

**The Strategic Plan for the Scholarly,
Scientific, Research, Development and
Innovation, Artistic and Other Creative
Activities of Higher Education Institutions
for
2016–2020**



MINISTERSTVO ŠKOLSTVÍ,
MLÁDEŽE A TĚLOVÝCHOVY

Preamble

Higher education institutions are an irreplaceable part of every developed and modern society. Higher education has contributed significantly to its cultural and economic growth and it accepts its share of responsibility for further sustainable development. The mission of every higher education institution is to help, in its unique way, to build a democratic, open, tolerant, cohesive, educated and cultural society as well as the competitiveness of the country and to help develop a knowledge and innovation based economy.

Higher education (HE) institutions fulfil that mission through three main groups of activities:

- educational activity,
- creative activity,
- direct societal and professional impact, or the "third role".

Although the educational activity is the primary and most inherent activity of HE institutions, all three groups of activities play their indispensable part. It is the linkage between education, research, other creative activities and the third role that makes HE institutions unique. Every HE institution is different, has its unmistakable profile and mission and carries out the basic activities in a different way and to a different extent, but every one of them contributes adequately and persistently to the shared academic and societal values.

Educational activity

A HE institution as an educational institution is the highest component of the educational system in the Czech Republic. The educational activities of HE institutions are mainly such activities which lead directly to the development of knowledge, skills and attitudes of students and prepare them for life in the future unpredictable, demanding and dynamic world. The educational activities may have many different forms, from traditional teaching by means of lectures, seminars and individual preparation, through a direct involvement of students in creative activities or practical training experience, up to forms of project teaching, on-line education and other modern ways of increasing the competencies of students. The key outputs of education are both professional, field-specific knowledge and skills and a broader set of transferable competencies including creativity, critical thinking, soft skills and preparedness for further, life-long learning.

The quality of the educational activity of a HE institution is understood mainly as:

- added value for every student, i.e. a complex sum of knowledge, skills and competencies which the graduates are equipped with and would not obtain if they did not study at a HE institution,
- relevance of the offered education, i.e. the extent to which the obtained learning outcomes meet the needs of life in the 21st century,
- openness of HE institutions to the internal and external environment and ability to reflect the educational needs of every student, regardless of their background and with a full use of their capabilities,
- harmony of the education with academic values and ability of the HE institution to prepare self-reliant, independent and self-confident individuals who think critically of the society and contribute actively to its development.

Creative activities

The creative activities of HE institutions include a broad range of activities leading to obtaining new knowledge and to its application for the benefit of the society. The creative activities include mainly basic and applied research, development and innovation, artistic creation and also transfer of technologies, synthesis of knowledge across disciplines or creation of study materials and public education sources. HE

institutions, in pushing the boundaries of the unknown and in critical review of the knowledge gained so far, cooperate with all relevant partners and ensure a both-way transfer of knowledge between the academic and the application sphere. The unique value of HE institutions is the involvement of students in the said activities and the upbringing of new generations, which is key for the development of Czech science and the other creative industries.

The importance of creative activities cannot be measured by their volume only, but above all by their quality, their benefit for the general development of knowledge, relevance for the society, its culture and needs, and by the extent to which their professional level is comparable to the world centres of excellence.

Direct societal and professional impact of HE institutions

Apart from the educational and creative activities, a no less important role of HE institutions is their direct societal impact and, in general, the so-called "third role". HE institutions contribute to spreading knowledge and values in the society in many different ways and they themselves carry out professional activity in their field. Along with other stakeholders they co-create the space for public discussion and they contribute significantly to its openness, critical approach, professional level and sophistication.

* * *

HE institutions are a place where people of various generations, nationalities, background and experience, as well as opinions, expectations and ambitions meet, teach each other and jointly create new values. The basis of every HE institution is the academic community (the academia), composed of its students together with the academic staff. HE institutions are open and dynamic institutions reflecting, and actively creating, a broader societal development in the Czech Republic and in the world. HE institutions are a space of an ongoing contact both among the academia members themselves - within their disciplines and across them - and among many other partners, including the graduates and representatives of employers, public administration or the non-profit sector, be they local or international.

In fulfilling this mission, HE institutions prop upon a high level of self-administration, academic freedom and rights and a stable legislative and economic environment, which enables them to progress towards the set objectives in the long term. HE institutions are strongly autonomous institutions bearing a high liability for the quality of their activities both towards all the academia members and towards their partners and the whole society.

Starting points of the Strategic Plan

The Strategic Plan for the Scholarly, Scientific, Research, Development, Innovation, Artistic and Other Creative Activities of Higher Education Institutions for 2016 – 2020 ("the Strategic Plan") is a key strategic document of the Ministry of Education, Youth and Sport ("the Ministry") defining the priorities and main planned measures in the HE policy in the period 2016 to 2020.

In its content, the Strategic Plan follows up many conceptual documents, at the national level mainly the Education Policy Strategy of the Czech Republic up to 2020 ("Strategy 2020") adopted in 2014 as an umbrella strategic document defining the starting points for strategic plans at all stages of the educational system, including higher education, and other conceptual materials.

The Strategy 2020 sets three fundamental objectives: (1) to reduce inequality in education, (2) to support quality teaching and teachers as its key prerequisite and (3) to manage the educational system responsibly and effectively. The first objective responds to the persisting barriers in access to education for pupils and students with a low socio-economic status and other disadvantages, it sees a challenge in the growing drop-out rates and not always sufficient accessibility of further (life-long) education. In its second objective, the Strategy focuses on the preparedness of the academic staff for their teaching work, it requests a straightaway description of the education objectives at all stages, modernisation of the systems of evaluating students and it underlines the need to pay more attention to direct evaluation of the quality of teaching (apart from research and other aspects) at HE institutions. The third objective is oriented on the issue of strategic management, data availability, the role of research and innovation in education and it mentions the need to improve communication among the stakeholders.

Other national documents include:

- The Strategic Plan for the Scholarly, Scientific, Research, Development, Innovation, Artistic and Other Creative Activities of Higher Education Institutions for 2011 - 2015,
- Framework for the Development of Higher Education Institutions until 2020,
- International Competitiveness Strategy 2012 - 2020.

At the international level:

- European Higher Education Area (Bologna Declaration of 19 June 1999 and subsequent communiqué),
- Europe 2020 strategy,
- Strategic Framework for European Cooperation in Education and Training (ET 2020 – Education and Training 2020).

A key role in preparing the Strategic Plan was played by the strategic documents of the individual HE institutions for the period 2011 to 2015, mainly their strategic plans. An analysis of the current situation in the Czech higher education, including important demographic and social starting points, forms a part of the above-mentioned Framework for the Development of Higher Education Institutions until 2020. Other available analytical materials, expert reports, directives and recommendations, contained in the documents below, were also taken into account:

- Standards and guidelines to ensure quality in the European Area of Higher Education, European Association for Quality Assurance in Higher Education (draft version 2014),
- High Level Group on the Modernisation of Higher Education: Report to the European Commission on Improving the Quality of Teaching and Learning in Europe's Higher Education Institutions,
- Eurydice: Modernisation of Higher Education in Europe – Access, Retention and Employability 2014,
- country specific recommendations for the Czech Republic,
- findings and recommendations of implemented national individual projects, mainly Q-RAM, KVALITA, KREDO, EFIN and EF-TRANS,

- surveys among students and graduates of Czech HE institutions, mainly EUROSTUDENT and REFLEX.

The Strategic Plan stems from the draft amendment to Act No 111/1998 on higher education institutions and on amendment and supplement of other acts (the Higher Education Act) as it was submitted to the Czech government in November 2014. It takes over its terminology in the key points and it builds on the legal framework changes contained in the amendment.

The Strategic Plan is focused on a limited number of cross-cutting priority objectives whose achievement requires the coordination of several different measures in the mid- to long term. The Strategic Plan is followed up by its annually issued Updates, which detail a plan for implementing the key measures for the given year and they expand the list of priorities with less complex tasks with a one-year implementation and, last but not least, they respond to the latest development in higher education and in the whole society, to new findings and analyses and they take into account the progress to date and the results of reforms.

The Strategic Plan Updates will be accompanied with a system of selected indicators of higher education development, enabling a continuous comparison and evaluation of achieving the set objectives.

The mission of the Ministry

The general values determining the direction of the Ministry in influencing the HE institutions in the nearest at least five-year horizon are as follows:

- **relevance** - higher education must be in harmony with the requirements and development tendencies of the society and at the same time take into account the leading world trends in activities of HE institutions,
- **effectiveness** - emphasising the resulting benefit and its quality while spending effectively the related funds,
- **accessibility** - higher education must be accessible regardless of sex, of belonging to social, religious or ethnic groups and regardless of economic or health limitations of the applicants.

Key strategic objectives of the Ministry for 2016 - 2020

The Ministry, being aware that on one hand it is the central authority for higher education and research and development, and on the other hand that significant changes in this segment require consensus at the political as well as governmental level, will:

- use all opportunities for convincing the political and executive bodies of the state about the importance of higher education and research and the necessity to advance it to the level of developed as well as a number of fast developing economies,
- strive for formulating a modern government strategy for higher education and a government strategy for research, which will comply with the above-mentioned mission.

For the period 2016 - 2020, the Ministry structures will implement activities so that the following strategic objectives of the Ministry are achieved:

- to ensure the budget of HE institutions both in the item of educational activity of HE institutions and in the item of research support in HE institutions, in the following direction:
 - the size of the budget in 2014 is considered to be the lowest limit that must not be reduced,
 - in negotiating the budget, the Ministry will emphasise first the impact of inflation in the relevant budget, second the international comparison, mainly the expenditure of OECD countries on higher education institutions in relation to the GDP,
- the budget will be distributed to the various HE institutions in a way that will support their stability, quality and openness; changes in the system of financing will be discussed with the academia through their representations,
- after the amendment to the Higher Education Act is approved, to ensure its smooth implementation, mainly in the area of accreditations,
- to promote a strong shift of the Czech higher education from quantity to quality,
- to enhance the diversification of the study programmes profiles with a financing mechanism and with setting the accreditation standards for the various profiles,
- to build an information base focused on the higher education segment including information sources on the needs of the labour markets towards the graduates,
- to carry out analyses, benchmarking studies etc. evaluating the development and comparisons of higher education and research in the higher education segment with a view to providing HE institutions, by means of feedback, with opportunities to develop their potential and to improve the quality of all activities,
- to maintain and expand international contacts realised at the government level both in higher education and in research,
- to engage in all activities (migration policy, promotion abroad etc.) which will lead to an increasing number of foreign applicants with prospects of successful studying at Czech HE institutions,

- in the course of the strategic period to prepare a methodology for evaluation of HE institutions and research,
- to ensure meaningful sustainability of research centres built with the support of the Operational Programme Research and Development for Innovation (RDI centres),
- to carry out a situation analysis of the doctoral studies and, based on that, to propose steps towards increasing its quality, which may lead to its re-design with a view to ensuring competitiveness of the Czech Republic in this area,
- to evaluate the situation in research activities in the higher education segment and to define the main directions, forms and scope of the possible support from the Operational Programme Research and Development for Innovation (OP RDI),
- to evaluate the condition of the material infrastructure of HE institutions (mainly with regard to support for research activities) and to define the directions of support for investments, refurbishment and equipment of HE institutions from the state budget and the OP RDI,
- to increase public accessibility of information on HE institutions, study programmes and research,
- to initiate negotiations with other ministries (mainly the Ministry of Labour and Social Affairs and the Ministry of Industry and Trade) on the funding of such activities of HE institutions with which the HE institutions fulfil tasks within the competence of the relevant ministries.

Priority objectives of the Strategic Plan for 2016–2020

The priority objectives represent the desirable state of Czech higher education, which the Ministry aims to achieve through its measures by 2020. All the steps of the Ministry, set out below, are to serve such objectives and their purpose is to create such environment and conditions for HE institutions which will help achieve the state described.

PRIORITY OBJECTIVE 1: ("Ensuring quality") **HE institutions will play a crucial role in ensuring the quality of their activities.** The autonomy of HE institutions is closely linked to responsibility for fulfilling the values set out in the Preamble hereto towards students, the academia and the whole society. Such responsibility will be implemented through strong and competent strategic management of HE institutions, effective internal mechanisms of quality assurance, clear profiles of the study programmes, enhanced diversification of the various HE institutions and accessibility of reliable and intelligible information for students, applicants and the public. The HE institutions will set and adhere to high quality standards in all their activities, including the requirements for the quality of creative outputs and for knowledge, skills and competencies of the graduates of study programmes.

PRIORITY OBJECTIVE 2: ("Diversity and accessibility") **HE institutions will offer a broad and diversified access to quality education.** The education offer of HE institutions will reflect the needs, interests and possibilities of the wide population of students, including the exceptionally talented. The diversified education will enable the achievement of apparent added value for knowledge, skills and competencies of all students, regardless of their social and economic background, age, nationality, previous educational or professional experience or special needs caused by health or other difficulties.

PRIORITY OBJECTIVE 3: ("Internationalisation") **The teaching and the creative activities of HE institutions will have a distinct international nature.** Internationalisation of HE institutions includes not only the engagement in mobility programmes and short trips of students or of a limited number of the academic staff. The environment at the HE institutions will have a distinct international nature based on full integration of the incoming students and the visiting lecturers in the life of the academia, on intensive international contacts in the creative activities and taking into account the world context and foreign experience in preparing the study programmes.

PRIORITY OBJECTIVE 4: ("Relevance") **In their activity, HE institutions will reflect the current social development, the latest scientific knowledge and needs of partners.** The HE institutions will be in a close and mutually open contact with partners at the local, national and international level, with graduates, employers, scientific and academic institutions and with the non-profit sector and public administration.

PRIORITY OBJECTIVE 5: ("Quality and relevant research, development and innovation") **The results of research and development at HE institutions will be internationally relevant and effectively transferred to the application sphere.** The research activity of HE institutions will be evaluated in a way reflecting both the quality and relevance of its results, and its management, strategic development and the level of internationalisation. Sustainability and effectiveness of utilising the research capacities will be ensured. The centres of excellence at HE institutions will be involved to a large extent in the macro-regional, pan-European and global projects and will succeed in obtaining prestigious international grants.

PRIORITY OBJECTIVE 6: ("Decision-making based on data") **The management of higher education policy and the HE institutions themselves will be conceptual, transparent and based on data.** The Ministry will play an indubitable role in directing the development of the whole system of higher education and will have sufficient capacities for analytical and conceptual work. Quality, reliable and systematically used sources of data providing sufficient information on higher education will be available to the Ministry, the HE institutions and other stakeholders.

PRIORITY OBJECTIVE 7: ("Effective financing") **The financing of HE institutions will be stable, transparent and effective.** The total volume of public expenditure on higher education will not be reduced. The

mechanisms for calculating the contributions will be transparent, fair, and predictable in a several-years horizon and will foster improving the quality of activities and the diversification of HE institutions.

The planned measures

In order to achieve the abovementioned objectives, a number of measures will be implemented, covering all key instruments of higher education management. The complex nature of the challenges induces the need of interlinked and mutually coordinated steps towards improving the state of Czech higher education. The interventions into the accreditation process must be in harmony with the modifications of the mechanism for HE institutions financing and the measures increasing the openness must not be in conflict with the efforts to improve the quality of the educational process.

The measures below apply to all HE institutions in the Czech Republic, with the exception of the majority of the planned modifications to the financing mechanisms (mainly the manner of distributing the contribution for activities) which will affect only the public HE institutions.

PRIORITY OBJECTIVE 1: Ensuring quality

Financing

To reinforce the principles of financing based on quality: The ability of the existing financing mechanisms to contribute to a higher quality of HE institutions' activity will be evaluated with regard to the diversity of their profiles. Based on that analysis, modifications to the system will be proposed with a view to increasing the informative power and reliability of the indicators used and to reducing the importance of the mere number of students for calculating the contribution.

To take into account the specific features of the various profiles of study programmes in the financing: A fair assessment of the education quality requires different evaluation of the outputs of theoretically oriented academic programmes and programmes oriented on the labour market and professional career. Special attention will be paid to the system of financing artistic and doctoral study programmes.

Accreditation

To provide the accreditation authority with support necessary for its independence and fulfilment of its role in ensuring quality in higher education: The Accreditation Authority will receive material, organisational and expert support for its accreditation and evaluation activities. New standards defining the conditions for accreditation and for extending the accreditation of study programmes and for institutional accreditation will be adopted. Evaluators of the Accreditation Authority entering the accreditation process will be trained so that the quality of the evaluation content and methodology are ensured.

To introduce so-called "institutional accreditation" emphasising the internal quality assurance: The HE institutions with a functioning system of internal assurance and evaluation of the quality of their activities, mainly the educational activity, will be allowed to perform accreditation and to extend accreditation of study programmes through internal processes, without the necessity of direct assessment by the Accreditation Authority.

To support the profile definition of the study programmes in the accreditation process: The criteria for accreditation of various profiles of study programmes will differ in order to take into account their different objectives and to emphasise the specific features related e.g. to the need of cooperation with the application sphere (involving external partners in the preparation of study programmes and experts from practice in teaching) in profession programmes, or by linking the study content to the creative performance of the workplace itself in academic programmes.

To emphasise the role of teaching quality evaluation in the accreditation process: In assessing the study programmes, the Accreditation Authority will take into account not only the inputs (material arrangements, numbers of academic staff etc.) and any outputs (employment rate of graduates, publications, artistic realisations etc.) but sufficient attention will be paid also to the actual form and quality of teaching. To identify that, the evaluators will, among other things, visit the HE institutions on the spot.

Information

To improve public accessibility of information on HE institutions and their study programmes: The better accessibility of information will enhance public monitoring of HE institutions and their liability towards external partners. The building of an information system and standards for transferring and publishing information will ensure a better access of applicants to the relevant data, which will increase their ability to assess the quality of the offer of HE institutions and to select a field of study according to individual preferences.

To improve accessibility of data on the quality of activities: Significant care will be dedicated to increasing the relevance and validity of data on the quality of HE institutions, which will help, among other things, to improve the financing mechanisms.

Other measures

To discuss with HE institutions their strategic documents: The Ministry will discuss regularly with the representatives of HE institutions their strategic documents, mainly the strategic plans according to Section 21 par. 1 letter b) of Act No 111/1998 on higher education institutions and on amendment and supplement of other acts (the Higher Education Act) in order to maintain mutual awareness of the problems identified and the solutions proposed. Such negotiations will include discussions on strategic objectives and the development vision of the HE institution and their relation to the national development vision of the higher education sector. Upon request of the HE institution concerned, representatives of other stakeholders may be invited to the meetings.

To complete and introduce a National Qualifications Framework for Tertiary Education: The creation and development of the National Qualifications Framework will be based on descriptions of learning outcomes at the individual stages of study, which will create, among other things, a basis for the processes of internal and external quality assurance. The linkage of the qualifications framework with similar foreign documents through the European Qualifications Framework (EQF) and the Qualifications Framework of the European Higher Education Area (QF-EHEA) will contribute to the development of the ECTS system, of international mobilities and will simplify the process of recognising studies abroad for the needs of further study and employment. The qualifications framework for higher education will be adopted as part of the national document covering all stages of education (the National Education Programme).

To carry out a situation analysis of doctoral studies and to take steps towards increasing their quality: To carry out a retrospective analysis of doctoral studies, which would evaluate both the quantitative aspect of doctoral studies (the numbers of accepted students, numbers of graduates, permeability, length of study, the direction taken by the graduates, the expenditure directed towards doctoral studies) and the qualitative aspect (the quality of graduates, their factual engagement in research, in HE institutions) and the follow-up programmes for post-doctoral students. Based on that to take steps towards increasing the quality of doctoral studies, which may induce radical changes in the existing system of support for doctoral study programmes.

Recommendations for higher education institutions

To focus on developing the systems of internal quality assurance: The mechanisms of internal quality assurance should be systematically improved and streamlined, and the evaluation of the quality of activities by students, graduates and external partners must be continuously developed, expanded and strengthened. Adequate funding and personnel capacities should be earmarked for such system. The evaluation of the quality of study programmes should take into account their profile, specialisation and strategic plan for their further development. The evaluation of quality for the needs of the HE institution management should include both evaluation of outputs and results, and the internal processes as key prerequisites for their achievement.

To use the methodology of learning outcomes in the preparation, implementation and evaluation of study programmes: Definition of specific learning outcomes - what students should know, understand and what they should be able to do after successfully completing the learning process - should be a part of the preparation of every course of study (subject) and of the whole study programme, lead towards linkage

among individual parts of the study and enhance the orientation of all partial subjects on the main objectives of the whole study programme. The subsequent implementation of the study programme, including the choice of the methods of teaching and evaluation of students, should be consciously focused on achieving those expected learning outcomes.

As part of internal quality assurance, to focus preferentially on the actual performance of activities and their results rather than on formal requirements: In their rules for internal evaluation, HE institutions should not be reduced to monitoring the formal criteria such as numbers of publications, artistic realisations or the qualification structure of the academic staff, but should also use methods of evaluating the quality of the actual performance of the HE institution's activities. For that they can use a wide range of instruments, in evaluating the educational activity e.g. a direct observation of teaching (inspection of classes), interviews with teachers and students, monitoring and comparison of the actual learning outcomes, i.e. knowledge, skills and competencies of the study programme graduates, evaluation of the quality of qualification works (theses) or monitoring of the employability of graduates or their further study. In the case of creative activities, they should use the peer review methods taking into account the real benefit of the results for the development and spreading of knowledge and achievement of the objectives of the HE institution.

To involve a broad group of partners in the preparation of strategic documents including the accreditation files: Students, academic and non-academic staff, external partners and experts should be involved in the whole process of preparing the strategic documents.

To verify the quality of their activity results, they should use, among other things, international rankings of HE institutions, including the field-specific: HE institutions should seek inspiration in comparable foreign institutions which are succeeding in building and maintaining international reputation through increasing their performance and sustaining high standards.

PRIORITY OBJECTIVE 2: Diversity and accessibility

Financing

To provide financial support to disadvantaged students: The existing system of scholarships will be evaluated, updated and expanded so that it facilitates, in an effective way, the study for applicants who cannot afford its standard form.

To provide financial support to HE institutions enabling access for specific groups of students: The higher costs incurred by HE institutions which support the study of students with specific needs and problems, including students with lower socio-economic status, parents with children, members of language and ethnic minorities, students with specific educational needs and health difficulties and students enrolled in further education while employed ("specific groups of students") will be compensated in a contribution from the state budget. Financial support will be provided to projects focused on strengthening the capacities for their education, from building barrier-free access up to organising compensatory courses for applicants from socially excluded communities.

Accreditation

To include the requirements on consultancy and support for specific groups of students in the standards for institutional accreditation: HE institutions striving to obtain institutional accreditation will have to, apart from other processes of quality assurance, demonstrate a functioning system of counselling and support for students.

To assess the policies of HE institutions in the area of access to study and successful completion within their applications for institutional accreditation: The required systems of internal quality assurance in HE institutions will also include the search for and gradual removal of apparent as well as hidden social and other barriers in access to studying. HE institutions will be obliged to explore the development and causes of drop-out rates.

Information

To introduce a systematic monitoring of access to higher education and its permeability: Accessibility and usability of data on the access to higher education, permeability of the system for students, successful completion, participation in foreign mobilities and career options of graduates will be enhanced. The system integrating information from various sources will facilitate the interconnection of data on a student from secondary school up to the labour market and will create a unique opportunity for identification of good practice and of problem causes.

Other measures

To assess and improve the quality and relevance of combined and distance learning: An analysis will be carried out as to what extent the existing combined and distance forms of study meet the needs of students, enable their broad access and provide apparent added value for their knowledge, skills and competences. Based on discussions with the HE institutions, examples of good practice will be identified along with possible improvements, including further use of the ICT potential in teaching, leading towards a higher quality and relevance of study combined with flexibility for students. Measures at the national level may, if the analysis supports their usefulness, include a modification of the rules for assessing the fee for exceeding the standard study period, a modification of specific accreditation requirements for combined studies, or financial support for the development of electronic study supports in cooperation of more HE institutions, including the foreign ones.

To identify the causes of growing drop-out rate: Based on empirical data, the Ministry in cooperation with HE institutions will draw up an analysis of the causes and consequences of drop-out and will initiate a debate on where and under what conditions the failure is a problematic phenomenon that needs to be reduced. Based on examples of good practice and with regard to the specific features of the particular HE institutions and fields of study, measures will be proposed to increase the success rate without jeopardising quality.

To cooperate systematically with the lower stages of the educational system: The ability of the lower stages of education to prepare pupils for further learning and higher education will be enhanced through cooperation between the tertiary and secondary schools. Representatives of HE institutions will be involved in the conceptual development and direction of the curricular documents for the lower stages of education (Framework Education Programmes).

To adopt recommendations for recognising the outcomes of previous learning: Based on experience of HE institutions to date and examples of good practice, a recommendation will be prepared as to how and to what extent subjects studied at other HE institutions including the foreign ones, and competences obtained outside the formal education, e.g. the results of practical experience and traineeships, should be verified and recognised.

Recommendations for higher education institutions

To evaluate the access of the various disadvantaged groups to education at the given HE institution: HE institutions should be informed about the structure of their students, the representation of the disadvantaged groups (at an extent allowed by the legal order in force) and the challenges they are facing during their study.

To provide quality consultancy services on the issues of study, professional career, personal and social situation and other: Consultancy, both of formal and informal nature, should be accessible also to applicants for study and to employees of the HE institutions. Consultancy should be focused on attracting persons interested in studying, on reducing the drop-out rate, improving the provided education and improving the integration of the graduates into the labour market. Consultancy services should be adjusted to the needs of students from disadvantaged groups. HE institutions should continuously develop the professional competencies of the staff responsible for consultancy.

To specifically seek and develop the talents of students: HE institutions should make efforts to actively recognise specific individual talents of students by means of a broad range of instruments. The talents of

students should be developed individually so that everyone could capitalise on their potential to the maximum.

To develop systems of electronic study supports and to use their potential for educating specific groups of students: HE institutions should continue to develop both methods and technologies and the content of the electronic study supports and to seek other possibilities of their use for streamlining and individualisation of the educational process. The publicly accessible open educational resources, including the foreign ones, should be used and further developed. HE institutions should also actively contribute to spreading the knowledge in the society, and to fulfilling their mission, by expanding the unlimited public access to study materials.

PRIORITY OBJECTIVE 3: Internationalisation

Financing

To take into account the level of internationalisation in calculating the contribution: Apart from the existing indicators focused on international mobilities, ways to evaluate fairly other aspects of internationalisation, including the participation in international projects (scientific, artistic and other) and involvement of lecturers with a long foreign experience in teaching, will be sought.

To support mobilities of students and academic staff with a special financial instrument: Obtaining foreign experience, from short trips through one- to two-semester stays up to work placements and other forms of international cooperation, will be supported with special additional financing for the existing programmes. The aim of the measure is to increase the numbers of persons profiting from obtaining foreign experience, to reduce social barriers in access to mobility programmes and on the whole to strengthen the internationalisation of Czech higher education.

To support joint study programmes: Study programmes sponsored by more institutions, including foreign ones ("joint degrees") will be funded adequately.

Accreditation

To take account of internationalisation when accrediting study programmes: Selected aspects of internationalisation of teaching (e.g. foreign lecturers, subjects in foreign languages, semesters dedicated to foreign mobilities or involvement in international projects) will be taken into account in the accreditation of study programmes, differentiated by their type, profile and specialisation. Standards for accrediting joint degree programmes will be created.

To recognise fully language competences as one of the necessary learning outcomes in Bachelor's degree programmes: When accrediting Bachelor's degree programmes, account will be taken of the need to develop student skills to communicate fluently in at least one world language, including professional topics. That may be achieved both through the teaching of foreign languages and through involving students in programmes of international mobilities or through including a sufficient number of subjects, literature and other educational experience in foreign languages in the study programme curriculum.

Information

To create a joint portal for international presentation of HE institutions: The portal will function as a tool for sharing good practice, it will facilitate access to information for foreign potential applicants for higher education and that way it will facilitate access to the particular HE institutions in the Czech Republic.

Recommendations for higher education institutions

To reflect foreign study periods of students in the curricula: Foreign study periods/ visits should not complicate the completion of the study within the standard period. Curricula must therefore reckon with the possibility of participation in one- or two-semester mobility programmes. In the same way it is desirable to select such partner institutions and study programmes, from which it will be possible to

recognise the granted credits and subjects completed by students, both in terms of their quality and factual similarity.

To integrated further the foreign academia members in the life of the academic community: HE institutions should utilise fully the potential represented by foreign students and lecturers who are long-term or short-term members of their academic community. The interconnection with the domestic academia members in the study and research activities and outside them should lead to deeper internationalisation of the HE institution. The use of experience of international students and their knowledge of the design of comparable courses abroad, the current trends in teaching methods, should be systematised.

To focus cooperation on priority territories: Based on assessing the potential for successful cooperation, HE institutions should define their priority target territories, focus the recruitment of foreign students and staff on them and seek partners for research, development and artistic projects and joint degrees in them.

To create strategic documents on the basis of foreign sources: When creating their strategic documents, not only in internationalisation, and when setting the internal systems of quality assurance, HE institutions should get inspired by foreign experience and documents of international organisations, created by European Union institutions, associations of universities, research centres or other partners.

PRIORITY OBJECTIVE 4: Relevance

Financing

To provide financial support to innovation of all activities of HE institutions: Innovation and update of activities, including adjustment of the content and form of study programmes to the needs of the society and the latest trends will be supported both from the state budget (Institutional Programme) and from the Operational Programme Research, Development and Education. Special attention will be paid to utilising the possibilities of new technologies, including digitisation of the educational offer.

Accreditation

To take into account the involvement of external stakeholders in the preparation of study programmes during the accreditation process: Consultations with employers, local stakeholders and other partners will be considered as an implied part of the process of preparing study programmes. At the same time, the HE institution will remain responsible for the way it organises the process, which stakeholders it will assess as relevant and how it will synthesise their requirements, opinions and evaluation. The introduction of requirements on consultations must not significantly increase the administrative burden of the accreditation process.

To include communication with external partners as one of the key processes of internal quality assurance in the standards for institutional accreditations.

Information

To improve cooperation with the Ministry of Labour and Social Affairs and other ministries in evaluating the relevance of learning outcomes: The sharing of data, analyses and experience with partner ministries will be strengthened, mainly in order to assess systematically the needs of the labour market, the career options of graduates and the relevance of the achieved learning outcomes.

To collect information on examples of good practice and the implemented innovations in the educational, creative and other activities of HE institutions: Measures implemented by HE institutions in order to increase the quality and relevance of activities, including the improvement of employability of the graduates, will be monitored and regularly published with a view to popularising examples of good practice and increasing awareness of the beneficial projects at HE institutions.

Recommendations for higher education institutions

Apart from traditional academic skills, to put emphasis also on language skills and other transferable competences of graduates: Transferable competences, e.g. the ability to communicate effectively, to solve problems and be creative, to learn individually, to work in a team, to master modern technologies or communicate in a foreign language, are key for the graduates' career and should be therefore developed at HE institutions.

To involve to a larger extent the relevant partners in the evaluation and improvement of activities: The quality assessment of activities should involve all relevant stakeholders, including e.g. the current as well as former students and representatives of employers in the case of the educational activity, users of the outcomes and expert partners in the case of creative activities and social partners in the case of the third role. The assessment processes should lead towards identification of problematic issues on which the next measures will be targeted.

To respond with own educational, research, development, artistic and other activity to the local, regional, national and international conditions and challenges: In their activities, HE institutions should orient on the burning national and global topics as well as contribute to solving problems and utilise the opportunities of their municipality and region, in the economic, social, cultural, environmental or technological area. For that they may use a whole range of means, from exploratory analysis of the situation, through its artistic reflection, development of innovation tailored to the needs of a specific area, expert consultations, direct involvement in the activity of self-government or linkage of professional study visits of students with the problems of the region, up to organisation of courses in the form of projects offering students the experience with addressing real problems of specific people and institutions.

To build centres supporting academic and non-academic staff as part of the internal quality assurance: The support centres should represent a supportive base for the professional and expertise growth of the HE institution staff and for improving their competences both in education and in creative and other activities, including the valorisation of outcomes.

PRIORITY OBJECTIVE 5: Quality and relevant research, development and innovation

Financing

To prepare a new methodology of evaluation for the financing purposes, which will support excellent research of high social and economic relevance: In order to improve the evaluation culture of research, development and innovation in the Czech Republic and their financing, the Ministry will draw up an entirely new methodology of evaluating the results and of institutional financing of research organisations. The new methodology will be prepared under the National Individual Project (IPn) Methodology in close cooperation with all relevant partners from the research sector. The methodology will take into account the position and role of the various types of research organisations, it will introduce principles of results evaluation based on informed international peer-review and it will consider the inter-disciplinary differences in evaluating the results of research, development and innovation. Last but not least, the new methodology will not concentrate exclusively on retrospective evaluation of the results achieved but will evaluate a number of other aspects including the quality of management, strategic development or involvement in international activities.

To support internationalisation of research and development at HE institutions by means of specific subsidy instruments: The Ministry will support the involvement of HE institutions in international cooperation in research and development through subsidy programmes focused on supporting the integration of research capacities into research infrastructures of pan-European and global importance, involvement of Czech research entities in projects of the EU framework programme for research and innovation Horizon 2020 (2014 - 2020) and participation in multicultural and bilateral programmes at inter-governmental level. The Ministry will provide financial support also to reintegrating excellent Czech research workers working abroad back into the Czech environment, or will motivate the top foreign research workers to work in the long term in the Czech Republic.

To stimulate effective exploitation of the results of research and development, their transfer to practice and commercialisation: The Ministry will support activities of HE institutions in the area of knowledge transfer and commercialisation of research results through the Operational Programme Research, Development and Education. Support will be also provided to horizontal (i.e. inter-sectoral) mobility of students and academic staff and their education directed towards the development of competences for innovative entrepreneurship and commercial use of the research and development results, as well as to the activities of technology transfer centres and other forms of infrastructure for commercialisation of the research and development results.

To pay increased attention to sustainability of the research centres financed from the Operational Programme Research and Development for Innovation (which are operated as part of HE institutions or with the participation of them) and their inclusion in the research of HE institutions: The putting into operation and the routine research operation will require from the relevant HE institutions an increased attention both in terms of ensuring the adequate quantity and quality of the research and operating staff, assessment of their outputs quality, legal identity, and in terms of their financing, including the objective specification of requirements on support for their research activities from public sources administered by the Ministry, mainly requirements towards the National Sustainability Programmes, programmes supporting research infrastructures etc.

Information

To increase awareness of the research infrastructure of the Czech HE institutions abroad: For the purpose of positive development of so-called research diplomacy and strengthening the international awareness of research capacities in Czech HE institutions, the involvement of HE institutions in the preparation of technically oriented promotional materials and in organisation of events by the Ministry in cooperation with foreign partners will be enhanced. The so-called research diplomacy will help spread awareness of the excellent research capacities of Czech HE institutions at the international level and so will help deepen the cooperation with the existing and establish contacts with new partner institutions abroad. The Ministry will create a National Portal for Research, Development and Innovation for that purpose.

Other measures

To develop cooperation of HE institutions with materially competent bodies of state administration in formulating and implementing the national policy of research, development and innovation: Through their representations and in close cooperation with the materially competent bodies of state administration, HE institutions will participate in the creation of key strategic and conceptual documents addressing research, development and innovation.

Recommendations for higher education institutions

To focus attention on excellent research with high social benefits: HE institutions should focus on increasing the quality of management and implementation of research activities in order to achieve results at an internationally competitive level. Increased attention should be paid to a broad range of aspects of the quality of research management, which include the definition of strategy for research infrastructure development, shaping the policy of developing human resources for research in direct link to educational activity and defining strategic research agenda in close interaction with partner entities from the public and private sphere, including the definition of the manner and conditions of their mutual cooperation. HE institutions should develop their research activities so that they address topics of high socio-economic relevance of local, regional, national and global importance. For the purpose of synergistic and mutually complementary utilisation of capacities and resources, HE institutions should deepen their cooperation with the other research organisations operating in the Czech Republic in their field of activity.

To reinforce the internationalisation of research and development activity and the integration of research infrastructure into international networks: By increasing the quality of research infrastructure (in the broadest sense), the HE institutions should exert efforts to become attractive for performing excellent research of strong international outreach and their research teams to become relevant and sought-after

partners of excellent foreign experts. Apart from creating favourable conditions for short-term study visits and long-term stays of foreign research workers, HE institutions should target their personnel policy also on permanent work of such workers in the Czech Republic. Internationalisation of the environment at HE institutions should be accompanied by integration of their research infrastructure into international networks and by involving their research teams in international projects of research and development financed through the EU framework programme for research and innovation Horizon 2020 (2014 - 2020) and other international subsidy programmes and financial instruments of support.

To increase competences of students and staff of HE institutions for knowledge transfer between the academic and application spheres: HE institutions should expand the educational activities for the benefit of enhancing creativity and entrepreneurship of students and should improve the competences of the academic and research staff and of the managers of their research facilities for the transfer of knowledge into practice, its commercial use and initiation of innovative entrepreneurship. In order to strengthen systematically such competences, the HE institutions should promote horizontal (i.e. inter-sectoral) mobility of students and academic and research workers, deepening their cooperation with the application sphere and partnership with the business sector in educational and research activities.

To develop cooperation with external partners in order to improve the relevance of research for the needs of the application sphere: Cooperation of HE institutions with industrial partners in defining research agendas in compliance with the socio-economic needs of the society should be consolidated through membership of HE institutions in technological platforms associating institutions of the public research sector with sectoral groupings of business entities and public administration bodies, or financial institutions.

To reinforce capacities for commercialisation of knowledge: HE institutions should utilise the existing or build new structures for transferring knowledge from research and development operatively into practice in the form of technology parks (centres) and business incubators.

To get involved in applied research programmes supported from public funds (programmes of the Czech Ministry of Industry and Trade, Ministry of Health, Ministry of Culture etc.) **and private sources.**

To formulate their strategies in research and development on the basis of the existing national and international documents: In their activity, HE institutions should follow up the approved objectives of national and international policies in research and development, and take steps that will make the implementation of the follow-up measures efficient.

PRIORITY OBJECTIVE 6: Decision-making based on data

Financing

To provide financial and organisational support to large collections of data: The Ministry will earmark funds to support strategically important surveys and analyses, mainly those conducted periodically and at the international level.

Accreditation

To include regular and systematic data collections and analysis at HE institutions as one of the key processes of internal quality assurance into the standards for institutional accreditation: Institutions striving to obtain institutional accreditation will be obliged to monitor and evaluate data on access to studying, successful completion rate, social issues of students, employment of graduates, needs of external partners and other.

Information

To improve, expand and interconnect the available data sources: The accessibility and usability of data will be enhanced, among other things, by interconnecting the existing databases, within the bounds of possibility and with regard to protection of personal data also among ministries. Data sources will be complemented and expanded in order to cover all key issues of higher education. Increasing the amount of

monitored data must not increase disproportionately the administrative burden on institutions and other partners. Data collection under the responsibility of the different ministries and institutions at the national and international level will be coordinated.

To increase the capacity for evaluating the data and working with them at the Ministry and HE institutions.

To ensure accessibility of relevant data for the professional and lay public: Public monitoring of higher education policy and its responsible management will be supported with a broad accessibility of relevant information and documents. The publication of data must not violate the principles of privacy and personal data protection.

To prepare a methodological material for the needs of HE institutions, defining the recommended scope and method of data collection for the purposes of quality assurance.

Recommendations for higher education institutions

To ensure collection and evaluation of data relevant for the quality of all of the institution's activities: The evaluation and analytical processes as the precondition for good functioning of the internal system of quality assurance should be based on an extensive and integrated data base covering various sources of quantitative and qualitative information. Collection and evaluation should be carried out continuously and regularly.

To develop the competences of employees for analytical, conceptual and strategic work: The HE institutions' staff responsible for data collections and analysis, evaluation of policies and development management should be regularly trained and systematically educated.

To coordinate data collections with the Ministry and other HE institutions: In the interest of comparability and usability of the monitored data, HE institutions should cooperate, share methodologies and actively spread examples of best practice when they collect data.

PRIORITY OBJECTIVE 7: Effective financing

Financing

To increase the share of funds allocated on the basis of results and performance of HE institutions: The role of financing according to indicators on the input of HE institutions' activities and according to the number of students will be reduced. The current output indicators will be strengthened and supplemented with new ones so that the share of the budget distributed according to performance is increased and reflects better the quality of the HE institutions' activities.

To introduce elements of multi-year financing: The period of implementing the institutional programme will be extended for a longer period so that the strategic nature of the programme is enhanced and the ability of HE institutions to conceptually increase the quality of their educational activity and to achieve the set long-term objectives is supported. The period, for which the limits for the numbers of funded studies are calculated, will be extended in order to facilitate the planning and strategic decision-making of HE institutions. At the same time, the possibilities of introducing a multi-year perspective into other components of financing of HE institutions will be examined.

To transfer the responsibility for decision-making on investment plans to the HE institutions: In accordance with the International Competitiveness Strategy, decision-making on investments will be entrusted to the autonomy of HE institutions, and priority will be given to refurbishments, modernisations and adaptation of buildings and material equipment to the needs of students with special needs. An investment priority will be the support for technical and nature-science courses and profession bachelor courses.

To reflect demographic trends and predictions in calculating the limit numbers of funded students: The number of financed studies will, apart from the development of demand for higher education, reflect also

the labour market requirements and other factors including the need to maintain the capacities for the period of demographic growth after 2020.

To utilise the funding from Operational Programme Research, Development and Education in an efficient and administration-friendly way: The objectives, criteria and conditions of spending the funds will be set in the operational programme so that they are in line with the priorities of the Strategic Plan 2016 - 2020. The selection of projects and the rules for their implementation will be transparent and stable. Beneficiaries will receive adequate support services from the funding provider.

To provide financial support towards preserving the teaching in courses with significant societal need.

Other measures

To take account of the administrative burden on HE institutions: In implementing the policies, the administrative and other burden which the HE institutions and other partners may incur will be considered. The required data will be collected fully in electronic form, the existing databases will be effectively interconnected and repeated requests for the same information will be excluded. The accreditation process will be simplified, mainly by granting institutional accreditations to HE institutions which have a functioning system of internal quality assurance.

Indicators of achieving the objectives of the Strategic Plan

The attached set of indicators serves as a means of monitoring the achievement of the key aspects of the priority objectives of the Strategic Plan at the national level and it is not intended as a set of goals for the individual HE institutions and as criteria for evaluating their quality. In some indicators, it will be necessary to introduce new instruments of data collection and to start to publish systematically some data now monitored by the Ministry only internally. The Ministry aims to achieve the set values in 2020.

With regard to the process nature of priority objectives 6: Decision-making based on data and 7: Effective financing for them result indicators have not been set.

PRIORITY OBJECTIVE 1: Ensuring quality

- 1) HE institutions will have a system of internal quality assurance in place.
- 2) All study programmes will be described completely and publicly by means of learning outcomes which are to be achieved by their graduates.
- 3) At least 20% of students will be enrolled in study programmes accredited under the institutional accreditation.
- 4) At least three Czech HE institutions will rank among the first five hundred best evaluated institutions on the international ranking QS and at least two Czech HE institutions will rank among the first four hundred in the international ranking Times Higher Education.

PRIORITY OBJECTIVE 2: Diversity and accessibility

- 1) The share of students with specific educational needs in higher education will be close to their share among secondary school-leavers.
- 2) The share of Bachelor degree programme graduates whose both parents do not have a HE degree, will be close to the share among secondary school-leavers in 2017.
- 3) All public HE institutions and at least 50% of private HE institutions will offer life-long learning courses.
- 4) At least 60% of Bachelor studies initiated in 2015 will be completed successfully before the standard study period increased by one year elapses.
- 5) The share of persons with a HE degree aged 30-34 will reach at least 35% (the Czech National Objective in the Europe 2020 Strategy was set to 32%).

PRIORITY OBJECTIVE 3: Internationalisation

- 1) At least 10% of Bachelor and Master degree programme graduates were sent, as part of their studies, to a study visit or traineeship abroad lasting at least 14 days.
- 2) The number of foreign students coming to Czech HE institutions for a short-term study visit lasting at least 14 days will amount to at least 10 000 a year.
- 3) At least 90% of doctoral degree programme graduates were sent as part of their study to an academic travel abroad and at least 50% of them stayed on such trip for more than one month.
- 4) At least 3% of study programmes will be accredited as joint / double / multiple degree.
- 5) At least 3% of graduates will graduate in study programmes accredited in other than the Czech language.

PRIORITY OBJECTIVE 4: Relevance

- 1) The share of unemployed persons with a HE degree aged 25-29 will be half at most compared to the share of the unemployed persons in the rest of the same age group who do not have a degree.
- 2) The share of unemployed fresh HE graduates will be half at most compared to the share of the unemployed fresh school-leavers from secondary vocational education with a school-leaving exam (registered unemployment in April of the year following the end of the study).
- 3) At least 60% of university educated persons aged 25-29 will work at qualification levels ISCO 1-3.

- 4) At least 90% of Bachelor degree programme graduates will master at least one world language at B2 level or higher, provided that the B1 level will continue to be guaranteed by the Framework Education Programmes for secondary vocational education with a school-leaving exam and for grammar schools.¹

PRIORITY OBJECTIVE 5: Quality and relevant research, development and innovation

- 1) The number of publications created in the HE sector in the Czech Republic relative to a FTE worker in research and development according to the Thomson Reuters Web of Science register will reach at least the average of the EU28 countries and will grow year-on-year in the course of the monitored period.
- 2) The citation counts of publications created in the HE sector in the Czech Republic relative to a FTE worker in research and development according to the Thomson Reuters Web of Science register will reach at least the average of the EU28 countries and will grow year-on-year in the course of the monitored period.
- 3) The share of funds obtained by the Czech HE sector from the EU framework programme for research and innovation Horizon 2020 (2014 - 2020) and its implementation sub-instruments will grow during the monitored period both in the frequency of participations and in absolute values.
- 4) The number of holders of European Research Council grant obtained by the Czech HE sector, reflecting the quality of conditions for implementing the so-called frontier research, will approximate significantly the EU28 average and will grow year-on-year during the monitored period.
- 5) The share of income for research, development and innovation in the Czech HE sector received from private sources will grow year-on-year and will at least double during the monitored period.

¹ The data source for this indicator will be a sample survey, or a language testing under the Erasmus+ programme.