced way into areas of business environment creation and direct support extended to firms - focus on creation of relationships between firms (clusters), implementation of the optimised method of firm management and development, development of human resources and co-operation with universities. Do not forget direct support to firms with innovative business plans.*
-  *Enhance the amount of partners at the boundary of the state and the private sector as well as the amount of support extended - allocate funds in support of incubators, technology parks and clusters. Stress top-quality and reasonably priced expert consulting services with high added value.*

¹⁶ Recommendations and their groups marked  below should be financed from EU funds.

- *Improve state intervention in the area of banking services - preferred financial products should be offered especially through private financial subjects.*
-  *Create environment for start-ups such that new, technologically oriented firms will be preferentially established - direct support in particular into areas where environment conducive to their development is created (buildings and services). Continue providing the consultation services already offered to this group and facilitate participation of venture capital.*
- *Concentrate the support extended to businesses and competitiveness to a single place to ensure cohesion of programmes and prevent duplicities and waste of funds.*
-  *Improve the objective mechanisms in support extended to SMEs - fulfilment of the development potential in supporting SMEs through the regional CzechInvest offices.*
-  *Improve investments in education, specifically in teaching and exchange of experience - apply tax break (deduction) also to investment in education by firms. Continue extending courses devoted to business issues and entrepreneurship at all levels. Make use of appropriate software to support transfer of knowledge from the academia to the SME environment.*
- *Raise the funds provided by the state to science and research in favour of SMEs.*
- *Enable SMEs access to qualified information and environment-oriented education to increase competitiveness on local and foreign markets.*

3.1.5.2 Enhance Export Performance of the Economy by Pro-export Tools

The Czech Republic ranks among countries characterised by a high proportion of import and export in GDP (about 60% GDP). The proportion in which the SMEs participate in export is however smaller (34%) than that common in EU member states (more than 50%). After accession to the EU the export dynamics has begun to improve and the balance of foreign trade even entered positive values; unilateral orientation towards only several commodities is an unfavourable feature, though.

The aim of pro-export policies is to support export under conditions comparable to those in effect in all developed countries.

Dynamics of export affects also demand for services on the part of all participating institutions. The Czech Export Bank has achieved an approximately 20% share in credit denominated in foreign currencies among all Czech banks and its focus on pre-export financing continues to rise. Similar trends have been observed in EGAP. The proportion of fundamental services provided with state support has

however decreased owing to competitive offers originating in the private sector. The latter is willing to accept also risks it previously rejected. The degree of risk has been decreasing owing to territorial focus of the export.

Similarly as in support lent to SMEs focus should be laid on indirect forms of support (CzechTrade) and, in connection with direct support, one should consider increased volume of export targeted to "exotic" countries, where direct support is irreplaceable. Supporting capital expansion of Czech firms abroad is also an important aspect.

The number of trade agencies has been increasing recently. Co-ordination and management of state economic services abroad, effected jointly with the Ministry of Foreign Affairs, has been also improving; according to experience gained by most EU member states the latter ranks among the most effective tools in support of export.

Export must be supported in a well-considered manner. Additional measures referring to strategic promotion of national interests abroad (both in the European Union and in prioritised territories outside Europe) will be then adopted on the basis of a premeditated conception; at the same time suitable local conditions for Czech exporters will be created (a comprehensive offer of programmes and services provided by export-supporting institutions, etc.).

RECOMMENDATIONS:

- *Enhance co-ordination and availability of interconnected pro-export services.*
- *Enhance co-ordination of promotional and presentation activities abroad. Enhance efficiency in promoting Czech economic interests abroad and supply appropriate funds. Undersized trade agencies in key countries must be beefed up (Russia, China and the Far East as a whole, etc.)*
- *Create the necessary conditions for capital expansion of the best Czech firms abroad.*
- *Approve a new concept of pro-export policies for the years 2006 to 2013 as an encompassing document in this area.*
- *In connection with the Concept of Pro-export Policies prepare a strategy of building up the commercial and economic Czech interests in the EU.*

3.2 Sources of Financing

3.2.1 Secure Sufficient Resources from the EU

Full utilisation of European regional and structural funds has become possible after accession. The funds must be directed to areas with the highest multiplicative effect and utilised in full.

3.2.1.1 Maximise the Influx from European Funds and Direct It to Areas Most in Need

The new EU financial framework for the period 2007 - 2013 will specify the target areas and amounts of European funds. The European Commission ("EC") has proposed expenditures equal to 1.14% of the EU gross national product (GNP), equal on average to 143 billion € a year. The member states will have the final say; the richest of them strive to reduce the maximum expenditures to 1.0% of GNP. The EC has also submitted new draft regulations to govern the structural policy between 2007 and 2013. Three new objectives of the economic and social cohesion policy have been so proposed: (1) convergence, (2) regional competitiveness and employment, and (3) European territorial co-operation. For the above period the Ministry of Finance has estimated the average influx of European funds into regional policy at 160 billion CZK a year (118.7 billion CZK in fixed 2004 prices), representing more than five times the current figure.

Estimated amounts allocated to regional and cohesion policies for the Czech Republic (billion CZK, current prices)

	2007	2008	2009	2010	2011	2012	2013	2007-2013
Structural funds	67.5	71.4	75.5	79.8	84.3	88.9	92.3	559.7
Cohesion fund	33.5	35.2	37.1	38.8	40.5	42.2	44.0	271.4
Total	101.0	106.6	112.6	118.6	124.8	131.2	136.3	831.1

Source: Czech Ministry of Finance, July 2005

The National Strategic Reference Framework (NSRF) represents the key programming document, subject to negotiation with the EC. The document will become a connecting line between European and national priorities of the cohesion policy, laid down in individual operational programmes. More detailed priorities and the corresponding partial objectives will be stated in an updated 2007 - 2013 National Development Plan.

The largest part of amounts from the Structural Funds has been so far allocated to four sectoral operational programmes (Infrastructure, Industry and Business, Rural Development and Multifunctional Agriculture, and Human Resource

Development) and one horizontal operational programme (SROP). Assistance has been provided to entrepreneurs mostly through the operational programme Industry and Business, but also via some selected measures of other programmes. Each programme has its own specific implementation agency and, accordingly, utilises different rules, conditions and forms for submitting projects. A possibility to centralise a major part of this process at a single location would be a major breakthrough for entrepreneurs.

RECOMMENDATIONS:

- *Concentrate operational programmes, their priorities and the allocated funds in conformity with the priority areas of Czech Republic development as laid down in the Czech Republic Strategy for Sustainable Development , the Economic Growth Strategy, and the appropriate regional policies.*
-  *Consider opening a special operational programme in support of the business sector, programme that would uniquely offer assistance to entrepreneurs through a single implementing agency communicating directly with businesses.*
- *In allocating funds to individual operational programmes, priorities and measures rely on experience gained in the current programming period with regard to programmes, priorities and measures that have incited most interest among applicants and, on the other hand, those where the allocated funds might remain unspent.*

3.2.1.2 Identify Sufficient National Resources for Co-financing Projects Financed from European Sources

Projects financed from EU funds must be co-financed from own resources. A substantial part will stem from public budgets, but these are subject to considerable pressure because of the Maastricht criteria. Assuming the co-financing level at 25% for projects financed from the Structural Funds and 15% for projects financed from the Cohesion Fund it follows that about 330 billion CZK from own resources will be needed over the future "seven-year plan".

Required amount of co-financing from Czech national public sources (data in billion CZK, current prices)

	2007	2008	2009	2010	2011	2012	2013	2007-2013
Structural funds	33.7	35.7	37.7	39.9	42.2	44.5	46.1	279.8
Cohesion fund	6.0	6.3	6.7	7.0	7.4	7.8	8.1	49.4
Total	39.7	42.0	44.4	47.0	49.6	52.3	54.3	329.2

Source: Czech Ministry of Finance, July 2005

RECOMMENDATIONS:

- *Assign top priority to identification of resources for co-financing projects financed from EU funds - in instances of overlap prefer European programmes to national ones.*
- *Harmonise local and European policies in a manner preventing conflicts or competition between support provided from local and European sources.*
- *Create conditions facilitating participation of private sources in co-financing as an alternative to public sources - e.g. by means of PPP; the appropriate legislative framework must be first created (see part 3.2.3).*

3.2.1.3 Support Influx of Money from the EU outside the Regional and Cohesion Policies Tools

The so-called community programmes¹⁷ administered by EC units represent a smaller item, offering financial assistance to activities in areas like education, science and research, development of transport and energy infrastructure, culture, information society, consumer protection, environmental protection, etc. Clear-cut architecture at the national level is absent here (operational programmes and uniform programming documents). Sufficient information is available about some such programmes. On the other hand, resorts (sponsors) possess only general information about some programmes and participation of interested parties is then strongly restricted.

RECOMMENDATIONS:

- *Strengthen activities of the sponsors (ministries) devoted to gathering relevant information about community programmes. Sponsors should be able to provide to potential applicants topical and comprehensive information. To be able to inform interested parties without delay, sponsors should permanently monitor the corresponding European legislation in this area.*

3.2.1.4 Enhance the Absorption Capacity for EU Sources

The amounts on offer represent only the monies potentially available from the Structural Funds. In the absence of quality projects the funds will be forfeited. Detailed information provided to potential recipients is therefore essential. Securing

¹⁷ Programmes not mediated by the state.

that the rules governing project assessment in the application stage are more lucid and clear will also favourably influence the absorption capacity.

RECOMMENDATIONS:

- *For the central contact places (see part 3.1.4.2) hire and train personnel capable of providing fundamental information about possible drawdown from the European Structural Funds as well as from the community programmes. Operators of the free contact line to the EU, 800 200 200, should be also able to provide such information.*
-  *The existing, well-functioning information portal www.strukturalni-fondy.cz need not deal exclusively with the Structural Funds and the Cohesion Fund. It could also provide information about community programmes (it is now scattered on the web pages of individual sponsors) and should be then renamed accordingly.*
- *Projects should be assessed according to well-defined, fixed, transparent rules specified in advance. Room left free for subjective decisions must be restricted.*

3.2.1.5 Effective Utilisation of Debt Instruments and Other Supportive Tools of International Financial Institutions

Assistance tools of international financial institutions¹⁸ offer additional means. In addition to direct financing of developmental needs they can act as an alternative to public resources in the form of co-financing "European projects".

Credit products that raise the public debt (in case of credit granted to a public institution) and foreign debt simultaneously constitute the most often used form. In addition to such direct credit, special credit schemes that focus on some selected handicapped business segments, mostly small and medium-sized enterprises, are on offer through local commercial financial intermediaries. Guaranties granted for commercial credit play a similar role. Direct capital investments in selected companies or support extended to venture capital funds represent other financial instruments available.

Some international financial institutions offer also technical and consulting co-operation (pension reform, reform of public finances, health-care reform) and grants.

¹⁸ E.g., the European Investment Bank, the European Investment Fund, the World Bank, the International Monetary Fund, the European Bank for Reconstruction and Development, the Council of Europe Development Bank.

RECOMMENDATIONS:

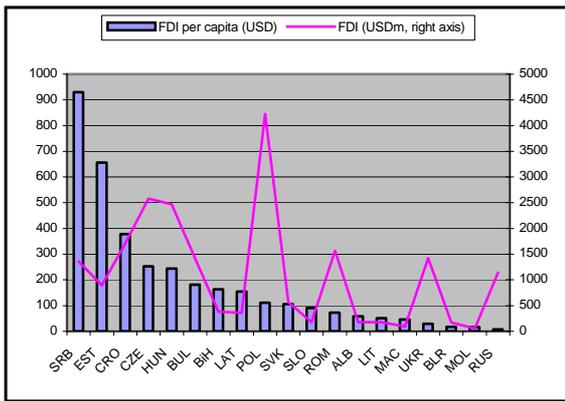
- *Make effective use of funds solicited from international financial institutions while respecting the limits of external indebtedness or public budget debt.*
- *Make use of resources obtained from international financial institutions in co-financing European projects.*

3.2.2 Maximise the Influx of Investments and Effectively Privatised Publicly Owned Assets

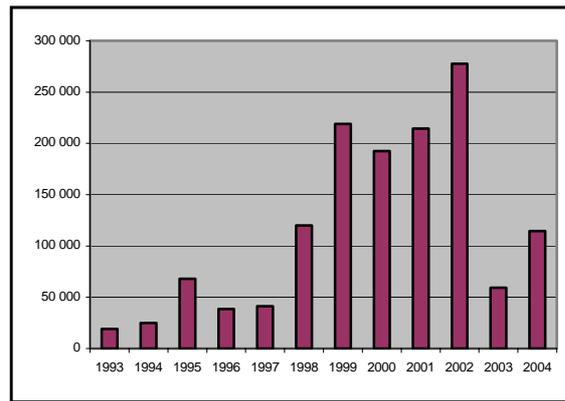
Private sources of exclusively local character are insufficient to increase competitiveness of the Czech economy. Foreign direct investment can offer an enormous support to financing new production, know-how and technologies. The state has already unloaded its stakes in the biggest enterprises that it still owned after the first and second privatisation waves; nevertheless, the privatisation process must continue. There are still publicly owned assets to be privatised as part of future reforms.

3.2.2.1 Maintain the Rate of FDI Influx

In recent years a massive influx of foreign direct investments, assisted by an implemented system of investment incentives, constituted the main driving force behind economic growth (primarily in the industry), creation of new jobs, improved balance of trade, enhanced qualification and incoming know-how. State subsidy can be provided in the form of income tax allowance lasting for up to ten years, support extended to creation of new jobs, to re-training and training. Prior to 1998, the year in which the above incentives were implemented, average FDI amounted to 38 billion CZK a year; the average value calculated for the period 1998 - 2004 is 171 billion CZK. As a result the Czech Republic ranks among the most successful countries in Central and Eastern Europe in this respect (see the charts below). Investments attracted by the incentives, taken cumulatively after 1993, represented almost one fourth of sum total FDI. The corresponding figure for the period after 2000, the year in which the system was institutionalised in the form of an enacted law, is 243 billion CZK (out of the sum total FDI representing almost 860 billion CZK).



Source: Czech National Bank



Source: UNCTAD

There is a long-term trend comprising maximum transfer of - even relatively sophisticated - activities, especially services, to low-cost countries. While in developed countries the proportion of services in GDP creation amounts to about 70%, in the Czech Republic the corresponding figure is a mere 53%. According to UNCTAD data the services sector constitutes around 60% of the worldwide amount of FDI. However, in the Czech Republic the proportion of services in FDI varies at around 46% and, surprisingly, exhibits a more or less decreasing trend. With regard to investments in science and research the comparison of the Czech Republic is similar (1.3% of GDP against 1.9% in EU-15). All these facts should be respected in the entire system of investment incentives. Accordingly, direct support to strategic services and technology centres as well as the ensuing technological level of supported investments should continue.

Considering the necessity of adapting the system of investment incentives to topical developments in the field of FDI, and taking into account the efficiency of public support provided as investment incentives, the costs and benefits of the system of investment incentives should be assessed regularly, especially with regard to its international competitiveness, to its impact on companies already active in the Czech Republic, and its benefits for regional development and the employment.

RECOMMENDATIONS:

- *Assess the results of FDI and, starting in 2007, replace the existing system of incentives by a new system taking into account competition between countries in the field of FDI and the needs of individual Czech regions.*

3.2.2.2 Complete Privatisation of the Remaining State-owned Ownership Interests; Privatisation of the Remaining Publicly Owned Assets

Privatisation constitutes an unfinished part of economy transformation. Assets valued at more than 340 billion CZK were privatised by means of the coupon privatisation method and additional 114 billion CZK (both in book value) were disposed of free of charge (Supporting and Guarantee Agricultural and Forestry Fund, Restitution Investment Fund, restitution, etc.). Assets disposed of by means of the so-called small privatisation brought to the state revenues in excess of 49 billion CZK. More than 413 billion CZK were added to the state coffers through tenders or by means of direct sale.

Transparent privatisation increases performance and brings about know-how, incorporation in international networks, new corporate culture, and other benefits. Privatisation thus represents an important macroeconomic task; the method in which the revenues are utilised may substantially influence the performance of national economy as a whole.

Network companies are still owned by the state and, what is more, the state acts both as owner and regulator of segments representing natural monopolies and may thus be in conflict of interest. Privatisation will put aside the conflict and enable truly independent regulation to be introduced.

A part of the rented housing stock is also in public hands. Deregulation of rental could resolve the hidden losses; another option is privatisation of the housing stock (associated with the problem of private subject financing).

RECOMMENDATIONS:

- *In justified instances privatise in full or in part the firms remaining in state hands.*
- *Allow for partial privatisation of network utilities considered strategic.*
- *Use the revenues from privatisation of state-owned stakes to finance the pension reform, liquidate old environmental damage, reconstruct abandoned buildings and premises of old production areas, and develop transport infrastructure.*

3.2.3 Create an Environment Conducive to Effective Public - Private Sector Partnership (PPP)

Financing major projects in co-operation of the public and the private sector ranks among standard methods in securing public services and public projects worldwide. The state assumes the restricted role of a subject that accurately defines - and pays for - the requested service, or enables the private subject involved to impose a fee on using the service, while surrendering the realisation and operation to

the private subject. In this manner the state passes to the private subject involved many risks previously undertaken, thus increasing efficiency. Payments in favour of the state are made during the term of the project and therefore pass to the generation that uses the service, and are realised only if the service in question is provided in conformity with pre-defined criteria. Consistent fiscal regulation is mandatory to ensure that PPP will be used only in instances where it brings about advantages and to prevent state obligations getting out of hand. Also important is first-rate legislation, institutionalised support from the public sector, utilisation of foreign experience and pilot projects, and efficient control by the Ministry of Finance.

At present the Czech Republic lacks suitable legislation. The body of laws only exceptionally refers to these issues in connection with licensing regulations (e.g., water supply, the Roads Act). An act that would empower the public sector to negotiate licences is absent and so is efficient fiscal regulation of long-term obligations. The legislative framework should also include clear-cut rules on approving projects, or at least control the maximum frameworks at the national level and for the self-administration authorities. Amendments to regulations affected by PPP but at present not reckoning with its existence are also necessary. For the suppliers and the financial institutions involved the necessary legislation would implement a clear, transparent and functioning system for conclusion of licence contracts. This would reduce the attached risk and, consequently, the project price. Incorporation of a licence arrangement in PPP projects fully complies with recommendations of the European Union.

Institutional support must be established and permanently provided to the public sector to make it a strong partner capable of eliminating risks ensuing from incompetent preparation and implementation of PPP projects. Methodical materials must be prepared to facilitate PPP projects preparation and implementation. Methodology should make use of experience gained by foreign institutions, supplemented and modified to respect features specific to the Czech environment. The support is currently provided by a PPP Centre established by the Ministry of Finance to extend specialised assistance to the public sector throughout the preparation and implementation of PPP projects. The advantages brought about by its functioning include concentration of knowledge and experience in implementation of PPP projects and its flexible transfer among sectors and projects, primarily by active participation in projects, creation of methodology and securing expert assistance to the public sector at all levels.

A project should be only realised if its actual need and financial acceptability have been demonstrated and it has been shown that the project will provide adequate value for the taxpayers' money (i.e., other possible ways to provide the public service in question are not more advantageous for the state). A qualified

prediction of profitability (or otherwise) is prerequisite for the Czech Republic benefiting from the PPP method. At present several methods are being used abroad to decide on PPP profitability; probably the most popular and most often used are the methods applying preliminary cost/benefits analysis for smaller projects, and the Public Sector Comparator method for major projects. At present the Ministry of Finance is unable to control the long-term obligations ensuing from PPP projects at all levels of public administration. The situation must be modified to ensure that PPP projects do not put in jeopardy the fiscal situation or that licensed projects that might be resolved otherwise do not submerge the Czech Republic in a flood of user fees.

One possible advantage of PPP projects is enhanced possibility to draw funds from the EU by increasing the proportion of projects of public interest co-financed by the private sector. Possible use of private sources for co-financing could significantly raise the absorption capacity of the Czech Republic. Not many examples of successful participation of private subjects in co-financing of projects financed from "European funds" exist at present.

RECOMMENDATIONS:

- *Enact a licensing act.*
- *Amend the Public Contracts Act No 40/2004 Sb., as amended, to introduce a new form of tender making use of a contest dialogue and enable the contractor to realise construction including preparation of the project documentation necessary for the proceedings mandatory under the Building Code.*
- *Amend Act No 218/2000 Sb., 'On Budgetary Rules and Amendments to Some Related Acts' ("Budgetary Rules Act"), as amended, to create conditions for transparently reviewing future obligations imposed on the state under contracts of PPP type, specifically by extending the scope of the mandatory subject of medium-term outlook.*
- *Amend Act No 250/2000 Sb., 'On Rules Governing Territorial Budgets', as amended, so that the obligations ensuing from long-term contractual relations are duly recorded.*
-  *Ensure that the PP Centre participates in all pilot projects so as to secure standard quality of preparation and effective transfer of information and experience.*
- *Establish effective co-operation focusing on exchanging information and sharing experience with OECD countries.*
-  *Specify the range of projects subject to regulation according to clear-cut rules. (Create a database of long-term obligations imposed on public budgets in*

connection with PPP projects, to be submitted as part of budgetary documentation.)

- *Strengthen the powers of the Czech Ministry of Finance in fiscal control of PPP.*
- *Create a clear-cut and transparent methodology that would enable PPP financing to be compared with other financing methods and make use of the PPP form of financing conditional on demonstrated benefits.*
- *Actively lobby in favour of simplification of EC rules governing co-financing of PPP projects.*
- *Prepare - and prefer - projects that would enable such drawdown. Prepare a PPP methodology for EU funds reflecting these efforts.*

3.2.4 Promoting Commercial Sources of Financing

The basic principle of most of the instruments and measures proposed below and designed to accomplish this objective consists in a clear preference of cross-cutting instruments and measures cultivating competition and improving the business environment over selective instruments. We suggest using the latter only in cases where their overall economic benefit considerably surpasses the loss of effectiveness of the market environment caused by such instruments.

3.2.4.1 Encouraging Diversification of Private Sources of Financing

The potential for improving the conditions for the development of financing by means of increasing own capital consists primarily in effective regulation and legislation in the field of organised capital market. While stock market capitalisation in developed countries amounts to 60% of the GDP (EU-15), or to 130% of the GDP (USA), in the Czech Republic the rate is just 29%. However, the quality of the capital market and its functioning as the provider of capital to business entities is a far more important factor. Though a first successful IPO¹⁹ took place in 2004 and several other companies consider taking the same step, and although the collective investment sector already works in a standard way, the Czech capital market still does not sufficiently perform the function of capital provider. Debenture market is still underdeveloped, except in respect of public bonds.

Regulation and legislation should not lag behind the very swift development of new products, which is characteristic of the financial sector. Laws should lay down

¹⁹ IPO – initial public offering.

the basic and, if possible, unchangeable principles. The processes and detailed rules of individual activities should be contained in subordinated legal instruments that are easier to amend.

With a view to ensuring a high quality infrastructure, it is necessary to provide a reliable and transparent registration scheme for securities and transactions with securities that is compatible with international standards in order to achieve sufficient flexibility and minimise the cost of transfer.

A considerable potential also is in the strengthening of tax competitiveness of institutional investors in order to prevent excessive drain of local savings to foreign countries.

One of the key preconditions for the development of capital markets is the liberalisation of investment limits imposed on institutional investors, namely pension funds and insurance companies, where greater inflow of financial resources can be expected. For example, it is possible to recommend an amendment to the applicable laws, which would make it possible for pension funds and insurance companies to allocate some of their monies to development capital funds, and this amendment will need to be linked to a pension scheme reform. An efficient allocation of these resources should be enabled to ensure adequate revenues. This also involves expanding the portfolio and improving liquidity of tradable securities.

To further strengthen the trust of foreign investors in the Czech capital market it is critical to attain maximum compatibility of applicable trade-related laws with international standards.

RECOMMENDATIONS:

- *Introduce a scheme of registration of securities and transactions with securities that is comparable with international standards.*
- *Strengthen tax competitiveness of institutional investors – to prevent excessive drain of local savings to foreign countries.*
- *Consider liberalisation of investment limits imposed on institutional investors – namely pension funds and insurance companies – to enable allocation of some of their monies to development capital funds.*

3.2.4.2 Supporting the Use of Venture and Other Capital (Private Equity and Venture Capital)

Financing of this type represents a dynamically developing but still insignificant form of financing of business activities with a high value added (between 1995 and 2003, members of the Czech Venture Capital Association made investments in excess of CZK 20 billion, and CZK 6.5 billion in 2003 alone). In the

investment process, a more intensive use of development capital is essentially linked to the overall quality of the business environment, which is comprehensively dealt with in Chapter 3.1 (Institutional Environment for Business) above. Another significant source of financing may consist of public funds expended to support small and medium-sized enterprise. Thanks to sophisticated, market-oriented investment process, allocation of these monies through development capital funds will contribute to their more effective use.

RECOMMENDATIONS:

- *Increase transparency and introduce as simple legal regulation of the capital market as possible.*
- *Establish a central depository as provided for in Act No 256/2004 Sb. on Business Activities in the Capital Market, and implement a transparent multi-level registration of securities.*
- *Promptly harmonise Czech accounting standards with international accounting standards (IAS), strengthen independence of external auditors, and implement the principles of "corporate governance" in corporate laws.*
- *Create an environment appropriate for the allocation of funds in support of SMEs via development capital funds.*

3.2.4.3 Improving Access to Funding for Individual Groups of Economic Entities

Improved access of local entities, and SMEs in particular, to sources of commercial financing can be achieved through cultivation of the legislative environment and development of the business infrastructure.

Through significantly strengthening the role of the creditor in bankruptcy proceedings, respecting the rights of secured creditors, creating transparent conditions for composition with creditors, and through a realistic possibility to restructure unsuccessful business it is possible to considerably reduce investment risks and attract more financing. A more flexible labour market will in its turn make it possible for entrepreneurs to better and faster react to unexpected events and will strengthen their financial stability, which is of key importance in fund raising. Specific instruments are dealt with in more detail in Chapter 3.1 (Institutional Environment for Business) above.

It is also necessary to make commercial financing substantially more available to all forms of newly launched business activities. The reluctance of banks and investors to provide funding to these forms of business is due to the aforesaid high level of risk. Elimination of this factor is a justifiable reason for the use of public

funding, which, however, should to maximal extent be applied through functioning market mechanisms, e.g., through development capital or security instruments. The effectiveness of use of public funding in support of newly launched business activities is materially affected not only by the comprehensibility and simplicity of the supportive programmes and their terms and conditions, but also their effective marketing vis-à-vis the business public.

RECOMMENDATIONS:

-  *Draft comprehensible didactic documents on how to raise funds for business.*
- *Closely work together with the banking sector in harmonising the processes and conditions for obtaining public assistance with commercial financing processes.*

3.2.4.4 Creating Competitive Conditions in Financial Markets in General

The services rendered by the financial sector can be improved and made less costly by providing a simple and transparent system of regulation, an effective information campaign oriented on the clients, and supporting their “financial education”. Unacceptable is compensation for contingent losses of investors above the limit of statutory insurance, which was the case in the past, as the impact of these non-systemic measures on credibility of financial market regulation is crushing. Major deficit of information exists in respect of private persons, which have insufficient financial literacy and a low level of perception of risks.

RECOMMENDATIONS:

- *Supervision over the financial sector should be integrated in a single institution, while separating activities that are not directly related to regulation itself, such as providing access to information or education and licensing of brokers and finance agents, to the remit of self-regulatory institutions.*
- *Increase the activity of relevant regulators in creating information sources comprehensible for the general public and in clearly explaining the rules of regulation.*

3.2.4.5 Preferring the Use of Sources with Multiplication Effect over the Financing of Consumption

It is necessary to thoroughly revise and remove public assistance provided to such activities of economic entities that result in consumption and production patterns inconsistent with the principles of sustainable development.

RECOMMENDATION:

- *Review public assistance in support of activities resulting in consumption and production inconsistent with the principles of sustainable development.*

3.2.5 Prudent Management of Public Funds

The gradually implemented and contemplated savings of public funds are prevalently of a cross-cutting nature. This also results in elimination of expenditures that may be reasonable and justifiable, while on the other hand expenditures may be preserved which do not perform any public function. The way to remedy the situation is in selectiveness, discharge of proposed intents that are the source of waste of funds, and in strengthening the individual element.

3.2.5.1 Strengthening Fiscal Discipline

Uneconomical management of public funds not only results in a relatively expensive and low-quality public service but, due to bad fiscal discipline, also undermines the trust of investor in the Czech Republic and the medium-term schedule of the Czech Republic's entry to the Eurozone. It is necessary to comply with the rules setting out medium-term fiscal targeting. However, this is conditional on the performance of expenditure audits and subsequent reduction of the share of mandatory and quasi-mandatory expenditures, which at present amount to more than 80% of all public expenditures.

RECOMMENDATIONS:

- *Consistently respect the rules setting out medium-term fiscal targeting.*
- *Perform expenditure audits in respect of all mandatory and quasi-mandatory expenditures with a view to finding potential savings.*

3.2.5.2 Carrying out Necessary Change in the Pension Scheme and Health Care

Health care is a complex system marked by low transparency, problematic financial situation of many health facilities and an incorrectly set system of incentives, which results in ineffective consumption, wastefulness and long-term instability of financing. It is therefore necessary to look for savings in this area and to improve its setting by eliminating the deformities mentioned above. The short-term stabilisation measures that are being currently undertaken are supported by this Strategy. It is expected that, when the Strategy is in effect, long-term measures will be adopted to substantially remediate this unfortunate situation.

One of these measures could be the consolidation of sickness insurance and health insurance. This step should be – as soon as the impacts of the new sickness insurance act have been assessed and stabilisation measures have been implemented in the health sector – considered as a potential way to increase efficiency of these systems.

Statistical data on morbidity in the Czech Republic and concrete known cases evidence that the sickness insurance scheme has been misused. This results in an increase of sickness insurance expenditure and also in increased costs and reduced income of health insurance companies. Certifying a person unfit for work and the subsequent treatment are associated with costs that have to be covered by insurance companies, and thus their expenditures increase. In addition, no one pays health insurance for the employee during his/her sick leave, and thus the income of health insurance companies further decreases.

Compared with the Czech Social Security Administration, health insurance companies are in a much closer contact with health care facilities and doctors who decide on sick leaves, and insurance companies are thus able to more effectively control their decisions. Moreover, the economic stimulus to monitor the misuse is much stronger at health insurance companies than at the Czech Social Security Administration given the aforesaid impact on their expenditures and income.

Situation is also complicated in the pension scheme, the financing of which is unsustainable in the long run due to the demographic developments. It is therefore necessary to adopt a political decision to modify this scheme.

RECOMMENDATIONS:

- *Adopt relevant measures to increase efficiency and prevent abuse of the health care system, and provide continued financial stability of the health care system.*
- *Consolidate sickness and health insurance.*
- *Reform the pension system as soon as practicable.*

3.3 Infrastructure

Infrastructure significantly influences the following three preconditions of economic development of the Czech Republic:

- mobility of individuals, goods and information – guarantee of sufficient supply of human resources, reliable logistics and flexible communication;
- supply of lands and structures prepared for investment – guarantee of prompt launch of business plans in the Czech Republic;
- competitive operating costs – guarantee of competitive prices of goods and services produced by undertakings in the Czech Republic.

In this sense, infrastructure may operate as a growth catalyser if it attains an adequate level of development, or creates barriers to growth if its standard is inadequate in quantitative or qualitative terms.

To a considerable extent, infrastructure also affects other segments of the community and business environment, the following of which are especially important in terms of economic growth:

- regional development – guarantee of cohesive growth;
- protection of natural and cultural heritage – guarantee of sustainable growth.

Objectives of the economic strategy in the field of infrastructure truly reflect the areas described above.

3.3.1 Increasing Mobility of Persons, Goods and Information

The first objective faced by the Czech society is to remove obstacles that currently impede mobility in the Czech Republic. Mobility of persons, goods and information is not perceived only in its narrow logistic meaning as an ability to transport goods, persons or documents from a place to another place by conventional means of transport. Important is also the ability of Czech citizens to change place of residence and move to a place where jobs are available. An increasingly important social role is ascribed to virtual mobility, based on electronic data transfer. At present, this involves more or less exclusively electronic transfer of information, but technology will in the following years allow virtual transfer of persons – in the form of massive use of tele-bridges and teleconferences, and goods – initially in the entertainment industry and education, later in other sectors as well.

3.3.1.1 Providing Maintenance and Development of Modern Road, Railway, Air and Inland Water Transport Routes

In the near future it will be necessary to complete the building of a network of highways and motorways – from the current 882 km to the planned length of 2,130 km. In addition, approximately 3,300 km of the total 6,200 km first class roads will need to be rehabilitated as they fail to meet the required parameters. The condition of second and third class roads too fail to meet economic needs and traffic safety. Lack of investments in the development of the railway infrastructure has had negative impact on and caused delays in modernisation of corridors and other national tracks, with unfit safety facilities too high cost of securing traffic. The decline of the operating parameters of railway tracks is the result of a lack of funding for maintenance and rehabilitation of the railway infrastructure.

The cause of bad repair and slow development of transport infrastructure is the long-standing imbalance between needs and available resources; the reason is not only the chronic lack of funds but also their ineffective use. Improvement in investor, engineering and design activities while building and operating transport infrastructure may bring in savings of hundreds of billions of Czech crowns (see also Chapter 3.3.5.3). As regards the lack of funds mentioned above, the situation is even graver as the National Transport Infrastructure Fund (SFDI) has thus far drawn means from the National Property Fund. The privatisation proceeds now being exhausted, it is necessary to adopt long-term measures or else the state will not be granted European assistance of approximately CZK 20 billion per year, i.e. CZK 140 billion for 2007 – 2013. Public budgets and/or other sources of financing should be able not only to co-finance projects supported by EU funds, but also to provide the necessary pre-financing of these projects.

It is therefore necessary to accelerate preparation of relevant legislation and introduce capacity charges in road transport. However, the toll should not be too high so that carriers do not bypass the segments the subject of the charge, which could put the competitiveness of domestic industry at a risk. The sum of the road tax, excise tax and toll at roads must not exceed the limit of competitiveness of domestic producers. Thus, an increase of available funding should be provided through a higher share of the transport department in the proceeds of the excise tax imposed on mineral oils. This share has thus far amounted to mere 20%, and after 1 January 2005 even just 9.1%. To provide the required funds, this share should be increased to 40%. The necessary amendments to applicable laws need to be linked to other reforms related to the expenditure side of the national budget so as they enter into effect as of 1 January 2008 and remain in force for the rest of the budgeting term of EU funds, i.e. until 2013. Total investment requirements of the transport infrastructure for the time period in question, taking account of savings of

expenditures, are quantified in table 3.3.1.1A. Coverage of these requirements by investment monies based on an increase of the SFDI's share in the proceeds of the excise tax, introduction of toll, intensive use of EU funds, application of PPP principles and considering the growth of effectiveness of the building industry is quantified in table 3.3.1.1B.

Sufficient resources are an inevitable, not just adequate precondition of investment development of the transport infrastructure. It is equally important to timely prepare projects, or otherwise availability of EU funding will be irreversibly lost. It is necessary to remove barriers of territorial, legal, legislative and administrative nature, which hamper capital investments. These issues are described in detail in Chapter 3.3.2. It is also necessary to improve project management. Optimisation of project management is a task faced by the Road and Motorway Directorate (ŘSD) and the Railway Infrastructure Administration (SŽDC). This process will result in trimmed organisations whose investor and engineering activities will be limited to the development of investment opportunities for the private sector and to subsequent control.

NEEDS 2005 – 2013	Investments	Operations	Total
	bln CZK	bln CZK	bln CZK
Road infrastructure	575.0	180.0	755.0
Highways and motorways	350.0	20.0	370.0
1st class roads	175.0	40.0	215.0
2nd and 3rd class roads	50.0	120.0	170.0
Railway infrastructure	350.0	75.0	425.0
Waterway infrastructure	15.0	5.0	20.0
Provision	80.0	20.0	100.0
Total	1,020.0	280.0	1,300.0
Savings of costs	320.0	30.0	350.0
Total after adjustment	700.0	250.0	950.0

Tab. 3.3.1.1A Requirements for building transport infrastructure (based on adjusted data provided by the Ministry of Transport)

ECONOMIC GROWTH STRATEGY

SOURCES 2005-2013	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total
	bln CZK	bln CZK	bln CZK	bln CZK						
Share in privatisation proceeds	22.3	21.7	21.1	0.0	0.0	0.0	0.0	0.0	0.0	65.1
Share in excise tax	6.2	6.5	6.7	31.1	32.4	33.9	35.2	36.7	38.0	226.7
Road tax	5.8	5.9	5.9	5.9	5.9	6.0	6.0	6.0	6.0	53.4
Term fees (vouchers)	2.2	2.4	2.6	1.6	1.6	1.7	1.7	1.7	1.7	17.2
Performance fees (toll)	0.0	0.0	0.0	6.0	6.0	6.0	6.0	6.0	6.0	36.0
EU funds	6.1	6.2	21.8	33.5	34.4	35.7	36.7	37.8	38.8	250.9
Loans and PPP	11.1	11.3	12.4	13.7	15.0	16.5	18.2	20.0	22.0	140.3
Total	53.7	54.0	70.5	91.7	95.4	99.8	103.8	108.2	112.5	789.6
Effectiveness of the building industry	100%	104%	108.2%	112.5%	117%	121.7%	126.5%	131.6%	136.9%	
Total after adjustment	53.7	56.2	76.3	103.2	111.6	121.5	131.3	142.4	154.0	950.0

Tab. 3.3.1.1B Sources of financing for building transport infrastructure (based on adjusted data provided by the Ministry of Transport)

RECOMMENDATIONS:

- *Provide balance between financing needs and sources of financing for maintenance, reconstruction, modernisation and development of the transport infrastructure – amendment to Act No 243/2000 Sb. on budgetary determination of taxes and Act No 13/1997 Sb. on surface traffic routes, and promulgation of act on project partnership of the public and private sector.*
- *Improve the process of preparation and construction of the transport infrastructure by state investors – optimising the organisational structure and management of projects by ŘSD and SŽDC.*
- *Open talks with the European Commission with a view to strengthening financial assistance to the Czech Republic for 2007-2013 intended for investments to transport networks and prepare required co-financing.*

3.3.1.2 Increasing Availability of Broadband Internet Connection

Access of undertakings and households to high-speed Internet in the Czech Republic at the end of 2004 was considerably lower than in more developed countries (see chart 3.3.1.2A). In 2005, households and institutions shift to connection with a higher transfer speed. The Czech Statistical Office states that an average of 19% of households have access to the Internet, out of which one fourth have access to high-speed Internet. The Czech Statistical Office has also explored the use of information and communication technologies in the business sector, where approximately 25% of undertakings have access to the Internet. However, there has not as yet been any dramatic improvement in broadband penetration rate as the limit between low-speed and high-speed Internet has been shifting in developed

countries. Broadband is provided by the Czech Telecom, mobile telephony operators, and cable TV operators, but their services are considerably more expensive than in Western Europe (see chart 3.3.1.2B) and, as a rule, are only available in large cities. The high charges are due to inadequate competition in the fixed data network and a low number of customers with required purchasing power. The state now has instruments capable of improving the situation with a virtually neutral impact on the expenditure side of the national budget. In the medium run, the impact on the revenue side of the national budget will be significantly positive.

A way to reduce prices is to improve the environment for competition, which can be achieved by full liberalisation of the market. The recent sale of the state-owned interest in Czech Telecom to a strategic partner – Spain’s Telefonica – is most promising. Nevertheless, the market is still asymmetric and will require a relatively high level of regulation. Market regulators will be required to safeguard equal conditions for competitors and open ways to the market to other operators. Regulation should promptly and without exceptions penalise any violations of law and stimulate telecommunication operators to investment and economic activities.

Another obstacle to a dynamic development of high-speed connection is insufficient motivation of households and undertakings to purchase access to the Internet or to shift to a higher speed service. The Internet still provides most applications in the field of entertainment, and this is not enough to stimulate its massive use. State administration authorities and local governments therefore should accelerate all legislative and operational processes and create conditions for unlimited secured electronic access to public administration services (e-government), to electronic commerce and business (e-commerce, e-business), to education and training systems (e-learning and e-training) and to healthcare services (e-health service, e-medicine).

A major obstacle to a wider use of broadband is its relatively high price (compared to average earnings). In this situation, willingness of the population to purchase broadband connection could be increased for example by waiving or at least reducing the administrative fees for public services provided electronically. Act No 634/2004 Sb. on administrative fees introduced waiver of fees for services demanded and provided via remote access if the fee does not exceed CZK 2,000.

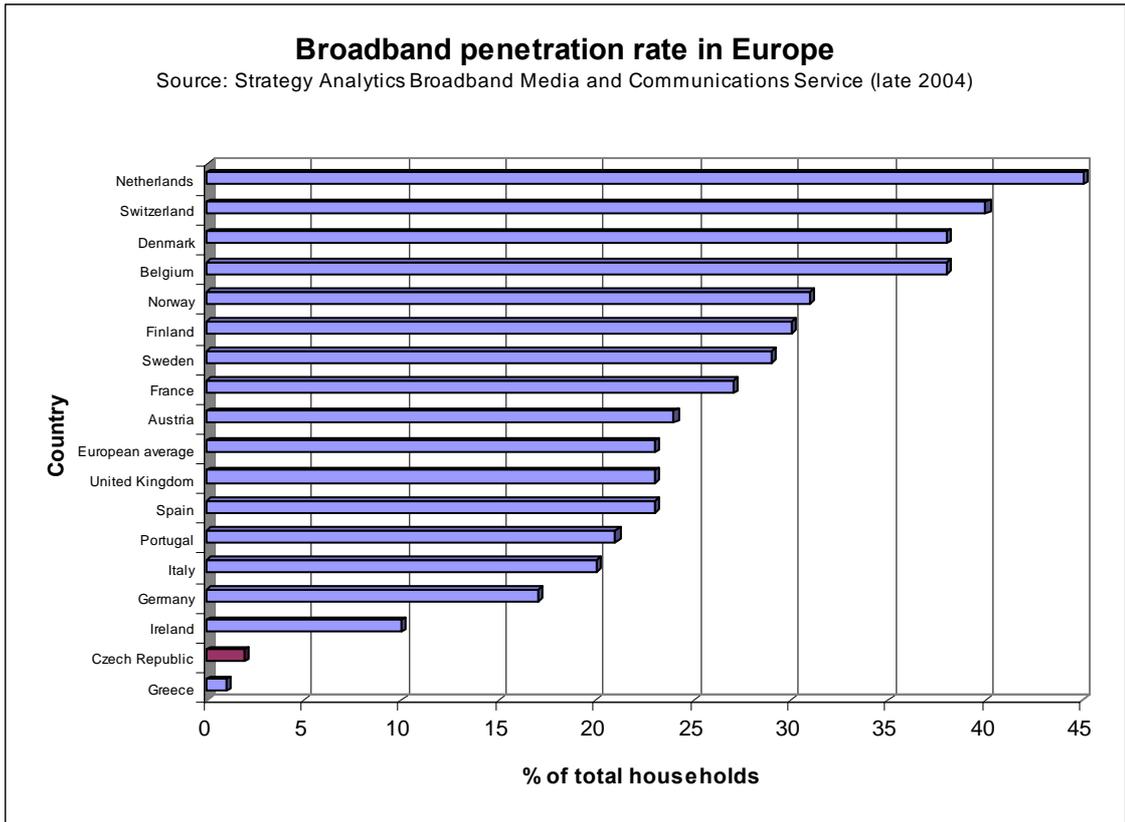


Chart 3.3.1.2A Broadband penetration rate in the Czech Republic and in selected European countries

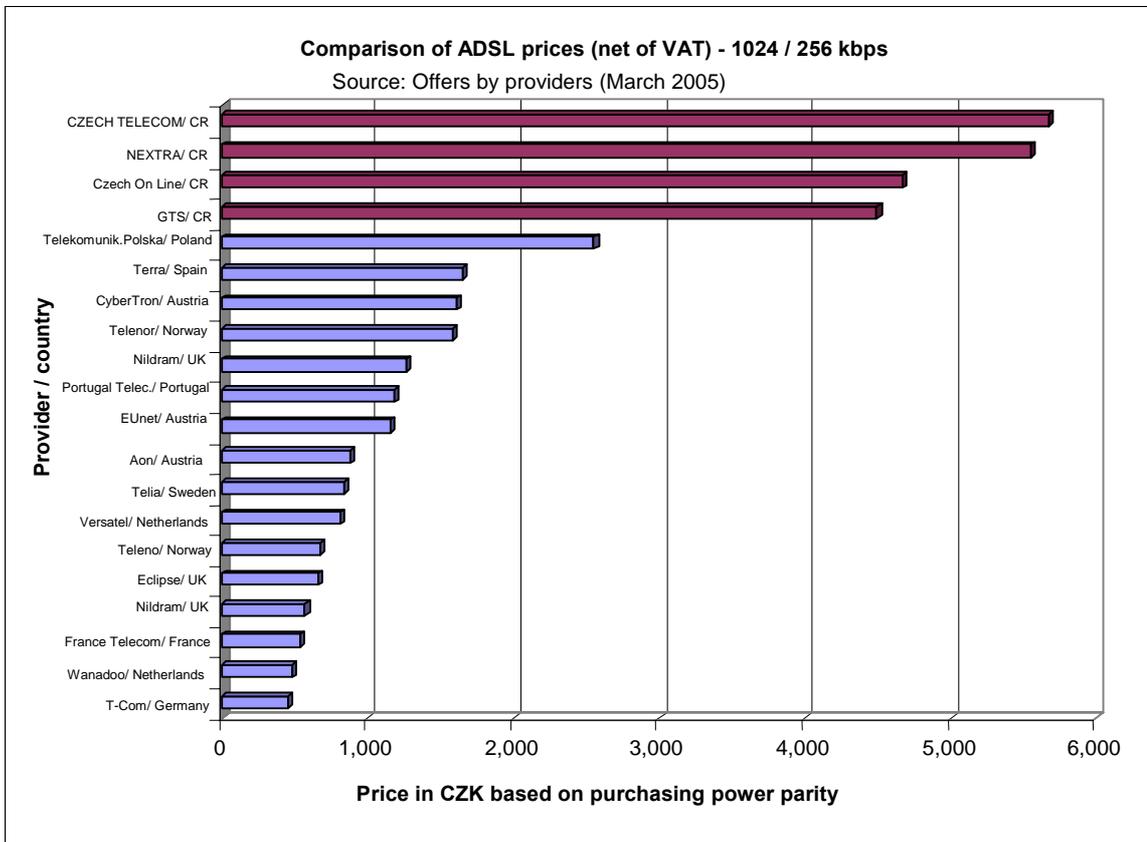


Chart 3.3.1.2B Comparison of ADSL prices in the Czech Republic and in selected European countries

RECOMMENDATIONS:

- *Create conditions for the development of high-speed technologies by means of transparent regulation oriented towards support of investments in the development of data networks – optimisation of the law on electronic communications, its consistent enforcement.*
- *Encourage demand of undertakings and households for high-speed connection through a sufficient supply of public services – a set of new laws and amendments to existing laws, providing data for electronic databases of administrative authorities.*
- *Stimulate the demand of undertakings and in particular households for high-speed connection by waiving administrative fees for public services rendered electronically.*

3.3.1.3 Enabling Labour Force Migration

Sociologic surveys carried out over years have indicated that Czechs are little willing to move for jobs. However, their reluctance to change residence is not exceptional compared to other European nations. Based on a study by PricewaterhouseCoopers, only 0.4% of EU citizens move for jobs every year, while in the United States the figure is six times higher. In the Czech Republic, the low level of labour force migration is due not only to national mentality but also to the persisting regulation of rent for flats. Liberalisation of the housing market may help increase mobility of the labour force.

RECOMMENDATION:

- *Gradually release regulation of rental payments in the housing sector – amend Act No 40/1964 Sb., the Civil Code, and promulgate a law on rental from flats.*

3.3.2 Accelerating Implementation of Investment Plans of the Public and Private Sectors

One of the cornerstones of any country's competitiveness is its ability to promptly implement business plans in its territory. This depends on how quickly suitable business facilities can be acquired or built. Purchase or lease of administrative or production facilities is not principally a problem in the Czech Republic, but construction based on capital investments is very complicated. This needs to be addressed by a comprehensive legislative change.

3.3.2.1 Creating Territorial Conditions for Implementation of Investment Plans

Zoning institutes are based on a foundation laid down by the Building Act of 1976. Despite numerous amendments, the current regulation does not meet the present requirements. A proposed building bill is being considered by the Czech Parliament. This Strategy fully respects the legislative draft approved by the Government. To the extent the Strategy proposes any additional measures that are not contained in the draft bill, such measures are designed so as not to be in conflict with the provisions of the bill.

RECOMMENDATIONS:

- *Create new legal framework to enforce public interest in using lands; simplify and accelerate relevant zoning procedures – substitute Act No 50/1976 Sb., zoning and building code, and implementing regulations by new legislative acts.*
- *Adopt strategy for the use of the whole territory of the country in national, international and cross-border context, taking due regard of sustainable development – a new zoning instrument at the level of the state.*
- *Draft and continuously update analytical zoning documents.*

3.3.2.2 Settling Ownership Issues for Implementation of Investment Plans

The Czech law contains a rare feature – the blocking clause in Act No 229/1991 Sb., on land. This clause prohibits transfers of lands owned by the state or administered by the Land Fund of the Czech Republic in respect of which any of the registered churches raised restitution claims. These lands cannot be transferred even to these churches, and as such are theoretically barred from mortgaging for a long term.

Another outstanding issue is the institute of pre-emptive right concerning lands in respect of which a decision was issued on installation of a structure in a public interest. In practice, these lands are often purposely transferred with the aim to prevent construction. This legislative drawback can be removed by establishing a pre-emptive right to the benefit of the state.

RECOMMENDATIONS:

- *Adopt an ultimate legislative decision in the matter of restitution claims raised by churches – amendment to Act No 229/1991 Sb., on land, and other laws.*

- *Institute the pre-emptive right of the state to lands in respect of which a decision was issued on installation of a structure in public interest – amendment to Act No 40/1964 Sb., the Civil Code.*

A frequent problem in the implementation of investment plans is the appraisal and acquisition of the necessary land plots, or their appropriation. The act on appraisal of lands and the relevant implementing regulations are imperfect, which causes delays in the appropriation procedures and suspension of construction by months or even years. Land pricing agreements that would be beneficial to both parties can only be concluded on the basis of land price maps. These maps should be prepared by an independent, must be presented for the professional public for comments and should be controlled by the Ministry of Finance and the relevant state administration authorities. Only thus will the seller and the purchaser perceive the maps as an independent underlying material. The maps will need to be prepared for each municipality.

Zoning adjustments are rarely used in settlement of ownership relations despite the fact that it is frequently demanded by land owners. The reason of this is the current regulation, drafted for agricultural purposes regardless of any other social needs. For owners who prefer replacement lands to cash compensation, comprehensive zoning adjustments in the area in question are an ideal solution, and should be provided as a free public service in connection with any major project.

The institute of appropriation is a separate matter. Purchase of private property in a public interest is embodied in the Constitution and the Bill of Fundamental Rights and Freedoms, and is applied in all EU countries and in the United States. A clearly formulated law should ensure that appropriation or any restriction of ownership is only possible in the public interest. Appropriation titles need to be specified in applicable special laws (building act, water act, energy act, act on land transport routes etc), and can only be applied in accordance with law and for compensation. Financial compensation may be substituted by in-kind compensation. Any compensation should take into account, according to the case law of the European Court of Human Rights, any other detriment caused to the subject of appropriation.

RECOMMENDATIONS:

- *Implement market principles in appraising lands and structures on the basis of price maps – amendment to Act No 151/1997 Sb., on appraisal of property, and its implementing regulations.*

- *Make use of the institute of comprehensive land zoning adjustments for purposes of capital investments – amendment to Act No 139/2002 Sb., on zoning adjustments and land registries, and its implementing regulations.*
- *Rehabilitate the institute of forced sale of land in a public interest – adoption of a new law in accordance with the Czech Constitution and the Bill of Fundamental Human Rights and Freedoms.*

3.3.2.3 Providing Legislative and Administrative Preconditions for Implementation of Investment Plans

The making of an investment should be as a rule preceded by an assessment of the impact of the project on the environment (EIA), zoning proceeding, issuance of an integrated permit (IPPC), and building proceeding. Current legislation is strongly restrictive, administrative deadlines and procedural complications may considerably delay the launch of construction work without sufficiently protecting individual or general values. Coordination of the activities of building authorities and public administration authorities defending special interests in building proceedings is regulated in a manner causing unwanted dispersion of efforts.

RECOMMENDATIONS:

- *Simplify and accelerate relevant procedures under the building code – substitute Act No 50/1976 Sb., zoning and building code, and its implementing regulations by new legislation.*
- *Simplify and unify environmental legislation by means of an environmental code – consolidate Acts No 17/1992 Sb., on the environment, No 100/2001 Sb., on environmental impact assessment, No 114/1992 Sb., on the protection of nature and landscape, No 86/2002 Sb., on air protection, No 76/2002 Sb., on integrated prevention, and many others.*
- *Provide a single coordinated position of a state administration authority if it is competent under several laws – amend approximately 45 laws on the basis of an audit of relevant special laws providing responsibilities of relevant authorities issuing decisions, positions, consents and approvals for the purposes of proceedings under the building code.*
- *Wherever possible, substitute separate administrative decisions on environmental protection by a binding opinion within the meaning of § 149 of the new administrative code – amendments to applicable laws.*
- *Revise the distribution of responsibilities and the institutes of protection of nature and landscape; create conditions for consolidation of proceedings – amendment to Act No 114/1992 Sb., on the protection of nature and landscape.*

- *Integrate EIA into zoning proceedings – amendment to Act No 100/2001 Sb., on environmental impact assessment.*
- *Issue integrated permits together with decisions under the building act – amendment to Act No 76/2002 Sb., on integrated prevention.*

3.3.2.4 Increasing the Quality of the State Administration at Land Registry, Cadastre and Building Authorities

The real estate cadastre is a major obstacle to the investment process. Cadastre authorities still work very slowly, administrative deadlines have not yet been shortened, and statutory limits are exceeded, especially in Prague. This is due to the long-lasting understaffing of cadastre offices, and their insufficient motivation. A similar situation also exists at building authorities. This frequently leads to low-quality decisions, which thereafter have to be cancelled by appellate authorities and remanded for new proceedings.

The persisting problems can be resolved by liberalisation of the relevant activities of administrative authorities. Some routine acts of these authorities could be undertaken by accredited agencies as services to be paid for by individuals and legal entities. State authorities and self-governments would focus on special and difficult cases, and decisions on appeals would remain within their remit.

RECOMMENDATIONS:

- *Liberalise certain acts within the exclusive remit of the state administration – amend applicable laws defining the scope of responsibilities of administrative authorities, and, alternatively, promulgate a new law laying down the rules of performance of state administration through agencies.*
- *Concentrate the performance of state administration depending on the significance of tasks, shift difficult tasks to the regional authorities.*
- *Increase the professional level of the staff of authorities – training programmes, consolidation of payroll funds, introduction of a floating incentive component of salary, etc.*

3.3.3 Accelerating Economic Growth of Regions

The gap between the wealthiest and poorest regions of the EU has widened after the enlargement. While prosperity of downtown London amounts to 315% of the European average, the living standard in eastern Slovakia and Latvia is below 40%. Prague with the rate of 153% belongs to the top regions, while prosperity of other regions of the Czech Republic ranges between 52.4% (Central Moravia) and 61.1% (Southwest) of the European average. In the context of the economic policy

of the European Union, the uneven development of regions should be perceived as a legitimate justification for state interventions, which are eligible for co-financing from the EU funds for economic assistance. Financial resources should be allocated to the transport infrastructure, telecommunications and industry zones.

3.3.3.1 Creating Transport Infrastructure for Regional Development

The importance of a high-quality transport service for the life of the population, and inflow of investments to regions, are unquestionable. Therefore, all networks of sustainable transport should be improved to the maximum extent possible in the period 2005-2013. Any further delays and postponed deadlines would in this respect cause significant economic losses to the whole country and to affected regions in particular.

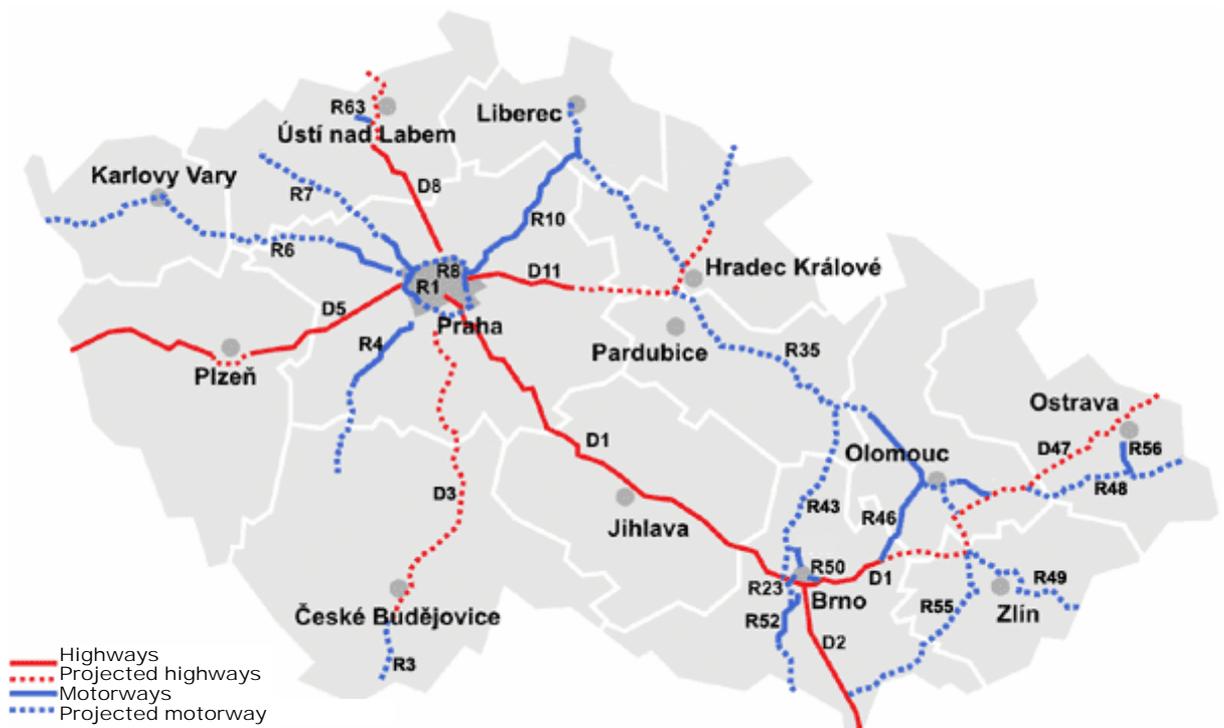


Fig. 3.3.3.1 Development of highways and motorways (source: ŘSD)

The highway network, especially in Bohemia, has a radial layout (see fig. 3.3.3.1). Regional centres have, or will have in the near future, fast connection with Prague, while connection between regional centres is provided by the original routes, even in regions associated in NUTS II cohesion units. This situation is, from the point of view of economic growth, beneficial for Prague but less beneficial for regional centres. A similar situation exists also at lower levels, e.g. between district centres and the relevant regional centre. The vertical direction of connection, i.e. connection with the centre, is a necessary precondition. To achieve a balanced development, it

is desirable, given the intensity of traffic, to also strengthen the horizontal connections between points of a similar economic and demographic significance. To this end, it is necessary, on a priority basis, to

- complete both highways connecting the western and eastern parts of the country: D1 from Prague to Brno, Vyškov and Kroměříž, and R35 from Hradec Králové to Olomouc and Lipník nad Bečvou;
- complete construction of highways and motorways connecting regional centres in Moravia (Brno – Zlín, Zlín – Olomouc, Olomouc – Ostrava);
- modernise the roads connecting regional centres consolidated in NUTS II units (Karlovy Vary – Ústí nad Labem, Liberec – Hradec Králové – Pardubice, České Budějovice – Plzeň);
- complete modernisation of roads connecting regional centres in the ring around Prague (Ústí nad Labem – Liberec, Pardubice – Jihlava – České Budějovice, Plzeň – Karlovy Vary);
- as part of modernisation of class I, II and III roads, promptly put in use the segments facilitating connection between cities and municipalities of a similar significance.

The transport integration of urban areas in individual regions develops primarily on the road basis. In suitable locations, it is necessary to support the integration by building a rail trunk infrastructure in the form of underground or high-speed track. The following conurbations appear to be suitable for this purpose: Hradec Králové – Pardubice – Chrudim or Chomutov – Most – Teplice – Ústí nad Labem – Děčín.

Industrial zones play an important role in the development of regions, with additional development potential in cooperation of undertakings, universities and self governing units in clusters. It is therefore desirable to prefer routes facilitating the creation and development of industrial zones and clusters. Thus, transport-related investments should be made in connection with the strategic industrial zone in Kolín and the potential automotive cluster along the Kutná Hora – Kolín – Poděbrady – Nymburk – Mladá Boleslav corridor.

Tourism plays an increasingly important role in prosperity of regions. In some areas, focus on tourism is the sole appropriate direction of development. These areas should be supported by means of building the necessary tourism transport infrastructure (biking tracks, revitalisation of historic rail tracks, development of recreational and sport boating etc.).

RECOMMENDATIONS:

-  *Accelerate and complete connection of all Czech regions to the international highway network and to selected railway networks.*
-  *Attain considerable progress in transport integration of cities and municipalities of similar economic importance as a counterbalance to connecting peripheries with centres.*
-  *Attain considerable progress in transport integration of cities and municipalities in socio-economic conurbations with the largest possible population and with the shortest practicable travel distances by building and modernising the trunk railway infrastructure.*
- *Within the frame of modernisation and development of the transport infrastructure, prefer routes supporting the establishment and development of industrial zones and clusters.*
- *Within the frame of modernisation and development of the transport infrastructure, prefer projects in support of development of tourism.*

3.3.3.2 Promoting Regional Development by Means of the Telecommunications Infrastructure

Like a high quality transport infrastructure, modern telecommunications, too, are a necessary precondition for the inflow of direct foreign investments. From the perspective of the ongoing transformation of global economy and the shift of traditional manufacturing industries to the east, the connection of regions to high-speed telecommunications routes through metropolitan networks is equally important as their connection to highway networks by highway approach roads. The infrastructure does not necessarily have to be built or owned by the public sector. It will suffice to assist private companies by providing public aid up to the amount of the cost gap.

RECOMMENDATION:

-  *Subsidise development of the telecommunications infrastructure based on advanced technology in economically weak or structurally impaired regions – design a programme of support of the construction of the access and metropolitan telecommunications infrastructure within the frame of budgeting prospect of the MI chapter with co-financing from EU funds.*

3.3.3.3 Supporting Regional Development by Pre-investment Development of Sites

Developed lands prepared for investments are of critical importance for the economic growth of regions. The MIT launched a programme in support of development of industrial zones in 1998, focussed on various sectors of the processing industry, development centres and strategic services. Industrial zones are a significant incentive for the inflow of direct foreign investments (see Chapter 3.2.2.1), enabling the growth of SMEs, contributing to the process of restructuring the industry and, last but not least, creating new job opportunities. Given the financial demands of the projects, cooperation with regions, municipalities and the private sector is essential. The extent of involvement of state budget funds is the result of application of the cost gap principle.

Based on the results achieved, the programme may be considered successful. Foreign and local investors will make investments of approximately CZK 120 billion in the supported zones by the end of 2006 and will create about 50 thousand new jobs there.²⁰ The programme helps increase the supply of investment opportunities in economically weak or structurally impaired regions. The regional importance of the programme should be reasonably emphasised by pre-investment development of the area and construction of business facilities sufficiently in advance. To this end it is necessary to allow greater involvement of private capital in the financing of the programme. This, however, is only possible if the principle of risk sharing is defined between the public and private sectors, whether by adjusting the budget rules or by dealing with this issue in the law on PPP.

RECOMMENDATIONS:

-  *Continue subsidising pre-investment development of technology parks and industrial zones in economically weak or structurally impaired regions – amendment to Act No 218/2000 Sb., on budgetary rules; optimise the programme in support of development of industrial zones in the context of the budgeting prospect of the MIT chapter with co-financing from EU funds.*
-  *CzechInvest should better coordinate construction/reconstruction of industrial zones.*

²⁰ Source: CzechInvest.

3.3.3.4 Promoting Regional Development through Cultural Infrastructure; Improving Conditions for Investments and Provisions of Services in the Culture Industry

Cultural infrastructure is a precondition for development of cities and regions, growth of culture tourism, and development of the culture and creative industry. Buildings furnished with technical equipment (projection and sound technology, lighting etc.) are a necessary prerequisite for the distribution of and trade with the products of culture (film, music, theatre, multimedia shows), and also for the development of culture services, the necessity and underestimation of which has been pointed out by the Strategy for Sustainable Development. The culture industry is linked to the development of the creative industry (design, fashion, advertising, multimedia, graphic design etc.). A well functioning culture infrastructure is also an important factor for the inflow of direct, especially foreign investments, as it is an indispensable prerequisite of social stability – it provides opportunities for meaningful use of spare time, social gatherings, and acts as prevention to negative social phenomena. The development of the culture infrastructure would benefit from the cooperation of the private and public sectors.

The culture industry is a progressively developing branch of the service sector, and has a high value added. The greatest potential is in the audio-visual industry and in culture linked to the tourism industry. The Czech Republic has a rich and continual film tradition. In early 1990s, the filmmaking industry was fully privatised, and now its most promising potential is in the rendition of services to foreign producers. Another priority is the stimulation of the development of the culture industry. This means a better use of the cultural heritage, values and architecture in a link with culture tourism. Thanks to their cultural heritage and values, which are the principal attraction for tourists, tourism destinations generate income that has the economic nature of rent. It should be kept in mind in respect of the culture industry that it employs skilled human resources and has no permanent impacts on the environment.

RECOMMENDATIONS:

- *Support regional development by increasing investments in culture infrastructure.*
- *Improve conditions for investments and services in culture industry.*

3.3.4 Protecting Nature, Environment and Cultural Heritage

The environment, nature and cultural heritage comprise the basic national and social values. Their economic significance will steeply increase in the next decades in connection with the boom of tourism. Protection of these values offers a great

potential for future income. Therefore, the Strategy for Economic Growth emphasises protection of natural and cultural heritage already in the period 2005-2013. It should be highlighted that orientation towards sectors with a higher value added is in itself the best guarantee of protection of nature and monuments. In the period in question, the energy and material requirements of generating the GDP will substantially decline. Only manufacturing processes based on the best available technologies friendly to the environment will survive the ongoing restructuring of the industry. At the close of this time period, the world and the Czech Republic as well will see a massive launch of hybrid vehicles. The increment of economic and social demands regarding mobility of people, goods and information will be fully undertaken by electronic data transfer. Growing standard of living will allow an increasing number of people to prefer goods based on alternative manufacturing processes, thus facilitating the shift of the community to sustainable consumption.

3.3.4.1 Providing Investment Sources for the Environment

The monies required for the period 2007 – 2013 amount, in respect of environmental issues, to CZK 400 billion. This amount will be allocated to municipal waste water treatment plants, reduction of industrial pollution, air protection, waste management etc. (for more details with estimated costs, see table 3.3.4.1A).

	2007	2008	2009	2010	Total 2007-2010	2011	2012	2013	Total 2007-2013	Annual average	
										2007-2013	2007-2010
Wastewater management	18.9	17.2	17.2	16.7	70.0	13.0	13.0	13.0	109.0	15.6	17.5
Waste management	8.4	8.4	8.4	8.4	33.6	8.4	8.4	8.4	58.8	8.4	8.4
Air protection	10	10	10	10	40.0	10	10	10	70.0	10.0	10.0
Treatment of past env. burden	1	1	1	1	4.0	1	1	1	7.0	1.0	1.0
Renewable sources and savings of energy	3.2	1.7	2.5	2.9	10.3	2.9	2.9	2.9	19.0	2.7	2.6
Reducing industrial pollution	17.0	17.0	17.0	17.0	68.0	17.0	17.0	17.0	119.0	17.0	17.0
Noise pollution	0.001	0.001	0.001	0.001	0.004	0.001	0.001	0.001	0.007	0.001	0.001
EIA and IPPC	0.02	0.02	0.02	0.02	0.08	0.02	0.02	0.02	0.14	0.02	0.02
Environmental protection and biodiversity	3.9	3.9	3.9	3.9	15.6	3.9	3.9	3.9	27.3	3.9	3.9
Radiation protection	0.06	0.06	0.06	0.06	0.24	0.06	0.06	0.06	0.42	0.06	0.06
Environmental learning	0.1	0.1	0.1	0.1	0.4	0.1	0.1	0.1	0.7	0.1	0.1
Others (e.g. flood-protection measures)	0.3	0.3	0.3	0.3	1.2	0.3	0.3	0.3	2.1	0.3	0.3
TOTAL	62.88	59.68	60.48	60.38	243.42	56.68	56.68	56.68	413.47	59.07	60.86

Table 3.3.4.1A Requirements for co-financing by the Structural Funds for environmental issues for 2007 – 2013 (source: MEnv)

It became clear between 2000 and 2005 that the Czech Republic has a sufficient absorption capacity for funding provided from the EU budget, and we

therefore assume that in the following years, too, there will be a sufficient number of projects using EU funds. A portion of the expenditures stated in the table above will be covered by EU funds, which will constitute part of the national budget from 1 January 2007 and are already identified as such. An important factor while encouraging investments into environmental protection is also the fact that they stimulate creation of jobs and development of business activities in a sector that is very promising, technologically developed, and has a considerable pro-export potential. Building a high-quality infrastructure (especially in water management) motivates regional development and thus also new jobs and development of business. (See also table 3.3.4.1B).

Activity (in bln CZK)	2007	2008	2009	2010	Total 2007- 2010	2011	2012	2013	Total 2007- 2013	Annual average	
										2007- 2013	2007- 2010
Cohesion for growth and employment (1B) - MEnv	62.9	59.7	60.5	60.4	243.1	56.7	56.7	56.7	413.1	59.0	60.8
Eligible expenditure	60.4	57.3	58.1	58.0	233.7	54.4	54.4	54.4	396.9	56.7	58.4
EU co-finances 70% of eligible expenditures	42.3	40.1	40.6	40.6	163.6	38.1	38.1	38.1	277.8	39.7	40.9
National financing	20.6	19.6	19.8	19.8	79.5	18.6	18.6	18.6	135.2	19.3	19.9
Of that:											
Own funding	3.5	3.5	3.5	3.5	14.0	3.5	3.5	3.5	24.5	3.5	3.5
MAgr aid	1.0	1.0	1.0	1.0	4.0	1.0	1.0	1.0	7.0	1.0	1.0
MEnv aid	0.25	0.25	0.25	0.25	1.00	0.25	0.25	0.25	1.75	0.25	0.25
SFZP aid	1.0	1.0	1.0	1.0	4.0	1.0	1.0	1.0	7.0	1.0	1.0
Not covered, to be financed from public budgets (national budget, budgets of regions that are not applicants)	14.9	13.8	14.1	14.1	56.8	12.8	12.8	12.8	95.4	13.6	14.2

Table 3.3.4.1B Structure of the requirements for national financing of environmental issues for 2007-2013 (source: MEnv)

RECOMMENDATION:

- 
Provide investment funding for environmental issues.

3.3.4.2 Reducing Extensive Urbanisation and Line Barrierisation of the Territory of the Czech Republic

Rather large areas of farmland near the limits of municipalities were taken in the past for mining, or for building shopping or entertainment centres, industrial zones, housing projects etc. The taking of farmland for purposes other than farming is regulated by the act on the protection of farmlands, and is subject to a fee depending on the quality of soil and other factor (typically up to CZK 10 per m²). The low amount of the fees is a demotivating factor for regeneration of areas in the inner parts of municipalities. The fees inadequately reflect to public benefit of the purpose of the taking of farmland; for example, the rate of the fee for housing construction is the same as the rates for shopping centres. The next stage of restructuring of the Czech economy will require an amendment to the applicable law, which will increase the absolute cap on the amount of the fees and their

differentiation according to the type of investment. Higher revenues from this source should be used for regeneration of sites in the same area.

The transport infrastructure and the associated traffic form a divide in the landscape and bar the migration of wildlife. In particular roads with intensive traffic divide landscape into isolated locations where endangered species may rapidly extinguish. It is therefore necessary to minimise the environmental impact of newly built transport infrastructure and the related traffic. Measures should be taken on existing roads to enable the passage of wildlife.

RECOMMENDATIONS:

- *Increase fees the use of farmland for other purposes, and differentiate their amount based on the type of investment; establish a link between investment and regeneration of the area – amendment to Act No 334/1992 Sb., on the protection of farmlands.*
-  *Intensify support of revitalisation of disused urban areas – amendment to Act No 218/2000 Sb., on budgetary rules; optimise the programme in support of regeneration of industrial zones in the context of the budgeting prospect of the MIT chapter and the investment prospect of municipalities including the increased revenue from the taking of farmland for non-farming purposes, with co-financing from EU funds.*
-  *Appropriately handle the crossing of transport routes and local systems of ecological stability in respect of existing and future routes – in the context of the budgeting prospect of SFDI with co-financing from EU funds.*

3.3.4.3 Shifting Some of the Transit and Long-distance Transport of Goods from Road and Air Transport Ways to Railway and Water Carriage Ways; Increasing the Ratio of Public Transport of Persons to Individual Transport of Persons

The increasing freight transport demands are the result of globalisation effects, which increase the distance between the points of production and consumption. In an effort to minimise transport costs, carriers prefer logistic systems that make use of the speed and reliability of road transport to railway or water carriage. The key to halting the decline of environmentally more friendly means of carriage, namely railway and water carriage, is to harmonise the conditions in the transport market, especially in respect of access to the transport ways. This can be achieved by imposing an adequate fee on the traffic on roads (differentiated road tax, excise taxes, toll). However, this should be carried out in European context. In

other words, the amount of fees and taxes should be adequate to those in place in the neighbouring countries.

The restrictive policy proposed in the preceding paragraph is complemented by intelligent transport systems controlling transport by telematics.²¹ These systems are capable of offering, in real time, more favourable (in terms of pricing or timing) alternatives to transport of goods or persons, and can thus cause carriers to decide to use railway transport. The tolling infrastructure presents an ideal opportunity for development of telematics.

The renewed use of railway freight carriage and transport of persons may be facilitated by building new high-speed tracks, which would increase attractiveness of the Czech Republic. This project would have international ramifications and as such could receive substantial assistance from EU funds.

As a shift of some of the freight from transit and long-distance road transport back to railways is inevitable, the state should support the establishment of freight terminals that would be open to all carriers. Investments with a public incentive scheme focussed on reloading systems could play an important role in increasing the capacity of such terminals, and particularly so in the case of inter-modal terminals. The expected benefits of such support include optimisation of distribution processes and concentration of transport flows in freight carriage, creation of conditions for a more extensive use of railway and water carriage, and improvement of logistic conditions for SMEs in the sectors of industry, commerce and services. Partnership of the public and private sectors will enable the creation of a product that will not only reduce the risk of congestions, but will also help increase competitiveness of local industry. While selecting suitable locations for installation of such terminals, it is necessary to respect the sources and purposes of transport, layout of industrial zones and possibility of access to transport routes, in particular railways.

The role of the public sector is irreplaceable in providing direct financial support to public transport of persons. Foreign public transport systems, too, could not exist without public support in the form of direct payments. The state and regions, however, may achieve substantial savings if they work closely together, and yet may provide public service adequate to the 21st century. In this case, the easiest way would be to optimise the system by regulating the supply through public assistance to private operators to acquire vehicles and by providing compensation for demonstrable loss incurred due to the obligation to provide public service.

²¹ Telematics is a combination of telecommunication and information technologies.

RECOMMENDATIONS:

- *Harmonise prices for the use of different types of transport routes in line with the applicable EU policies.*
-  *Encourage combined transport – increase the share of railway transport in logistic chains.*
-  *Introduce telematic systems of transport control and regulation.*
-  *Create conditions for development of inter-modal systems of freight carriage – a programme in support of combined transport and public logistic centres in the context of the budgeting prospect of SFDI with co-financing from EU funds.*
-  *Complete railway corridors, begin modernisation of railway tracks affected by obligations under international treaties, optimise the Elbe river water way in accordance with the National Transport Policy – in the context of the budgeting prospect of SFDI with co-financing from EU funds.*
-  *Provide for territorial stabilisation of high-speed railway tracks and commence preparations for their construction – in the framework of the European Cohesion Fund.*
-  *Optimise conditions for development of public passenger transport – a programme in support of public passenger transport and integrated transport systems (see also Chapter 3.3.3.2) in the context of the budgeting prospect of SFDI with co-financing from EU funds.*
-  *Support renovation of vehicle fleets in public passenger transport.*

3.3.4.4 Increasing the Share of Renewable Resources in Generation of Electricity and Heat

The Economic Growth Strategy of the Czech Republic is consistent with the National Energy Policy. The adopted energy scenario reflects the resource capacity of the country and the needs of its economy, and creates space for purchases of renewable sources of energy (see charts 3.3.4.4A and 3.3.4.4B).²²

²² The energy scenario of the MIT indicates that the use of primary energy resources will, by 2030, little change in terms of amounts, but will change substantially in terms of their structure. The consumption and extraction of lignite will decrease by approximately 40% by 2030. Still, lignite will remain the principal primary source of energy. The black coal market will decline by more than 40% by 2030, and increasing quantities of black coal will be imported. Petroleum use will drop by 50%. Increased use will apply to natural gas (2030/2000 index = 1.2), nuclear fuel (2030/2000 index = 2.5) and renewable resources in

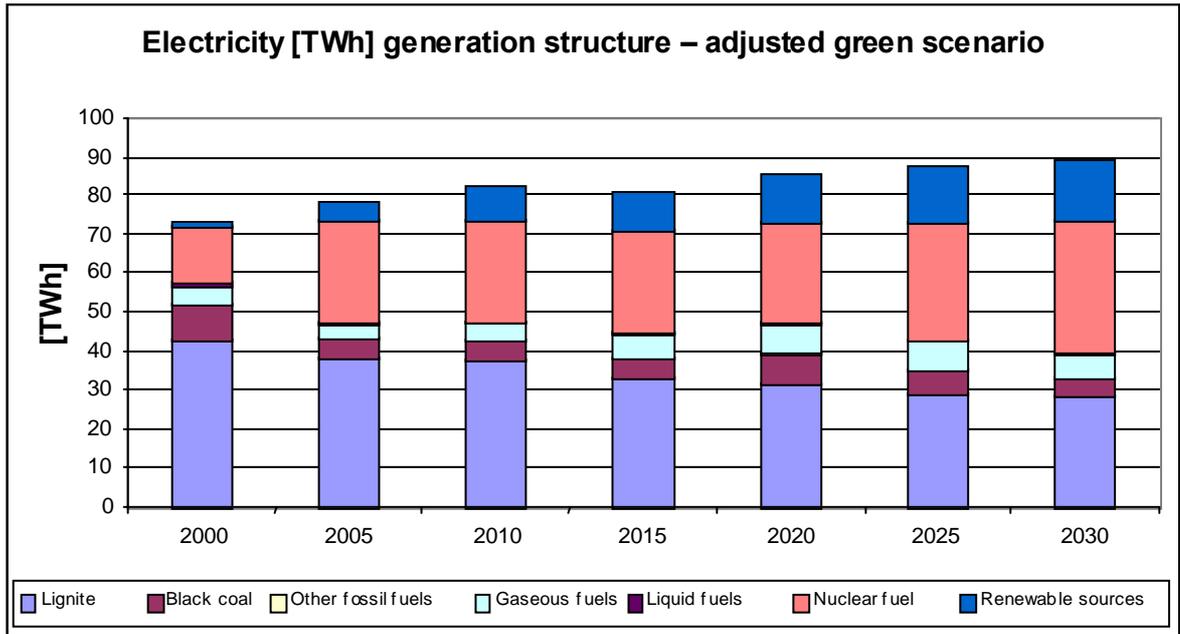


Chart 3.3.4.4A Structure of electricity generation in the Czech Rep. by 2030 (source: MIT)

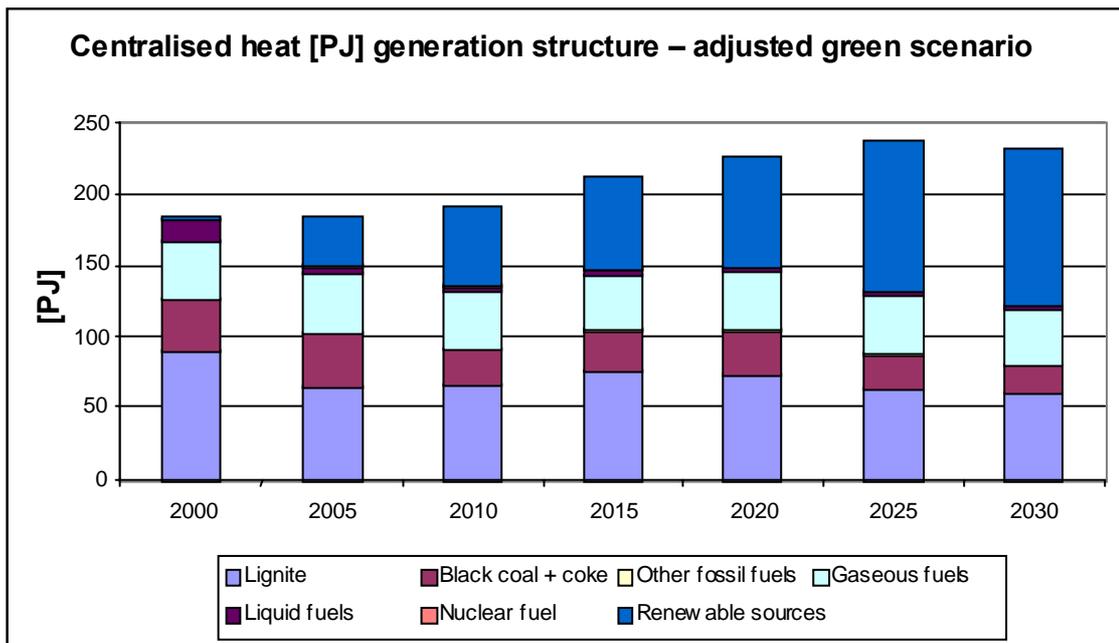


Chart 3.3.4.4B Structure of centralised heat generation in the Czech Rep. by 2030 (source: MIT)

particular (2030/2000 index = 6.4). Imports of energy resources will substantially exceed exports – energy exports will be nearly double by 2030. Valuation of energy inputs will considerably improve. The energy requirements of generating the GDP in the period 2030/2000 will drop below 40% of the current amounts.

This Strategy will contribute to the implementation of the adopted law on promotion of use of renewable resources. The law draws on European experience and foresees likely future developments in the field of renewable resources in the European Union. It combines a well-tried system of fixed purchase prices (Czech Republic, Germany, Austria, France), where the operator of the distribution system is obligated to purchase all “green” power at a regulated price, with the market system of “green” bonuses (Spain). Use of renewable resources should be supported not only in power generation but to a reasonable extent also in generation of heat.

RECOMMENDATION:

-  *Support generation of electricity and heat from renewable resources – act on promotion of use of renewable resources.*

3.3.4.5 Increasing the Share of Settlements Connected to Sewage Systems with Wastewater Treatment

The Economic Growth Strategy of the Czech Republic is also consistent with the Water Management Policy Concept of the MAg²³. However, the sector of water distribution and sewage systems still needs to resolve the issue of write-off policy, which is closely linked to subsidies provided by the state. The write-offs of the original acquisition price of property authorised for use 10 years ago, or even before 1989, now utterly fail to meet the existing pricing arrangements due to the high inflation rate of the 1990s. A similar effect is achieved by state subsidies, which are not counted against the acquisition cost of property and, by extension, against the prices of water and sewerage. As a result, there has been a lack of funding for renovation of this property. This situation, which would result in continuous demand for financial assistance of the state in the future, is no longer sustainable. It would therefore be appropriate to modify the rules for calculation of regulated prices, and in particular to substitute the link to tax write-offs by a link to accounting write-offs and to set the accounting write-offs at a level adequate for the generation of a fund for renovation of property.

²³ In terms of drinking-grade water supply, the situation in the Czech Republic is comparable with that in the most developed countries of the European Union. The percentage of population connected to water distribution reached 89.8% in 2002. The principal goal in this area is to increase this rate to 91% by the end of 2010. The main aim in the area of wastewater management is to build wastewater treatment plants, sewage systems and improve wastewater treatment technologies in all conurbations with equivalent population in excess of 2000.

RECOMMENDATION:

- *Modify the rules of write-off policy in the context of setting a regulated price for water and drainage – amendment to the Price Bulletin of the Ministry of Finance.*

3.3.4.6 Retaining the Agricultural Character of Rural Areas

The terrain in the Czech Republic is prevalently mountainous, piedmont and hilly, and natural conditions do not allow any intensive and competitive agricultural production. Nonetheless, agricultural activities significantly contribute to cultivation of rural areas. From this point of view, agriculture subsidies in locations that are less favourable in terms of production are a necessary precondition for preserving the natural heritage. Support may be provided as part of agro-environmental programmes aimed at, for example, afforestation of less fertile lands or planting fast-growing trees, but only to a reasonable extent so as not to jeopardise the principal objective – preserving the present character of Czech landscape.

RECOMMENDATION:

-  *Continue providing subsidies for development of rural areas and poly-functional agriculture; accentuate agro-environmental and forestry-environmental measures, payments in the framework of the Natura 2000 scheme and payments related to Directive 2000/60/EC – in the context of the budgeting prospect of the MAgri chapter with co-financing from EU funds.*

3.3.4.7 Preserving and Enriching Cultural Heritage

The importance of architectural monuments and other forms of cultural heritage for the development of tourism and for strengthening the cultural awareness of the local population goes without saying, and so does the chronic lack of funds for their maintenance, whether owned by the state, municipalities or private persons. A more effective use of the potential of cultural heritage for the purpose of increasing the economic and social quality of regions is conditional on support given to inter-regional mobility of human resources, while respecting the emergence of new business activities in the field of cultural heritage, and systemic cooperation of culture institutions with schools and their effective involvement in educational programmes. The so generated added value will contribute to the development of knowledge-based economy and human resources. The use of resources of cultural heritage will form a part of new values that will be created, among others, through the use of information technologies.

RECOMMENDATIONS:

- *Provide higher intensity of support to preserving cultural heritage.*

- *Support development of contemporary creative arts.*

3.3.5 Maintaining Competitive Production and Operating Expenses; Optimising the Sectoral Structure of Comparative Pricing Advantages

From corporate point of view, the price of infrastructure is substantially lower in the Czech Republic than in the EU-15 countries. This is true in respect of all services provided, except certain telecommunication services. This fact makes it possible for the Czech processing industry to produce at a substantially lower cost and, as a result, successfully place its products on international markets. The Strategy faces a complex task of how the comparative pricing advantages of the Czech Republic after its accession to the EU-25 could be retained and accommodated to future needs.

3.3.5.1 Harmonising the Level of Externalities in Telecommunications, Transport, Energy Sector, Water Management and in the Real Estate Market

Any decrease or increase of taxes, levies and charges, as well as any direct or indirect forms of financial assistance proposed in the preceding chapters should be exactly in an amount ensuring that they:

- generate the required relative comparative advantages of the relevant industrial sectors in the best interests of restructuring the economy;
- internalise external costs in the interest of ecologisation of industry, construction, transport and agriculture, and in the interest of protection of human health and the environment;
- do not undermine competitiveness of Czech undertakings in foreign markets;
- are fiscally neutral to public budgets while preserving the composed tax rate;

It is obvious that some compete with one another, and the resulting tax rates and intensities of public aid should be an acceptable trade-off based on a detailed analysis of impacts. The important fact is that this goal is attainable.

RECOMMENDATION:

- *Harmonise the amount of proposed taxes, charges and levies, or tax benefits and direct assistance, from the perspective of households, undertakings, non-profit organisations and public budgets – after a detailed analysis of fiscal impacts.*

3.3.5.2 Proceeding with Privatisation, Demonopolisation and Liberalisation of Services in Telecommunications, Energy Sector, Transport and Water Management

Privatisation, demonopolisation and liberalisation of infrastructure sectors are not easy, as these sectors involve natural monopolies that have to be regulated to a certain extent. The aim is to set the regulatory rules so that they would cultivate, not stifle the market. A regulatory environment that would be of high quality in terms of legislative and institutional conditions is a prerequisite for privatisation of individual national operators. This system, too, needs a motivating factor, both for the operators and the regulator.

RECOMMENDATIONS:

- *Optimise the regulatory legislation and the work of regulatory authorities – amendments to applicable laws and other regulations in individual sectors.*
- *Set up a regulatory authority for water management.*
- *Proceed with privatisation of state-owned interests in the operators of those infrastructure sectors where appropriate regulatory framework exists.*

3.3.5.3 Achieving Savings of Investments

The public sector does not verify the cost requirements of the construction of new roads and highways, railway corridors and other transport-related structures. The same is true about water management structures. The performance of investor and engineering activities in the course of preparation and implementation of public orders is not satisfactory. Especially at the stage of pre-project and project preparation, tender procedure and supervision over implementation of projects, public investors have much to improve. Unlike in the United Kingdom or France, the cost requirements are not the subject of opposition procedure in the Czech Republic. Representatives of public institutions are not motivated to comply with the budget of the project, and project designers and contractors are not motivated to make savings. In addition, conflicts of interests still exist. This facilitates clientelism and other manifestations of grey economy.

RECOMMENDATIONS:

- *Rehabilitate the conflict of interests law.*
- *Optimise preparation and implementation of infrastructure construction projects by public investors – amendment to the public procurement act, decree on project documentation for construction projects, and act on authorised persons.*

3.4 Human Resource Development – Learning and Employment

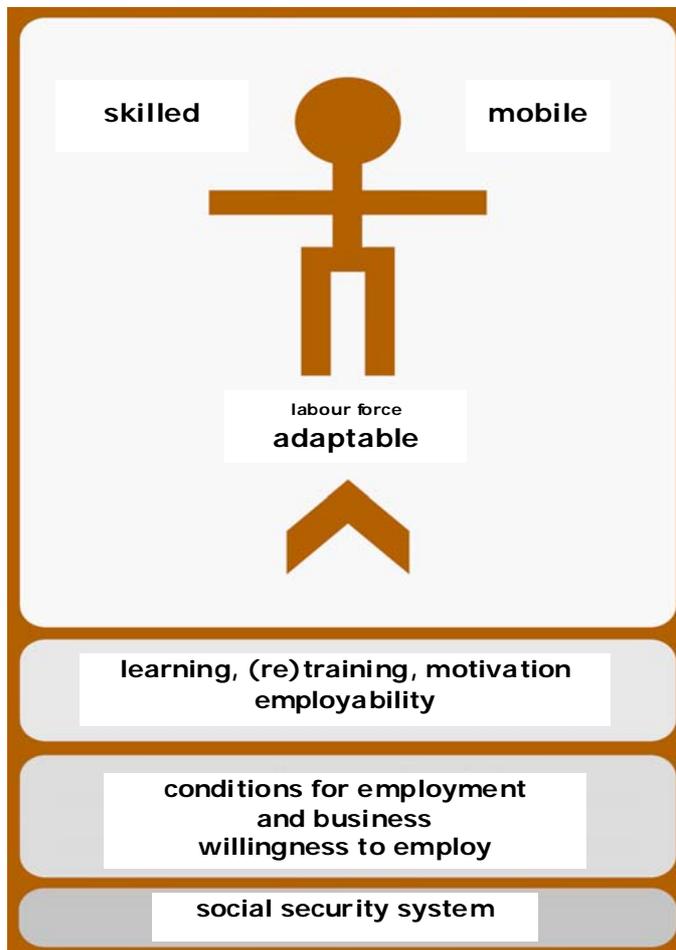


Chart No 1: System of human resource development and labour force

The Czech Republic will be able to provide its long-term economic growth only if it has a sufficient supply of educated, trained, skilled and adaptable people. This is particularly true about occupations that are most in demand. Another condition is for the labour force to be sufficiently mobile.

Success in the labour market depends primarily on education, skills, and the willingness to further learn and/or retrain. Also important are the conditions for employment and business, which affect the supply of available jobs, and the system of social security, the financing of which affects the cost of labour force.

The state therefore should provide (institutional, legislative and social) conditions such that people would have a chance to be as successful in the labour market as possible. This will further improve competitiveness of Czech labour force in the European Union and beyond. Work motivation is also affected by the system of social security, which will provide every individual with a clearly specified level of

assurance in difficult situations, such as the loss of opportunity to make earnings, and thus the loss of regular income.

The cost of any labour force is defined by the relation of demand and supply – and in particular its quantity and quality. Besides learning, which is of key importance for competitiveness, this chapter will also deal with the issue of quantity and availability of labour force, chiefly with regard to its mobility and access to the labour market.

Knowledge and skills directly affect work productivity. The higher the productivity, the higher (as a rule) the wages and salaries.²⁴ The quality and level of education significantly contributes to the growth of the living standard of each of us.

Competitiveness is also dramatically affected by the personal income tax and payments to the social security system.

The proposed priorities and solutions are formulated primarily with regard to determining the elements of competitiveness of labour force, and also with regard to determining the objectives and formulating the priorities for disbursements from the European Social Fund in the next budgetary term of the EU (2007-2013).

3.4.1 Increasing Flexibility of the Education System

The most important factor affecting human resource development is learning, provided by the education system. In order to maintain a high quality and flexibility of the education system, it is necessary to ensure growth of public investment to education, which in 2004 amounted to approximately 4.29% of the GDP,²⁵ significantly less than in most developed countries. It is also necessary to develop other forms of financing, e.g. from the Structural Funds and based on the public and private partnership.²⁶ Success can only be attained if monies are designated for specific purposes and instruments are created to ensure their effective use. It is equally important to ensure that the education system will continuously improve its ability to positively motivate children, young persons and students for continued learning by adapting teaching procedures and methods and by emphasising other factors. This will create conditions necessary for their continued professional development, adaptability and mobility.

²⁴ In November 2004, the Research Institute for Labour and Social Affairs carried out a purely economic study of the cost of labour for the Council of Economic and Social Agreement. This part of the Strategy should thus be perceived in the context of the study.

²⁵ MF and CSO, 2005.

²⁶ See also recommendation of the OECD and European Commission, Growth and jobs, 2005.

In the initial learning system, the primary aim is to carry out a curricular reform, which has already been launched. To be successful, the reform will require a massive and universal support of schools and teachers, especially in the system of continued learning of educators. It will however require additional related changes, such as adequate systems of evaluation of pupils and schools, consultancy, and support for pupils.

3.4.1.1 Opening the Education System

The education system is strongly selective. Selection affects children from the beginning of primary education. It is in childhood when a loss is most dangerous, and despite the best possible systems of continued learning, retraining etc. an individual will hardly be successful in the labour market.

Doing away with selectiveness of the Czech education system is one of the priorities of the current "education reform". It is necessary to start at an early age of the child. Preparatory classes and kindergartens have demonstrated how effective the pre-school preparation of children from disadvantaged environment is; however, the system lacks instruments motivating the parents of these children to use the offer of such pre-school preparation.

Czech primary schools successfully provide education to children that may draw on the educational background of their families. A child whose parents are unable to help her with homework is considerably threatened by failure. Elementary schools are still unable to educate children with a health handicap.

The integrating role of schools is strengthened by the ongoing curricular reform, increase in the hourly subsidy, reduction of the number of children in classes, offer of all-day programmes at schools, increasing numbers of assistant teachers etc. Another relevant factor is the role of the teacher, which may be influenced by the level of educational qualification and compensation for work.

Dramatic selection occurs when children reach the age of eleven years. Some of them leave to study at grammar schools. Levelling the conditions of learning at the second level of primary schools and at grammar schools only diminishes this selection, but does not eliminate it.

There still persists insufficient capacity of grammar schools, which provide the best preparation for tertiary education. In this respect it is regions that should accommodate the supply of education to the fact that more than one half of the nineteen year olds currently embarks on tertiary education. Without expanding the offer of comprehensive secondary education, any efforts whatsoever to increase the number of successful graduates of universities would be pointless.

A low-income family with a successful student who is granted scholarship is no longer eligible for social allowance, as the amount of the scholarship counts as part of the family's income. As the income increases, the family ceases to be eligible for allowances. This presents an obstacle to the state's endeavour to increase the standard of education, and the students' motivation declines. It is therefore necessary to harmonise the national system of social protection of students with the possibilities of obtaining scholarship.

In order to preserve equal access to education and to ensure that higher education is also available to low-income groups of population, it is necessary to introduce a system of state-funded social scholarships. In addition, it will be necessary to create a functioning system of loans to fund the cost of studies.

RECOMMENDATIONS:

-  *Facilitate access of groups threatened by social exclusion to vocational training and university education – by increasing the quality of primary and secondary education and by introducing social scholarships financed by the state. These scholarships would be harmonised with the system of social support.*
- *Support loans for the costs associated with studies.*
- *Harmonise the system of scholarships with the system of social allowances. Ensure that low-income families do not cease to be eligible for social allowances guaranteed by the state as a result of the fact that scholarships count as part of the family's incomes.*
-  *Improve involvement of disadvantaged schoolchildren and students – by supporting the development of early care services and by introducing motivating elements into instruction, educational consultancy and out-of-school activities of children and the youth.*
-  *Support programmes that will help reduce spontaneous selectivity of the Czech educational system.*
-  *Increase the offer of comprehensive secondary education and study programmes of secondary vocational schools.*

3.4.1.2 Strengthening the Link between the Supply of and Demand for Education in the Labour Market

The educational system will never fully meet the desires of employers, who seek to satisfy their short- or medium-term needs while hiring employees. On the other hand, the educational system is set for a longer time span and provides a knowledge basis, widely applicable skills, and thus allows adaptation to the permanent changes of the economy and society. Educational programmes should

reasonably reflect the changing sectoral structure in regions and in the whole country and the trends of social development. The ongoing curricular reform introduces, inter alia, the possibility of school educational programmes. These can be prepared on a modular basis, and the requirements of regions and employers can be better reflected in their separate modules. This is a great opportunity for the Czech educational system, but nonetheless the reform must be consistently implemented and supported by sufficient funding.

Support should also be provided to the system of consultation services at schools and school consultation facilities. These services are designed to help in deciding about the choice of and modifications to the educational and future professional career of children, pupils and students. They represent an instrument supporting the process of acquiring and developing knowledge, attitudes and value orientation. They also play an important role in preventing educational failures and premature departure from the educational process. They also involve expert assistance in integration of individuals with special educational needs (including socially disadvantaged children pupils and students and children of immigrants), who belong to the most endangered groups in terms of future placement in the labour market. Effective coordination of the system of consultation services in the school system with information and consultation services provided at employment offices may significantly contribute to reduction of unemployment among school-leavers.

Investments into the educational system may be increased at higher levels and in adult learning by promoting other forms of financing based on the principle of public and private partnership, by funding from the Structural Funds, or on the basis of the principal of cost sharing between the public and private sectors.

One of the key elements in forming an innovative environment involves graduates of technical and natural-science branches,²⁷ which are much in demand by Czech employers. The higher education system has shifted to a structured three-level model that will support the horizontal and vertical permeability of higher education. The shift to structured studies, one of the priorities of the Bologna Process, has a potential to contribute to satisfying the demand of employers for students of natural science and technical branches (for details see Chapter 3.5.3.).

RECOMMENDATIONS:

-  *Create suitable conditions for career consultation services at schools and school consultation facilities. Support effective coordination of career consultation*

²⁷ MIT: Policy of Innovation for Industry and Business for 2005-2008, 2004.

services within the school system with information and consultation services provided at employment offices.

- *Progressively adopt measures designed to promote cost sharing between the public and private sectors – based on the PPP principle.*
- *Increase the number of graduates of natural science and technical studies, subject to maintaining and increasing their quality by providing support and accelerating the shift of the higher education system to the structured model.*

3.4.1.3 Extending Access to Vocational Training and University Education

The educational structure of the Czech adult population is, compared with other countries, characterised by a high percentage of persons with secondary GCE or vocational training (more than 90% of adults between 25 and 64 years of age have at least secondary education). On the other hand, the percentage of people with higher and tertiary education is very low.

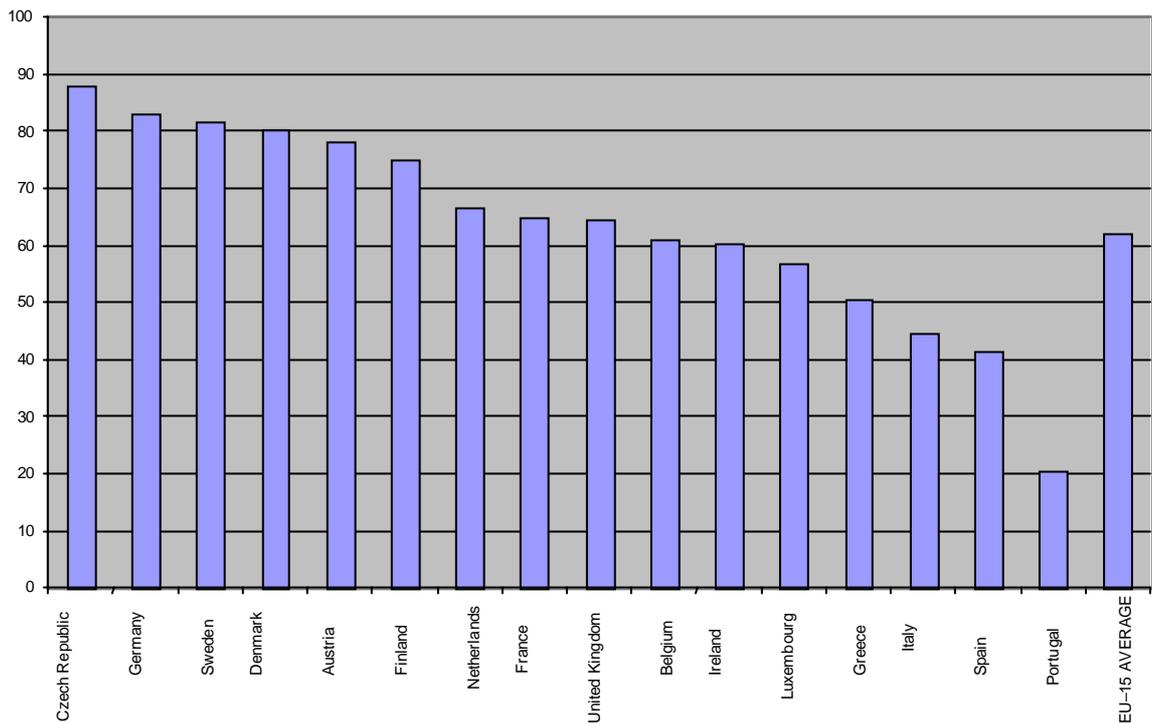


Chart No 2: Share of adults between 25 and 64 years with secondary education²⁸

This situation was satisfactory at the time when the Czech economy was oriented at less demanding sectors and its labour market was based on the low cost

²⁸ OECD: Education at a Glance, 2002.

of work and relatively well skilled labour force. However, this cannot be sufficient if the Czech Republic intends to become a country with highly skilled labour force, i.e. if it desires to attract investments in production processes with a higher value added, services and research and development.

Czech economy therefore needs a higher level of education, especially vocational training and university education. Over the last 15 years, the number of students admitted to universities has doubled.²⁹ The share of graduates with tertiary (higher vocational or university) education in overall population is still very low, and amounts to just 12% in the 25-34 years of age group.³⁰ This is due to the relatively high number of those who do not complete their studies. A negative role here also plays the insufficient offer of shorter and more practically oriented forms of tertiary education.

The objectives in this area include not only the nearly completed efforts towards a quantitative upsurge of higher education but also, to a much greater extent, further segmentation of the various levels and branches of tertiary education, more focused orientation on practical application and improvement in the quality of the study programmes. It is also necessary to facilitate access to education to the youngest as well as to the middle and older generations.

Those interested in studying choose educational institutions and branches of studies and subsequently make investments in education without having sufficient and comprehensive information about educational opportunities, their quality and demands, ability of placement in the labour market etc. This needs to be changed. The supply of information should also contain the results of evaluation of educational institutions as to the quality of teaching at individual schools or the results of comparative national and international examinations and surveys.

RECOMMENDATIONS:

-  *Continue expanding more practically oriented vocational training and bachelor's studies.*
- *Consistently apply sanctions for exceeded standard term of study at public universities.*
-  *Provide availability and distribution of key information in comprehensible form, mainly information regarding educational programmes, opportunities,*

²⁹ Institute for Information on Education: Yearbook on Developments in Education in the Czech Republic 1989/90-2002/03.

³⁰ OECD: Education at a Glance, 2004.

unemployment, placement in the labour market and wages of graduates, broken down by region, and information about services provided by schools, such as meals, accommodation, involvement in international cooperation etc.

3.4.1.4 Supporting Development of Transferable Skills of Graduates

Teaching must place increasing emphasis on the standard of key competences. Czech 15-year-old students have above-average literacy in natural sciences and mathematics. Their ability to make use of and work with knowledge – their functional literacy – is safely at the level of OECD average, but is imbalanced. It is necessary to continue suppressing the teaching style which concentrates on acquiring a huge amount of facts and little focuses on acquiring a higher level of key capabilities and skills. It is these capabilities and skills that allow graduates to better orient themselves in the information society, grasp the basic principles of analysis and evaluation of new situation, and faster accommodation to the needs of the labour market. The quality of primary and secondary school-leavers varies considerably. Improvement will be achieved through nationwide comparative tests.

European integration and the ensuing opening of economy considerably increase the demands regarding language knowledge. Nonetheless, 28% of the present young population between 20 and 29 years of age have command of no foreign language, nearly 50% know only one foreign language, and only 28% speak two or more foreign languages.

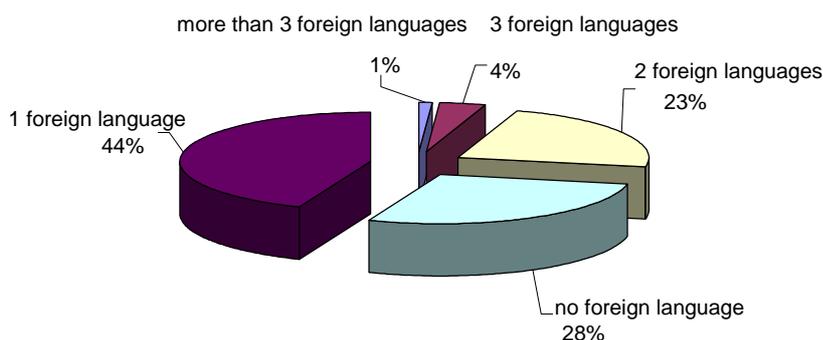


Chart No 3: Language knowledge of population between 20 and 29 years of age³¹

³¹ National Training Fund, MLSA: Human Resources in the Czech Republic, 2003.

With the increasing variability of teaching, the demands concerning the ICT infrastructure will increase as well. The current connection speed of schools planned at 256 kb/s will be insufficient (see objective under 3.3.1.2 – increasing availability of broadband connection to the Internet). Work of teachers and graduates with information and communication technologies should improve as well.

Increasing the language and information literacy is one of the principal prerequisites for placement of school-leavers in the labour market. With regard to university graduates emphasis should be placed on language knowledge, managerial skills, teamwork and gaining of practical experience.

RECOMMENDATIONS:

-  *Increase functional literacy of schoolchildren by changing teaching methods – implementation of the curricular reform and using the freedom provided by the relation between framework educational programmes and school educational programmes, in order to develop plurality of teaching forms while introducing an evaluation system that will provide international comparison.*
-  *Modernise school equipment and improve computer skills and information literacy of teachers and students. Equip schools with ICT, basic applications and programmes and infrastructure, and improve work with information.*
-  *Support cooperation of employers with secondary schools and universities in the field of practical training of students within the framework of instruction – involvement of employers in the drafting of school teaching programmes, instruction and practical training.*
-  *Support the introduction of project management of instruction focused on acquisition of presentational and managerial skills, teamwork, and knowledge of launching new business.*
-  *Expand teaching of foreign languages, primarily English, and instruction in English – draft a National Plan for Foreign Language Teaching, consistently implement programmes in support of increasing the language skills of teachers, and support of creation of foreign language instruction programmes.*
-  *Support effective involvement of the Czech Republic in the Integrated Action Programme for Life-Long Learning.³²*

³² The Programme has been proposed at the EU level. It focuses on promotion of language learning, increase of mobility and other aspects of training.

-  *Increase the amount of programmes in English and teaching programmes for children and young people in the public media.*

3.4.2 Increasing the Level of Education of Older Generation

An important target group in the sector of education and training is comprised of people who had worse conditions for learning before 1989 and had to adapt themselves to new socio-economic setting. This applies particularly to people above 45 years of age, whether employed or not. It is necessary to develop a system of continued learning, including training in businesses, and acknowledge practical experience acquired in employment.

3.4.2.1 Removing Barriers to Access of Economically Active Persons to Education

The most serious obstacles preventing the access of economically active persons to education include problems with harmonising family life with work and learning, the high indirect costs of learning (lost earning during studies), and inadequate access of households to the Internet. Language knowledge and computer skills are one of the major weaknesses of this age group. In addition, the teaching materials offered by schools and methodology of instruction are not sufficiently accommodated to their way of learning.

Initial learning is not followed by any other system of continued learning. Implementation of such system will require changes to be carried out in the traditional educational system and in initial learning, and creation of many various opportunities for continued learning with a view to attaining, increasing or changing qualifications. This particularly applies to endangered groups of population (unskilled, elderly or unemployed persons). A more effective interrelation of these elements will be provided by the National System of Qualifications, which combines the National System of Occupations with branches of education.

Operators of secondary schools will need to prepare for a significant decline in the number of children leaving primary schools. This, however, should not result in blanket closings of secondary schools. However, they should more focus on education of adults in the future. The Ministry of Education, Youth and Sports together with operators of schools should prepare transformation programmes that will allow them to become, for example, centres for retraining and continued learning, preferably with the use of monies from the EU Structural Funds.

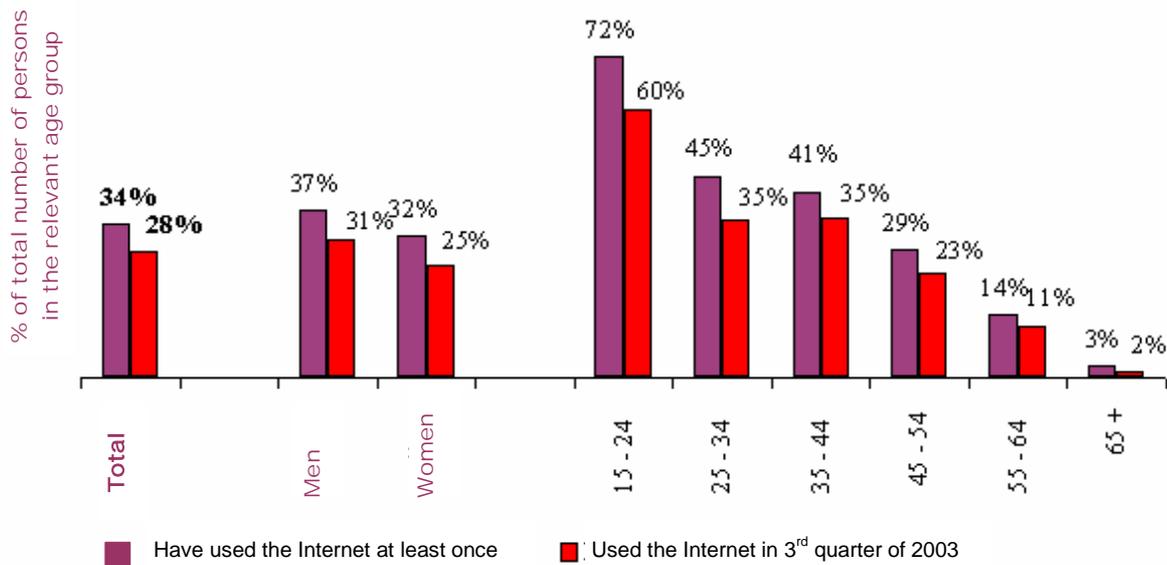


Chart No 4: Internet use by individual in the Czech Republic (by gender and age)³³

RECOMMENDATIONS:

- 

Expand the offer of programmes of continued professional learning, with an emphasis on language skills and ICT literacy, for the age group above 45 years. The form of instruction and ancillary services should help harmonise family life with work and learning. Continued learning programmes should be accompanied by the service of care for seniors (or children in case of younger population).
- Reduce indirect costs related to learning by introducing a system of acknowledging informal education – promulgate bill on verification and recognition of continued learning attainments, and its implementation.*
- 

Improve the teaching skills of trainers of adults by supporting branches of studies focused on methodology of adult teaching.
- 

Expand educational services offered by schools to also include training and retraining of adults – set up a network of schools supporting continued learning.
- Interconnect the systems of initial and continued learning by finalising the National System of Qualifications.*

³³ CSO: Survey on use of ICT by households and individuals, 2003.

3.4.2.2 Encouraging Continued Learning and Human Resource Management in Companies

Training and care of employees has a beneficial effect on work productivity, and thus also on competitiveness of undertakings. It is therefore necessary to encourage the use of human resource management in undertakings.

Many people acquire education in a free market, which is characterised by differences in quality. The education market is saturated, and does not use any internationally recognised quality standard.

Corporate practice indicates that dominant employee perquisites include “miscellaneous financial consideration”, the cost of which is not used in the computation of health insurance and social security payments for employees (e.g. life insurance, pension supplemental insurance, meal vouchers). Training of employees supported by employers should be advantaged in the context of perquisites.

While developing the system of continued learning, support should be provided to schools, other providers of training (employers), and also to those being trained. The demand for continued education should be encouraged by means of co-financing with the involvement of the national budget and other public budgets, contributions from employers, and payments by those being trained.

RECOMMENDATIONS:

-  *Continued support for the application of the internationally recognised human resource management system Investors in People.*
-  *Support introduction of a quality standard in connection with continued learning, that would be compatible with European systems.*
-  *Prioritise training provided by employers as part of the overall system of perquisites (this recommendation should be perceived in the context of the proposed social system reform (see Chapter 3.4.5)).*

3.4.3 Providing Sufficient Labour Force

The Czech population is growing older, which poses a threat to the ability to maintain economic prosperity. It is necessary to intensify support of the development of new, alternative services of care for children and seniors so that people can harmonise their family life with work and learning. The Czech economy also should open itself to recruitment of foreign workers.³⁴

³⁴ European Commission Green Paper: Confronting demographic change: a new solidarity between the generations, 2005.

Migration within the borders of the Czech Republic is complicated by the rather dysfunctional housing market and the fact that housing is not affordable for a substantial part of the population (see objective 3.3.1.3 – Enabling labour force migration). Lack of willingness of the population to move also plays a role. Commuting is impeded by insufficient transport infrastructure and inadequately developed public transport between cities and villages, and the extra cost of travelling to work plays a role as well.

3.4.3.1 Creating Suitable Conditions for Harmonising Professional and Family Life

Younger people even more than the generation of their parents realise the importance of education and skills. They also emphasise professional position and financial background. They postpone parenthood until later age.

At the same time, the size of households diminishes and the number of incomplete families increases. Thus, the care for pre-school children and the demanding care for seniors in a small family can be a problem preventing placement in the labour market. These problems are pointed out in the European Commission White Paper on services of general interest, 2004.

RECOMMENDATIONS:

-  *Support retraining of persons who cared for children and have not been gainfully active for a long time – by expanding programmes to increase necessary skills required for placement in the labour market.*
-  *Encourage savings of employees' time – by expanding the supply of services covering pre-school children, and by supporting the development of services to groups of population disadvantaged in terms of access to the labour market.*

3.4.3.2 Supporting Influx of Skilled Workers in Accordance with the Needs of Local Labour Market

The Czech labour market is short of skilled labour force. This causes problems to employers and may result in that investors will make investments elsewhere. The state therefore desires to provide skilled labour force, whether local or from abroad. Czech professionals should be motivated to stay, and highly skilled foreigners must have unrestricted access to the labour market. However, foreigners are still subject to substantial bureaucratic restrictions. Despite positive change introduced by the new act on employment, the loss of work permit results in departure from the country. Thus, dependence of foreign employees on their Czech employers is

extremely high. The situation is further complicated by a lack of differentiation of work permits according to the duration of stay and type of employment.

As the Czech population ages, it is desirable to encourage permanent immigration of skilled workers and their families. They will contribute to decreasing the population decline and to long-term economic and social development of the Czech Republic.

Problems are caused by lack of information on the supply of foreign professionals and on the demand of local employers. The Ministry of Labour and Social Affairs does operate an information portal in the framework of its pilot project "Choosing skilled foreign professionals" – but the database only applies to selected non-EU countries. Candidates from these countries are offered advantages in obtaining permanent residence under the project. The project should be expanded to also involve citizens of other countries.

One of the disadvantages is that non-Czech graduates of Czech universities from third countries cannot enter the Czech labour market on more advantageous terms than other foreigners. Thus, a non-Czech graduate of a Czech university is obligated to leave the Czech Republic upon completion of studies, and only then may apply for residence and work permit in the Czech Republic. Due to this complication, the country loses young experts to whom the state invested public funds.

The primary condition for successful integration of immigrants into the society is the command of the language of the host country. Czech Republic's immigration policy should therefore support free of charge pre-school Czech language courses for the children of immigrants from third countries.

RECOMMENDATIONS:

- *Simplify the system of granting work and residence permits – by amending the act on employment and the act on stay of foreigners in accordance with the recommendations contained in the European Commission Green Paper on economic migration.*
- *Introduce anti-corruption measures applicable to residence permits, visas and employment of foreigners. Consistently sanction employers and employment agents for transgressions. Increase effectiveness of the work of control authorities (employment and authorities) in respect of illegal employment.*
-  *Finalise a nationwide public information system merging information on available foreign professionals and on the demand of employers in the Czech labour market.*
- *Complete and expand the pilot project "Choosing skilled foreign professionals" to cover the whole spectrum of developing countries.*

-  *Extend availability of free pre-school Czech language courses to children of immigrants from third countries.*

3.4.3.3 Keeping Young Talents in the Czech Republic (Reducing "Brain Drain" and Increasing "Brain Gain")

After 1989 and later after the Czech Republic's accession to the European Union, the opportunity to gain professional and language skills in foreign countries significantly improved. This opportunity is used mainly by young people who travel for scholarships, internships, and to study or work. Some of them, however, do not return from these stays, primarily for financial reasons. It is in the best interest of the state to motivate these people to return. One of the ways is to create conditions for study or work that are comparable with the standard at foreign research and science facilities. The support provided to young researchers and motivation to return from abroad have changed in the recent years, thanks mainly to programmes of the Ministry of Education, Youth and Sports, the Czech Academy of Sciences and the Czech Science Foundation. However, the amount of this support is still very low, the programmes are not effectively coordinated, and publicity is inadequate. (See also objective 3.5.3.)

RECOMMENDATIONS:

-  *Improve and effectively coordinate support for young researchers (up to 35 years of age), not only at universities and research institutes.*
-  *Introduce development programmes focused on establishing top university centres working together (regional centres and sectoral networks), that will increase attractiveness of continued work of graduates.*

3.4.4 Increasing Flexibility of the Labour Market

Dynamic development of global economy requires a flexible labour market. If the Czech Republic fails to adapt the conditions of the labour market, then the country may face long-term problems accompanied by unemployment and excessive social costs. The high rate of employment in Czech processing industry (as compared to EU-15 average) means its increased sensitivity to external influences. Any such problems may be prevented by increasing the amount of investments in the human capital, supporting commutation and migration to work, and creating legislative conditions for flexible labour-law relations.

3.4.4.1 Making Labour Law More Flexible

Czech Labour Code is frequently referred to as little flexible, mainly in the area of justified dismissals. This increases costs incurred by employers and limits creation of jobs. In order to increase the rate of creation of new jobs, it is desirable to increase effectiveness of the process of matching supply and demand in the labour market. This requires partial release of restrictions imposed on employment arrangements in a link to the Civil Code and other laws and while respecting EC directives and other international regulations binding on the Czech Republic. Flexibility of the labour market could be further improved by simplifying the process of hiring employees through employment agencies offering temporary jobs.

RECOMMENDATION:

- *Extend contractual freedom in employment arrangements – submit proposed amendment to the Labour Code.*

3.4.4.2 Approximating the Cost of Work to Productivity of Low-skilled Labour Force

More than one half of all unemployed are long-term unemployed.³⁵ Besides objective reasons such as the high age of job seekers or considerable lack of jobs in certain regions, the International Monetary Fund (2004) states the following as the principal causes of long-term unemployment: inadequate skills of job seekers (skills and qualifications are dealt with in Chapters 3.4.1 and 3.4.2), inadaptability of wages, the institutional framework (social benefits, employee protection and work taxation legislation, see also Chapter 3.4.5) and low mobility of persons and jobs (see also Chapter 3.4.3).

Long-term unemployment is problematic in particular in case of persons with low income. The fact that net earnings of persons with the lowest income are unattractive when compared with unemployment benefits and state social allowances is demotivating (see Chapter 3.4.5.4).

This situation makes it possible to use the current social protection system for purposes other than as originally intended.

At times of economic growth, unemployment declines due to the increasing supply of jobs. This supply, however, is affected by the cost of work, which thus becomes a competitive factor in deciding on allocation of an investment. The ratio of income tax and all statutory social security payments to the total cost of work of

³⁵ CSO: Employment and unemployment in the Czech Republic (selective survey), 2005.

employees whose wages amount to two-thirds of the average wages is currently higher in the Czech Republic than in many OECD countries.³⁶ Reducing taxation of this group of population would contribute to creation of new jobs.

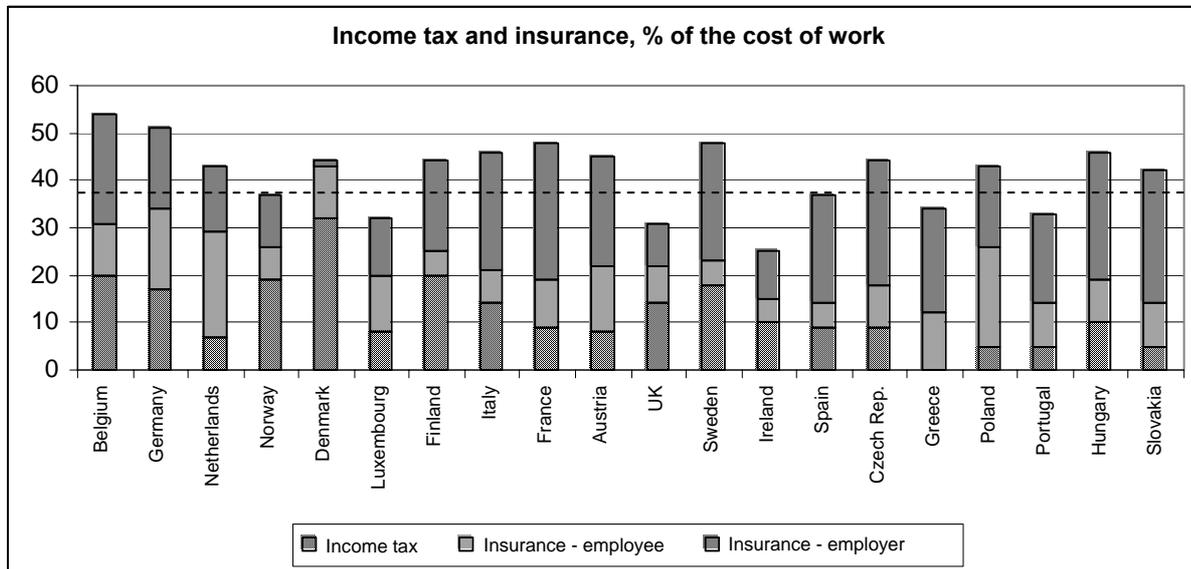


Chart No 5: Income tax and insurance, % of the cost of work³⁷

RECOMMENDATIONS:

- *Strengthen the system of income tax relieves for low-income groups – based on practical experience with tax discount for children and tax bonuses.*
- *Reduce taxation of low-income groups of population and motivate them to work.*

3.4.5 Providing Employment Policy Motivating to Work

More than one-third of all unemployed are in the age group above 45 years.³⁸ The system of social protection (mainly state social assistance, social security and social care) insufficiently motivates this generation to seek job, and the offer of active assistance is also inadequate. It is necessary to take steps to eliminate abuse of the system and improve actual assistance to the needy. The change will allow savings in budgets, better social protection of these people and their active access to the labour market. See the Recommendations under this chapter.

³⁶ OECD: Economic Surveys: Czech Republic, 2004.

³⁷ OECD: Taxing Wages, 2004.

³⁸ MLSA: Quarterly Unemployment Report, 2005.

3.4.5.1 Motivating to Work and Preventing Abuse of the Social Protection System

The social protection system is complicated and complex. It is not set so as to ensure that taking a job would be financially more attractive than taking unemployment allowances. This situation will not improve in the near future despite progressive growth of real wages and despite the partial legislative changes undertaken in 2004.

It is therefore necessary to intensify the motivating factors in the structure of the available social allowances and introduce effective prevention and control of any abuse of the system by individuals or by the business sector. This will be achieved by simplifying and consolidating the allowance schemes and the active employment policy. Close link between the two systems would facilitate elimination of concurrent registered unemployment and work in the "grey economic" zone.

Organisation of the entire system of social protection does not guarantee optimum use of the present staffing of employment offices and social departments of municipalities towards activation of the unemployed. The system would benefit from an organisational change, which would merge the responsibilities of employment offices and social departments of municipalities.

RECOMMENDATION:

- *Assess functionality of the social protection system (chiefly the setting of its parameters), and subsequently carry out its reform to assure that all activities leading to taking a job will be advantaged.*

3.4.5.2 Increasing Participation of "Pension" Age Employees in the Labour Market

As the Czech population will continue ageing, it will be necessary in the future to keep in the labour market some of the people that would otherwise retire. Seniors currently have problems if they wish to work. For example, they cannot conclude work contracts for indefinite time periods, and the time span of contracts for a definite term is limited. The items deductible from the income tax base are lower, and sickness benefits are paid for a shorter time. These restrictions should be eliminated.

This situation could be resolved by further increasing the statutory age for retirement, together with limiting the possibilities of early retirement on different grounds.

Pension reform is quite inevitable. Within the framework of such reform, it is appropriate to consider incentives for postponing the decision to retire. This could,

on both sides of the labour market, eliminate undesirable expectation of termination of one's professional career. It would lead to an increase of investments in human resources and to growth of employment in disadvantaged groups.

RECOMMENDATIONS:

- *Further intensify sanctions for early retirement.*
- *Progressively increase the age limit for retirement.*
- *Eliminate existing statutory barriers disadvantaging employment of persons at retirement age.*

3.4.5.3 Increasing Involvement of Groups Threatened by Social Exclusion

Stricter requirements concerning allowances under state social protection scheme should apply together with development of supportive programmes for disadvantaged groups of population. A desirable move could be, for example, providing a temporary advantage to ethnic minorities by means of targeted training and retraining. Nonetheless, persons above 55 years of age are exposed to a higher risk of social exclusion. The proposed measures therefore should target these groups in particular. It is necessary to consistently apply the policy of equal opportunities in the labour market. These measures will reduce the expenditures related to the employment policy.

RECOMMENDATIONS:

- *Reduce social security payments in respect of persons disadvantaged in the labour market, in particular above 55 years of age.*
- *Transform the system of social benefits in respect of persons with disability; react to actual adverse social impacts of disability instead of providing financial compensation for disability itself.*
-  *Encourage development of social services and employment services that will allow disadvantaged groups to remain in, return to or enter the labour market, and will create conditions for access to training and other common resources of the society – through introducing national quality standards in respect of social services and employment services.*

3.4.5.4 Increasing Effectiveness of the Active Employment Policy

The system of Active Employment Policy (AEP) received no response in the municipalities involved in it. In addition, it insufficiently motivates the unemployed. About one-third of the AEP funds are allocated to direct financial support of creation

of new jobs, which is, based on international surveys, probably the least effective form of AEP. Retraining programmes are mainly short-term and fragmented and do not achieve the set goals.

A major problem of the unemployed associated with the taking of a job is the loss of ability to stick to a daily work regime, together with weakened transferable skills, such as computer literacy. Practice has also shown that the staff (consultants and agents) of employment offices does not possess a suitable comprehensive supply of information about existing retraining courses, which should be provided by the state. This impedes their ability to successfully offer retraining opportunities.

The funds available under the AEP will need to be used in the future in coordination with other means of social protection, chiefly with community service programmes and more complex targeted long-term retraining, all this while preserving support given to creation of jobs for disadvantaged groups of population. Implementation of these programmes should be underlain by a systematic, periodical, statistically credible and independent assessment of their financial returnability.

The key to success of the proposed recommendations is their strategic compatibility: if one part of the system (e.g. financing) is set effectively but without concurrent changes in other sectors (e.g. state social benefits and sickness insurance), the effect of the measures will be limited and may be counterproductive.

Investment incentives represent one of the principal instruments of the AEP. Their purpose is to help in creating new jobs and training or retraining employees. At present, however, support focuses on creation of jobs. It is necessary to shift attention to training (see chapter 3.2.2.1).

RECOMMENDATIONS:

- *Analyse links between passive employment policy and other allowance-based systems of social protection with a view to linking these systems and making them more effective in support of the Active Employment Policy.*
-  *Support targeted comprehensive retraining programmes and concentrate on practical work, gaining working habits and computer skills.*
-  *Use private agencies for development of public work programmes.*
-  *Increase effectiveness of programmes – introduce periodical and statistically credible assessment, independent of the implementer, of effectiveness of and success of the programmes.*
-  *Make comprehensive information about retraining services available to staff of employment offices, improve provision of information on retraining courses,*

and link the information channels of the MLSA (portal.mpsv.cz) and services provided by the MEYS in this area.

3.4.6 Improving Strategic Management of Human Resource Development

The Czech Republic is preparing for another budget period of the European Union. We could obtain up to 4% of the annual GDP for the cohesion policy. It is therefore necessary to negotiate with the European Commission conditions that will meet our national needs. The Czech Republic will be successful in the negotiations with the European Union on condition that it is able to achieve effective coordination of its cooperating central government authorities. Further, success is conditional on cooperation with NUTS II territorial units during the preparations for the new budget period of the Structural Funds for years 2007-2013.

3.4.6.1 Defining Responsibilities of Public Administration

The existing powers of central government authorities in the area of human resource development stem from the economic needs that existed after the collapse of communism in 1989. The definition of new responsibilities of individual authorities must be based on the function these authorities are to assume in the society. The Ministry of Education, Youth, and Sports must concentrate on the field of continuing education in connection with the acquiring, maintaining, or changing qualifications (coordination rather than management). In the context of this strategy, the Ministry of Labour and Social Affairs must focus on satisfying the essential needs of citizens in cases of loss or inability to earn income as well as active return to work and staying employed. The Ministry of Industry and Trade must pay close attention to linking the Human Resource Development Strategy to programmes supporting business and other concepts.

RECOMMENDATIONS:

- *Redefining the responsibilities and powers of government authorities in the area of education, the abovementioned central government authorities in particular, by amending Act No 2/1969 Sb. (Act on Powers).*
- *Redefining the responsibilities and powers of the Ministry of Labour and Social Affairs based on a comprehensive analysis of all parts of the social protection system.*

3.4.6.2 Modifying the National System of Data Collection and Instruments of Strategic Management of Human Resources

This task is related mainly to the need to modify the system of compiling statistics and incorporating issues concerning continual education (adult education in particular) into the system. At the present time, these data in the Czech Republic are not systematically collected, analysed, and compared in an international context. Further, it is necessary to evaluate services included in the system of foreign investment incentives. This objective entails the need to perform analyses of employment and training on the national labour market (so-called sectoral studies), which will also serve as a basis for an assessment of policies in the area of human resource development on the national and regional levels and for proposing new solutions.

RECOMMENDATIONS:

-  *Performing sectoral and regional analyses of employment and training needs on the labour market, especially in economic sectors where extreme labour market phenomena exist, such as high employment or high unemployment.*
-  *Interlinking public administration information systems in areas concerned by human resource development and securing the necessary methodological and information services for government authorities.*

3.4.6.3 Supporting Regions and Activities of Regional Authorities Responsible for Human Resource Development

At present, regional councils for human resource development (HRD councils) are loosely associated groups of regional partners (regional offices, schools, employment offices, entrepreneurs, etc.) established during 2003-2005 based on a methodical instruction issued by the Government. The objective was to secure support for human resource development on the regional level. Activities of HRD councils depend on the willingness of individual members to take active part in the work of these bodies; for this reason, HRD councils need to be provided with services especially in respect of data collection and analysis.

RECOMMENDATIONS:

-  *Securing information services that ensure effectiveness of activities carried out by regional HRD councils through sharing the outputs of sectoral analyses.*
- *Disbursing financial support for their activities where possible.*

-  *Supporting the participation of cities and municipalities in activities of HRD councils through suitable promotion.*

3.5 Research, Development, and Innovation

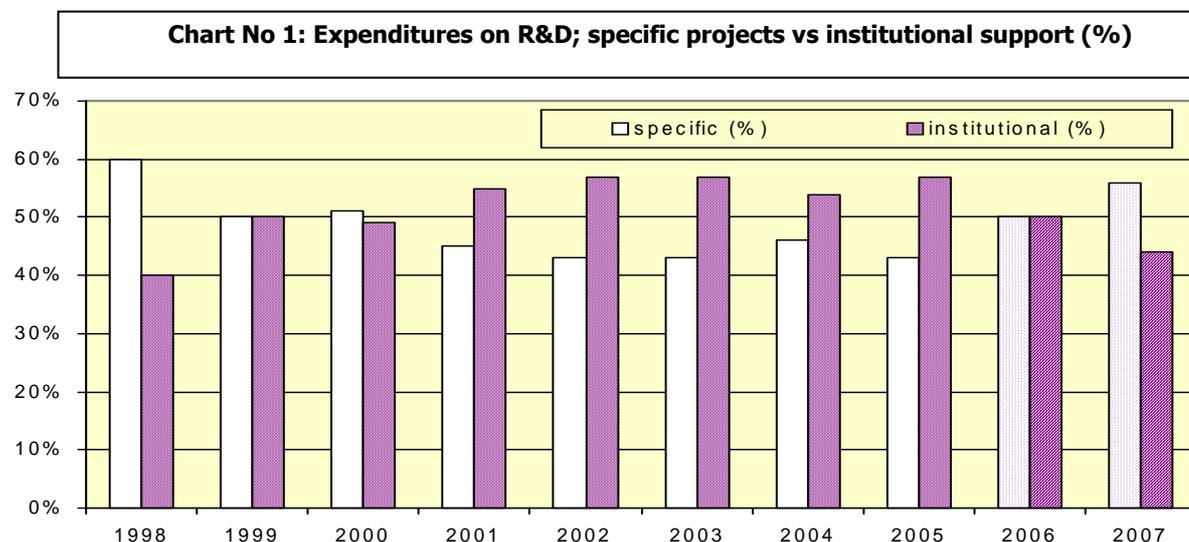
Continuous and intensive economic growth cannot be achieved without ongoing innovation of products and services as well as employed technologies and methods of corporate organisation and management. The state must help attain such a state of affairs through the creation of favourable legislative and institutional conditions. The government must eliminate barriers that hinder innovation and support selected activities by direct and indirect instruments, using funds from the public budgets of the Czech Republic as well as the EU budget.

3.5.1 Strengthening Research and Development as a Source of Innovation

Research and development (R&D) in the Czech Republic does not provide a sufficient volume of new knowledge that can be rapidly and effectively used in the innovation of products, technologies, and services. The causes exist both on the part of research facilities and the users of their work. There is a lack of organisation and activities necessary for the transfer of know-how and technologies into practice.

3.5.1.1 Increasing Annual Public Expenditures on R&D with Focus on Industrial Research

The existing system of public support for R&D allows a number of beneficiaries to produce no more than research papers. In such cases, the usefulness of the results is low or none. Up to now, the system has not allowed penalising research facilities that have lacking results. Nonetheless, new procedures for rating R&D activities are to be introduced starting in 2005. Another problem concerns the inability to define in a sufficient detail a limited number of priority R&D areas, where the bulk of available assistance would be concentrated. Institutional support is



preferred at the expense of support for specific research projects, where targets can be set in a more specific manner and performance evaluated in a more objective manner.

In the upcoming years, the volume of public expenditures on R&D should continue to grow by at least 20 to 25% annually, so that these funds will attain 1% of GDP by 2010. Their growth should be accompanied by measures motivating increases in private (corporate) R&D expenditures at a similar rate. Further, it is necessary to create conditions for the effective coordination of internal national expenditures and the use of foreign funds for R&D and innovation, sources from the EU in particular. By the year 2010, the proportion of investments into R&D should reach at least the EU-25 average.

The growth of public expenditures needs to be used primarily for strengthening specific-purpose financing and concentrated on industrial research programmes that have concrete objectives that can be evaluated. The process could involve advantages provided to companies executing R&D projects, especially companies from the ranks of small and medium enterprises. In addition, priority areas need to be determined by defining the long-term general directions of research activities approved by the Government. Results achieved by research facilities will be rated not only from the purely economic viewpoint, but assessments will also examine benefits for other areas of societal development.

RECOMMENDATIONS:

- *Increasing annual public expenditures on R&D by 20 to 25% and by 2010 ensuring that R&D expenditures account for 1% of GDP – State Budget Act of the Czech Republic.*
-  *Changing the structure for distribution of public expenditures on R&D – strengthening specific-purpose financing to the detriment of institutional financing; channelling increased public expenditures on R&D primarily into industrial research programmes – State Budget Act of the Czech Republic.*
- *Basing the preparation of new programmes and activities primarily on long-term general research directions approved by the Government³⁹ – procedure outlined under Act No 130/2002 Sb.*

³⁹ Sustainable development, molecular biology, energy sources, material research, competitive machine industry, information society, and security research.

- *Distributing funds based on achieved results and strengthening the role of marketability of the results in the performance of assessments – procedure outlined under Act No 130/2002 Sb.*

3.5.1.2 Securing Protection of Intellectual Property Consisting of the Results of R&D through Government Support and Increased Skills of Relevant Workers

International comparisons show that in the area of R&D and innovation ('R&D/I'), the Czech Republic is lagging behind considerably as regards the number of applications and awarded patents (Chart No 2). The Czech Republic is below 5% of the EU-25 average. There are number of reasons, ranging from insufficient quality or the results of R&D, financial demands and complicated nature of the patenting processes, and underestimated protection of copyrights and intellectual property rights to insufficient knowledge of issues concerning protection in this area on the part of R&D/I specialists.

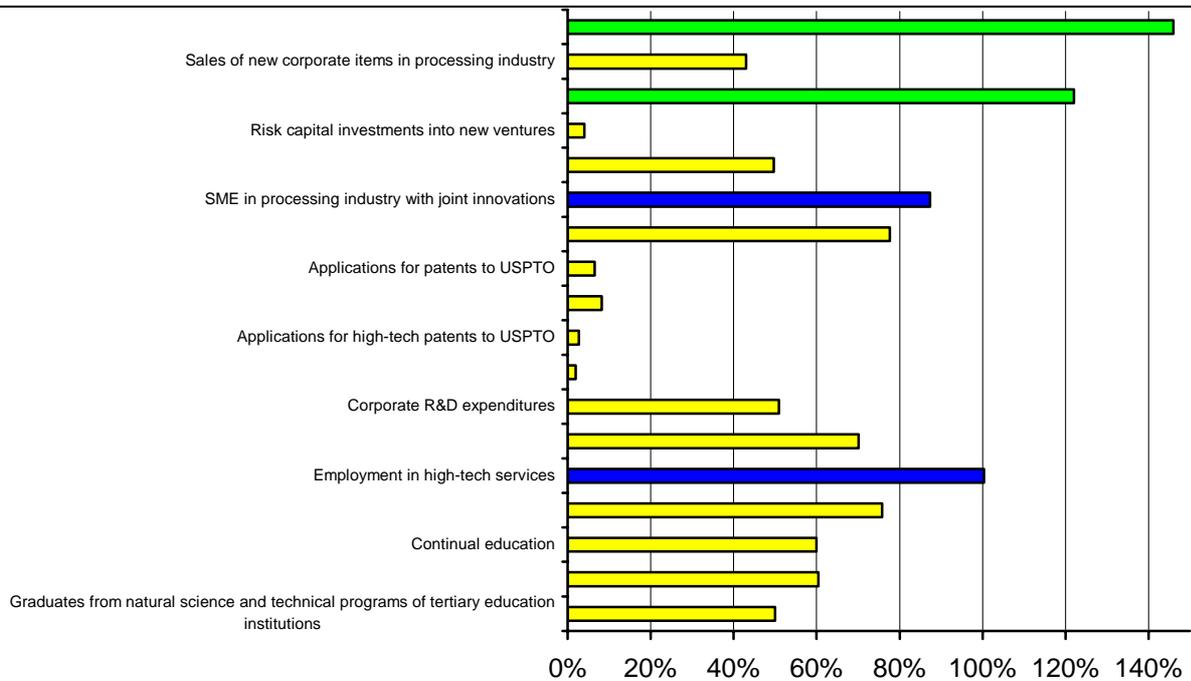
Consequently, it will be necessary starting in the 2006/2007 academic year, to begin gradually incorporating the basics of protecting copyrights and intellectual property rights in natural science and technical study programmes at universities. Issues relating to protection of intellectual property rights must become a part of the general knowledge of Czech scientists and academic staff, and activities ensuring protection of these rights must be incorporated into their everyday work. The main responsibility, however, lies with R&D facilities and universities. Thorough contractual protection of created intellectual property must become the standard in these institutions, as opposed to being exceptional. By the end of 2006, the legislation covering protection of intellectual property should be reviewed, and proposals should be made for a piece of legislation that would simplify the entire system.

RECOMMENDATIONS:

- *Supporting effectively protection of currently unprotected results of R&D through a programme aimed at protecting intellectual property co-financed from the state budget and corporate sources.*
- *Using and gradually simplifying the existing legal framework that protects intellectual property through consistent verification of contracts defining the use of the results of R&D projects and drafting an amendment simplifying existing legislation.*
-  *Improving the knowledge of graduates from natural science and technical study programmes at universities with regard to protection of intellectual property*

and its economic use – modification of the curricula of study programmes at the applicable faculties of universities.

Chart No. 2: Overview of innovation policy of Czech Republic – indicators compared to EU-25 average (%)



Czech figures below 80% of EU-25 average	Czech figures within 80-120% of EU-25 average	Czech figures over 120% of EU-25 average
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Data source: European Innovation Scoreboard 2004, SEK (2004) 1475

3.5.1.3 Coordinating the Use of National and European Sources of Funding for R&D/I

At the present time, the Czech Republic uses to an insufficient extent the advantages of the synergic effects of coordinated use of support for R&D/I from public budgets and resources within the EU. In many cases, the drawing of assistance from EU funds has been delayed due to behind-schedule methodological and organisational preparations for their use. Most of the capacities of the public R&D sector are concentrated in Prague and Brno, and regional organisations interested in the results of R&D often face problems with securing necessary research work from R&D organisations located outside their region. Another important barrier consists of differing methodologies used by the individual providers of assistance for applied and industrial resorts (ministries – administrators of budget chapters). A new R&D programme targeting the needs of regions needs to be set up

no later than in 2007. The programme should rely on a model that has been proved abroad, where support for research activities and the transfer and distribution of the results of R&D are secured by a single agency that uses a uniform approach.

RECOMMENDATIONS:

-  *Increasing participation of entities from the Czech Republic in the Seventh EU Framework Programme of Research and Development of Technologies by improving information and consulting services provided by sectoral and regional contact organisations.*
-  *Rapid introducing and using the planned changes in EU regulations for use of the Structural Funds and the Cohesion Fund with regard to support for innovation – see also Measure 3.2.1.1, Maximise the Influx from European Funds and Direct It to Areas Most in Need*
-  *Rapid introducing and using the planned changes in EU regulations for disbursement of subsidies for R&D and innovation with special emphasis on support for small and medium-sized enterprises.*
-  *Setting up programmes of support for innovation within regions in connection with planned operational programmes aimed at the use of the EU Structural Funds.*

3.5.1.4 Simplifying Procedures for Establishing New R&D Organisations and Simplifying the Process of Distributing Assistance

One problem faced by the Czech Republic is an overly high stability of R&D organisations in the public sector. Too stable a structure is incapable of a flexible response to the changing needs of the economy and society. This situation is due to the fact that institutional support based on a proposed research plan may only be provided to organisations that demonstrate success in past research activities.

This situation should be dramatically changed by the Act on Public Research Institutions that is to come into effect in mid-2005. The legislation will facilitate the creation of new R&D organisations and the dissolution of institutions that are unable to adapt to new economic and societal needs.

RECOMMENDATIONS:

-  *Facilitating the creation of new R&D organisations by instituting a system where provision of support from public sources will not depend primarily on an applicant's past institutional research activity, but will be based on the quality of the research team, including past results of its members.*

3.5.1.5 Securing Indirect Support for Innovation-Oriented R&D

Twelve Member States of EU-15 have more extensive indirect instruments for support of R&D/I than the Czech Republic. Their extent needs to be increased by drawing on experiences of other EU Member States. So far, only certain taxation deductions have been introduced that will apply from 2005. Taxation measures must be supported by cooperation between organisations from the public and corporate sectors as well as transfer and distribution of the results of R&D. Without increasing indirect support, it will be impossible to achieve the necessary growth of corporate expenditures on R&D.

RECOMMENDATIONS:

- *After assessing their effect, continuing tax deductions stimulating R&D in the corporate sector that were introduced in 2005. Changing the Income Tax Act with the aim of further expanding the possibilities of reducing the tax base – see also Measure 3.1.3.2, Improve the Incentive Elements in the Tax System*

3.5.1.6 Making the Results of Research – Development – Innovation Available to the Public

The Czech Republic continues to underestimate the importance of providing information to the public on the positive impact R&D/I has on the quality of life. It is therefore necessary to publicise the benefits of supporting R&D/I using public funds. Suitably structured information and regularly presented awards for goods results improve the public perception of this area and develop entrepreneurial culture.

RECOMMENDATIONS:

-  *Supporting information, evaluation, and other activities aimed at publicising issues related to R&D/I as part of supporting public relations, presenting awards and publicising the best achievements, research teams, and collectives.*

3.5.2 Establishing Functional Cooperation between the Public and Private Sectors in Research, Development, and Innovation

Save for several countries (Finland, Holland), EU states, including the Czech Republic, suffer from more or less serious deficiencies with regard to the cooperation between the public R&D sector and private enterprises. Without creating stable and effective ties between the public R&D sector and its counterpart in the corporate world, it is impossible to achieve significant increase in the speed and effectiveness of the transfer of the results of research and development into the design of new products, technologies, and services.

For this reason, conditions must be rapidly created for the establishment and fast development of ties between public and private R&D activities. Short- to mid-term work and study internships in the opposite sector (with the exception of fundamental research) should become commonplace. It is necessary to eliminate any barriers related to medical and social insurance that may hinder mobility.

Starting in 2006, it will be necessary to intensify the participation of representatives or organisations using the outcome of R&D in the preparation of research programmes and assessment of their results. Using technology platforms proven abroad, it is necessary to provide support for large R&D projects, including financial backing. Specific cooperation projects should be discussed at frequent meetings, financially assisted by the government, of representatives of the public R&D sector, users of the results of R&D, and financial institutions.

Further, it is necessary to facilitate the establishing of new companies that put into practice the outcome of R&D. A programme supporting transfer of know-how and technologies must be prepared and set up by 2007, which will allow using assistance from EU Structural Funds. In connection with changes in EU regulations, analyses will be performed of the advantages of instituting a fund for financing joint projects of the public and private R&D sectors (Hungarian model).

Since companies in the Czech Republic (small and medium-sized enterprises in particular) do not use to a sufficient extent all opportunities offered by existing information and communication technologies ('ICT') for increasing work productivity and competitiveness, a programme should be introduced in 2007, which will target introducing and using ICT in small and medium-sized enterprises.

RECOMMENDATIONS:

-  *Setting up programme(s) supporting worker mobility between the academic and private sectors.*
-  *Setting up a programme supporting the formation of functional technological platforms, as a basis for the preparation, execution, and financing of large R&D projects.*
-  *Analysing, in connection with changes in EU regulations, the advantages of instituting a fund for financing joint projects of the public and private R&D sectors (see also Measure 3.2.1.2, Identify Sufficient National Resources for Co-financing Projects Financed from European Sources, and Measure 3.2.4.3 Improving Access to Funding for Individual Groups of Economic Entities).*
-  *Supporting the creation of new technology firms established for the purpose of using the results of R&D ('spin-off programme') (see also Measure 3.2.4.2*

Supporting the Use of Venture and Other Capital (Private Equity and Venture Capital).

-  *Setting up a programme of support for transfer of technologies and know-how developed as part of disbursing public assistance for R&D to a broad range of users.*
-  *Setting up a programme aimed at introducing and using information and communication technologies (ICT) in small and medium-sized enterprises (see also Measure 3.3.1.2 , Increasing the Availability of Broadband Internet Connection, Measure 3.3.3.3, Supporting Regional Development through Telecommunication Infrastructure, Measure 3.1.2.3, Promote Electronic Communication with State Administration Authorities and the e-Government Concept).*

3.5.3 Securing Human Resources for Research, Development, and Innovation

It has been demonstrated time and again that one of the most serious obstacles hindering the progress of R&D and the intensification of innovation processes is a lack of well prepared, active, and motivated workforce. Researchers are getting older, and young and relatively well educated individuals leave the sector for other fields. A survey of innovation activities in the Czech Republic has shown that companies consider a lack of workers in all education categories as a serious obstacle of innovation. The same has been stated by numerous foreign investors. The situation necessitates a rapid solution. It is therefore necessary to introduce incentives and motivating measures to secure the necessary human resources for R&D and innovation processes (human resources issues are analysed in detail in Chapter 3.4).

3.5.3.1 Securing Human Resources for R&D with the Necessary Structure and at All Levels

The relative number of researchers per 1,000 workers in the Czech Republic amounts to a half of the EU-15 average. Apart from lower investments into R&D, the situation is affected by the fact that the Czech Republic has considerably fewer university graduates who have completed a natural science and technical study programme in the age category of 20-29 years than the EU-15. As far as these indicators are concerned, the Czech Republic lags behind the EU-25 average significantly (see Chart No 2). The share of population with university education amounts to 60% of the EU-25 average, and the share of graduates from natural science and technical study programmes totals some 55% of the EU-25 average.

A very serious problem is posed by the high average age of research workers, where many fall into the age category of 50-60 years.⁴⁰ Only few graduates from doctoral programmes leave the academic world to work in research and development. Many young researchers do not return from study and work internships abroad or leave for other fields. Another serious problem is insufficient preparedness of graduates for team work, management of large research projects or teams, and a lack of basic business knowledge.

It is especially necessary to improve material and technical conditions for education and research in natural science and technical study programmes at universities (building laboratories, establishing contacts with practice, etc.) to increase the number of graduates and their expertise. Motivating measures must be instituted with the participation of the corporate sector, which will benefit from a sufficient number of well trained specialists.

Universities should create programmes aimed at providing graduates with the knowledge necessary for using and incorporating the results of R&D into innovation of products, technologies, and services. In addition, it is necessary to support the establishing of centres for knowledge management and focusing on this field at universities and public research institutions. Motivating measures and supplementary programmes should be introduced gradually starting in the 2006/2007 academic years.

Mobility programmes may increase the attractiveness of the Czech Republic to motivate Czech researchers to return from abroad and skilled specialists from EU and third countries to seek mid-term work internships in the Czech Republic. Barriers hindering cross-border mobility (different medical and social insurance conditions, etc.) should be dealt with in connection with Commission recommendations.⁴¹ Accordingly, a similar document, which will respect the specific situation in the Czech Republic, needs to be prepared and set up in 2006.

RECOMMENDATIONS:

-  *Motivating interest in enrolment in natural science and technical study programmes at universities, in particular by improving material and technical*

⁴⁰ See an analysis of the state of research and development in the Czech Republic and comparison with the situation abroad in 2004. The analysis was acknowledged by the Government in Resolution No 1208 dated 1 December 2004.

⁴¹ C (2005) 576/1 of 04/03/2005; Commission Recommendation on the European Charter for Researchers and on a Code of Conduct for the Recruitment of Researchers.

conditions for education and research as well as the relevant financial conditions (scholarships, etc.) – development programmes for universities.

-  *Setting up education programmes targeting research and development workers and managers with the aim of improving their knowledge and skills for using and diffusing the results of R&D – development programmes for universities.*
-  *Setting up programmes supporting international mobility of research workers (see also Measure 3.4.3.2 Supporting Influx of Skilled Workers in accordance with the Needs of the Local Labour Market).*
- *Drafting a charter for researchers and a code of conduct for the recruitment of research workers (see also Measure 3.4.3.3 Keeping Young Talents in the Czech Republic [Reducing 'Brain Drain' and Strengthening 'Brain Gain']).*

3.5.3.2 Securing Human Resources for Innovation Processes at All Levels

Fulfilling the objectives of support for R&D/I will necessitate considerable changes in the education system. This section of the Strategy only contains proposals for and explanations of recommendations concerning changes in university education. Recommendations for other levels of the education system are outlined in the part of the Strategy that deals with human resource development.

Systems providing financial support for public universities need to be strengthened with regard to outputs (number and expertise of graduates, including their professional engagement) to the detriment of inputs (number of accepted students). Cooperation between universities and the corporate sector should be bolstered through a change in the criteria for distribution of funds for specific research at universities. Changes should be made in the 2006/2007 academic year, using, among others, financing from EU Structural Funds.

The participation of universities in the use and diffusion of the results of R&D must be supported by changes in the management of universities directed at the implementation of managerial and entrepreneurial methods. In the upcoming years, increased funding for universities should be mainly directed at development programmes arising from the Long-Term Plan of the Ministry of Education, Youth, and Sports, its update in accordance with the Strategy for Sustainable Development, the Economic Growth Strategy, and other specific strategic and conceptual documents.

RECOMMENDATIONS:

- *Changing indicators and criteria of support for public universities in education and research so as to take into account cooperation with the corporate sector, achieved results, and ways of using funds.*

3.5.4 Improving Efficiency of Public Administration in Research, Development, and Innovation

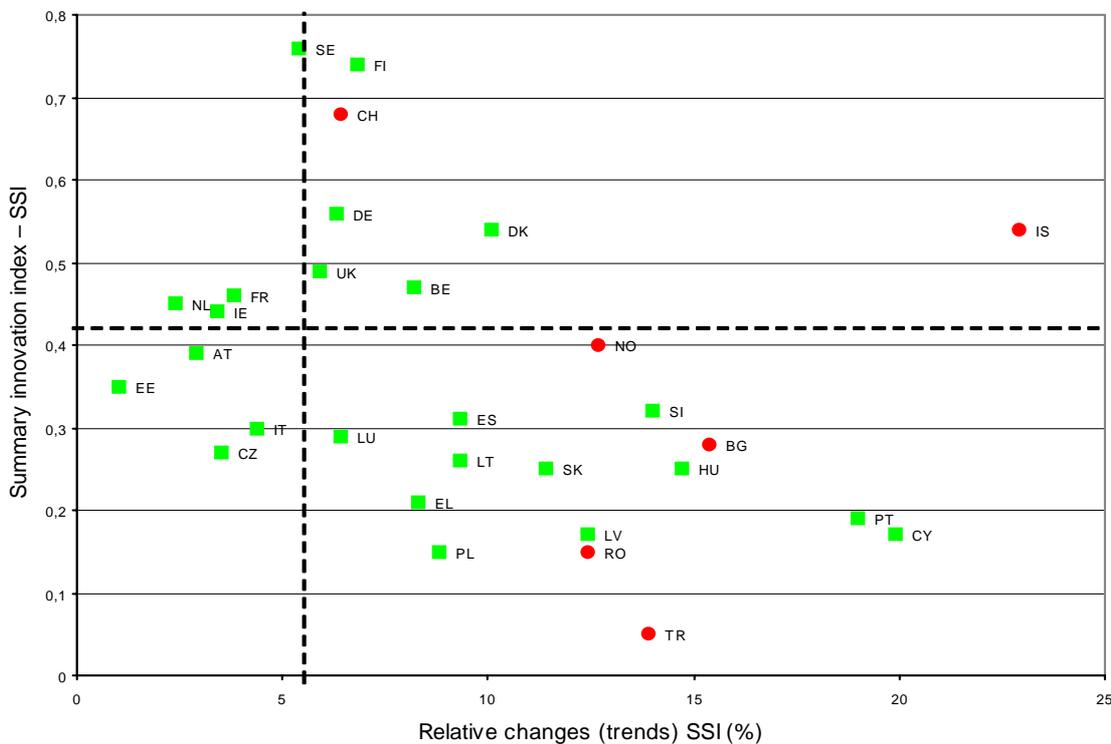
The public administration system in R&D gradually developed since 1990 has enabled a relatively successful transformation of public support for R&D. Since the second half of 1990s, however, more or less serious deficiencies of the system and the absence of a public system for innovation have become apparent. The results are evident from the Czech Republic's worst position among advanced countries with regard to innovation activity (see Chart No 3). The following sections outline tasks and recommendations aimed at closing the gap between the public administration system for R&D and innovation and the proven systems that exist in highly competitive countries.

3.5.4.1 Reducing the Existing Number of 22 Budget Chapters Used for Supporting R&D and Setting Up a Central Administrative Authority Responsible for Innovation

Compared to most OECD countries, the Czech public system of support for R&D is considerably decentralised. Public support for R&D is dispersed in a large number of budget chapters (ministries). The repeatedly amended Act on Powers explicitly refers to jurisdiction over R&D with regard to only four ministries (Ministry of Education, Youth, and Sports; Ministry of Industry and Trade, Ministry of Health, and Ministry of Agriculture). Powers are defined in entirely different ways. Act No 130/2002 Sb. on Public Support for R&D differentiates between the central administrative authority responsible for research and development – currently the Ministry of Education, Youth, and Sports – and central and other administrative authorities responsible for R&D to the extent of their jurisdictions. In contrast, no powers are defined for central authorities with regard to innovation.

An amendment to the Act on Powers and other acts or a new wording of the Act on Powers is necessary for the substantial centralisation of public support for R&D into a smaller number of budget chapters. The relevant amendments should come into effect no later than in the beginning of 2007.

Graf No. 3: Position of the Czech Republic based on the Summary Innovation Index and Its Changes



Source of data: European Innovation Scoreboard 2004, SEC (2004) 1475, 19. 11. 2004⁴²

LEGEND: AT-Austria, BE-Belgium, BG-Bulgaria, CY-Cyprus, CZ-Czech Republic, DE-Germany, DK-Denmark, EE-Estonia, EL-Greece, ES-Spain, FI-Finland, FR-France, HU-Hungary, CH-Switzerland, IE-Ireland, IT-Italy, IS-Iceland, LT-Lithuania, LU-Luxemburg, LV-Latvia, NL-Netherlands, NO-Norway, PL-Poland, PT-Portugal, RO-Romania, SE-Sweden, SI-Slovenia, SK-Slovakia, TR-Turkey, UK-United Kingdom

Basically, it is possible to select a functional and effective model of public administration in the R&D sector: a single ministry is responsible for research, development, and innovation (Denmark) or the relatively more common alternative where R&D is in the jurisdiction of two or more ministries, which are individually responsible for basic and targeted research at universities and applied research, development and innovation (Sweden, Netherlands, Austria, etc.). Under these models, the ministries disburse a considerable portion of public funds allotted to

⁴² Research, development, and innovation are rated in the EU and other countries by means of a set of 18 joint indicators that are used for calculating the Summary Innovation Index (SSI). In Chart No 3, the Czech Republic is in the lower left quadrant, which means that its SSI is below the EU-15 average. In addition, increases of this index during 1999-2002 are below the EU-15 average (the situation is worsening in comparison with the EU average).

R&D. Other ministries only dispose of R&D funds necessary for the performance of the administrative tasks. The second model appears to be more suitable for the Czech Republic, i.e. concentration of budget funds allocated to R&D into a lower number of budget chapters.

It is expected that the Czech Technology Agency will be established with the aim of standardising the procedures for announcing industrial research programmes, evaluation and selection of projects, and assessment of the results.

Innovation of products, technologies, and services is the basic key to the maintaining and improving competitiveness on international markets. Although the responsibility for innovation lies with corporations first and foremost, the government can create favourable conditions for innovation activities and motivate them through assistance that does not distort economic competition. The existing Act on Powers does not clearly define the jurisdiction over the creation and execution of the innovation policy. Based on loose interpretations, some activities have been carried out by the Ministry of Industry and Trade and the Ministry for Regional Development since the second half of 1990s. Certain areas are overlapping, and, conversely, some activities that have proved successful abroad are lacking. The first draft of the National Innovation Policy has been prepared by the Section of the Deputy Prime Minister for Economy. It was presented to the Government in the first half of 2005. As is the case with the excessive decentralisation of the system of public support for R&D, the situation will be dealt with through an amendment to or a new wording of the Act on Powers. Depending on the selected model of public administration in the area of R&D and innovation, one central authority will be charged with preparing and implementing the National Innovation Policy.

RECOMMENDATIONS:

- *Defining in a clear and specific manner the powers of individual central government authorities with regard to research, development, and innovation; concentrating state budget funds allocated to R&D into a substantially lower number of budget chapters – amendment to the Act on Powers (Act No 2/1969 Sb.) and other acts, including implementing regulations.*
- *Setting up the Czech Technology Agency with the aim of standardising procedures for creation of industrial research programmes, evaluation and selection of projects included in such programmes, provision of assistance for selected projects, and assessment of the results of completed projects and programmes.*

3.5.4.2 Ensuring Feedback between Governmental Measures and Corporate and Social Needs by Adding to the Existing R&D Information System Information on Innovation, Czech Statistical Office Surveys, etc.

As regards the innovation policy, a government must do more than merely implement instruments and measures used – albeit successfully – abroad. Such instruments and measures need to be adapted to the current needs of the country in question. The Czech Republic lacks detailed and regularly repeated statistical surveys of innovation and investigations into the needs and requirements of corporations, which are conducted in EU-15 countries.⁴³ The Czech Statistical Office conducted a detailed model survey of innovation in 2002. Another survey was completed in 2004, and the results were published in April 2005. The European Commission rates the Czech Republic's innovation policy using quantitative indicators of inputs into and outputs from R&D (funds, human resources, patents, etc.), employment in hi-tech production and service sectors, and risk capital expenditures (see Charts No 2 and No 3). However, there is no feedback between information on current problems and the needs of corporations.

This is why the responsibilities of the Research and Development Council should be expanded to include innovation. Further, innovation needs to be added to the R&D information systems whose parameters are outlined under Act No 130/2002 Sb. In connection with EC Regulation No 1450/2004,⁴⁴ it is necessary to introduce a statistical system in the area of innovation. These recommendations must be implemented no later than in 2007.

RECOMMENDATIONS:

- *Expanding the responsibilities of the Research and Development Council by adding innovation – amendment to Act No 130/2002 Sb. and modification of the Statutes of the Research and Development Council.*
-  *Setting up an information system for innovation by amending Act No 130/2002 Sb. and Government Regulation No 267/2002 Sb. on Information System for Research and Development.*

⁴³ Harmonized surveys of innovation in EU (CIS – Community Innovation Survey).

⁴⁴ Commission Regulation (EC) No 1450/2004 of 13 August 2004 Implementing Decision No 1608/2003/EC of the European Parliament and of the Council concerning Production and Development of Community Statistics on Innovation.

- *Introducing in the Czech Republic statistics in the area of innovation in connection with Commission Regulation No 1450 of 13 August 2004.*

3.5.4.3 Securing Continual and Interlinked Process of Preparation of Strategies and Policies and Its Ties to Execution Programmes

Only recently has the Czech Republic ceased underestimating the importance of concept work and creation of strategies and policies. Until now, there have been numerous methodological uncertainties related to the content, method of preparation, and interconnection of strategies, policies, and programmes.

In accordance with Act No 130/2002 Sb., the National Research and Development Policy of the Czech Republic⁴⁵ is drafted for the area of R&D for every period of four to six years. No policy has been compiled for the area of innovation. In March 2004, the Government approved the initial and general National Innovation Strategy.

The Economic Growth Strategy will be the input or basis for the preparation of a number of new or the update of existing policies. As regards R&D and innovation, this will apply to two policies in particular. The National Innovation Policy will be submitted to the Government in June 2005. It will be interlinked with the Innovation Concept for Industry and Business for the Years 2005-2008, which is being prepared by the Ministry of Industry and Trade. In like manner, the document will be tied to a material of the Ministry for Regional Development that deals with barriers hindering the growth of competitiveness. The existing National Research and Development Strategy will have to be updated no later than in 2006; alternatively, a new strategy will have to be drafted. Other problems concerning R&D and innovation should be dealt with in documents, policies, and measures implementing the recommendations from other sections of the Economic Growth Strategy. An obligatory part of assessment of proposed R&D programmes will be an evaluation of conformity to concept documents, this Strategy in particular.

RECOMMENDATIONS:

- *Preparing a new National Innovation Policy of the Czech Republic for 2005-2010 in connection with the Economic Growth Strategy and the National Development Plan.*

⁴⁵ Section 5, paragraph 1, subsection a) of Act No 130/2002 Sb.

- *Assessing conformity of proposals for R&D programmes submitted to the Government to this part of the Economic Growth Strategy that concerns R&D/I, using the procedure outlined in Act No 130/2002 Sb.*

3.5.4.4 Determining the Speed of Necessary Changes in the Size of Public Support and Basic Principles for Individual Instruments of Support

The harmonised National Research and Development Strategy should define the order and speed of necessary changes in public support. Changes in disbursement of financial assistance cannot be made abruptly; they need to be implemented over a commensurate period. Further, the National Research and Development Strategy should specify in a sufficiently clear and definite manner the basic principles of individual instruments of support for R&D. These principles may not be changed in the course of announcing conditions for competitions for grants or in the course of evaluating submitted proposals.

RECOMMENDATIONS:

- *Harmonising the National Research and Development Policy of the Czech Republic for the years 2004-2008 with this part of the Economic Growth Strategy that concerns R&D/I and the National Innovation Policy of the Czech Republic for the years 2005-2010 to ensure that it defines the basic principles for support of R&D from public budgets, change in the size of institutional and specific-purpose assistance for R&D, and the growing share of industrial R&D (see also Measure 3.5.1.1 Increasing Annual Public Expenditures on R&D with Focus on Industrial Research).*

CHAPTER 4 Basic Fiscal Principles of the Economic Growth Strategy of the Czech Republic

The Czech Republic's economic policy, including the concepts proposed in the Economic Growth Strategy, should respect some general fiscal principles, such as transparency in defining and implementing the objectives of policies, stability of the volume of funds used by the fiscal policy to influence the development of the economy, responsibility for the management of public budgets, and effectiveness of proposals and implementation of budgetary measures on the side of both revenues and expenditures.

The Czech Republic has instituted a fiscal policy that is based on explicit fiscal rules, both on the national and international level (European Union). The economic policy should conform to these rules, which contain binding limits, as they have been established in light of the need to secure long-term balance of public budgets without a negative impact on economic growth.

4.1 Current Situation in and Obligations of the Czech Republic

The Czech Republic has implemented a system of fiscal targeting with binding mid-term expenditure frameworks and expenditure limits. Mid-term expenditure frameworks determine the maximum possible volume of funds spent by the central government during three-year periods, which ensure attaining the set fiscal objective. The importance of expenditure frameworks and to some extent the fact that they are superior to the annual budget stems from the fact that the drafts of the state budget and the budgets of state-run funds must be based on the mid-term expenditure framework defined for the same year. Expenditure frameworks for subsequent periods have been set in light of the expected slower growth of public budget expenditures than the GDP growth and consequently a relative decline in these expenditures.⁴⁶ Considering the efforts to reduce the tax burden and the need to further reduce the deficit of public budgets, it can be expected that the relative share of expenditure in GDP will continue to decrease.

⁴⁶ See Mid-Term Outlook for the Years 2006 and 2007 approved together with the draft of the state budget for 2005.

At the level of the European Union, the Czech Republic has embraced the rules of fiscal discipline that limit the amount of gross debt and deficits of public budgets to the level of 60 and 3% of GDP, respectively. In its Convergence Programme, the Czech Republic agreed to reduce the deficit of public budgets by 2008 to less than 3% from the estimated approximately 5% in 2005. The long-term objective is attaining mid-term balance or surplus of public budgetary performance, as implied by the Pact of Stability and Growth, which the Czech Republic has undertaken to comply with by joining the European Union.

Further, the Czech Republic is one of the countries that will be considerably affected by the process of aging population. It is necessary to begin preparations for the fiscal consequences of this phenomenon. The implementation of some alternatives of structural reforms of the pension and healthcare system entails significant costs at the present time and only long-term benefits for the sustainability of public finances. If these variants are selected, expenditures should be, at least to some extent, compensated by savings in other areas. If it is impossible to complete the reforms, it will be necessary to secure considerable surplus of public budgets to offset future liabilities related to aging population. Postponing the reforms will result in their higher cost in the future.

4.2 Fiscal Policy Implications

The fundamental aspect of the fiscal policy is therefore the necessity to implement the allocation and redistribution function of public budgets in mid-term expenditure frameworks that are set with regard to the long-term macroeconomic sustainability of public budgets and the requirements of fiscal oversight institutions of the European Union. The stabilisation or reduction of public debt is of key importance for reducing the volume of debt servicing and consequently for securing greater room for an active fiscal policy.

Thus, the principle relies on budgetary control and consistent definition of priority expense programmes, which can only be executed within budget restrictions represented by expenditure frameworks. An increase of an expense priority under a specific programme can therefore be achieved only on condition of consistent attenuation of another or other programme(s) and the resulting savings. It should be expected that during the period targeted by the Economic Growth Strategy, the Czech Republic will continue to strive to reduce dynamic imbalances with the aim of attaining balance or surplus in public finances.

The Economic Growth Strategy of the Czech Republic therefore needs to be understood chiefly as an instrument aimed at clear specification of priorities and the corresponding redistribution of the considered available resources as part of the mid-term fiscal strategy. The key fiscal priorities include reforms in areas that may

jeopardise long-term fiscal sustainability (pension and healthcare systems) as well as measures supporting the development of an institutional environment for business, infrastructure, human resources, and support for research and development.

The introduction of new expense programmes is conditional on consistent re-allocation of resources. Further, a necessary precondition is increased effectiveness of management of public funds at all levels of public administration. This objective can be attained through the introduction of performance- and result-oriented budgeting and consistent control mechanisms. Delegation of powers and budget funds must be closely related to the responsibility for such funds and actual economic performance. Wherever possible, standard market-based management principles must be employed, as part of which the successful administrators of funds will be remunerated accordingly.

The introduction of new expense programmes must be subject to thorough economic analyses of costs, revenues, relations to existing programmes, and classification on the preferential scale of budget priorities. The effect of measures must be monitored and objectively assessed in relation to expected results.

We consider as a priority the implementation of those measures proposed in the Strategy that improve the institutional environment, support entrepreneurial activity, and are able to have a positive impact on economic growth, while such measures do not entail long-term negative consequences for public budgets.

Careful consideration must be given to the extent to which the state's intervention in specific areas is effective and whether an appropriate change in the institutional framework would accomplish the same result. It needs to be realised that the government's redistribution activities disrupt the process of deciding the use of available private resources, and increasing the state's interventions may generally crowd out private entrepreneurial activity and distort incentives available to private organisations.⁴⁷

The objective must be support for business and development of partnership between the public and private sectors with the aim of introducing market-based principles of management and decision making into the implementation and assessment of selected governmental activities.

⁴⁷ An example is the unclear conclusion of an OECD analysis targeting the role of government subsidies and aid for research, development, and innovation (Innovation Policies – Innovation in the Business Sector, ECO/CPE/WP1(2005)2).

New robust measures targeting the economic policy should be subjected to economic and financial analyses, which must not be limited to examining the immediate impact on public budgets, but also target broader economic implications.

We consider of key importance the fact that sound and sustainable public finances are one of the pillars of sustainable development of the Czech Republic.

CHAPTER 5 Use of the Structural Funds and the Cohesion Fund for Support of the Priorities of the Czech Republic

The first step the Czech Republic must take to be able to use assistance from the Structural Funds and the Cohesion Funds in the new programming period, i.e. the years 2007-2013, is the creation of operational programmes. The document that covers all operational programmes, as required by the European Commission, is the National Strategic Referential Framework (NSRF) that interlinks the priorities in the National Development Plan (NDP) with Community objectives of EU's economic cohesion policy during the 2007-2013 period.

Under the Treaty Establishing the European Community (TEC), the Structural Funds are EU's key instrument for attaining the objective of lessening the differences between the degree of development in various regions and reducing the backwardness of the most disadvantaged regions, including rural areas (TEC, Art. 158). At the level of the Czech Republic, this area is dealt with strategically by the National Development Plan and the Regional Development Strategy of the Czech Republic (RDS of the Czech Republic). The Regional Development Strategy of the Czech Republic is the fundamental long-term concept document for the regional policy of the Czech Republic, as a sovereign country and an integral part of the EU regional policy, which must be complementary to one another.

The factual content of proposed operational programmes should be based on the priorities identified in the Economic Growth Strategy and the ensuing NDP and other strategic documents. Specifically, operational programmes will target those priorities outlined in this Strategy that can be financed using the Structural Funds and the Cohesion Fund. Using the Structural Funds in the upcoming programming period is based on the objectives set by the European Union. The effective drawing of assistance from the Structural Funds and the Cohesion Funds in the Czech Republic during 2007-2013 should be secured through the harmonisation of the political priorities of the Czech Republic and the European Union, so as to optimise the share of national and community financing sources and to respect the additionality principle. Wherever the national and European priorities are contradictory or a low likelihood of obtaining assistance from EU funds exists, it will be necessary to make an effort to secure financial backing for the attaining of the objectives of the Economic Growth Strategy from budget and off-budget sources within the Czech Republic.

As regards implementation, the structure of new operational programmes should be defined taking into consideration the following factors and principles:

- ▶ assessment of experience gained in programme implementation during 2004-2006,
- ▶ simplification of the implementation structure of individual programmes – involvement of as few entities as possible, with clearly defined rights and responsibilities, abolition of the complicated implementation structures used at the present time,
- ▶ development of the subsidiarity principle at the national and regional levels and support for the partnership principle,
- ▶ elimination of duplicate financing,
- ▶ optimisation of the sectoral and territorial structure of operational programmes based on past experience,
- ▶ development of the system for administration, implementation, and monitoring of future operational programmes in a way allowing the maximum possible increase of the absorption capacity of the Czech Republic and use of all assistance from the Structural Funds allocated to the Czech Republic,
- ▶ reduction of differences between the degree of development in individual regions and alleviation of the backwardness of the most disadvantaged regions, including rural areas, as the fundamental objective of all interventions involving the Structural Funds (TEC, Art. 158 and 159), which should be assisted by the optimal balance of operational programmes; the Economic Growth Strategy will be the starting point for determining the priorities of the National Development Plan and setting the actual number of operational programmes in discussions of the Steering Coordination Committee,
- ▶ optimisation of the number of operational programmes (OP) resulting in:
 - ▶ increase in the flexibility of the drawing of assistance,
 - ▶ acceleration of the OP approval process at the EU level,
- ▶ if the programme structure is similar to the 2004-2006 period, consideration could be given to the results of system audits conducted during this period, and past experiences from implementation could be used, a fact that will have a positive effect on the acceleration of the drawing of assistance,

- ▶ taking into account the new EU legislation pertaining to the Structural Funds, the Cohesion Fund, and cross-border cooperation between European regions,
- ▶ taking into account national programmes, preventing the duplicate financing of priorities, optimising the use of national and EU resources, and taking into account national programmes.

Starting in 2007, the Czech Republic will be able to receive a much higher volume of funds than in the programming period ending in 2006. This fact represents a great challenge for potential final beneficiaries as well as authorities responsible for the administration of assistance. It is therefore necessary to strengthen the absorption capacity of the Czech Republic in a targeted manner. Further, improvement of the administrative capacity in the area of structural assistance will have a positive impact on other areas of the public administration. The use of interventions involving the Structural Funds will also directly allow increasing the effectiveness of the public administration in the Czech Republic on the central, regional, and local levels alike.

Cross-border and trans-regional development programmes executed within the EU space represent an important sphere of European regional cooperation. Activities of this type mainly involve the execution of joint programmes of drawing EU assistance together with partners from regions located along the Czech border (Germany, Poland, Austria, Slovakia) based on common macro-regional interests and the effective use of the Structural Funds.

In the long-term outlook, consideration could be given to the possibility of joint programming of European and national funds. In practice, such a comprehensive approach would allow the joint monitoring of the use of public funds from both the EU and the Czech Republic, which would have a positive effect on the effectiveness of the utilisation of public funds from EU and the Czech Republic and promote the attaining of priorities of economic and social cohesion.

■ | CHAPTER 6 ■ | Monitoring the Outcome of the Economic Growth Strategy

The Government will continually monitor the progress of implementation of measures and their results using clearly quantifiable indicators of recognised institutions (see below). Thus, the selected set of indicators will provide a basis for an effective assessment of the results of the Economic Growth Strategy of the Czech Republic.

The fulfilment of the individual tasks outlined in the Strategy will be assessed based on the implementation of the measures recommended in the text. The indicators listed below will be used for evaluating the actual impact on the economic, social, and environmental development in the Czech Republic.

The Strategy mainly targets the sustainable economic development and competitiveness of the Czech Republic in the international context, as suggested by the overall vision of the document. The basis for monitoring the results of the Strategy and comparing the development of the competitiveness of the Czech Republic in an international context will be a single **summary indicator rating the total competitiveness of the country**. Selected for this purpose has been the rating of the independent Swiss institution International Institute for Management Development (IMD). Every year, IMD publishes the World Competitiveness Yearbook, a report that contains an assessment of the development of competitiveness based on a comprehensive approach.⁴⁸ Rather than absolute ratings of the monitored criteria, the assessment consists of a relative comparison with other countries.

The **Human Development Index** (HDI) will be used for evaluating developments in the quality of general living conditions for people. This index is issued annually by the United Nations in its Human Development Report that includes an assessment of three basic areas of human development – length of life, knowledge, and living standard of the population. Hence, the report takes into account the degree of both the economic and social development of a country.

Considering that the Economic Growth Strategy is directly related to the Lisbon Strategy as its implementation in the Czech Republic, the monitoring of its results will be completed using a set of 14 **structural indicators** administered by

⁴⁸ The publication assesses 323 indicators for 60 countries. Indicators are divided into four sections: economic performance, government efficiency, business sector efficiency, and infrastructure.

Eurostat. Thanks to a standard method of processing and clearly defined quality profile that defines the descriptive value of individual indicators, the data can also be used for comparing the development of the Czech Republic within the European Union. The monitored set consists of the following 14 indicators:

1. *GDP per capita* measured in purchasing power parity, EU-25 = 100.
2. *Work productivity* per worker, EU-25 = 100.
3. *Employment rate – total* – share of employed persons 15-64 years of age in total population of the same age.
4. *Employment rate of older workers* – share of employed persons 55-64 years of age in total population of the same age.
5. *Expenditures on research and development* as percentage of GDP – including expenditures of corporations, government, private non-profit organisations, and research and development financing by universities.
6. *Education level attained by young people* – share of persons 20-24 years of age with complete secondary education as a minimum.
7. *Comparative price levels*.
8. *Corporate investments* – gross accumulation of fixed capital in the private sector as a percentage of GDP.
9. *Poverty risk rate* – number of persons with available income (after inclusion of social transfer payments) under the poverty level set as 60% of the median national available income (after inclusion of social transfer payments).
10. *Spread of regional employment rates* – at the level of NUTS 2.
11. *Long-term unemployment rate* – share of persons unemployed for more than 12 months in the total economically active population.
12. *Total emissions of greenhouse gases* – percentage change in the volume of emissions with regard to the reference year 1990.
13. *Energy input into economy* – share of gross domestic energy consumption in GDP; the indicator measures energy consumption in the economy and the total energy effectiveness.
14. *Freight transport* – share of freight transport in GDP in reference to the year 1995.

Abbreviations

- ADSL** – Asymmetric Digital Subscriber Line
- CDMA** – Code Division Multiple Access
- ČD** – České dráhy (Czech Railways)
- ČEZ** – České energetické závody (Czech Energy Corporation)
- CSO** – Český statistický úřad (Czech Statistical Office)
- EDGE** – Enhanced Data Rates for GSM Evolution (technology for fast data transfer)
- EIA** – Environmental Impact Assessment
- EPA** – European Patent Agency
- EU** – European Union
- FNM** – National Property Fund
- GDP** – Gross domestic product
- HFC** – Hybrid Fibre-Coax (network using both optic and coaxial cables)
- ICT** – Information and communication technologies
- IP** – Internet Protocol
- IPPC** – Integrated Pollution Prevention and Control
- KÚ** – Katastrální úřad (Land Registry Office)
- MF** – Ministry of Finance
- MI** – Ministry of Informatics
- MIT** – Ministry of Industry and Trade
- MLSA** – Ministry of Labour and Social Affairs
- MEYS** – Ministry of Education, Youth, and Sports
- MAgr** – Ministry of Agriculture
- MEnv** – Ministry of the Environment
- NUTS** – La Nomenclature des Unités Territoriales Statistiques (territorial unit)
- PPP** – Public Private Partnership
- ŘSD** – Ředitelství silnic a dálnic (Road and Motorway Directorate)
- SFDI** – Státní fond dopravní infrastruktury (State Transport Infrastructure Fund)
- SFRB** – Státní fond rozvoje bydlení (State Housing Development Fund)
- SŽDC** – Správa železniční dopravní cesty (Railway Infrastructure Administration)
- ÚOHS** – Úřad pro ochranu hospodářské soutěže (Office for the Protection of Competition)

USPTO – US Patent and Trademark Office

R&D – Research and development

R&D/I – Research, development, and innovation

VŠ – Universities

ZPF – Agricultural land

Definitions of Terms

Reader literacy – an individual's ability to understand a written text, consider it, and use it in attaining set objectives, development of own skills and knowledge, and active involvement in the life of a society.⁴⁹

Functional literacy – an individual's ability to adequately process and respond to presented information (literary, document, and numerical).⁵⁰

Information literacy – ability to understand the role and power of information, ability to seek information and use it in making decisions, and ability to produce and process information using information technologies.⁵¹

Mathematical literacy – an individual's ability to understand the role played by mathematics in the world, make substantiated conclusions, and use mathematics in the fulfilment of the individual's needs as a creative, involved, and thoughtful citizen.⁵²

Workforce mobility – the Economic Growth Strategy differentiates between territorial and vocational mobility.

Transferable /key/ life skills – ability to resolve problems, process information, work with information technology, and function in a team.⁵³

Natural science literacy – ability to use knowledge about natural science, ask questions, and draw conclusions based on personal experience that lead to the

⁴⁹ Učení pro život (*Learning for Life*), Results of OECD PISA 2003 survey, MEYS.

⁵⁰ Human Resource Development Project, Phare, 2001.

⁵¹ Behrens, S.J.: A Conceptual Analysis and Historical review of Information Literacy. College & Research Libraries. 1994.

⁵² Učení pro život (*Learning for Life*), Results of OECD PISA 2003 survey, MEYS.

⁵³ Human Resourced Development Project, Phare, 2001.

understanding of the natural world and help in making relevant decisions that entail environmental changes caused by human activity.⁵⁴

Groups disadvantaged in access to education – the disadvantages faced by these people are due to age, medical condition, loss or absence of learning skills, or social situation. Such people include children from socially weak families or families where parents have low level of complete education, children from remote areas, institutionally raised children (children's homes and institutes), children from socio-culturally disadvantaged environment (drug addicted and delinquent youth, youth endangered by crime), economically active population with no time for study, parents on maternal or parental leave, single parents caring for juvenile persons, persons caring for fully or partially handicapped family member, persons suffering from a medical handicap (physical, mental, developmental), persons entitled to old age pension, national and ethnic minorities, and refugees.

Groups disadvantaged in access to the labour market – the disadvantages faced by these people are due to age, medical condition, loss or absence of work skills, or social situation. Considered disadvantaged from the social viewpoint are mainly: graduates and young people without work experience, persons suffering from a medical handicap (physical, mental, developmental), parents after maternal or parental leave and single parents caring for a juvenile or handicapped child or a fully or partially handicapped family member, persons over 45 years of age, aged persons entitled to old age pension, national and ethnic minorities, refugees, persons unemployed over a long term, inflexible persons who are employed over a long term in a single or similar work positions, population of lagging rural regions, persons with no or low skills, person with low level of complete education or with incomplete education, persons returning to civil life after serving a prison sentence, young people exiting a children's home or returning to civil life after serving a prison sentence, drug addicts, persons without shelter, children and young people endangered by crime, persons endangered by prostitution, victims of violence, persons infected by AIDS, and crime victims.

Social protection system – for the purposes of this Strategy, the social protection system consists of state social support benefits, social care, social insurance,⁵⁵ and the instruments of the active employment policy.

⁵⁴ Učení pro život (*Learning for Life*), Results of OECD PISA 2003 survey, MEYS.

⁵⁵ Joint Memorandum on Social Inclusion, MLSA, EC, 2004

Student social protection system – all measures of the state social protection system available to students, including subsidies for accommodation and sustenance provided to students.

Tertiary education – in the context of the Czech Republic, tertiary education corresponds to the level of academic establishment a person can enter after completing secondary education (passing final examination); tertiary education is mainly provided by universities and higher specialised schools.⁵⁶

⁵⁶ Long-Term Plan for the Development of the Czech Education System. MEYS, 2005

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