

**Ministry of Education, Youth and Sports**  
**Department for Higher Education Institutions**

**The Long-Term Plan for Educational, Scientific, Research,  
Development, Artistic and Other Creative Activities of Higher  
Education Institutions for 2006 – 2010**

**Prague, August 2005**

## I.

# **The Long-Term Plan for Educational, Scientific, Research, Development, Artistic and Other Creative Activities of Higher Education Institutions for 2006 – 2010**

## **1. Introduction**

Act no. 111/1998 Coll. on Higher Education Institutions and on the Amendment and Supplement to Some Other Acts (the Higher Education Act) stipulates that the Ministry of Education, Youth and Sports (“the Ministry”) is obliged to develop, annually update and publish a policy document entitled “The Long-Term Plan for Educational, Scientific, Research, Development, Artistic and Other Creative Activities of Higher Education Institutions” (“the Long-Term Plan”). Its objective is to identify the main tasks in the development of higher education in the following period in line with the state education policy, and, in this way, to establish a common framework for the development of long-term plans for the development of higher education institutions. Higher education institutions will develop their long-term plans for 2006-2010 including their updated versions for 2006 and submit them to the Ministry by 31 October 2005. By this date higher education institutions will also submit development projects for 2006. From 15 November 2005 the long-term plans of higher education institutions will be discussed with the Ministry. As the law requires, the Long-Term Plan of the Ministry is focused on higher education, but in some respects concerns the entire sector of tertiary education<sup>1</sup>.

The Long-Term Plan of the Ministry for 2006-2010 follows from the Long-Term Plan for 2000-2005 and from major documents of the Ministry<sup>2</sup> and the government<sup>3</sup>. In terms of international developments it draws primarily on the Bologna and Lisbon processes, and the most important EU and OECD documents<sup>4</sup>. The quantified objectives of the Long-Term Plan were set on the basis of a SWOT<sup>5</sup> analysis which is based on an analysis of the aforementioned documents, the outcomes of activities of higher education institutions as they are presented in annual reports on their operations and financial performance, on analyses of data from student registers and other international and national information sources, and on the results of various research projects.

---

<sup>1</sup> The tertiary sector in the CR is composed primarily of public, private and state higher education institutions (providing Bachelor's, Master's and doctoral degree programmes), tertiary professional schools (providing tertiary professional education and possibly Bachelor's degree programmes in co-operation with higher education institutions), and, finally, by other institutions providing education leading to the acquisition of a higher than secondary level of education (in the CR these are two-year studies at conservatories after the “maturita” examination).

<sup>2</sup> The National Programme for the Development of Education in the Czech Republic – the White Paper (2001), The Strategy for the Development of Tertiary Education 2000-2006 (1999), the Outline of Higher Education Reform (2004) and the National Research and Development Policy in the CR for 2004-2008 (2003).

<sup>3</sup> Particularly the Strategy for Economic Growth in the CR (2005).

<sup>4</sup> See for example the key document of the Bologna process (Berlin 2003 and Bergen 2005), but also documents of the European Commission, particularly “The Role of Universities in the Europe of Knowledge”, (2003) and “Mobilising the Brainpower of Europe: Enabling Universities to Make their Full Contribution to the Lisbon Strategy”, (2005).

<sup>5</sup> See the annex “The Strengths and Weaknesses of the System, Opportunities and Risks related to Further Development”.

Higher education institutions in the Czech Republic have undergone a number of changes in the previous period – quantitative, qualitative as well as structural. There has been a considerable increase in the number of students, and the path towards further diversification of higher education has been cleared by the establishment of first public non-university higher education institutions. In line with the European process of harmonisation and the building of the European Higher Education Area (the so-called Bologna process), an overwhelming majority of degree programmes in higher education have been restructured by means of dividing them into two levels – Bachelor's and Master's studies. The European Credit Transfer System (ECTS) has been introduced at most public and some private higher education institutions. This has facilitated increased openness towards the international environment.

The Long-Term Plan of the Ministry is focused, above all, on increasing the quality of academic activities, cultivation of the academic environment and involvement of higher education institutions in international co-operation in education, research and development, and therefore on enhancing their competitiveness. These activities will be supported particularly through development programmes. Substantial support from the funds of the European Union is also envisaged.

The objective of the Ministry is to create a competitive, highly diversified system fulfilling all three principal functions of higher education institutions<sup>6</sup>.

- In the area of education, the system should develop and make full use of the potential of individuals, prepare young people for entering the labour market and provide for their employability over the long term, educate active citizens who strive to build democratic society, encourage graduates to pursue continuing education and learn throughout their lives, and further develop knowledge in a wide variety of disciplines.
- In the area of research and development the role of higher education institutions is gaining in importance. Higher education institutions are increasingly expected to establish appropriate conditions for the development of R&D of top standards, and to communicate the results of research and development or to apply them in practice as an important source of innovation.
- The third area of the operations of higher education institutions, in no way less important, is their co-operation with the business sector (enterprises, employers and other clients), and their contribution to the establishment of innovative and technological partnerships and involvement in the development of the region where the higher education institution operates (the so-called service function).

The Long-Term Plan of the Ministry prepared for the period of five years is annually updated, which makes it possible to respond to the relatively dynamic changes in the national and international contexts (the building of the European Higher Education Area). The updated version of the Long-Term Plan of the Ministry for 2006 is a separate document. The Long-Term Plan of the Ministry and its updated versions place emphasis on the introduction of output and quality parameters into mechanisms for the provision of subsidies (particularly by increasing the proportion of “non-formula” funding), and on co-operation between higher education institutions and regional institutions, the industry and other clients (which expands the possibilities of co-funding particularly from private resources).

---

<sup>6</sup> See the document of the European Commission “Mobilising the Brainpower of Europe: Enabling Universities to Make their Full Contribution to the Lisbon Strategy“, 2005.

The Long-Term Plan of the Ministry was developed at a time when the Czech Republic joined the OECD project “OECD Thematic Review of Tertiary Education”. At present materials are being prepared for a National Background Report. Based on the National Background Report and the findings identified for the CR by OECD experts an OECD expert report will be developed in 2006 (the so-called Czech Republic Country Note) which will assess the current situation and make recommendations and suggestions – to the Czech government and the Ministry - as to the further development of the system of tertiary education in the Czech Republic. The results of the OECD project as well as the conclusions derived from other policy papers concerned with tertiary education will be incorporated, as they become available, into the updated versions of the Long-Term Plan of the Ministry – particularly for 2007 and 2008.

## **2. The Main Objectives and Tasks of the Long-Term Plan**

### **The structure and diversification of programmes and institutions**

In the following period the Ministry aims to ensure further diversification of degree programmes on offer and to continue developing an appropriate distribution of student numbers in Bachelor's, Master's and doctoral degree programmes. This distribution will be supported by the Ministry by means of a flat 5% increase in formula funding to increase student numbers in Bachelor's degree programmes, and by a differentiated increase in the funding of doctoral programmes in order to increase the number of students where the rate of success of the studies shows a considerable growth.

It may be expected that the increase in the number of students in Bachelor's degree programmes will, by 2010, satisfy the demand for studies. Admission to Master's degree programmes will be subject to selection upon meeting demanding requirements for this type of study. As the number of students in Master's degree programmes will no longer increase, we assume that some 50% of graduates of Bachelor's degree programmes will continue studying at Master's level. Admission to doctoral degree programmes will be conditional upon meeting very demanding requirements. The development of these programmes will reflect the development of R&D and challenging creative and artistic activities carried out by institutions that have the relevant resources available. Student numbers in doctoral programmes will grow in view of the needs of the labour market.

Another important trend is the strengthening of the vertical and horizontal transferability of the entire tertiary sector. The ratio of students between the two main components of tertiary education – i.e. higher and tertiary professional – will remain unchanged. However, the ratio may alter as a result of an enlarged supply of higher education in the form of non-university higher education institutions transformed from the best tertiary professional schools on the one hand, and stagnation of interest in tertiary professional studies in relation to increasing availability and diversity of higher education on the other hand.

Changes in the regional distribution of tertiary education are also important and, particularly in the 2<sup>nd</sup> half of the 1990s, resulted in a decreased proportion of students in main higher education centres and an increase in their numbers in regional centres. This trend is desirable as a major booster for the development of regions and an increase of long-term employability in all regions of the CR. Student numbers and the structure and content of degree programmes must therefore follow from the development in the labour market over the

medium term<sup>7</sup> - both as regards programmes and key competencies. The Ministry will therefore continue supporting the “regionalisation” trend in the 2006-2010 period as one of the priorities of its Long-Term Plan.

Private higher education institutions<sup>8</sup> contribute to the development of educational provision, particularly at Bachelor’s level, and will do so in the following period. In previous years their number increased significantly. This is a young sector, as the establishment of private higher education institutions was only made possible by the Higher Education Act of 1998. They began to appear in 1999 and more have been established since then. At present their activities are being evaluated as they have produced first graduates. It is therefore a priority to stabilise this sector and to design its strategic aims as part of an updated version of the Long-Term Plan of the Ministry, or, possibly, in the form of a supplement to the Long-Term Plan which will be primarily concerned with private higher education.

Transferability and recognition of qualifications (including work experience) are conditional upon the development of the relevant qualifications framework. A national qualifications framework will be developed for higher education (covering all its levels and forms, including programmes following up from the so-called short cycles and tertiary professional education). It will be compatible with the Overarching Framework for Qualifications of the European Higher Education Area which was adopted by ministers responsible for higher education at the Bergen conference in May 2005<sup>9</sup>. The national framework for qualifications will be based on outputs, acquired competencies and graduate profiles, and it will use the European Credit Transfer System – its transfer and accumulation functions. This will form a basis for transferability and recognition of qualifications (including previous work experience). The Ministry will seek to link this framework with the European framework for qualifications, which is in the making, for all levels and forms of vocational education. The development of the national qualifications framework will be launched before 2007.

### **Access to education, student and graduate numbers**

**Access to higher education.** As many as 37% of young people got an opportunity to achieve higher education in public and private higher education institutions in 2004/2005. It is also necessary to realise that it was for the first time in this academic year that almost 50% of the relevant age groups<sup>10</sup> were enrolled within the entire tertiary sector (including tertiary professional schools and other institutions providing tertiary education<sup>11</sup>). In 2005/2006 the proportion of young people first enrolled in higher education will approach 40%, and the proportion of those enrolled in some form of tertiary education will exceed 50% of the

---

<sup>7</sup> Each higher education institution has a different regional labour market where most of its graduates operate.

<sup>8</sup> In the academic year 2004/2005 private higher education institutions are attended by 18,100 students out of the total 276 thousand students in higher education (including 4,1000 students at the University of Defence and the Police Academy of the CR – i.e. higher education institutions within the purview of the Ministry of Defence and the Ministry of the Interior respectively).

<sup>9</sup> See the Communiqué from the conference of European ministers responsible for higher education in Bergen in 2005 “The European Higher Education Area – Achieving the Goals” and the document “A Framework for Qualifications of the European Higher Education Area”.

<sup>10</sup> The calculations presented are made in line with the OECD methodology providing for an international comparison, and are based on the number of students first enrolled in the academic year 2004/2005 and the relevant age groups of the population.

<sup>11</sup> Tertiary education in the CR also includes, apart from tertiary professional schools, two state higher education institutions (the University of Defence and the Police Academy of the CR), and “post-maturita” studies at conservatoires.

relevant age groups. This will mean that the objective set out in the White Paper in 2001 will be met in full. It is expected that, by 2010, some 45-48% of the young population<sup>12</sup> will enrol in higher education institutions, and, together with those enrolled in tertiary professional schools and other types of tertiary education, this will amount to over 55% of young people (in 2015 it is realistic to expect as many as 50% of the relevant population group in higher education alone).

However, the social composition of students still constitutes a major problem in terms of access to education in the Czech Republic, as the rates of participation of children from various social groups vary significantly. While the proportion of students at higher education institutions whose parents have higher education runs at around 90%, the proportion of students whose parents have not achieved secondary education with “maturita” remains below 10%. Such severe inequalities in access to higher education are not common in most EU countries<sup>13</sup>. This is why, along with a continuing expansion of higher education opportunities, additional measures will be adopted aiming to increase the proportion of students from non-traditional social groups so as to ensure that the composition of students is brought more in line with that common in developed West-European countries<sup>14</sup>. This concerns the family and social backgrounds, and the age and life situations.

**Student numbers, success and effectiveness of higher education.** As in other West-European countries, the quantitative expansion of higher education in the CR has brought about certain unfavourable phenomena and trends as concerns the effectiveness and efficiency of studies. On the one hand, since the 2<sup>nd</sup> half of the 1990s the time an average higher education student spends in the system has been extended by almost one year. On the other hand, the average rate of success in studies has declined and it is below 70%. However, full implementation of the system whereby a payment is required if the standard length of studies is exceeded by more than one year, and the completion of structural changes in higher education in line with European developments (three levels – Bachelor’s, Master’s and doctoral) will contribute to an increase in the success rate to some 80-85%. Moreover, the period students spend in one degree programme will, as a result, shorten by about six months by 2010 (from the current 4.3 years to approx. 3.7 – 3.8 years). However, due to a reduction in the proportion of students dropping out of studies at the initial stages and an increase in the proportion of those who continue studying at doctoral level it will not be possible to lower the overall average period students spend in higher education.

In view of the above, and taking account of the development of new enrolments, it may be expected that the number of students in higher education will increase from the current 276 thousand to some 330 thousand in 2010 and that, due to a demographic decline,

---

<sup>12</sup> The current debate – for example in Great Britain – shows that it is likely that the objective of Blair’s government, which is to ensure that 50% of young people first enrol in higher education (universities and polytechnics) in 2010, will not be achieved. The situation is similar in France and Germany.

<sup>13</sup> The presented statements may be documented by data from extensive international studies initiated by the EU, for example “Transition from School to Work” or “Eurostudent 2000 and 2004”, and by the relevant data for the CR.

<sup>14</sup> The document of the European Commission “Mobilising the Brainpower of Europe: Enabling Universities to Make their Full Contribution to the Lisbon Strategy” emphasises the need for diversity – in admission, forms of instruction, fields of study, competencies acquired – so as to ensure a full development and use of the intellectual potential of an individual. It sets out a number of essential measures to expand access to higher education for non-traditional students (facing economic, social or cultural disadvantages, minorities, etc.), and to attenuate the link between family background and educational attainment: e.g. the role of guidance services (before and in the course of studies), flexible forms of admission and individualisation of educational paths, grant and loan systems, affordable accommodation and part-time job opportunities.

the figure will remain unchanged until 2015<sup>15</sup>. To a rather large degree, this increase will be attributed to new public higher education institutions (the first one was set up in 2004 in Jihlava) and private institutions<sup>16</sup>. Although it is possible to expect, in years to come, a continuing increase in the number of students in higher education, a slowdown in the growth dynamics may be expected in public higher education institutions and, after 2012, the increase may even stop. This will facilitate a more intensive focus on their qualitative and structural development, and on the provision of new types and forms of education for non-traditional student groups. The increasing age of higher education students will go hand in hand with an increasing proportion of distance learning, and the share of students in other than full-time (“daily attendance”) form of studies will go up from less than one fourth at present to one third of all students by 2010.

**Graduates of higher education institutions, entering the labour market.** The aforementioned developments will result in a considerable increase in the number of graduates of higher education institutions, and their proportion in the workforce entering the labour market will also grow. There has already been a sharp increase in the number of people who achieve the first higher education degree: from less than 25 thousand in 2000 to over 30 thousand at present. The number of graduates will rise, by 2010, to almost 50 thousand per year. Graduates of Bachelor’s degree programmes will constitute a decisive portion of this figure. This will naturally result in an increase in the number of new graduates at all levels and types of school entering the labour market. Around 2010 over one third of them will be graduates of higher education institutions or other institutions providing tertiary education. And five years later it will be as many as 40%. Since the mid-1990s, the Czech labour market has shown an extraordinarily high demand – in the context of continental Europe - for graduates with higher education degrees and, even in the period under question there is no need to worry about their excessive supply in view of the current development trends in the Czech economy<sup>17</sup>.

### **The quality of studies and students**

In order to ensure the quality of studies a system for comprehensive external evaluation will be gradually built in addition to a systematic support for internal evaluation of institutions. The system will expand the evaluation carried out by the Accreditation Commission. Many activities in this area are already taking place as part of the Bologna process in Europe<sup>18</sup>. The Czech Republic is actively involved in this process and, in the area of quality evaluation, influences it to a large degree.

---

<sup>15</sup> According to the OECD methodology, this will result in an extension of the average length of tertiary education of the relevant population from 2.5 years in 2005 to 3.1 years in 2010, and to 3.4 years in 2015. The latest average figure available for the “old” EU-15 countries is about the same as the average for all OECD countries in 2002 – it is 2.7 years and in recent years the increase has slowed down.

<sup>16</sup> While the year-on-year increase in the number of students at private institutions has been in the order of several tens of percent in recent years, it is less than 10% in public institutions.

<sup>17</sup> For example the Government Strategy for Economic Growth (2005).

<sup>18</sup> See the Communiqué from the conference of European ministers responsible for higher education in Bergen in 2005 “The European Higher Education Area – Achieving the Goals” and the document “A Framework for Qualifications of the European Higher Education Area”. At national level, this issue, including pilot testing at several higher education institutions, is the subject of a project entitled “Evaluation of the Quality of Higher Education Institutions” which is being implemented by the Centre for Higher Education Studies (in close co-operation with the Accreditation Commission and the Council of Higher Education Institutions). The body responsible is the Ministry of Education, Youth and Sports.

Co-operation between higher education institutions and secondary schools is another factor which impacts upon the quality and characteristics of students entering the tertiary sector. This co-operation and mutual communication are insufficient at present, and it is in the interest of both higher education institution and secondary schools to pursue improvements in this area which should be reflected in the number and quality of admitted applicants. This area will also receive support from the Ministry in 2006-2010 so as to ensure a major enhancement of mutual co-operation between the secondary and tertiary sectors of education. The quality of this co-operation will have effects on the entire education system, particularly in view of assuring the quality of the training of teachers for the introduction and implementation of curricular reform at lower levels of education. Attention will also be devoted to identification of top talents. Efforts will be made to pinpoint the most talented applicants whose choice of a higher education institution will also be reflected in the relevant financial mechanisms.

### **Internationalisation of studies**

The use of the European Credit Transfer System (ECTS) will be further enhanced and the issuance of the bilingual diploma supplement expanded. The objective is to ensure that half of the public higher education institutions and those private higher education institutions which have the “Erasmus Charter” obtain the “ECTS Label” awarded by the European Commission, and that all higher education institutions issue the diploma supplement (while meeting the conditions of the Berlin Communiqué of September 2003), and obtain the “Diploma Supplement Label” certificate of the European Commission.

Higher education institutions are increasingly opening up towards the international environment. Student mobility in both directions has roughly doubled since 2000 (the overall number of foreign students in Czech higher education institutions was 17,500 in 2004/2005 – i.e. more than 6% of all students). All students who will show interest and capacity will get an opportunity to spend at least one semester at a foreign higher education institution (it is expected that this will concern up to one half of all higher education students). The proportion of foreign students in Czech higher education institutions will go up to 10% of the overall number (this includes all students who undertake a part of their studies at least one semester long at Czech higher education institutions).

The proportion of degree programmes delivered in foreign languages will increase: in doctoral programmes from approx. 30% to 60%, and a half of Master’s degree programmes will be taught in foreign languages. The language competencies of professors, associate professors and all junior academic staff will also improve so as to ensure that they are able to lecture and communicate with students in at least one foreign language. Administrative and technical staff will also enhance their language skills to be able to provide services to foreign students and academic staff in at least one foreign language (predominantly English).

### **Funding**

**The funding of higher education from public resources.** The principle objective as regards the funding of higher education and implementation of the aforementioned goals is to achieve, by 2008, the level of expenditure on higher education totalling 1% of GDP. Even when the entire system of tertiary education is included, this will only bring the level closer to what is common in Europe (EU-15) – i.e. 1.0 - 1.4% of GDP. The most recent document of



the European Commission states<sup>19</sup> that societies and economies that are based on an intensive use of knowledge, which is the Czech Republic's aspiration as well, need to spend at least 2% of GDP to finance their systems of tertiary education. The items in the budget for Czech higher education that will increase most significantly include support for effective operations of institutions focusing on outputs (for example support related to the number of employable graduates), development programmes or support for access to higher education for non-traditional social groups (co-operation with secondary schools, a scholarship fund).

**The funding of higher education from private resources.** In view of the current situation as regards public budgets the insufficient level of funding of Czech higher education cannot be redressed only by increasing state expenditure, but also, in the spirit of the recommendations made by the European Commission and the OECD, by a substantial involvement of private resources. It is also necessary to take account of the fact that so-called "revenues from own activities" already form a significant part of the existing financial resources of higher education institutions and account to some 20% of their overall budget. The aim is to at least maintain the existing structure of resources and therefore to increase the level of non-public funding at the same pace as is the case with public funding.

Although there are currently no plans to introduce tuition fees at national level, it is necessary to realise that roughly 18 thousand students (mostly citizens of the CR) at private higher education institutions and 10 thousand students of public higher education institutions whose studies have exceeded the standard length by more than one year – i.e. some 10% of all higher education students – already pay tuition fees at some level, which is often not negligible<sup>20</sup>. Moreover, we must realise that the experience of other European countries in this respect is not entirely conclusive even in economic terms. The introduction of tuition fees always requires the development of relatively costly systems of student loans and grants in order to reduce the occurrence of social inequalities in access to higher education<sup>21</sup>. However, neither are these systems fully successful and the total ratio of costs and benefits is not very convincing. As the Czech Republic can be characterised by large inequalities in access to higher education in European terms, it is not advisable to recommend an across-the-board introduction of tuition fees. Instead, a more gradual process should be opted for whereby the quality and effectiveness of teaching and learning at higher education institutions should be promoted by a number of various steps. This will ensure that full use will be made of the motivation function of tuition fees (another function besides the economic one), which is already the case with, for example, the collection of fees for exceeding the standard length of studies by more than one year. Implementation of this measure must be consistent.

**Eliminating the internal debt of higher education institutions.** Insufficient levels of funding of higher education institutions over the long term show in two key areas. Firstly, there are low standards of equipment and laboratory facilities, the premises are often inappropriate, disintegration occurs, etc. The Ministry is making efforts to facilitate the use of non-capital funding to renovate capital assets by pursuing amendments to the relevant

---

<sup>19</sup> "Mobilising the Brainpower of Europe: Enabling Universities to Make their Full Contribution to the Lisbon Strategy", 2005.

<sup>20</sup> Not to mention students at tertiary professional schools where it is a majority of students who pay at least some tuition fees.

<sup>21</sup> A brief discussion is presented in the aforementioned document of the European Commission "Mobilising the Brainpower of Europe: Enabling Universities to Make their Full Contribution to the Lisbon Strategy", 2005. The document states explicitly that although there is a number of alternatives, "fair access for all qualified students" must always be guaranteed and "where tuition fees are introduced, a substantial part of the funds should be redistributed as income-contingent grants/loans aimed at guaranteeing access for all, and as performance-related scholarships aimed at encouraging excellence".

legislation which would take more account of the needs of higher education institutions and their situation and which would make it possible for them to spend resources on the development of assets as opposed to their mere reproduction. Secondly, the remuneration of staff at higher education institutions is insufficient and below European pay levels. This has negative effects on the staff's age structure and, most importantly, on their quality.

**Research and development.** The main objective in this area is to ensure that research and development foster, to a larger degree, economic growth and increase the technological standards of the country and, in this way, enhance its prosperity and competitiveness. This should be done primarily through successful innovations. The main approach to implementing R&D objectives consists in gradual implementation of the objectives of the Lisbon strategy and in increased level of R&D funding from public resources up to 1% of GDP by 2010. At the same time, steps must be taken to increase the proportion of private funding of research and development up to 2% of GDP. This means that the level of public resources for R&D will have to reach 36 billion CZK in 2008, and the level of private resources will have to double.

In order to achieve the aforementioned goal it is necessary to change the position of higher education institutions so that it is closer to what is common in developed countries. This means that two basic strategies will have to be implemented at the same time. The first aims at increasing the rate of participation of higher education institutions in research as a whole from 15% to at least 20% (in developed countries it is even 30%). This will amount to almost 6.5 billion CZK in 2008. The meeting of the first objective constitutes a precondition for the meeting of the second objective, which is to increase, in a substantial manner, the level of private funding for R&D at higher education institutions (a five-fold increase compared to the current situation).

### **3. The Priorities of the Long-Term Plan of the Ministry**

The priorities of the Long-Term Plan of the Ministry are focused on 3 major areas:

- internationalisation,
- quality and excellence of academic activities,
- quality and culture of academic life.

These priorities relate to major areas of higher education institutions' activities and their implementation is unthinkable without their responsible governance. They cover in particular:

- the provision of higher education of the relevant scope, structure and quality with a direct, and indispensable, link to science, research and development, and creative and artistic activities;
- all internal and external activities of higher education institutions concerned with human resources development and contributing to the development of a society based on knowledge, openness and values.

The implementation of the priorities of the Long-Term Plan of the Ministry will result in an increase in the necessary funding and a more efficient use of resources.

## I. Internationalisation

Implementation of the objectives of the Bologna process will contribute to the gradual building of the European Higher Education Area and, at the same time, enhance the competitiveness of higher education institutions at international level (within and outside the EU). These objectives currently constitute the main features of the internationalisation process in higher education. Internationalisation is present in all major areas of higher education institutions' activities – education, research and development, creative and artistic activities and all other activities which, in general, contribute to the development of society. Internationalisation will be more evident in specific sub-areas such as innovation, human resources development and co-operation as part of international programmes. The capacity to take part in international competitions and tenders constitutes a fundamental pillar for building competitive higher education institutions, and it is closely linked to the possible use of resources from the European Union.

Important instruments for internationalisation include:

- 1. Sufficient opportunities for studying in foreign languages.** The objective is to motivate higher education institutions to expand the range of programmes delivered in foreign languages, preferably in English. This will improve access to studies for foreign students and make it possible for Czech students to undertake at least a portion (selected modules) of their degree programme in a foreign language in line with their preferences. Studies in foreign languages will also enhance the employability of Czech students in view of international competition. Support will be directed, above all, to doctoral and Master's degree programmes delivered both in Czech and in a foreign language.

*The Ministry will support these activities by means of development programmes. Financial resources may also be obtained from educational programmes of the EU and the justification being an increase in employability, also from the EU Structural Funds.*

- 2. A larger degree of openness on the part of higher education institutions and the expanded range of programmes in foreign languages, including „joint degrees“, will undoubtedly place demands on the level of **language skills of students, as well as academic and administrative staff.**** It will be necessary to introduce two communication languages (the choice will be at the institutions' discretion) and emphasis will be placed on:
  - 2.1. the language skills of students.** This will particularly include top-quality language courses designed according to the relevant fields of study and professional orientation, expanded provision of specialist seminars run in foreign languages for Czech and foreign students, the development of modules taught in foreign languages, and Czech courses for foreigners;
  - 2.2. the language skills of the academic staff.** Their language competencies will play a role in the evaluation of quality of their higher education institution/faculty, or will be taken into account during accreditation of Master's and doctoral degree programmes;
  - 2.3. the language skills of the administrative staff.** The capacity to provide services in a foreign language, in addition to Czech, will be viewed as an important feature during the evaluation of quality of the higher education institution/faculty.

*Innovation of degree programmes in this sense will be supported by means of development programmes. The language competencies of academic and administrative staff will be*

*promoted through various courses as part of lifelong learning. Further resources may be available within educational programmes of the EU.*

**3. International educational programmes** facilitate co-operation in instruction. The development of activities will focus on:

- 3.1.** involvement of higher education institutions (as partner institutions, but primarily as project co-ordinators) in programmes such as Socrates, Leonardo da Vinci (and their next stages from 2007) and Tempus, EU programmes for co-operation with Asia, Latin America, the USA, etc.,
- 3.2.** involvement of higher education institutions in co-operation and projects implemented as part of professional networks or the European University Association (EUA) and other important international institutions.

*The activities will be funded from the relevant international programmes. The Ministry will support a number of them, particularly their preparation, through development programmes.*

**4. The mobility of students and academic staff**

**4.1. Study visits of students and academic staff** will take place as part of co-operation in education and research at European, regional or bilateral levels (particularly the EU programmes Socrates, Erasmus and other sub-programmes, Leonardo da Vinci and their future forms after completion of the current stage as part of the new Integrated Lifelong Learning Programme for 2007-2013, the 6<sup>th</sup> and 7<sup>th</sup> Framework Programme for research and development, regional co-operation programmes such as CEEPUS, Aktion, co-operation as part of the Visegrad Fund, and bilateral research and development programmes). Study visits as part of bilateral co-operation between higher education institutions will also be included, including visits based on an individual agreement between the student and the foreign institution approved by the student's institution (so-called "free movers"). Attention will be paid not only to study visits, but also to work placements that will be part of degree programmes.

**4.2. Admission of foreign students and academic staff.** The interest on the part of foreign students and academic staff in Czech higher education is important in terms of openness of the entire Czech higher education system, its increased competitiveness and, as a result, better quality. Attention will be paid to the following issues:

- 4.2.1.** admission of foreign students and academic staff as part of international exchange programmes described above (see 4.1),
- 4.2.2.** involvement of higher education institutions in the Erasmus Mundus programme (also see point 5.2),
- 4.2.3.** identification of countries suitable for self-paying students (India, Thailand, countries of the former Soviet Union); this will include, for example, support for participation in selected education fairs, etc.,
- 4.2.4.** scholarships for talented foreign students particularly in doctoral and possibly Master's degree programmes,
- 4.2.5.** attracting, above all, young academics and scientists from abroad,
- 4.2.6.** facilitating participation in national research and development programmes for foreign higher education students and academic staff as well as practitioners.

*These activities will be funded particularly from the aforementioned international programmes. The Ministry will also provide resources designed for additional support for the "end users" within the Socrates programme (scholarships and additional financial*

*support within selected projects) and further support in the form of development programmes. Last but not least, resources will be obtained from self-paying students.*

**5. Joint degrees.** Along with the restructuring of degree programmes the nature of student mobility will change. In addition to the existing opportunities, mobility will also involve joint degree programmes. The development in this area will be focused on:

- 5.1.** degree programmes designed in co-operation with one or more foreign higher education institutions leading to a so-called “double degree”, or a “joint degree”, as well as joint tuition of Master’s theses and doctoral dissertations,
- 5.2.** projects as part of the EU Erasmus Mundus programme aimed at co-operation of European higher education institutions in designing study opportunities (Master’s degree programmes) for students from outside Europe, particularly Asia and Latin America.

*The Ministry will support, through its development programmes, particularly the activities described in 5.1. Funding for other activities may be obtained by higher education institutions from EU resources.*

**6. Consistent implementation of the ECTS in Bachelor’s and Master’s degree programmes** leading to the certificate of the European Commission “ECTS Label”. **Automatic issuance of the Diploma Supplement for all graduates, free of charge, in a widely spoken foreign language** (bilingual) leading to the certificate of the European Commission “Diploma Supplement Label”. These certificates will be a sign of quality as regards the implementation of a credit system and the issuance of the Diploma Supplement, and will also constitute a competitive edge as regards EU projects or acquisition of foreign students.

*These activities may be funded from EU resources and from consultative assistance as part of the “Bologna Promoters” project. As in the previous period the Ministry will support these activities through development programmes and create conditions for dissemination of good practices.*

## **7. International co-operation in research and development**

International co-operation in research and development (R&D) is one of the basic aspects of the development of R&D aimed at promoting economic growth, increasing the standards of technology and innovation, and, as a result, enhancing the competitiveness of the CR. The major building block in international co-operation in R&D involves joint projects, success in tenders and R&D results achieved in the international arena – this will constitute one of the qualitative indicators in evaluation of higher education institutions. The activities within the Framework Programmes for Research and Development of the EU will continue to be a priority. However, attention will also be paid to separate projects of bilateral co-operation, participation in major international networks and teams, university research units and other institutions active in tertiary education, participation of academic staff in international industrial research projects, and co-operation with important international governmental as well as non-governmental organisations.

*Financial resources in this area will be obtained particularly from the relevant programmes and various types of co-operation. The Ministry will also support higher education institutions by means of consultancy concerned with administrative work in relation to the submission of projects.*

## **II. The Quality and Excellence of Academic Activities**

The pursuit of quality and excellence will be evident in all major activities of higher education institutions, particularly in education, research and development, and creative and artistic activities. Emphasis will be placed on outputs and measurable outcomes which will constitute an important criterion for funding of higher education institutions' operations. Major quality indicators will include co-operation between higher education institutions, partnership with the relevant region, promotion of links to the private sector and co-operation with clients. In line with the institutions' plans, quality will also take the form of well-functioning support services and an appropriate infrastructure. As distinct from the 2000-2005 period, increased attention will be devoted to the governance function, efficient and transparent use of financial resources allocated from the national budget, international co-operation and participation in international projects. Moreover, a larger degree of importance will be attributed to the academic ethos and relationships within the academic community, as all these aspects point to the quality of a higher education institution.

Evaluation of the quality of higher education institutions in line with international developments will facilitate the identification and promotion of the strengths of higher education institutions and their units. This will allow them to pursue excellence and competitiveness at European level, possibly, excellence at national level, which will guarantee progress in the relevant area, or contribute, in a considerable manner, to the development of the economy or other areas of national importance. The Ministry will support this development and dissemination of good practices. Support may be directed towards major research and development centres, implementation of successful degree programmes of all types as well as activities leading to the institution's excellence at regional (national, international) level, important co-operation with clients interested in the results of higher education institutions, etc. The principle objective is to support all higher education institutions so that they may pursue top quality in activities where the future lies for them and where they are capable of achieving excellence. This relates to another objective, which is the maximum possible use of all capacities and resources, and no institution should be excluded from this development.

This approach will make it possible for higher education institutions/faculties to shape their profiles and excel in the areas where they show major strengths.

As regards quality evaluation, the Ministry will support the adoption and implementation of the principal framework of standards the first version of which has been prepared, and will be further developed, by the European Association for Quality Assurance in Higher Education (ENQA) together with the European University Association (EUA), European Association of Institutions in Higher Education (EURASHE) and the National Unions of Students in Europe (ESIB), and which was adopted by the conference of ministers responsible for higher education in May 2005 in Bergen. At national level this entails the development of the culture of quality which involves, above all, internal evaluation. The objective is to ensure that the outcomes may be used, in line with international requirements, in external evaluation carried out by the Accreditation Commission for accreditation purposes and in other external evaluation processes focusing on improving the work of higher education institutions in the national and international contexts.

## **1. The qualification and age structure of academic staff and its development**

**1.1. Enhancing the quality and potential of academic staff** is considered to be one of the key development factors in higher education on which, generally, the quality of

education, research and the academic environment depend. Although changes have taken place as regards the age and qualifications structure of the academic staff, the situation is still unsatisfactory. Higher education institutions will make efforts to enhance gradually the attractiveness of an academic career (a system of incentives, a highly creative environment with the relevant research facilities), and to develop human resources potential by attracting talented students and graduates of Master's and doctoral degree programmes. Human resources policies must strive to toughen the requirements for the existing academic staff (professional growth criteria, academic career development, own scientific or creative activities, opportunities for an international academic career). Ways will also be sought to motivate experts from industry to work at higher education institutions.

**1.2. Support for the continuing training and education of academic and administrative staff.** Continuing training and education and the dynamics of professional growth should become one of the most important criteria in evaluation of the work of academic and administrative staff. Continuing training and education will primarily focus on:

**1.2.1. – for academic staff** – the development of knowledge and skills in the relevant discipline and in the entire area of knowledge, processes and methods of higher education and adult education. Emphasis will further be placed on the capacity to communicate knowledge and skills to students and on the development of so-called general competencies (presentation, teamwork, information literacy, ICT skills in education and research, the development of language competencies, management skills, the knowledge related to intellectual and industrial property, etc.),

**1.2.2. – for administrative staff** – the development of information skills including the use of administration and management information systems, and the development of language competencies.

*The development of qualifications and age structure of academic staff is being boosted by the opportunity for higher education institutions to set out their own wage regulations which the Ministry will continue to monitor. The Ministry will promote the creation and implementation of continuing training and education and academic and administrative staff development schemes by means of development programmes. Financial resources may also be obtained from the EU Structural Funds.*

## **2. Transferability of the system, enlarging access to education, lifelong learning**

Enlarged access to tertiary education does not only entail increased intake figures in the relevant age group, but also an increasing openness of tertiary education towards older age categories (employed or economically inactive) – i.e. implementation of the lifelong learning concept. There are many urgent reasons for this, including the requirements of society and individuals stemming from the development of the knowledge economy and the increasingly demanding industry and occupational structure. Moreover, the Czech Republic has too a low proportion of the workforce with tertiary education, which cannot be quickly redressed by a mere transfer of new graduates to the labour market. The solution also consists in enhancing the qualifications of the older workforce who only have secondary education. The need for them to acquire new competencies and qualifications will be increasingly apparent. Higher education institutions must accommodate learning needs of a variety of students and learners (traditional and new categories), which calls for individualisation of their educational paths, increased diversity of programmes on offer (including continuing training), an inter-linking nature of the provision (transferability) and opportunities for recognition of professional competencies

(including previous work experience). The necessity to provide for a broader access to tertiary education for non-traditional learners in particular, and for a more differentiated provision and individualisation of learning routes, is pointed out in a number of documents of the EU and the most developed countries in the world.

- 2.1.** One necessary precondition for the development of the system of tertiary education is its **transferability** – i.e. between individual levels of higher education and between shorter cycles and other parts of tertiary education (particularly tertiary professional), which will facilitate access to studies at any level.

Transferability will be ensured particularly by the following:

- 2.1.1.** **modularity** of degree programmes at all three levels which will make it possible to follow up on completed modules at any time – both at Czech and foreign institutions of tertiary education (while always meeting the relevant entrance requirements),
- 2.1.2.** **a system for recognition of education acquired outside the relevant higher education institutions** with the application of the Lisbon principles and objectives of the Bologna process.
- 2.2.** The Ministry will contribute to the development of a **national qualifications framework for the tertiary sector**, which will be compatible with the Framework for qualifications of the European Higher Education Area adopted by ministers responsible for higher education in Bergen in May 2005 and which will be necessary for recognition of lifelong learning programmes in initial education. The international framework for qualifications is a reference framework where qualifications are described primarily by means of outputs – i.e. competencies acquired. In harmony with European developments and preparations for the next meeting of ministers in London in 2007, this priority will be included in the updated version of the Long-Term Plan of the Ministry.
- 2.3.** Enlargement of the provision of educational programmes, which aims at enhancing the qualifications of the population and meeting the needs of the changing society, particularly in relation to demographic developments, concerns both Bachelor's (and Master's) degree programmes, and shorter courses of lifelong learning which respond to industry/regional needs. In both cases it is desirable to facilitate recognition of professional competencies (including previous work experience) so that only a section of the degree programme/lifelong learning course may be undertaken in order to acquire a (full or partial) qualification. The following specific areas require special attention:
- 2.3.1.** the continuing training of teachers aimed at meeting the existing demand of teachers for acquiring the relevant professional qualifications and fulfilling additional qualification requirements in line with Act no. 563/2004 Coll. on Pedagogical Staff and on the Amendment to Some Other Acts;
- 2.3.2.** development and implementation of learning programmes for elderly citizens in view of demographic changes and the population ageing (including "Third-Age Universities"),
- 2.3.3.** pilot testing of the forms of lifelong learning where previously acquired qualifications are recognised – particularly in shorter lifelong learning programmes.
- 2.4.** Expanding the range of study opportunities in general and educational opportunities for adults in particular is conditional upon further development of **combined and distance learning modes, and the introduction of learning supports** (multi-media learning aids), the use of e-learning, interactive instructional programmes and materials, the development of joint teaching laboratories, the introduction of learning



based on projects and problem-solving, and the development of counselling/information centres. Wide co-operation between higher education institutions/faculties will be necessary if such forms of learning are to be effective. “Virtual mobility” will be used by students who do not wish or cannot be involved in traditional mobility schemes.

**2.5. In educational activities** improved effectiveness of studies will be a very important quality indicator. Emphasis will therefore be placed on:

**2.5.1. the design of Bachelor’s degree programmes which will be modified to meet the diverse needs, interests and abilities** of a wide spectrum of the relevant population entering the programmes. By means of this the rate of failure will be reduced (particularly the ratio of graduates to students admitted to the 1<sup>st</sup> year) without softening the relevant requirements for this type of programme,

**2.5.2. eliminating unnecessary extension of the standard length of studies** – this should even concern the one-year extension permitted by law – particularly in Bachelor’s and Master’s degree programmes,

**2.5.3. restructuring degree programmes in line with the Bologna process (i.e. a two-level structure and a modular approach) in the initial training of pedagogical staff, particularly teachers at all levels,** and their innovation in the sense of the requirements laid down in the new Act no. 561/2004 Coll. on Pre-School, Basic, Secondary, Tertiary Professional and Other Education (the Schools Act), and Act no. 563/2004 Coll. on Pedagogical Staff and on the Amendments to Some Other Acts. This will particularly concern the competencies in pedagogy, psychology, subject didactics, the development of specific scientific, technical or artistic competencies, and the capacity to raise the students’ interest in learning (particularly in science and technology). Moreover, emphasis will be placed on information literacy and the use of ICT in instruction, enhancement of language competencies and basic organisational and management skills related to education,

**2.5.4.** – in all types of degree programme – aiming for tops standards of language competencies and computer and information literacy, further development of communication and management skills, and the elasticity of graduate profiles in view of the needs of society, the relevant region and the labour market,

**2.5.5.** innovation of the existing degree programmes focusing on lowering of direct teaching and replacing it by customised study plans, problem-solving approaches, projects etc.

*The Ministry will support these activities by means of development programmes and, possibly, projects within the “Higher Education Institutions’ Development Fund”. Financial resources may also be obtained from the EU Structural Funds or educational programmes. The Ministry will publish examples of good practices and create platforms for their dissemination. The Ministry will allocate bonuses, as part of formula funding, to those higher education institutions where a higher percentage of students complete their studies within the standard length.*

### **3. Equal access to education and counselling**

Support to ensure equal access to education, good employability and a favourable social position for applicants from **socio-culturally disadvantaged groups** (from backgrounds which fail to motivate young people to take part in higher/tertiary education) will take the following forms:

3.1. preparatory courses before studies (possibly in co-operation with secondary schools),

3.2. counselling services during studies.

**Effective provision of counselling and guidance services**, which is very important for all students, and possibly academic staff, in general, and for the aforementioned disadvantaged groups in particular, will be guaranteed in the following ways:

3.3. the development of guidance services aimed at assisting students in seeking individualised ways of successful completion of degree programmes; career guidance will also be included as well as other aspects, such as the institution's involvement in international co-operation and related opportunities, educational counselling, etc. Overall access to information will be improved.

3.4. further development of vocational guidance and the organisation of fairs of job opportunities at higher education institutions.

*The Ministry will support these activities mainly by means of development programmes, and possibly as part of projects of the "Higher Education Institutions Development Fund".*

**4. The employability of graduates, co-operation between higher education institutions and regions, linking theory and practice, co-operation with clients.** The employability of graduates of higher education institutions is considered to be one of the most important indicators of the quality of the institutions' academic performance. As in the previous period, the Ministry, in co-operation with the Ministry of Labour and Social Affairs and labour offices, will monitor the trends in the unemployment of graduates and the supply of jobs according to degree programmes, higher education institutions, faculties and regions. Based on this data and statistics an overview of degree programmes will be continuously updated focusing on the employability of graduates and the trends in employers' requirements for graduate profiles. The aim is to help higher education institutions respond to the labour market needs. Emphasis will therefore be placed on the maximum possible use of all available information and innovation of degree programmes in line with the trends.

Co-operation between higher education institutions and regional bodies, potential employers and the consumers of R&D results (in addition to higher education institutions' social responsibility and their role as centres of education, research and creative and artistic activities) will lead to increased attractiveness of higher education institutions and opportunities for further funding particularly from the private sector. This co-operation will also facilitate the transfer of graduates from the academic environment to industry. The objective is to reinforce co-operation with regional institutions and potential employers, which will occur particularly in the following areas:

4.1. the design and implementation of degree programmes, participation of experts from industry in instruction, including co-operation in the development of Bachelor's, Master's theses and doctoral dissertations,

4.2. organisation of fairs presenting job opportunities and services higher education institutions may offer,

4.3. the commissioning, design, implementation and evaluation of research plans and projects, transfer of R&D results into practice, the establishment and development of technology centres and innovation parks, participation in industrial R&D, implementation of R&D projects in companies,

4.4. organisation of work placements for students and academic staff, sabbaticals, etc.

*The Ministry will support higher education institutions in their focus on the employability of graduates, labour market needs and co-operation with regions by means of development programme and, possibly, as part of projects of the "Higher Education Institutions*

*Development Fund”. Projects dealing with issues in 4.1 may receive funding from the EU Structural Funds. The Ministry will provide the aforementioned information to higher education institutions and provide incentives to partners/consumers for co-operation. The Ministry will also publish information about the unemployment of graduates of individual higher education institutions and gradually involve this factor in the funding principles.*

**5. The development of R&D at higher education institutions, reinforcing the link between education and research**

In line with international documents and commitments the Ministry will pursue an increase in the expenditure on research and development. The competitiveness of R&D at higher education institutions will be boosted by means of various research plans and schemes implemented jointly by higher education institutions and their partners in research centres. Further development of competitiveness in R&D will occur as part of the CR's joining the European Research Area, success in competitions within the emerging European Grant Agency, excellence networks (e.g. in technology), participation in international R&D programmes and projects.

There are more and more opportunities for obtaining finance from other than public resources (particularly from the EU and the private sector), which may provide incentives for the development of R&D. The application of R&D results in practice leading to increased competitiveness of companies and processes constitutes another incentive, and the same is true of the training of R&D experts. Attention will be primarily paid to:

- 5.1. enhancing the scope and effectiveness of doctoral degree programmes,**
- 5.2. increasing the proportion of specific research** mainly by involving students (in Master's and doctoral degree programmes in particular) in research and creative activities, the involvement of “post docs” in scientific teams and projects, and support for young talented researchers,
- 5.3. co-operation between higher education institutions and the consumers of R&D results** in innovation and the transfer of R&D results into practice, and in commercialisation of the results of research, development and creative and artistic activities,
- 5.4. acquisition of finance from other than state resources.**

*The Ministry will support the development of R&D by means of providing sufficient institutional support for research plans, and by the provision of purpose-linked funds to promote the qualitative development of the existing and the building of new centres of excellence in research and development. When allocating public resources, finance from other sources, particularly private, will be taken into account, which will encourage further efforts aimed at their identification and use.*

**6. The governance and integration of higher education institutions**

In the following period it will be necessary to enhance the governance, decision-making and quality improvement processes and systems in higher education, which requires optimisation and professionalism in this area. Attention therefore must be paid to:

- 6.1. increasing the professional standards of governance** (beginning with filling management, administrative and organisational posts with professionals) and enhancing management and decision-making processes, including the establishment of an optimal balance between governance and self-governance, and processes concerned with the distribution of information,
- 6.2. identification and implementation of an optimal balance between de-centralisation and integration** in governance and decision-making at individual higher education institutions,

**6.3. introduction of integrated governance processes** (the use of information technologies),

**6.4. co-operation at national and international levels in governance and the development of governance** at institutional and system level which can be supported by participation in projects.

An appropriate degree of integration of higher education institutions will optimise synergy between various units of the institutions, promote integration within the tertiary sector as a whole, and allow for concentration of resources (human, technical/material) and optimisation of their use and reproduction. The following activities will be geared towards the above:

**6.5. integrated projects focusing on the development of higher education institutions,**

**6.6. integration of academic activities** within one higher education institution and between higher education institutions,

**6.7. inter-disciplinary projects and degree programmes** (e.g. inter-disciplinary instruction, modularity of degree programmes, design and implementation of joint degrees at national level, etc.),

**6.8. sharing access to costly information systems and resources,**

**6.9. building joint multi-media study supports and joint laboratories.**

*The activities described in 6.1. – 6.4 will be supported by the ministry as part of development programmes, and also by means of publishing examples of good practices and developing a platform for their dissemination. Financial resources may also be obtained from the EU Structural Funds. Other activities will be supported primarily through development programmes and finance will also be available for projects within the “Higher Education Institutions Development Fund”.*

## **7. Infrastructure of higher education institutions**

This aspect involves the buildings, technical infrastructure and the necessary maintenance, refurbishing and modernisation of the existing assets and, in justified cases, new construction. All this constitutes one of the principal preconditions for the development of each higher education institution. The objective is to:

**7.1.** maintain the standards of higher education and its competitiveness at international level, even when student numbers grow,

**7.2.** provide for the relevant standards of material/technical resources for education and research,

**7.3.** expand material/technical facilities for the delivery of accredited degree programmes,

**7.4.** improve the quality of management processes through the introduction of ICT systems.

*The development of material/technical resources (infrastructure) is being ensured by the Ministry as part of programmes for the reproduction of assets. They are designed so as to maximise the economic effectiveness of the solution in view of the level of financial resources invested.*

## **8. Research and development infrastructure at national and international levels**

**8.1.** The main function of R&D infrastructure is to support, co-ordinate, concentrate and integrate the potential of R&D. The Ministry, in co-operation with the Council for Research and Development, will support the development of R&D infrastructure. In addition to the technical/material infrastructure (e.g. laboratories and equipment), the Ministry will pay primary attention to the development of information infrastructure

(mainly integrated activities and projects), the main objective of which is to establish conditions for effective co-operation of (possibly international) research teams. This co-operation and sharing of resources may be facilitated by high-speed computer networks and grids. The Ministry will promote their further use, operations and development over the long term.

- 8.2. Libraries at higher education institutions will see to the creation and availability of information databases, and the accessibility of other sources of information for the needs of R&D at higher education institutions. They will ensure that the maximum use is made of the resources, contribute to evaluation, dissemination and application of R&D results, and promote the use of the results of Master's theses and doctoral dissertations and other papers.
- 8.3. Apart from the development of R&D information infrastructure, the objective of the Ministry in the following period is to ensure its effective use and a more intensive involvement in international information infrastructures by means of sharing access to electronic sources of information for the needs of R&D and education (and ensuring its continuity) after 2008 when the Ministry's programme 1N Information Infrastructure in Research will have been completed.

*The Ministry will support these activities by development programmes and, as regards activities described in 8.2, as part of projects of the "Higher Education Institutions Development fund". With a view to developing technology and science, the Ministry will support the development of the State Technical Library.*

## **9. Availability of information resources and the development of information infrastructure**

### **9.1. Internal and external information systems**

At present all public and some private higher education institutions have a high-speed connection to the CR's national network for science, research, development and education CESNET2. As regards the use of information systems in the educational and administrative processes at higher education institutions (staff files, wages, distribution of key information), the Ministry will support:

- 9.1.1. integration and co-ordination of activities of various units of higher education institutions in the area of information systems,
- 9.1.2. implementation of management information systems at higher education institutions including portals geared towards external information systems,
- 9.1.3. efforts to improve the quality of computer networks, strengthen transmission capacity in local networks and enhance the security of data transmission and storage,
- 9.1.4. efforts to expand the use of information systems on the part of students and staff at higher education institutions, including raising awareness of all information resources and their accessibility,
- 9.1.5. involvement in the MetaCentrum project and the development of super-computer centres the aim of which is to develop and administer the Czech academic grids and related research,
- 9.1.6. involvement of higher education institutions in projects concerned with European high-speed networks and their implementation and use, further development of super-computer and multimedia centres and laboratories for education, R&D and innovation,
- 9.1.7. digitalisation of libraries and increasing the availability of high-speed connection to information sources, along with awareness rising as to the use of information infrastructure and its accessibility for the general public.

*The Ministry will support these activities by means of development programmes. Activities described in 9.1.7. will be supported as part of projects of the “Higher Education Institutions Development Fund”.*

## **10. Quality assurance at higher education institutions**

The basic precondition for **quality assurance is the development of internal quality evaluation systems** at individual higher education institutions. Internal evaluation is one of the important instruments for institutional governance and improvement of the quality of the entire system of higher education. Moreover, it is closely linked to the general culture of quality, which must be nurtured over the long term.

Internal evaluation of quality is also a generally acknowledged prerequisite for **external quality evaluation**, which is an integral part of quality assurance systems and may be carried out by various institutions including international ones (e.g. EUA, professional associations). The results of external evaluation serve for accreditation purposes (the responsibility of the Accreditation Commission) and for continuous improvement of all activities of higher education institutions.

Recommendations made by the evaluation team and the publication of the results (including the evaluation report) constitute basic instruments for **quality improvements** within the body under review, and a source of information for all stakeholders. One necessary precondition for the workings of the system is pursuit of closer links between internal and external evaluation. The quality evaluation methodology proposed as part of the project “Evaluation of the Quality of Higher Education Institutions” and other outputs of the project, including pilot testing at several institutions, will constitute a valuable contribution in this area. The project is being implemented by the Centre for Higher Education Studies; the body responsible is the Ministry. The project is implemented in close co-operation with the Accreditation Commission and the Council of higher education institutions.

*The Ministry will support all activities leading to the development of the culture of quality by means of its development programmes or bonuses as part of formula funding. When evaluating projects, attention will be paid to the application of conclusions of evaluation processes in practice. The Ministry will also disseminate and assess good practices, e.g. proposed methodologies for quality evaluation, and other outputs of the project “Evaluation of the Quality of higher education institutions”.*

## **III. The quality and culture of academic life**

### **1. Student and staff social matters**

The Ministry will support activities of higher education institutions aiming to improve the social situation of students and the staff, and to address problems generated by the existing welfare system mechanisms. This will primarily concern the introduction of motivation policies for doctoral students and the issue of social security and health insurance paid by doctoral students who are older than 26. Furthermore, this will include the provision of counselling and guidance services (e.g. transfer between and within degree programmes, career issues, study “profiles”), transformation of the existing accommodation support, proposals related to dining facilities (the degree to which they should be independent) and the issue of their funding. Higher education institutions should also aim to support staff development schemes (professional and personal) – e.g. by offering complementary and

lifelong learning courses, to facilitate flexible transfers between the academic and business environments, and to promote the use of sabbaticals. The quality of academic life is also affected by the motivational/creative features of the environment and by the development of competitiveness.

## **2. Disadvantaged groups of applicants/students at higher education institutions**

In line with international and national documents the Ministry will see to the implementation of measures concerned with the promotion of equal opportunities in access to and implementation of education. This primarily concerns measures rendering equal opportunities for students at risk of some form of social or cultural exclusion, such as disabled individuals and persons from socio-culturally disadvantaged backgrounds.

Moreover, the Ministry will take account of student activities aiming to overcome social and cultural barriers (organisation of cultural and awareness raising events, seminars, lectures), and to integrate students at risk of social exclusion (student partnerships across years and degree programmes, building the sense of belonging to an institution, cohesion and solidarity).

*The Ministry will support these activities by means of development programmes.*

## **3. Students with exceptional talents**

The objective of the Ministry is to implement measures and introduce mechanisms to support students with exceptional talents. These include:

**3.1.** the design and implementation of effective scholarship policies,

**3.2.** involvement of students with top talent in creative activities and research, and in projects funded from grants.

*The Ministry will publish examples of good practices and set up platforms for their dissemination.*

## **4. Partnership and co-operation**

The Ministry will also support activities geared towards the establishment and strengthening of partnership between the student and academic staff, such as:

**4.1.** co-operation between students and academic staff members in the development and implementation of the relevant educational path,

**4.2.** joint building of the academic area and sharing the vision as to the nature of the higher education institution and studies,

**4.3.** exchange of experience not only between students and academic staff, but also between students and doctoral students/visiting teachers/senior students, shaping study profiles and involvement in projects funded from grants,

**4.4.** co-operation and partnership between academic and other staff at higher education institutions,

**4.5.** co-operation between administrative staff and students.

*The Ministry will publish examples of good practices and develop platforms for their dissemination.*

## **5. The culture of educational and research processes**

One important factor affecting the quality of academic life is, in addition to its participants, the culture of the educational and research processes. The following activities contribute to their optimisation and quality:

**5.1.** effective two-way communication between management/governing bodies and the academic community,

**5.2.** improving the accessibility and communication of key information,

- 5.3. development and implementation of a vision concerned with appropriate relationships between the academic community members,
- 5.4. sharing habits based on good manners,
- 5.5. division of responsibilities for academic activities, good relationships between academics, administrative staff and students,
- 5.6. facilitating access for students to the existing knowledge in the relevant discipline, literature, etc.

*The Ministry will include the standards of the culture of education and research among the criteria for evaluation of higher education institutions. These criteria will be taken into account as regards the allocation of additional resources (bonuses) as part of formula funding. The Ministry will publish examples of good practices and set up conditions for their dissemination.*

#### **6. Co-operation between higher education institutions and graduates**

The Ministry will support co-operation between higher education institutions and their graduates. The co-operation should reinforce the institution's position, increase awareness of its activities within the region and facilitate livelier contacts with employers and other clients of higher education institutions. Moreover, excellent graduates will be motivated to return to the higher education institution.

*The Ministry will publish examples of good practices and set up conditions for their dissemination.*

#### **7. Accommodation and meals provided by higher education institutions**

The Ministry will provide additional funding to higher education institutions for meals and accommodation for students. The indirect subsidy for halls of residence will be transformed into a direct subsidy in the form of a grant for accommodation as early as 2005/2006. A similar approach as regard the subsidy for meals will be considered.

### **4. The funding of higher education institutions**

If we assume that the budget will be constantly increasing in real terms in view of the need to increase performance and enhance its quality, then the additional public resources will not be allocated on an across-the-board basis. This means that there will be no direct increase in the level of the level of resources per student and degree programme (the "normative"). The additional funds will be allocated for specific educational activities where measurable outcomes will be specified or derived directly from output parameters. In this way efficient use of public resources will be ensured. This may be viewed as an implicit increase in the normative per student and degree programme. Long-term plans for education, research, development, artistic and other creative activities of higher education institutions ("Long-Term Plans of higher education institutions") and their annual updates will provide room for implementation of the government plans with the use of a motivational financial mechanism. This means that the instruments for implementation of the Long-Plans of higher education institutions will include suitable funding mechanisms.

**Principles for allocation of subsidies to higher education institutions to cover expenditure outside so-called "programme funding" (resources designated for the development of assets)**

#### **1. Formula funding of educational activities**



- 1.1. according to student numbers and financial requirements of the degree programme,
- 1.2. according to graduate numbers and financial requirements of the degree programme and its type, or using another criterion reflecting the relationship between the number of students for whom finance is provided and the number of graduates in the relevant degree programmes,
- 1.3. agreed increases in student numbers – a contract.

## **2. Non-formula funding of educational activities**

### **2.1. funding on the basis of Long-Term Plans of higher education institutions and their updated versions as part of development programmes initiated by the Ministry,**

#### **2.1.1. Activities centrally funded by the Ministry:**

- Joint projects of institutions,
- Individual activities of higher education institutions in which only some higher education institutions are involved (concerning disabled applicants and students from socio-culturally disadvantaged backgrounds, participation in international evaluation schemes and follow-up activities, etc.).

#### **2.1.2. Funding of activities of individual higher education institutions based on their SWOT analysis – from resources allocated to higher education institutions as part of formula funding according to criteria agreed with their representatives.**

### **2.2. educational projects of the Higher Education Institutions Development Fund,**

### **2.3. Education Policy Fund,**

### **2.4. funding of contractual (at national level) international co-operation,**

### **2.5. projects within the EU Structural Funds.**

## **3. Student matters**

- 3.1. grants to doctoral students, accommodation, mobility,
- 3.2. social grants, grants for excellent students,
- 3.3. subsidies for meals.

## **4. The funding of research and development**

- 4.1. specific research,
- 4.2. research plans,
- 4.3. research centres,
- 4.4. newly initiated programmes as part of National Research Programme II.

**As regards assets reproduction programmes (“programme funding”),** it is assumed that the existing portion of state funding earmarked for the development of material/technical facilities of public higher education institutions will be maintained.

From 2007 a slowdown in the extensive development of higher education institutions is expected. It is envisaged that public resources will be allocated in the form of subsidies and institutions’ own resources will be expected. There will also be opportunities for co-funding from use of EU resources and from resources generated from co-operation with clients (multiple-resources funding).

The level of funding allocated to public higher education institutions for the reproduction of assets will be based on the agreed Long-Term Plans of higher education institutions, and it will not observe the principle of formula funding for educational activities.

### **Planned increases in funding in 2006 - 2008**

The objective and tasks set out in the Long-Term Plan of the Ministry cannot be implemented without appropriate funding. Planned increases in funding for 2006-2008 are described in the following table. The table was prepared in line with Budget Chapter 333 of the MoEYS for 2005 and it was submitted to the government as part of the Report on Updating the Reform of the Higher Education in CR in August 2005. The principle aim is to achieve, by 2008, the level of expenditure on higher education amounting to 1% of GDP. This will still be below the common European level, which is 1.3% of GDP on average, even when tertiary education as a whole is calculated. The most important items where growth in funding will occur include development programmes, support for efficient performance of institutions focusing on outputs (e.g. funding related to the number of employable graduates), or support for access to higher education for non-traditional groups of applicants (co-operation with secondary schools, a scholarship fund).

In the event that there is not a sufficient increase in the level of financial resources within the higher education budget, the ministry will decide on which objectives and tasks of the Long-Term Plan of the Ministry can be implemented.

An outlook for 2009 – 2010 will be developed on the basis of evaluation of the results achieved.

(in mil. CZK)

Item - content	Budget	Required increases in funding as compared to the previous year			Financial budget required		
	2005	2006	2007	2008	2006	2007	2008
<b>Higher education institutions – recurring and capital expenditure excluding programme funding</b>							
<i>Formula funding</i>							
Part of the subsidy taking account of increased input parameters	13, 933	860	537	418	14, 793	15,330	15, 748
Part of the subsidy taking account of output parameters (implementation of reform)	401	599	1, 000	1, 200	1, 000	2, 000	3, 200
<i>Internationalisation</i>							
EU programmes, academic mobility	0	125	150	150	125	275	425
Involvement in international programmes and networks (implementation of reform)	303	45	45	45	348	393	438
<i>Programmes</i>							
Development programmes – state policy implementation (implementation of reform)	971	560	850	1, 100	1, 531	2, 381	3, 481
HE Institutions Development Fund	280	89	100	100	369	469	569
<i>Student matters</i>							
Social grants (according to Economic Growth Strategy)	0		500	300	0	500	800
Grants for accommodation – transformation into direct subsidies (implementation of reform)	666	200	150	150	866	1, 016	1, 166
Meals	168	20	20	40	188	208	248
<b>Total</b>	16, 722	2, 498	3, 352	3, 503	19, 220	22, 572	26, 075
<b>“Programme funding”</b>	3, 413	-179	558	558	3, 234	3, 792	4, 350
<b>Research and development</b>							
Specific research with the use of output parameters (implementation of reform) *)	1, 044	0	0	0	1, 044	1, 044	1, 044
Research plans, research centres (implementation of reform) **)	2, 924	500	700	700	3, 424	4, 124	4, 824
<b>Total R&amp;D</b>	3, 968	500	700	700	4, 468	5, 168	5, 868
<b>Total</b>	24, 103	2, 819	4, 610	4, 761	26, 922	31, 532	36, 293

\*) see comments, part Research and Development

\*\*) For 2005 this is reality. The resources obtained by higher education institutions for research plans, research centres “1M (NPV 1)” and basic research centres “(LC)”.

THIS IS NOT TOTAL FUNDING FOR R&amp;D which is proposed to be 6, 766, 318 thousand CZK (proposed expenditure from chapter 333-MŠMT approved by Government resolution no. 822 of 29. 6. 2005).

<b>Expenditure per student (development as with total GDP) – in thousand CZK</b>	50,500		54,200	58,100	62,400
<b>Student numbers</b>	275,700		290,800	299,400	305,700
<b>GDP in current prices – mil. CZK (Prediction of the Finance Ministry, April 2005)</b>	2, 940, 000		3, 152, 000	3, 379, 000	3, 629, 000

## **Comments regarding the planned increases in funding in 2006-2008**

### Formula funding – subsidies for educational activities

Part of the subsidy for educational activities designated on the basis of input parameters will be used to cover a 5% increase in student numbers in Bachelor's and doctoral degree programmes.

Part of the subsidy for educational activities designated on the basis of output parameters will support an increase in efficient use of financial resources with a view to reduce study failure (drop – out) and develop institutions/faculties' strengths. As a result of consistent restructuring of studies and an increased intake in Bachelor's degree programmes, the growth in that part of the subsidy where input parameters are considered will gradually slow down.

### Internationalisation

The Czech Republic is successful in terms of involvement in educational programmes of the EU – in higher education it is particularly the Socrates – Erasmus programme. There is a growing interest on the part of students and teachers in this programme – primarily its mobility-related actions. Reduced grants would certainly constitute a barrier for many applicants as the cost of living in other EU member countries is still considerably higher than in the CR. A continuous increase in funding will be used to make it possible for all students who wish to spend a period of their studies abroad (at least one semester) to do so. This is at the same time an important contribution to the implementation of the Bologna Declaration – each student should undertake at least one semester abroad. The CR is still far from meeting this objective.

### Programmes

Development programmes and the Higher Education Institutions Development Fund, the establishment of which was made possible by the Higher Education Act of 1998, have become an important instrument for indirect steering of higher education institutions by means of targeted institutional funding. This instrument will facilitate implementation of the state's plans, and increased funding for these purposes constitutes a precondition for meeting a number of priorities of the Long-Term Plan of the Ministry.

### Student matters

The accommodation and meals subsidy has not virtually changed over the last ten years. In consequence of the growing number of students living in halls of residence and other facilities with which higher education institutions have contracts, and as a result of a growing number of meals provided, the nominal subsidy per bed and meal has been constantly decreasing. The cost increase throughout this period has been turned over to students. In 2005 the transformation of the subsidy for the operation of accommodation facilities into a subsidy which institutions use as accommodation scholarships provided to students – the aim of which is to help resolve the continuing excess demand for accommodation in halls of residence and some political problems – has led to a further decrease in the level of various contributions. One important factor which will force an increase in the standards of accommodation and meals is the growing number of students from other EU member countries for whom the CR is obliged to ensure the same conditions as for Czech students.

### “Programme funding”

In practice the required increase will cover the increase in taxation for the programme approved until 2007.

### Research and development

As regards support for research and development, emphasis will be placed primarily on finance linked to specific projects – mainly those involving co-operation between higher education institutions, institutes of the Academy of Sciences of the CR and institutions using the results of R&D which will actively contribute to project funding. The additional funding will therefore be used to run a series of public tenders as part of the Research Centres programme (the sub-programme “National Research Programme I”) and the “Basic Research Centres” programme.

From 2 January 2007 implementation of new research plans should be launched where a 500 million CZK subsidy is envisaged.

Specific research as an item within institutional funding has been stagnant for some time. The Council for Research and Development does not plan any increases in years to come. In view of the growing level of resources obtained by higher education institutions to cover institutional as well as purpose-linked expenditure (as part of public tenders) – and this points to the development of R&D at higher education institutions – it is advisable to increase funding for specific research as well. The reason is that it would motivate higher education institutions to involve students in research and development activities, which is important for the students’ development and for the development of R&D at higher education institutions in general.

Prague, 22 August 2005

JUDr. Petra Buzková  
Minister of Education, Youth and Sports

## **II.**

### **Annex to the Long-Term Plan of the Ministry for 2006 – 2010**

#### **Strengths and weaknesses of the system, opportunities and risks as regards further development**

This analysis is based on comparing the objectives set out in the White Paper, the Long-Term Plan for Education, Research, Development, Artistic and Other Creative Activities of higher education institutions for 2000-2005 and its updated versions, and in the Strategy for the Development of Tertiary Education in the CR (2000-2005). It is further based on the results of the activities of higher education institutions as described in their annual reports, data from the student registry, and the outcomes of several research projects.

#### **I. The higher education system**

##### **Institutional development**

- **Strengths**
  - \* The principal quantitative development of public higher education institutions of a university type has been completed,
  - \* Public non-university higher education institutions are being set up where the relevant conditions exist in regions, and complement the provision of tertiary education,
  - \* Establishment of private higher education institutions covering the demand for degree programmes where the provision of public higher education institution is insufficient, particularly Bachelor's degree programmes.
- **Weaknesses**
  - \* High concentration of educational opportunities in the capital and the largest cities,
  - \* A large number of private higher education institutions – fragmentation (small institutions).
- **Opportunities**
  - \* Gradual shaping of higher education institutions' profiles based on consolidation of their strengths,
  - \* Higher concentration of investment with a view to the expected quantitative and qualitative development in the relevant regions,
  - \* Response to future labour market needs as part of human resources development strategies for individual regions.
- **Risks**
  - \* Continuation of extensive development of private higher education institutions (a large number of small institutions),
  - \* Establishment of many separate units of higher education institutions – the risk of difficulties as regard quality control.

##### **The structure and number of students**

- **Strengths**
  - \* 40% participation of the 20-year-old population in tertiary education has been achieved; the number of older ("adult") students is increasing.

- Weaknesses
  - \* there are still applicants who passed entry examinations to higher education institutions and could not be admitted,
  - \* A high rate of drop-out particularly in the first year of studies; return to studies (some 20% of newly admitted students fail to complete the first year and some return to the system, over 10% of the total number of students in higher education drop out without a certificate, the system faces quantitative and, most importantly, financial obstacles due to insufficient productivity),
  - \* Preferences of higher education institutions to have as many students as possible in Master's degree programmes (this is influenced by the system of funding and often uncritical aspirations on the part of students to achieve the highest possible degree).
- Opportunities
  - \* All those who have the capacity and interest in studying should get an opportunity to follow a suitable path within tertiary education (programmes adjusted to the interests and capacities of applicants and the needs of the labour market),
  - \* Preservation of the traditionally high quality of Master's studies in view of the massive expansion of higher education,
  - \* Recognition of lifelong learning, despite it has led only to a certificate, when an individual re-enters formal education (possible its inclusion in statistical reporting).
- Risks
  - \* Large regional disparities in terms of student numbers and programmes available,
  - \* Insensitive steps halting quantitative development and consolidation of the existing programme structure and regional proportions,
  - \* Too high a percentage of students continuing in Master's degree programmes and not heading, after Bachelor's studies, for the labour market, which, in view of the growing student numbers, will decrease the standards of Master's studies,
  - \* Possible "over-education" and further strengthening of generational disparities in the level of educational attainment (and employability as a likely result).

### **The sector of private higher education institutions**

- Strengths
  - \* Students' satisfaction with the choice of the relevant private institution and with its individual approach to students who tend to be more in the "client" role; if there is dissatisfaction, then students are more critical,
  - \* Flexible modification of the content of studies in view of industry needs, no burden in the form of "habits" which may be the case with traditional public faculties,
  - \* Effective and quick use of own finance for material, technical and information resources,
  - \* More extensive participation of experts from industry in the instruction as part of practically oriented Bachelor's degree programmes, an opportunity to "acquire" top specialists, although external co-operation predominates.
- Weaknesses
  - \* A large number of institutions, often with a small number of students,
  - \* Non-existent (or only partial) systems for self-evaluation, often limited to questionnaires for students,
  - \* Lack of "self-criticism" and efforts to achieve accreditation of Master's studies as soon as possible,

- \* A relatively low number of students, a problem which is particularly apparent where creative activities are concerned (only institutions with at least 600 students can set up conditions for creative activities),
- \* The primary focus on combined form of studies fails to provide for the genuine “higher education climate”,
- \* Efforts to acquire the highest possible number of students at the expense of material and human resources (separate units outside the main premises which despond with a low availability of staff),
- \* Human resources policies aiming primarily at acquiring external experts who only concentrate on the actual instruction,
- \* Insufficient academic qualifications on the part of internal academic staff.
- Opportunities
  - \* Flexible development of new study programmes, primarily at Bachelor’s level, depending on the situation in the labour market,
  - \* Targeting on creative activities,
  - \* Flexible modification of the organisation structure in view of specific conditions and developments,
  - \* Motivation on the part of internal academic staff to enhance their academic qualifications,
  - \* Development of non-formal international co-operation with the relevant education institutions,
  - \* Focus on ESF grants and various ministerial grant schemes,
  - \* Development of lifelong learning provided both for free and for a payment, including the pursuit of “accreditations” for various retraining and other courses (e.g. for public administration).
- Risks
  - \* Continuing quantitative development of small institutions in particular (with a low number of students),
  - \* Insufficient motivation on the part of academic staff to achieve additional qualifications and to pursue continuing education both in their field and in methodology/pedagogy,
  - \* Lack of creative activities,
  - \* Negative effects of the declining demographic curve on the choice of students,
  - \* Ensuring sufficient qualifications for those graduates who “pay for their education”.

## **II. Academic activities**

### **1. Internationalisation**

- Strengths
  - \* Trend towards full openness,
  - \* Relatively good preconditions: structured studies in most fields, the use of the ECTS,
  - \* All programmes accredited which boosts credibility – also within the European Higher Education Area,
  - \* High rate of participation in educational programmes of the EU, several higher education institutions take part in the projects within the Erasmus Mundus programme – with success,
  - \* Participation in educational projects of other partners in the European Higher Education Area,



- \* Implementation of the ECTS and issuance of the Diploma Supplement at all higher education institutions.
- Weaknesses
  - \* All activities are financially demanding,
  - \* Problems reaching beyond the education sector (e.g. visa, study permits, work permits)
  - \* Few study programmes and modules in English (generally in foreign languages),
  - \* Weak language competencies on the part of teachers and administrative staff at higher education institutions,
  - \* The ECTS system in place often fails to conform to the “ECTS Label” standards, and the issuance of the Diploma Supplement falls short of some of the requirements of the Berlin Communiqué – some higher education institutions are not able to issue the supplement automatically and free of charge for all students from 2005.
- Opportunities
  - \* Establishing a position in Europe, better competitiveness,
  - \* Enriching the system by means of new knowledge, forms of co-operation, culture, exchange of experience
  - \* Better employability of graduates in the labour market,
  - \* Better understanding of other cultures,
  - \* Paying students – another source of co-funding,
  - \* Virtual mobility – distance learning, trans-national education,
  - \* Establishing opportunities for immigration policy in selected fields (support for R&D),
  - \* Meeting the “ECTS Label” requirements may result in improved information systems, better organisation of studies and, consequently, enhanced quality of study programmes in terms of the subject structure,
  - \* Acquisition of the official certificates “ECTS Label” and “Diploma Supplement Label” may increase the competitiveness and attractiveness of higher education institutions in terms of EU projects, particularly as regards co-operation with countries outside the EU – e.g. Erasmus Mundus.
- Risks
  - \* Excessive commercialisation (education as a service – launch of discussion on WTO-GATS),
  - \* Financial requirements may divide students (if no suitable support system is in place) into those who can study in a foreign language and make use of mobility programmes and those who cannot.

## **2. Quality and excellence of academic activities**

### **The concept of lifelong learning within the system of tertiary education**

- Strengths
  - \* most degree programmes are structured, the original “first-degree” Master’s degree programmes are designed for students attending them to complete their studies; as yet unstructured degree programmes, where structuring is possible, are currently subject to discussion,
  - \* degree programmes requiring harmonisation in line with “EU Directives” (medicine, dental medicine, pharmacy, general nursing, midwifery, veterinary medicine and architecture) have been harmonised and their graduates are recognised in the European labour market,

- \* structuring will facilitate access to education for a larger number of students and preservation of the traditionally high quality of Master's studies,
- \* Act no. 111/1998 Coll. on Higher Education Institutions and on the Amendment and Supplement to Some Other Acts (the Higher Education Act) and Act no. 561/2004 Coll. on Pre-School, Basic, Secondary, Tertiary Professional and Other Education (Schools Act) ensure transferability within tertiary education, including recognition of prior education for the purpose of further studies (also education gained outside higher education institutions).
- Weaknesses
  - \* Only formal structuring – lower employability of graduates,
  - \* Inappropriate content, possibly a bad choice of the study plan in the 1<sup>st</sup> cycle leading, along with insufficient motivation on the part of students, to a high drop-out rate,
  - \* Insufficient emphasis on using structured studies to identify students with aptitudes for studying in higher cycles – search for talents
  - \* Inappropriate range of programmes in other than full-time (“daily attendance”) form,
  - \* Still insufficient opportunities for transferring from tertiary professional to higher education programmes, and often even within higher education,
  - \* Non-existent system for recognition of prior education for the purpose of further studies, including qualifications gained outside higher education – despite the fact that legal regulations do not pose many obstacles in this respect,
  - \* Weak language skills of graduates of teacher training programmes who have other than language specialisations.
- Opportunities
  - \* Inter-disciplinary focus, preconditions for mobility between institutions (in the CR and abroad) – preparatory/compensatory programmes as part of lifelong learning,
  - \* More flexible response to new needs, support for timely retraining (combined and distance studies),
  - \* A selective nature of Master's studies and, as a result, better preparation and selection of students for doctoral degree programmes,
  - \* Better preconditions for involvement of students at Master's level in R&D,
  - \* Seeking more effective ways of co-operation between higher education institutions and industry,
  - \* Identification of major experts from industry for instructional purposes and the design of degree programmes,
  - \* Easier transfers within the system of tertiary education,
  - \* Establishing more flexible paths towards the acquisition of academic qualifications.
- Risks
  - \* Inappropriate content of study programmes may affect the employability of graduates, only a formal decrease in drop-out rates,
  - \* Too narrow specialisations leading to limited employability,
  - \* If language skills of teachers at basic and secondary schools do not improve (this concerns those who do not specialise in languages), their opportunities for co-operation with foreign institutions will be restrained and their response to new educational needs will not be flexible,
  - \* The problem of transfer between Bachelor's and Master's degree programmes (e.g. if the field is not the same or if the student comes from a different higher education institution, though studies the same discipline),
  - \* Traditional aspirations of an overwhelming majority of students to achieve a Master's degree which is not in line with their aptitudes and the actual situation in the labour market,

- \* Structured studies may extend the length of studies (the average standard length of 3 years in the 1<sup>st</sup> cycle + 1 year, and 2 years in the 2<sup>nd</sup> cycle + 1 year).

## **Equal access to education and guidance**

### **The employability of graduates, co-operation between higher education institutions and regions**

- **Strengths**
  - \* Relatively high unemployment among graduates of higher education institutions,
  - \* Increasing awareness of new types of degree programme, particularly at Bachelor's level, which is the result, among other things, of co-operation between (some) higher education institutions and employers in restructuring traditional "first-degree" Master's programmes,
  - \* Resulting good employability of graduates of Bachelor's degree programmes in the labour market.
- **Weaknesses**
  - \* The structure of study opportunities falls short of employers' needs; employers, particularly small and medium-sized enterprises, are not familiar enough with the qualifications structure in the dynamically changing system of higher education,
  - \* Insufficient co-operation between higher education institutions and industry,
  - \* Insufficient involvement of experts from industry in instruction and the design of study programmes,
  - \* Insufficient communication and co-operation between secondary schools and higher education institutions (in both directions).
- **Opportunities**
  - \* Better transferability between degree programmes (provided that there are good guidance services),
  - \* Better employment opportunities,
  - \* Attracting experts from industry to take part in all activities of higher education institutions,
  - \* Expanded opportunities for students and academic staff to undergo work placements and fellowships or sabbaticals respectively,
  - \* Reinforcing co-operation between secondary schools and higher education institutions resulting, for example, in better preparation of secondary school graduates, or increased motivation for studying science and technology,
  - \* Strengthening co-operation between secondary schools and higher education institutions as regards socio-culturally disadvantaged groups.
- **Risks**
  - \* Excessive influence of the commercial sector on education (too narrow specialisations) and on the use of R&D results,
  - \* As the number of higher education graduates grows, the percentage of unemployed graduates and people with higher education in general may increase,
  - \* If candidates for higher education studies from socio-culturally disadvantaged groups are not identified and prepared at secondary level, their participation in higher education will still be too low.

## **Internal management and integration of higher education institutions**

- Strengths
  - \* The Higher Education Act allows for establishment of strong and competitive higher education institutions,
  - \* Possibility of making use of the advantages of management and academic self-administration,
  - \* Suitable legislative conditions for the involvement of students.
- Weaknesses
  - \* Excessive fragmentation of activities at higher education institutions – several departments/institutes with the same focus at various faculties within one higher education institution,
  - \* A low degree to which managerial, administrative and organisational positions are filled with professionals.
- Opportunities
  - \* Finding an optimal balance between decentralisation and integration,
  - \* Cultivation of management processes (including optimisation of the relationship between academic self-administration and governance),
  - \* Integration of academic activities – within one institution and between them,
  - \* Inter-disciplinary projects and programmes,
  - \* Sharing access to demanding technologies and equipment,
  - \* Setting up competitive, joint laboratories on a university-wide platform focusing on one discipline (for students of more than one faculty or higher education institution – particularly in science and technology).
- Risks
  - \* Possible abuse of the existing system of governance of higher education institutions by interest groups instead of placing emphasis on the development of the higher education institution as a whole,
  - \* Continuing fragmentation of the activities of higher education institutions,
  - \* Disintegration of investment, higher education institutions will compete instead of creating a competitive university or an institution with a region-wide impact.

## **Research and development**

- Strengths
  - \* Growing involvement of higher education institutions in research,
  - \* Gradual involvement of young researchers in important projects,
  - \* Relatively favourable results in international comparison in science, technology and medicine.
- Weaknesses
  - \* Low levels of funding allocated to higher education institutions for R&D, particularly from private sources,
  - \* Low number of staff concerned with R&D and insufficient interest of students in a research career, particularly in science and technology,
  - \* Low capacity to attract foreign experts to work at higher education institutions in the CR,
  - \* Inappropriate support for transferring new knowledge and technologies,
  - \* Insufficient involvement of students at doctoral and Master's levels in R&D during studies.

- Opportunities
  - \* A full use of the European Research Area and involvement in major international projects,
  - \* Enhancing the quality and effectiveness of doctoral studies by means of involving students in projects,
  - \* Co-operation with the private sector, the relevant amendments to tax legislation.
- Risks
  - \* The CR incapable of meeting the Lisbon strategy indicators (investment in R&D totalling 3% of GDP with two thirds of private resources),
  - \* Unchanged situation as regards human resources – i.e. a low number of researchers,
  - \* Neglecting some R&D areas, e.g. considerable preference for industrial research at the expense of basic and applied research, or a high proportion of basic research with no relation to applied research,
  - \* Inappropriate organisation of governance and management in R&D in the CR and at individual institutions.

### **The quality assurance system**

- Strengths
  - \* Long tradition of external (“institutional”) evaluation by the Accreditation Commission which the Commission, after a pause caused by accreditations of study programmes, has resumed,
  - \* Introduction of a shorter cycle of evaluation of accredited activities, particularly in the cases where quality problems have been suggested,
  - \* Independence of the external evaluation system both from higher education institutions and from the Ministry,
  - \* Long experience of the Accreditation Commission and its good position in Central and Eastern Europe,
  - \* Czech system for quality assurance complies with the requirements for quality assurance within the European Higher Education Area; the Accreditation Commission is a member of the ENQA – a European network of agencies concerned with quality assurance,
  - \* Appropriate legislative conditions for external evaluation by the Accreditation Commission, as well as for international evaluation at the level of higher education institutions.
- Weaknesses
  - \* Non-existence of a strong link between the system of external evaluation (by the Accreditation Commission) and internal evaluation,
  - \* Varying standards of internal evaluation at higher education institutions – ranging from its non-existence to a comprehensive application of its findings,
  - \* Conflict between the demands of the actual evaluation process, its necessity and periodicity on the one hand, and the capacities of evaluators on the other hand,
  - \* Problematic, often only formally satisfied, requirements of the Accreditation Commission for human resources in degree programmes which fail to produce real quality,
  - \* A minimum level of participation of students in external evaluation, in internal evaluation their participation, in most cases, takes the form of questionnaires although the student is the main “client” of the higher education institution; a little use of the

- student evaluation of the relevant activities of higher education institutions and teachers,
  - \* A little use of the evaluation results for improvement in general.
- Opportunities
  - \* A gradual establishment of systems of internal evaluation the results and procedures of which would be applicable in external evaluation,
  - \* A larger degree of participation of students in both types of evaluation (at the beginning at least at doctoral level),
  - \* Making use of evaluation procedures established as part of international co-operation (conclusions of the Ministers' meeting in Bergen, "Standards and Guidelines for Quality Assurance in the European Higher Education Area" developed in co-operation between ENQA, EUA, EURASHE and ESIB),
  - \* Specification of the Accreditation Commission's requirements for human resources to cover degree programmes which would take more account of the actual requirements of programmes at various levels and contribute to the shaping of the relevant higher education institution's profile,
  - \* Effective system of evaluation should be linked to the accreditation of the relevant degree programmes and the subject areas where associate professorship and professorship proceedings take place without additional administrative processes,
  - \* Making use of the proposed quality evaluation methodology and other outputs of the project "Evaluation of the Quality of Higher Education Institutions" (implemented by Centre for Higher Education Studies, body responsible – the MoEYS).
- Risks
  - \* Artificial (formal) adjustment of the evaluation system to international requirements – e.g. as regards efforts aimed at inclusion into the register of accreditation commissions, including excessive financial demands,
  - \* Changing the meaning of evaluation, which is to draw attention to shortcomings that must be eliminated, by means of developing "evaluation for evaluation" – i.e. covering up these drawbacks,
  - \* Unchanged, only formal requirements of the Accreditation Commission for human resources in degree programmes may lead to an illusion of quality, and not to real quality (the opposite is more likely),
  - \* If evaluation requirements constitute an excessive burden, the process will be formal and the results will not reflect the actual quality, nor will they motivate for elimination of the shortcoming identified.

### **3. The quality and culture of academic life – the social situation of students**

- Strengths
  - \* Scholarships granted to doctoral students,
  - \* Scholarships covering foreign study visits/work placements as part of study programmes,
  - \* Possibility of granting scholarships to talented foreign students (particularly in Master's and doctoral degree programmes),
  - \* The system makes it possible to pay scholarships to students in difficult life situations and excellent students,
  - \* The system makes it possible to pay various types of scholarships from study fees,
  - \* Efforts to transfer welfare support directly to the student – accommodation scholarships, subsidies for meals.

- Weaknesses
  - \* There is no comprehensive system guaranteeing social security and open access to higher education for students,
  - \* Higher education institutions mostly address problems related to study arrangements and R&D and do not normally have energy and means to address social issues,
  - \* Insufficient representation of some social groups among higher education students.
- Opportunities
  - \* A comprehensive analysis and development of a student social security system,
  - \* Making use of the opportunities to award grants to excellent students to support talent,
  - \* Making use of the resources obtained from study fees (including the fees collected from students who exceed the standard lengths of studies by more than one year),
  - \* A suitable social security system for students, guidance, preparatory studies and open access to higher education institutions will facilitate the acquisition of higher education for applicants from all social groups.
- Risks
  - \* The development of the social system may face a general aversion in the CR to differentiate – in most cases everyone gets the same,
  - \* It is possible to expect problems related to the acquisition of data about the social situation of students – the law on personal data protection,
  - \* It is not clear who is responsible for the social system (MoEYS or MoLSA), a possible abuse of the system is also a risk.

### **III. Governance and funding of higher education at state level**

- Strengths
  - \* Democratic governance, the necessity of consulting all major decisions with higher education representations which supports joint responsibility,
  - \* Opportunity for indirect governance by means of funding geared towards implementation of state priorities,
  - \* A diversified budget facilitating transparent allocation of public resources to priority areas,
  - \* Various mechanisms for allocation of financial resources for various budget items – each institution has a chance to strive for resources according to its capacity, a constant increase in funding for higher education in recent years amounting to levels which make it possible to ensure an efficient use of the resources,
  - \* A reasonable degree of stability in some parts of the budget (research plans; the objective is gradually to take the same approach to development programmes),
  - \* Various ways of incorporating the results of quality evaluation virtually into all mechanisms for allocation of funds.
- Weaknesses
  - \* Clumsy decision-making processes,
  - \* Under-funding of the system as a whole, a low budget expenditure on higher education as a percentage of GDP,
  - \* Varying levels of efficiency in the use of public resources – defined, for example, by the number of financed years per one graduate in comparable fields of study,
  - \* A low level of involvement of private resources in the funding of public higher education institutions.
- Opportunities

- \* Desirable development of the higher education system and individual higher education institutions, if suitable conditions are set up – the opportunity to support strengths and eliminate weaknesses of individual higher education institutions,
- \* The possibility of quantifying objectives and defining indicators related to their fulfilment,
- \* The possibility of influencing the development of the system by means of funding mechanisms,
- \* A sensible use of the increased funding,
- \* The possibility of establishing a reasonable level of stability within the budget items (using good experience gained from research plans to pursue development programmes).
- Risks
  - \* Incorrect or insufficiently clear objectives,
  - \* Inappropriate selection of criteria which could lead to decreased performance and quality (particularly in the medium and long term),
  - \* Further concentration of capacity in regional centres and regions.