The Strategic Plan for the Scholarly, Scientific, Research, Development, Innovation, Artistic and Other Creative Activities of Higher Education Institutions for 2011-2015

Table of Contents

<i>Introduction</i>		2
I.	The Basis for Priority Setting	6
1.	Student Numbers	6
2.	Institutional Development	7
3.	Demographic Development	8
4.	The Development of the Labour Market's Educational Needs	9
II.	The Priorities of the Strategic Plan	12
1.	Quality and Relevance	13
2.	Openness	19
3.	Effectiveness and Funding.	26

Introduction

Act No. 111/1998 Coll. on Higher Education Institutions and on Amendments and Supplements to Some Other Acts (the Higher Education Act), as amended (hereinafter "the Act"), lays down, in Section 18 (3) and Section 87 (b), the obligation for the Ministry of Education, Youth and Sports (hereinafter the "Ministry") to develop, annually update and publish a strategic plan for the scholarly, scientific, research, development, innovation, artistic and other creative activities of higher education institutions. This strategic document, along with the strategic plans of higher education institutions and other elements as described in Section 18 (3) and (5) of the Act, is crucial for determining the level of contributions and subsidies from the state budget and, as such, it is conducive to creating a transparent and predictable environment for the further development and funding of higher education institutions. This Strategic Plan for the Scholarly, Scientific, Research, Development, Innovation, Artistic and Other Creative Activities of Higher Education Institutions for 2011-2015 (hereinafter the "Strategic Plan of the Ministry") focuses on the main principles of the operation of modern higher education institutions in a demanding, competitive global environment. Its main mission is to:

- evaluate the implementation of the priorities and objectives of the previous strategic plan of the Ministry $(2006 2010)^1$;
- forecast key trends affecting the system of higher education in the CR;
- set strategic objectives for higher education in 2011-2015;
- identify major instruments for and ways of attaining these objectives.

Higher institutions may use the Strategic Plan of the Ministry to develop their own strategic plans for 2011-2015 that shall be presented to the Ministry, along with an update for 2011, by **1 October 2010** in three printed copies. Public HE institutions shall also present their development projects for 2011 by this date.

The Strategic Plan of the Ministry follows upon the key Czech and European strategic documents on education and science policies. At national level, it builds primarily on the evaluation of the implementation of the objectives of the previous strategic plan of the Ministry for 2006-2010 and its annual updates. Moreover, the document we are presenting takes account of expert recommendations contained in more recent strategic materials (particularly the so-called. Country Note OECD,² White Paper on Tertiary Education,³ Strategy of Lifelong Learning in the CR⁴) and the ensuing reform plans of the Ministry that are elaborated on as part of individual national projects (INPs) in the area of higher education. The critical document concerning research, experimental development and innovation is the

³ http://www.reformy-msmt.cz/reforma-terciarniho-vzdelavani/bila-kniha

¹ This is, of course, only a partial evaluation. A comprehensive analysis of the implementation of the priorities and objectives of the Strategic Plan of the Ministry for 2006-2010 will be submitted in 2011.

² http://www.msmt.cz/uploads/bila_kniha/OECD_Country_Note_ENG.pdf

⁴ http://www.msmt.cz/mezinarodni-vztahy/publikace-strategie-celozivotniho-uceni-cr

National Policy of Research, Development and Innovation for 2009-2015⁵ the objectives of which are being implemented as part of the ongoing research, development and innovation reform in the CR.

At international level, the Strategic Plan of the Ministry follows up, above all, the principal documents of the so-called Bologna process, particularly the relevant communications of higher education ministers (London 2007, Leuven 2009) and other documents (e.g. the Lisbon Convention on the Recognition of Qualifications concerning Higher Education in the European Region). In the area of research, experimental development and innovation the strategic plan similarly reflects the development of the European Research and Innovation Area.

Furthermore, several expert studies were commissioned and used as background material in the process of developing the Strategic Plan of the Ministry.

With the support of these documents the strategic objectives of the Strategic Plan of the Ministry have been identified with a view to:

- doing away with weaknesses in the higher education system;
- eliminating potential risks;
- taking up opportunities;
- boosting strengths.

The key objective of the Strategic Plan of the Ministry is to bring about a fundamental change in the focus of HE institutions **from quantity to quality**, and this change should concern all main functions and roles of HE institutions. The Ministry will support this shift by means of the priorities of this strategic plan. The main precondition for introducing effective qualitative changes is diversification of the higher education system (in point of fact tertiary education 6). Quality must therefore be defined as a multi-dimensional category and the objectives within the various priorities must be specified accordingly:

• **General objectives** result from the general priorities of the Czech Republic and the European Union, and the Ministry will pursue their implementation across-the-board regardless of the specific nature of individual HE institutions.

Example: social equity in access to studies should be guaranteed both at research-oriented universities and non-university higher education institutions focusing primarily on profession-oriented education.

• **Specific objectives** are considered to be sub-priorities. Their implementation at various HE institutions may differ in relation to their differentiated mission, roles and specific priorities.

Example: Top-level research need not be a relevant objective for a higher education institution that focuses, over the long term, on lifelong learning and regional functions, or on creative artistic activities.

_

⁵ http://www.vyzkum.cz/FrontClanek.aspx?idsekce=5579

⁶ In the Czech Republic the term "tertiary sector" is not yet defined in legislative terms. In general it means a sector including public, private and state higher education institutions (providing degree education in Bachelor, Master and Doctoral study programmes), tertiary professional schools (providing tertiary professional education or, possibly, Bachelor degree programmes in cooperation with a higher education institution) and, finally, other institutions providing education leading to acquisition of a higher than secondary level of qualification (two-year studies at conservatoires following the secondary leaving examination – "maturita").

The implementation of the priorities of the Strategic Plan of the Ministry is a process involving the Ministry and the HE institutions. As the roles of these main actors vary, there are also different instruments available for the implementation of the specific objectives.

1) On the part of the Ministry:

- The Ministry considers funding to be one of the main instruments for the governance and development of the tertiary education system. The funding rules and principles must not only reflect the state's strategic priorities in higher education policy, but they must even become one of the main drivers of the change from quantity to quality and towards diversification of higher education. The Strategic Plan of the Ministry therefore sets out, among other things, the main principles for the establishment of the budget that will be gradually elaborated upon in the updates and implemented so as to support the implementation of the given priorities (see Chapter II.3).
- The instruments of a systemic nature include, above all, individual national projects for the area of higher education and research, experimental development and innovation that are implemented as part of the Education For Competitiveness Operational Programme (hereinafter the "ECOP"), priority axis 4.2 (System framework for tertiary education and the development of human resources in R&D). There are currently the following projects underway: Tertiary Education Reform Project, Qualification Framework for Tertiary Education (Q-RAM), System Support of Efficient Management of Tertiary Education Institutions and R&D Institutions (EFIN), Support for Technology and Science Fields (PTPO), Effective Knowledge Transfer (EFTRANS), International Audit of Research, Development and Innovation in the CR and Implementation of its Conclusions within Strategic Documents (International Audit of RDI). Another project entitled Tertiary Education Quality Evaluation is under preparation⁷.
- The reform efforts in the tertiary area will be supported by the preparation of two new laws: a law on tertiary education and a law on student financial support.
- The very coordination of the operational programmes (ECOP and the Research and Development for Innovation Operational Programme, hereinafter the "RDIOP"), which fall within the purview of the Ministry, is of systemic nature and it aims to ensure efficiency and synergy in their use by the beneficiaries – particularly HE institutions, research institutions and development and innovation centres.
- The existing instruments the Ministry is currently using (e.g. the Associated Student Register Information – SIMS) will be preserved and innovated to meet the needs of the moment.

2) On the part of higher education institutions:

A comprehensive analysis of the strengths and weaknesses of a higher education institution developed with a view to shaping its strategic profile should constitute the starting point.

Based on this analysis individual objectives and targets should be identified as well as specific tools and means to be used in order to implement them (e.g. changes in internal regulations, support for development via promoting projects within the relevant programmes, etc.).

http://www.msmt.cz/strukturalni-fondy/ipn-pro-oblast-terciarniho-vzdelavani-vyzkumu-a-vyvoje

At the time of drafting the Strategic Plan of the Ministry the development of several major trends, particularly political and economic ones, was not yet clear. The annual updates will therefore play a more important role than has so far been the case, as they will provide an opportunity to respond more flexibly to the dynamic developments in the national as well as international arenas and to specify the general objectives in more detail. The update of the Strategic Plan of the Ministry for 2011 is a separate document.

I. The Basis for Priority Setting

The main priorities and aims of further development of higher education and the increased emphasis on the quality of the implementation of all functions and roles of HE institutions cannot be pursued without taking account of the major quantitative and structural trends that have a significant impact on the workings of the higher education system in the Czech Republic. This is why this chapter briefly summarises some important findings about the existing trends in the development of Czech society and higher education, and, with the support of available forecasts, provides a foundation for the setting of key qualitative priorities.

1. Student Numbers

After 2000 the Czech Republic ranked at the top of the list of developed countries for the growth in the proportion of first enrolments. This growth was significantly faster in tertiary degree programmes of ISCED 5A category (at higher education institutions) as compared to ISCED 5B programmes (at tertiary professional schools). The average year-on-year increase in the proportion of first enrolments in tertiary education in the CR was more than double the OECD average. The most recent OECD report of 2009 (stating data for 2006/2007) reveals major shifts in the ranking of the Czech Republic on the international scale as a result of a permanent increase in the absolute number of students in the CR and, since the mid-1990s, a parallel decrease in the number of 19-to-21-year-olds.

In 2006/2007 nearly 75,000 students enrolled for the first time in ISCED 5A programmes at higher education institutions (public, state and private). This accounted for 54% of the relevant age cohort (in 2000 it was less than 25%). There were another 11,000 students who enrolled in tertiary professional programmes at ISCED 5B level – i.e. 8.5% of the relevant age group. When we deduct those who may have been enrolled in a higher education institution for the first time but who earlier enrolled in a tertiary professional programme (and vice versa) - i.e. "double" enrolments - the resulting figure is roughly 60% of the relevant age cohort enrolled for the first time in tertiary education, according to the OECD methodology. Thanks to this development the Czech Republic outstripped, as early as the 2006/2007 academic year, several economically more developed countries for the proportion of those enrolled in ISCED 5A degree programmes. It effectively reached the average for developed European countries (EU-19) and ranked higher than, for example, Germany, Austria and Switzerland (i.e. countries with similar schooling traditions and, most importantly, a similar structure of secondary education with an emphasis on technical and vocational training.

In the course of the following three years, i.e. until the 2009/2010 academic year for which the most recent data are available, there was a further dramatic change. The overall number of students enrolled for the first time in tertiary education exceeded 95,000. The number of first enrolments in higher education institutions increased by over 15,000 (of this 58% in public HE institutions and 42% in private ones), whereas the number of those enrolled for the first time in tertiary professional schools dropped by some 1,000. Thanks to this in 2009/2010 the proportion of first enrolments in the age cohort increased to 61.5% at ISCED 5A level and decreased to 7.5% at ISCED 5B level. Even if we deduct the estimated number of "double"

enrolments in both 5A and 5B programmes (some 2 percentage points) it is clear that over two thirds of the relevant age group enrolled in tertiary education for the first time in 2009/2010.

What is also important is the fact that the objective of the previous strategic plan of the Ministry – only 50% of graduates of Bachelor degree programmes continuing to study Master programmes – was not met. Data for 2009 reveal that more than 80% of Bachelor programme graduates go on to study Master programmes, and therefore a large majority of higher education graduates hold Master degrees. This is also one of the reasons why, since structured studies have been introduced, the average length of the higher education of a student has increased instead of decreasing.

Moreover, this speedy growth in the number of students is disproportionate to both the economic situation and the capacity of higher education to adjust and offer appropriate educational opportunities to the wide spectrum of applicants with diverse background, life experience, study aptitudes, motivation, aspirations and objectives.

Also, due to the approaching demographic turn the age groups which will reach 19-21 years of age in the middle of the upcoming decade will be much smaller in size. This will have a significant impact on the quantitative development of higher education. The reason for this is that the current number of first-time enrolments in tertiary education is higher, in absolute figures, than the overall size of the relevant age group in 2016.

2. Institutional Development

In line with the expansion of the system in terms of student numbers, recent years have witnessed continuation of the institutional development of Czech higher education. This was particularly dynamic in the sector of private higher education. Between 2006 and 2009 a total of 10 new private HE institutions were established, while 4 private HE institutions ceased their operation in the same period – two were integrated into existing public HE institutions as new faculties, one had its state approval withdrawn and one had the accreditation of its only accredited study programme revoked. The transformation of 3 private HE institutions into university-type institutions also constituted an important development.

In the sector of public HE institutions there was extensive institutional development at the level of faculties. Although only one new public higher education institution of a non-university type was set up in the period under review, i.e. after 2006 (the Technology and Business College in České Budějovice), 17 new faculties were established by means of transforming independent higher education institutes or by means of grouping several departments of existing faculties under a new faculty name.

Recent years have also seen an important increase in the number of new facilities (branches) of both public and private higher education institutions located at places other than the main campuses. According to a survey carried out by the Ministry in autumn 2009, 16 public HE institutions have a total of 61 such branches where instruction takes place, and 18 private HE institutions operate a total of 43 branches. Quite a few branches were set up in places without any previous academic traditions, which may be interpreted as another stage in the regionalisation of higher education. There is justified concern resulting from the observation, (which needs systematic corroboration), about uneven qualitative standards of instruction and academic activities at these locations. Branches of foreign higher education institutions pose a specific problem. The Ministry only has a picture of what they do when they apply for inclusion in Annex 3 of Decree No. 322/2005 Coll., as amended, on further studies

(instruction) that are considered to be secondary or higher education studies for the purpose of state social support and pension insurance. (As of 1 January 2010 the aforementioned annex contains 12 educational institutions operating in the Czech Republic and delivering higher education programmes /or fields of study/ of foreign HE institutions.)

3. Demographic Development

In the mid-1990s the demographic surge of those born in the mid-1970s made it to higher education institutions. Nearly 200 thousand pupils from various age groups reached the level of higher education. Although in the mid-1990s there was quite a rapid rise in the absolute number of those enrolled in HE institutions, both the number of students and, several years later, the number of graduates, the indicators of access to higher education and the proportion of graduates in the relevant age cohort reflected this reality only in part for the demographic reasons mentioned above.

In the 2nd half of the 1990s, HE institutions faced a demographic turnaround in that the size of the relevant age cohorts was reduced to some 130-140 thousand, i.e. by about a quarter. Consequently, a much faster increase in the number of enrolments occurred and was followed, after several years, by an increase in the proportion of higher education graduates in the relevant age group.

The ensuing demographic period, the length of which is approximately ten years, started roughly in 2002-2005. This period is characterised by almost no changes in the size of higher education age cohorts (the development is stuck at a sort of a demographic plateau). This reflects the relatively constant demographic development in the 1980s when the number of newborns became stabilised. Between 2002 and 2009 the average size of the 19-21-year-old group fell only slightly from 139 to 135 thousand (i.e. only by 3%). In recent years the increase in the number of enrolments, students and graduates has therefore nearly corresponded with their proportionate increase in the relevant age cohorts.

However, the demographic curves clearly indicate that the stagnation of the size of higher education age groups is only temporary. A further demographic turn lies ahead for higher education institutions in the 2012-2016 period when the number of representatives of the relevant age group will experience a steep decline. This will at first affect enrolment figures, then the number of students and, later, graduates. This second demographic turnaround is the result of a slump in the birth rate in the first half or the 1990s. The average number of children born to women during their lives (the so-called overall birth rate) decreased from 2 in the 1980s to 1.1 in the 2nd half of the 1990s, which was one of the lowest figures in Europe.

This demographic decline is characterised by its steepness. Over several years the size of population groups at higher education age will drop to slightly over 90,000 individuals, which is a fall of nearly a third as compared to the current situation. This phenomenon is currently moving from basic to secondary education, its impact on the future number of secondary school leavers being apparent. This low number of some 90,000 to 95,000 individuals in an average age group will be preserved for some ten years (i.e. another demographic plateau). Around 2025 the population cohorts at the age of higher education will again begin to grow, but this development will be short-lived.

4. The Development of the Labour Market's Educational Needs

The situation of higher education graduates in the labour market in the Czech Republic has been favourable over the long term, and their employment prospects and position are currently better than those of their counterparts with the same qualifications in most West European countries. There is a quick return on investment in the costs of higher education both from the perspective of the state (in the form of increased tax yields) and at individual level. Individuals with tertiary qualifications display a lower rate of unemployment compared to people with lower levels of educational attainment. They spend less time seeking their first employment, get higher wages, attain better social status and more robust work security, and overall, they show more job satisfaction.

There are several reasons for this. Firstly, due to historical circumstances there are still relatively few tertiary qualification holders among the adult population, and they face far milder competition in the labour market than is the case with higher education graduates in other European countries. Secondly, in recent years and particularly since joining the EU, the Czech labour market has experienced quite rapid development and changes, which have significantly leveraged opportunities for young educated people. It has been the very graduates of higher education institutions who, understandably, have benefited from this situation. Their position and labour market prospects are still better when compared to those of their counterparts in most West European countries. Apart from the two reasons mentioned above, it is necessary to add that the quality and relevance of their higher education, which is still satisfactory in average terms, contributes to the graduates' good employability levels.

However, research has revealed that there are marked differences between graduates of various higher education institutions in terms of their employability and employment prospects. These differences are caused, to an extent, by external factors such as the quality of the applicants admitted or the situation in the regional labour market that the graduates enter. Even so, there is no doubt that certain differences also stem from factors related to the operations of the institutions, such as the breakdown of students according to the field of study, the mode and content of studies, the standards of pedagogical work and the overall learning climate. It is only through regular and profound analyses and evaluation of the graduates' transition from education to the labour market that appropriate attention may be paid to the existing bottlenecks and risks of labour market imbalances, and problems associated with the employment of tertiary education graduates may be alleviated.

As fallout of the economic downturn, the end of 2008 saw a deterioration of the situation of graduates entering the labour market. There are two interconnected questions that are of major importance for the development in the immediate future. The first one is how swiftly the economic crisis and its implications for the labour market will be overcome, and what form further economic development will take. The second one is when, to what extent and at what price the crisis in public finances will be warded off and how the necessary austerity measures will affect the number of jobs in the public sector (public administration, education, healthcare, social care, etc.). Both these questions are closely linked to the employment situation of higher education graduates.

When thinking in the medium and long term it is necessary to compare the dynamics of the development of the number of graduates coming from higher education institutions to the labour market with the development of the corresponding jobs in the economy. Due to the expansion of the higher education system graduates with tertiary qualifications currently form the largest group leaving the education system (and what is more, most of them have a Master degree). However, we cannot assume that similarly dynamic development will occur in the

structure of jobs. This is why, over the next couple of years, the position of individuals with tertiary qualifications will begin gradually to come closer to that of people with lower levels of educational attainment (i.e. it will worsen in relative terms), as is the case with most other European countries. Higher education graduates will more often than now find themselves among the unemployed or doing jobs not matching their qualifications.

Preliminary results of a forecast developed as part of an extensive programme of the European Union ("New Skills for New Jobs") anticipate that, by 2020, the overall number of jobs and employed people in the Czech Republic will have decreased by more than 3% in comparison with 2008, which amounts to approximately between 130,000 and 150,000 people. This decline will affect predominantly jobs that require secondary and, even more so, basic education. The number of jobs for tertiary qualifications holders will continue to increase in the upcoming years despite this overall decline. The forecast envisages that, in 2020, the number of jobs designated for people with tertiary education in the Czech Republic will have risen by nearly one fifth (i.e. roughly by 150,000) as compared to 2008. In the same period nearly 250,000 individuals with tertiary degrees will depart from the labour market (mostly into retirement), thus supplying further jobs requiring these qualifications. Overall, in 2020 jobs for individuals with tertiary education (as we perceive them today) will account for approximately 20% of all jobs.

The largest increase in the number of jobs for higher education graduates in the CR will occur in the quaternary public sector of the economy, amounting to several tens of thousand (particularly in education, healthcare and social work). A robust increase in the number of jobs for tertiary qualifications holders may also be expected in the quaternary market sector (particularly in property, business services, research and development and partly also in finance and insurance, although this is one of the sectors where the total number of jobs has been negatively affected by the financial crisis). In spite of the general decrease in the total number of jobs there will be a slight increase in the number of new jobs for higher education graduates in the secondary and tertiary sectors. The lowest increase, in absolute terms, will take place in the primary sector.

Jobs only constitute one side of the labour market (the demand side). The other side, of no less importance, is the people (the supply side) who fill these jobs (the workforce). As a result of the expansion of higher education over the last decade, in 2020 there will be some one and a quarter of million individuals with tertiary qualifications on the Czech labour market. While these people will account for roughly 25% of the workforce, only 20% of all jobs will be designated for them. This means that there will be more people with tertiary education than the number of available jobs. People with tertiary qualifications will therefore gradually begin to fill jobs currently held by parts of the workforce with lower levels of education – particularly upper secondary qualifications ("maturita")⁹. Understandably, recent graduates seeking their first job will be affected more strongly by this development.

The resulting problems concerning the employability of tertiary qualification holders and, most importantly, the match between their qualifications and the jobs available, will vary from sector to sector. The point is that, by 2020, by far the greatest increase in the number of higher education graduates will concern business disciplines (the proportion of graduates with business and economics degrees in the total population with tertiary qualifications will go up from 16% to some 20%) and social fields. These individuals may be expected to face more difficulties when seeking suitable jobs. As distinct from this, the number of graduates with technology qualifications will score the mildest increase (the proportion of holders of degrees

_

⁸ http://ec.europa.eu/social/main.jsp?catId=568&langId=en

⁹ Secondary school leaving examination

in technology in the labour market will even fall by 4-5 percentage points), and their situation regarding employment prospects will therefore be more favourable.

II. The Priorities of the Strategic Plan

The key priorities of the Strategic Plan of the Ministry have been identified, based on an analysis of the previous development and a summary of the principal trends that will influence both Czech and European higher education in the upcoming years. The final wording of the priorities is the result of nearly one-year-long discussion in the working group that was set up for the purpose of developing the strategic plan in April 2009 and consisted of the representatives of the Ministry, the Czech Rectors' Conference, the Council of Higher Education Institutions and other experts in education and science policy.

The Strategic Plan of the Ministry covers a number of important topics that have been grouped into three priority areas: ¹⁰

- 1. Quality and relevance
- 2. Openness
- 3. Effectiveness and funding

The priority areas are described using a uniform structure. They contain a definition of the priority and the rationale behind it, set out individual objectives and identify the main instruments for their implementation.

-

As opposed to the previous strategic plans the individual objectives in the area of research and development, for example, are not treated separately, but always in the context of the relevant priority areas.

1. Quality and Relevance

Czech higher education has undergone considerable changes in recent years, the continuing increase in the number of students being the most striking one. The relevant quantitative indicators far exceeded the objectives set out in the Strategic Plan of the Ministry for 2006 – 2010. The key stakeholders agree that the rapid transformation of tertiary education from an elite system towards a universal system, further powered by demographic and economic developments, has generated and is still generating a number of serious consequences for the general functions of higher education, the forms and content of educational activities, students' learning paths, and, also, for the governance of the system of higher education as a whole and for the management of individual HE institutions. In this context the Ministry, higher education institutions and external players see new challenges concerned with the quality, relevance and effectiveness of higher education as being of particular importance.

The available information suggests that at least some Czech higher education institutions with longer traditions achieve relatively high standards - certainly not lower than those displayed by the Czech Republic in other areas that are subject to comparison. Moreover, in no way does the employment situation of graduates of Czech higher education institutions show major differences as compared to what is common in West European countries. However, in the recent period, in particular, there have been certain symptoms of a long-term threat to the quality of higher education diplomas and of their devaluation. This is often a result of the disproportionate (and not always controlled) expansion of the system. The aim of the Strategic Plan of the Ministry is to address these signals and, in the 2011-2015 period, to focus on the development of all components of the higher education system so as to ensure that the quantitative expansion, which has been finalised by now, should be accompanied by an appropriate emphasis upon quality and relevance.

What has become apparent in the Czech Republic as a result of the developments mentioned above (and this, of course, applies in general) is that quantitative expansion must go hand in hand with the diversification of higher education. The objective of diversification is, on the one hand, to provide education to a far more diverse population of students and to prepare them for various posts in society. On the other hand, diversification should aim to protect and preserve the traditional elite university sector of higher education, and to maintain its high standards that are absolutely essential for the development of society (and the economy). In a mass and diversified higher education system that fulfils a number of diverse functions, it is therefore necessary to establish a favourable environment for individual institutions to shape their profiles so that they can reach excellent results in what they do. In addition to institutions focusing on top-level international research and demanding study programmes at Master and Doctoral levels, there must be sufficient room for the development of those institutions that will focus, for example, on Bachelor programmes, adult education, the transfer of knowledge, cooperation with businesses or support for the relevant region.

1.1 The number of students

Objective: Bringing the number of students into line with the demographic development and the labour market needs

- seek to ensure that the proportion of first-time enrolments in tertiary education as a whole will remain roughly up to two thirds of the relevant age cohort by 2015;
- seek to ensure that the proportion of graduates of Bachelor study programmes in the Czech tertiary system who continue studying follow-up Master programmes will not exceed 50%. However, this proportion at individual HE institutions and in various fields of education may vary significantly, depending on the institutional profiles and on the nature of the study programmes delivered;
- change the parameters of financing public higher education institutions so that the weight of the input parameters (student numbers) should gradually diminish in favour of output and qualitative parameters. There will also be a gradual strengthening of the components of contract funding based on an intersection of the strategies of the Ministry and the strategies of individual HE institutions. This system will make it possible to achieve a higher degree of differentiation in the use of resources and to target the resources to enhance quality and to support more diverse arrangements in terms of the functions, roles and activities of HE institutions.

Instruments:

A change in the rules for the financing of public higher education institutions.

1.2 The number and structure of higher education institutions

Objective: Achieving an optimal number and structure of higher education institutions, supporting institutional diversification of HE institutions or their parts with regard to various forms of excellence (research, teaching, international cooperation, regional functions)

- not support the establishment of new higher education institutions;
- seek to toughen the terms under which it is possible to establish a new higher education institution;
- support integration of the existing higher education institutions and their branches for the purpose of assuring the quality, relevance and effectiveness of their operations;
- pursue a systemic solution to the problem of branches of foreign higher education institutions;
- set out the rules for diversification as part of the Tertiary Education Reform project;
- pursue consolidation of the system of tertiary education including integration of a number of tertiary professional schools into the system according to clear qualitative criteria set in advance, as intended by the Tertiary Education Reform project;
- support, in cooperation with the Accreditation Commission, the setting of parameters for multi-criteria evaluation of the quality of higher education institutions with a link to funding;
- seek to identify more specific criteria for evaluation of whether the preconditions have been met that allow for proper implementation of scholarly, scientific, research, development, innovation, artistic and other creative activities of higher education institutions in compliance with the Higher Education Act;

• introduce a system of regular checks of the implementation of individual objectives set out by higher education institutions in their strategic plans that will be linked to the discussion on the updates of strategic plans of HE institutions.

Recommendations for higher education institutions:

- to define clearly their mission and general objectives, and to take these into account when developing long-term strategic development plans. The plans should draw on a thorough analysis of their strengths and weaknesses and support a clear profile of each higher education institution in terms of its mission and objectives, and promote the achievement of excellence in implementing the relevant activities;
- to introduce a system of strategic management (or to reinforce it if there is one in place) that is based on comprehensive planning of activities carried out by a higher education institution and on evaluation of the results achieved against the objectives set.

Instruments:

The Education for Competitiveness Operational Programme (ECOP): support area 4.2 - national individual projects: Tertiary Education Reform, Quality Evaluation, Q-RAM, International Audit of RDI;

The Research and Development for Innovations Operational Programme (RDIOP): support areas 1.1 and 2.1;

A change in the rules for the financing of public higher education institutions.

1.3 Internal and external quality assurance

Objective: Adjusting the external and internal systems of quality evaluation so that they are in line with international standards, strengthening their importance, ensuring feedback from evaluation to education

The Ministry shall:

 pursue a change in the system of accreditation and re-accreditation – a shift towards accreditation of educational areas (units broader than programmes) awarded for a longer period;

- seek to introduce multi-criteria evaluation of the quality of higher education institutions that will take account of the specific roles and functions of higher education institutions;
- support the establishment of links between internal and external evaluation and the corresponding system of powers and responsibilities for quality assurance at various levels of tertiary education;
- promote efforts aimed at strengthening the importance of external evaluation of higher education institutions as part of activities implemented by the Accreditation Commission, including material and financial support;
- support the adoption and implementation of the Standards and Guidelines for Quality Assurance in the European Higher Education Area at individual higher education institutions¹¹:

¹¹ http://www.msmt.cz/vzdelavani/standardy-a-smernice-pro-zajisteni-kvality-v-evropskem

- provide consistent support for "external" evaluation of conclusions and recommendations arising from internal quality evaluation systems, and for its implementation at higher education institutions;
- promote the development of a system of activities taking the form of an academic audit, and providing feedback for educational practice;
- support the Accreditation Commission in the systematic monitoring of branches of higher education institutions and in evaluation of the educational activities carried out by them.

Recommendations for higher education institutions:

- to develop internal quality evaluation systems and to ensure their interconnectedness with the institution's strategic planning;
- to ensure and strengthen a balanced and differentiated role of various groups of stakeholders in higher education (academic staff, management of HE institutions, students, alumni, employers and other social partners) in internal quality assurance.

Instruments:

A change in the system of accreditation;

Development programmes;

ECOP: support area 2.2, support area 4.2 – national individual projects: Tertiary Education Reform, Q-RAM, Quality Evaluation.

1.4 The National Qualifications Framework as a means of quality assurance

Objective: Developing and implementing the National Qualifications Framework for Tertiary Education

The Ministry shall:

- design the National Qualifications Framework for Tertiary Education and pilot its implementation;
- support an across-the-board implementation of the National Qualifications Framework for Tertiary Education following evaluation of the Q-RAM national individual project;
- provide for self-certification of the National Qualifications Framework against the overarching qualifications framework for the European Higher Education Area;
- arrange for the referencing of various levels of tertiary education against the European Qualifications Framework for Lifelong Learning (EQF);

Recommendations for higher education institutions:

- to implement the National Qualifications Framework for Tertiary Education following its incorporation into the accreditation process;
- to implement the National Qualifications Framework for Tertiary Education primarily by means of designing the profiles of various study programmes on offer and their translation into the expected competences the acquisition of which will be verifiable.

Instruments:

ECOP: support area 4.2 – national individual projects: Q-RAM (development and pilot testing), Tertiary Education Reform (interconnecting the qualifications framework with the accreditation system), Quality Evaluation (interlinking the qualifications framework with the system of quality assurance at institutional level);

Instruments for institutional funding.

1.5 Progressive modes and methods of education

Objective: Diversifying the modes of study and educational methods in close connection with the profile of individual institutions, the nature of the programme studied, the expected learning outcomes and the characteristics of the target group of students (e.g. age characteristics)

The Ministry shall:

- support the use of material and technical resources in instruction that are in line with the latest trends;
- develop conditions for the education of academic staff in pedagogy;
- promote the establishment of further links between tertiary education and business;
- support further development of modern educational methods and creativity (e.g. project-oriented education, e-learning, blended learning, etc.) that should, among other things, satisfy the needs of specific target groups of students (part-time adult learners, individuals with physical or social disadvantages).

Recommendations for higher education institutions:

- to support the introduction of part-time modes of study depending on the nature of the HE institutions and study programme; to ensure that the quality of these modes of study is the same as for full-time, on-site studies;
- to develop a system supporting work placements for students;
- to develop a system for interconnecting education with research, development, innovation, artistic and other creative activities;
- in incorporate the continuing education (pedagogical, professional) of academic staff into career systems;
- to support gifted students;
- to establish and further develop conditions making it possible for individuals with specific needs to study;
- to establish conditions for recognition of prior education, including non-formal education, and for adjusting the academic curriculum according to actual educational needs in individual cases.

Instruments:

Development programmes;

The Fund for the Development of Higher Education Institutions;

ECOP: support areas 2.2 and 2.4;

RDIOP: support area 4.1.

1.6 Responsibility for the employability of graduates

Objective: Increasing higher education institutions' responsibility for the employability of their graduates

The Ministry shall:

- arrange for evaluation of data concerning the employability of higher education graduates;
- use the employability of graduates as a criterion for the evaluation and funding of higher education institutions;
- prepare a programme for supporting the recruitment of higher education graduates in areas related to applied research, experimental development and introduction of innovation, or in knowledge-intensive fields;
- seek to ensure that Bachelor degree holders are placed in appropriate pay categories of state institutions, and to initiate a meeting with the Ministry of Labour and Social Affairs on this topic;
- seek to ensure that higher education in Bachelor study programmes is perceived by the labour market as comprehensive education, and that graduates of such programmes are seen as competent specialists in the given areas;
- support actions to ensure that the requirements laid down in legal regulations concerning the practice of regulated activities or jobs in the public sector are, in addition to formal qualifications, described by means of learning outcomes as much as possible;
- take steps to enhance the quality of educational activities at faculties of education with a view to improving the training of their graduates in the teaching profession.

Recommendations for higher education institutions:

- to innovate study programmes with regard to the future needs of society and the employability of graduates;
- to establish and reinforce links with the prospective employers of graduates;
- to support, in addition to specialist knowledge and skills, the development of general competencies of students;
- to enhance the quality of educational activities at faculties of education in line with the efforts of the Ministry.

Instruments:

ECOP: support area 2.2 a 2.4, support area 4.2 – individual national project: Support for Science and Technology Disciplines (PTPO);

Development programmes;

A change in the rules for the financing of public higher education institutions.

1.7 Human resources for research, development and innovation

Objective: Providing for high quality human resources for research, development and innovation in 2011-2015

The Ministry shall:

- initiate programmes to support researchers (particularly graduates of Doctoral study programmes and young researchers) to study abroad and then return to the CR (so-called "return grant");
- develop a system of post-doctoral posts (fellowships) filled by means of open competition.
- implement, from 2012, a programme aimed at enhancing the quality of human resources for research, experimental development and innovation entitled "Return" (Návrat);
- support long-term visits and integration of top-level foreign students and academic staff.

Recommendations for higher education institutions:

• to develop an internal system of incentives and a support scheme for post-doctoral posts filled by means of open competition.

Instruments:

ECOP: support areas 2.3 and 2.4

From 2014 the resources to implement the relevant programmes will be provided by the state budget.

The resources for the "Return" scheme will be covered from the expenditure of the Ministry earmarked for international cooperation in research, development and innovation for 2012.

2. Openness

2.1 Internationalisation

2.1.1 Internationalisation in education

Objective: Implementing the Bologna process in the Czech Republic so that Czech higher education institutions become full members of the European Higher Education Area and enhance their competitiveness in the international arena

- provide for the participation of the Czech Republic in programmes of the EU and other organisations that are concerned with international cooperation in tertiary education (Lifelong Learning Programme, Erasmus Mundus, Aktion, CEEPUS etc.);
- support programmes focusing on the mobility of students and staff of higher education institutions;

- seek to ensure financial advantages for higher education institutions that will obtain the Diploma Supplement Label and the ECTS Label;
- seek to establish suitable conditions for the permanent employment of foreign experts in academia (this concerns, *inter alia*, the international comparability of the system of academic posts);
- promote Czech higher education abroad (in cooperation with the Centre for International Services) via the www.studyin.cz website, participation at international fairs, publication of promotional information materials.

Recommendations for higher education institutions:

- to focus on correct implementation and the maximum use of the ECTS credit system based on learning outcomes, free-of-charge issuance of the Diploma Supplement to all graduates in Czech and English (or, at the student's request, in another widely used European language). The award by the European Commission of the Diploma Supplement Label and the ECTS Label constitutes acknowledgement of good practice;
- student mobility should become a regular component of studies (e.g. the so-called mobility window as a part of study programmes), the objective of which to make it possible for all those interested to undergo at least part of their studies at a foreign institution;
- long-term mobility should be part of career progression for academic staff, and mobility should also be a commonplace for other (administrative) staff at higher education institutions;
- to increase the number of students undergoing study visits and work placements abroad:
- to maintain data on outgoing and incoming students in the student registry in a consistent manner;
- to support student mobility by means of providing scholarships covered from HE institutions' own resources;
- to provide for appropriate and consistent recognition of studies undertaken abroad (for short-term study visits abroad this should be done automatically in line with the learning agreement); to address this matter in the HE institutions' internal regulations;
- to increase the number of foreign students at Czech higher education institutions by means of: enlarging the scope of study programmes delivered in foreign languages, promoting education at Czech higher education institutions abroad (web-based information, presentations at international educational fairs, cooperation with embassies), developing HE institutions' strategies of international cooperation and preparing conditions for the studies of foreign students (study programmes in foreign languages, facilities and equipment, language skills of staff in higher education, accommodation, leisure activities, etc.), and by means of foreign experts working at Czech higher education institutions;
- to develop the supply of study programmes (particularly those at Master and Doctoral levels) accredited and delivered in foreign languages, and of joint/double/multiple degrees;
- to participate in European Community programmes the Life Long Learning Programme, programmes involving cooperation between the EU and other parts of the

world (Erasmus Mundus, Tempus, EU-USA, EU-Canada, EU-Australia, EU-Korea etc.);

• to establish conditions for developing a genuinely international environment where English (or another language) is the common language of communication – not only instruction (this applies to HE institutions focusing on intensive cooperation with foreign HE institutions).

Instruments:

European Community programmes;

Development programmes;

ECOP: support area 2.2;

Own resources of higher education institutions.

2.1.2 International cooperation of higher education institutions in the area of research, development and innovation

Objective: Establishing conditions for higher education institutions' intensive involvement in international cooperation in research, development and innovation

The Ministry shall:

- continue running programmes of multilateral cooperation and developing bilateral agreements on cooperation with countries both within and outside the EU;
- provide support for participation in programmes of international cooperation in research and development;
- seek to ensure financial benefit for higher education institutions that succeed in bidding for international research projects;
- pursue simplification of the administration of project applications with expected impact in the form of an increased active involvement of HE institutions in programmes of international cooperation;
- implement, from 2011-2012, the "ERC CZ" programme for research, experimental development and innovation to support basic and applied research (so-called frontier research). Financial support will be provided for projects that have received a positive rating as part of the ERC scheme at European level but for which funding was not made available.

Recommendations for higher education institutions:

- to support two-way international mobility of researchers at higher education institutions;
- to create conditions for possible implementation of ERC projects within the ERC CZ programme at a higher education institution as a "host institution".

Instruments:

ECOP: support area 2.3, support area 4.2 – national individual projects: International Audit of RDI, EFTRANS;

Financial resources for the ERC CZ programme will be provided from the expenditure of the Ministry earmarked for international cooperation in research and development.

2. 2 Cooperation with business

Objective: Higher education institutions as centres of the most advanced level of learning, research and development must open up more to cooperation with business

The Ministry shall:

- support a higher degree of responsible involvement of external stakeholders in the management of higher education institutions;
- promote cooperation between higher education institutions and representatives of business in the implementation and evaluation of educational activities;
- develop and carry out pilot testing of a methodology for using the results of research and development at higher education institutions as part of the EFTRANS national individual project;
- support activities concerned with ensuring protection of intellectual property at higher education institutions:
- promote the development of entrepreneurship skills at HE institutions;
- establish close and regular cooperation with key providers of targeted support (designated for a specific purpose), e.g. with the Technology Agency of the Czech Republic;
- support, within available resources, the development of education in fields that are vital in terms of the future needs of the country.

Recommendations for higher education institutions:

- to support participation in the operations of science and technology parks, to build technology transfer centres and business incubators;
- to design study programmes/fields of study with regard to employers' needs;
- to invite business experts to take part in instruction, the development of study programmes, the work of higher education institutional bodies, the drafting of strategic plans of HE institutions (including in research and development);
- to support internships/work placements of students and staff of HE institutions in businesses;
- to develop career guidance, to cooperate with businesses in the area of graduate employment;
- to create conditions for spin-off from the academic community.

Instruments:

Development programmes;

ECOP: support areas 2.2, 2.3 and 2.4, support area 4.2 – individual national projects: EFTRANS, Tertiary Education Reform, PTPO;

RDIOP: support area 3.1 and 3.2.

2.3 Lifelong learning

Objective: Highlighting the role of higher education institutions in lifelong learning The Ministry shall:

- see through the discontinuation of legislative discrimination against students over 26 years of age;
- seek to establish a systemic solution to the recognition of prior learning, including non-formal education, within the framework of accredited study programmes;
- seek to introduce a systemic solution to the admission of graduates of lifelong learning courses to accredited study programmes pursuant to Section 60 of the Higher Education Act:
- create conditions in order to ensure that combined studies and lifelong learning are subject to both internal and external evaluation;

Recommendations for higher education institutions:

- to support the development of lifelong learning courses (that may be derived from study programmes in terms of content) in cooperation with regional employers and labour offices, in line with labour market requirements and with a view to ensuring the conditions for the education of individuals with specific needs;
- to develop appropriate marketing strategies towards target groups (those interested in continuing education, employers);
- to design appropriate support and multimedia teaching aids for combined and distance modes of study;
- to innovate lifelong learning courses in relation to the introduction of a credit system;
- to create a transparent mechanism for recognition of learning outcomes;
- to incorporate lifelong learning courses into the system of internal evaluation of educational activities:
- to develop courses for academic staff focusing on effective use of information technologies in instruction (e.g. the development of study supports) and on enhancement of pedagogical competencies needed for the teaching of mature (employed) students and participants in lifelong learning courses;
- to promote guidance services for applicants for, and participants in, lifelong learning courses (and to include evaluation of the quality of guidance services within the internal evaluation system).

Instruments:

ECOP: support area 2.2, support area 4.2 – individual national projects: Q-RAM, Quality Evaluation, PTPO.

2.4 The accessibility of higher education

Objective: Alleviating barriers to access to education and barriers that may occur in the course of studies

The Ministry shall:

- prepare a bill on student financial support;
- seek new financial support mechanisms to eliminate economic barriers faced by potential applicants for higher education studies who come from socially disadvantaged backgrounds, and mechanisms motivating HE institutions to attract and support such students;
- pursue a change in the legislative status of a higher education student;
- support the studies of students with sensory impairments, with physical and related disadvantages, and students with specific educational needs; provide for systemic changes in the funding of the relevant activities.

Recommendations for higher education institutions:

- to support socially disadvantaged students in the form of scholarships;
- to create conditions for the education of students with physical disadvantages and students with specific educational needs;
- to innovate study programmes with a view to ensuring easier access to study materials and aids:
- to develop preparatory courses for applicants for studies;
- to cooperate with basic and secondary schools in developing the motivation of pupils and students in their preparation for studies at tertiary level;
- to support the involvement of students in their own creative activities.

Instruments:

ECOP: support area 2.2, support area 4.2 – individual national project: Tertiary Education Reform;

Development programmes; a gradual transition to a systemic solution.

2.5 Guidance services at higher education institutions

Objective: Adjusting guidance services to the needs of students

The Ministry shall:

• provide methodological support in the area of guidance services at higher education institutions, and publish good practice examples.

Recommendations for higher education institutions:

- to provide, or to arrange for the provision of guidance services to applicants, participants in lifelong learning and staff of higher education institutions guidance on study-related matters, career guidance, psychological and social counselling, etc. in order to attract potential applicants, decrease the rate of study failure and assist in enhancing the employability of graduates on the labour market;
- for this purpose to facilitate the continuing education of academic and other staff of HE institutions, to provide information to the target group in a suitable manner (websites, etc.), and to develop cooperation with other HE institutions in the Czech Republic and abroad;
- to provide special guidance services for individuals with specific needs.

2.6 Promotion and marketing

Objective: Improving both the internal and external ways of presenting higher education institutions

The Ministry shall:

• provide, on a continuous basis, the public with information about the Czech higher education system while seeking to cover the various functions and roles of higher education institutions and their benefits for the public.

Recommendations for higher education institutions:

- to develop a marketing and promotional strategy including various visual styles with a view to reinforcing the identification and presentation of a higher education institution both for those within the institutions and those outside it;
- to focus on promotional activities aimed at individuals who might be interested in cooperation, studies/lifelong learning (cooperation with secondary schools, etc.).

Instruments:

Development programmes.

3. Effectiveness and Funding

The principal factor affecting the funding of higher education in the Czech Republic in recent years has been the growing number of students. Although the level of public spending has scored significant increases, particularly since 2000, there has also been a dramatic increase in the number of students. Expenditure per student also grew continuously, but only until 2008 when the dynamics of the student intake exceeded the pace of funding increases resulting in a drop in the level of resources per student (even at current prices). On the other hand, in terms of international comparisons the Czech system has not been proven ineffective. For the indicator of effectiveness expressed as a ratio of the quality of HE institutions to expenditure on higher education, the Czech Republic ranks 14th among OECD countries, and has provided evidence of improvement in this respect in the last five years.

A comparable indicator that expresses the relationship between expenditure per student and economic performance is the ratio of expenditure per student to GDP per capita. As recently as the mid-1990s the level of this indicator was some 45%. By 2000 it had fallen to 32% and then continued to decrease gradually down to 29% in 2006. The year 2007 and especially 2008 saw a further decrease to 25%. The reason for this was – as with other developed countries – the growing number of students in tertiary education and pressures on public spending exerted by other sectors of the economy. The level of the indicator fell despite the rising proportion of overall expenditure on tertiary education related to GDP. One of the reasons for this was an extension of the length of studies in Bachelor, Master as well as Doctoral study programmes.

Czech higher education has gradually got into a situation where the existing system of funding fails to reflect the new strategic goals and the needs of this sector of education. It is apparent that in view of the current high enrolment figures and the demographic development expected in the upcoming years, it is necessary to carry out relatively rapid and robust change in the predominating approach to funding which continues to encourage HE institutions to further increase their intake. The key trends presented in this Strategic Plan of the Ministry – i.e. a shift from quantity to quality and support for effective diversification of the system – must be boosted by appropriate financial mechanisms. This should coincide with the alteration of other features allowing for diversification of the tertiary sector (e.g. the accreditation system).

Although it is necessary to strive to bring the level of public resources set aside for tertiary education to match at least the European average, it is also necessary to develop an environment where more private resources may flow into this sector. There are major differences among countries in terms of the proportion of private resources in tertiary education. The Czech Republic, with nearly 18% in 2006, almost equalled the EU average. Over the last three years there has been an increase both in the proportion of private funding in public higher education, and in the proportion of students paying fees at private institutions, in the overall student population. This means that the level of private funding in the overall expenditure on higher education in the Czech Republic has further risen and currently accounts for over 20%.

The emphasis on quality requires that, in addition to ensuring a sufficient volume of funding, a change in the methodology of its distribution should also be carried out. First of all it will be necessary to increase the degree of stratification of financial resources so that the diversity of higher education institutions may naturally develop on the basis of their strategic plans and

the strengths they will be targeting. The dimensions of this diversification will include, apart from education, research (and other creative activities), continuing education, international activities, regional functions and cooperation with business and the employers of graduates. At the same time, the stratification of financial resources should encourage institutions to seek other sources of revenues, including international ones, instead of relying only on public funding. However, in this context it is necessary to provide incentives for the business sector so that enterprises would find awarding contracts on research to higher education institutions at least as attractive as doing their own research, and they would not be put off by the way in which deductible cost items are set out in the tax system.

The changes in the rules of funding of higher education institutions, which should promote their development from quantity to quality, must also affect some essential elements of HE institutions and therefore cannot dwell too much on what has so far been the common approaches to higher education budgeting. The existing rules of funding must be viewed as outdated, primarily because they are predominantly based on quantitative development indicators. There is no rationale behind this practice, nor are there favourable economic conditions for a further increase in student numbers. On the contrary, there are many reasons for diminishing them. However, a marked improvement in quality can hardly be achieved without a relative increase in unit costs, and functional and effective diversification of higher education cannot be reached without new financial stimuli.

The newly introduced financial instruments will be far more supportive of the characteristics of output and quality of various higher education institutions. The institutions will bear a larger degree of responsibility for learning outcomes – the employment situation of graduates will be one of the important criteria. Besides this it is necessary to seek further effective mechanisms supporting quality in education and the development of other functions of HE institutions. HE institutions will no longer be supported in their efforts to attract as many students as possible. Qualitative indicators will gain in weight and quantitative indicators will lose it. A mechanism will gradually be introduced that will stimulate HE institutions to attract the best graduates of secondary schools. This will contribute to the enhancement of their quality. This mechanism of funding that will take account of the number of the best secondary school graduates admitted to study will naturally be linked to the overall diversification of the functions of each higher education institution and to other funding instruments. Moreover, the Ministry will propose mechanisms for influencing the proportion of students at Bachelor, Master and Doctoral level.

The changes in funding are not intended to be, and need not be, radical. They will not be introduced all at once, but will take place in gradual steps. The transition to the new funding principles and budgetary rules may be phased in over a period of 3-4 years. Czech higher education as a whole is not in a critical condition that would require an instant solution without taking account of possible negative implications for the individual institutions and for the stability of the entire system.

3.1 Effective governance of the system of higher education

Objective: Increasing the effectiveness of the system of governance of higher education; specifying the division of powers and responsibilities among key players responsible for the workings of the higher education sector (the Ministry, the Accreditation Commission, higher education institutions and their representative bodies, external stakeholders)

- evaluate the implementation of the Strategic Plan of the Ministry for 2006-2010 and bring the results to bear in the updates of the Strategic Plan of the Ministry;
- support the autonomy and accountability of higher education institutions;
- seek to ensure a higher level of involvement of external stakeholders in analyses and strategic consultations concerning the development of tertiary education as a whole;
- pursue a better coordination of the governance of secondary and tertiary education (e.g. entrance examinations to higher education institutions, inclusive education).

Instruments:

ECOP: support area 4.2 – individual national projects: Tertiary Education Reform, International Audit of RDI.

3.2 Higher education institutions with responsible, educated management

Objective: Providing for a better performance of management mechanisms at institutional level, particularly by means of regular evaluation of the implementation of the relevant objectives and by means of discussing the mechanisms with HE institutions

The Ministry shall:

- strive for rationalisation of powers and responsibilities at institutional level;
- develop and pilot methodologies supporting effective management of higher education institutions focused, above all, on supporting economic and administrative processes;
- support the system of education of managerial and administrative staff at higher education institutions and those academics and students who participate in their administration;
- provide systemic support for higher education institutions in the process of identifying their costs so that they can compare their financial demands and cost structure with those of similar institutions in the Czech Republic and in other European countries.

Instruments:

ECOP: support area 2.2, support area 4.2 - individual national projects: Tertiary Education Reform, EFIN.

3.3 Non-capital funding

Objective: Adjusting financial mechanisms so that they constitute effective instruments for the implementation of the Strategic Plan of the Ministry

- pursue stability of the public higher education budget in relation to the state budget;
- seek to ensure that the proportion of expenditure on higher education institutions in the GDP approaches the EU 15 average;

- define the main principles of budgeting for longer periods of time so that individual institutions may sense stability in their revenues from the state budget within a time frame of several years;
- treat various types of study programmes separately in the budgeting for educational activities;
- pursue a gradual transition to a system where public higher education institutions will be financed based on a multi-annual contract with the state that will be derived from formula funding;
- implement changes in the structure of budgetary areas with a view to reducing the weight of input criteria in favour of output and qualitative criteria;
- the development programmes and the Fund for the Development of Higher Education Institutions shall be preserved in principle, but the Ministry will carry out partial changes in their functioning (most importantly, it will gradually strengthen the weight of centralised development programmes at the expense of decentralised programmes);
- stimulate higher education institutions to seek other sources of income;
- support the development and implementation of a system for evaluating the outcomes of artistic activities and their link to the funding of art-based higher education institutions.

The changes in the system of funding will take place gradually so that the institutions have sufficient time for implementation of their own development strategies and so that there would be no radical changes in their funding.

Instruments:

Changes in the rules for the financing of public higher education institutions;

ECOP: support area 4.2 – individual national project: Tertiary Education Reform.

3.4 Capital funding

Objective: Restoring and developing a higher education infrastructure that will contribute to enhancing the quality of teaching, research and the culture of the academic environment; introducing strategic plans in relation to the profile of individual higher education institutions; strengthening the transparency of capital funding schemes and ensuring a transition to a new system of funding.

- establish conditions, by means of calls for proposals, to ensure the maximum use of
 financial resources for investment derived from operational programmes of the EU,
 particularly the RDIOP (European centres of excellence, regional R&D centres,
 infrastructure for teaching at higher education institutions combined with research);
 support HE institutions in preparing projects to be presented within these programmes;
- as opposed to the previous periods, the building of new premises shall not be a priority; The construction of new facilities will be addressed on an individual basis and pursued only in clearly justified cases;

- a decisive portion of financial resources will be used for the refurbishing and modernisation of the existing educational facilities, libraries, halls of residence, dining facilities, administrative facilities, ICT infrastructure, access to sources of information and scientific knowledge, including the renovation and procurement of new equipment and devices;
- support, via targeted allocation of capital grants, the trend towards diversification of higher education institutions;
- seek to ensure, for the sake of balanced workings of the tertiary education sector as a whole, minimisation of the impact of inequalities resulting from the rules governing the use of EU funds;
- support investments with the potential of tying in further capital resources from sources outside the Ministry's budget;
- pursue, in line with the legislative regulation under preparation (the bill on tertiary education), a change in the rules for transparent capital funding, including the possibility of carrying capital resources over to be administered by higher education institutions.

3.5 Funding of research, experimental development and innovation from the institutional resources of the stage budget

3.5.1

Objective: Increasing the effectiveness of the use of state budget resources provided for research, experimental development and innovation at higher education institutions as part of institutional support by means of linking this support to actual achievements in these areas

- carry out evaluation of research plans in line with Act No. 130/2002 Coll., as amended, that will be finalised in 2011 and 2013. The funding of research plans will be completed in 2013 in the latest and will be replaced by institutional support for research, experimental development and innovation from public resources provided for the long-term strategic development of research organisations;
- act as a provider of institutional support for research, experimental development and innovation from public resources for the long-term strategic development of organisations that meet the definition of a research organisation pursuant to Section 2, par. 2 d) of the Act on the Support for Research, Experimental Development and Innovations. It will provide this support on the basis of evaluation of the results achieved by the individual research organisations;
- ensure, as a provider of institutional and targeted support, an annual collection of reliable data concerning the results of research, experimental development and innovation in line with the Methodology for Evaluation of Research and Development adopted for the relevant year, and arrange for the delivery of the data into the Information System for Research, Development and Innovation within deadlines laid down by law.

3.5.2

Objective: Implementing new modes of support from state budget resources as part of the reform of the research, development and innovation system

The Ministry shall:

- set, on an annual basis, the proportion of resources allocated to each higher education
 institution for specific research projects that are part of its studies. The level of
 resources allocated will depend on the degree of excellence, measured through
 evaluation of RDI results, achieved in research, development and innovation at HE
 institutions, and on the number of graduates of Master and especially Doctoral study
 programmes who achieve excellent results.
- set the conditions for cooperation with the main providers of support, particularly the Technology Agency of the Czech Republic and the Grant Agency of the Czech Republic;
- support the setting up and development of large research, development and innovation infrastructures in parallel with establishing a sustainable mechanism for funding their operation.

Instruments:

RDIOP:

ECOP: support area 4.2 – individual national projects: EFIN, EFTRANS, International Audit of RDI;

Launching the national programme "Support for Large Infrastructures / Capital Funding Schemes for Research and Development (National Policy of Research, Development and Innovation, task A3-4) in 2012;

Implementation of the aforementioned programme in 2014-2015 that will be supported from the state budget resources allocated to the Ministry and earmarked by the Ministry for this purpose.

PhDr. Miroslava Kopicová Minister of Education, Youth and Sports

Prague, 6 February 2010