European Commission
Directorate-General for Economic and Financial Affairs

**Economic Policy Committee** 

# Efficiency and effectiveness of public expenditure on tertiary education in the EU

## ANNEX : COUNTRY FICHE BULGARIA

Joint Report by the Economic Policy Committee (Quality of Public Finances) and the Directorate-General for Economic and Financial Affairs

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Authors: Ministry of Education, Youth and Science

## Brief characterization of the tertiary education system

Institutions within the system of education and science enjoy autonomy to conduct their own policies under the conditions and through the order set with the legal arrangements.

#### 1. Main features

Currently the system of tertiary education includes 51 higher schools which under the Higher Education Act are state owned and private, incl. universities, specialized higher schools and colleges.

Higher schools are universities, specialised higher schools and self-contained colleges. A university is a higher school which provides training in a wide range of subjects in professional areas within at least three of the four major branches of science - humanities, natural sciences, social sciences and technical sciences; offers bachelor's, master's and doctor's degrees in the respective major branches of science; has ample scientific and artistic potential and through its activities contributes to the development of major branches of science and culture.

A higher school offering academic courses in one or two major branches of science or culture may be a university with its appellation signifying its specific nature.

A specialized higher school conducts scientific research or artistic and creative activities and offers courses of training in one of the major areas of science, arts, physical culture, and military science. Its appellation shall signify the specific area in which it trains specialists. These higher schools may also offer instruction for the educational and qualification degree of "master" and the educational and academic degree of "doctor".

A self-contained college shall provide instruction for the educational and qualification degree "professional bachelor in ......" The college shall have full-time faculty, holding at least a half of the classroom teaching and practical exercises in each specialty. Full-time habilitated persons shall give at least 50 percent of the lecture courses in each specialty.

A college may be also established within the structure of a university or of a specialised higher school accredited for the professional areas or specialties of regulated professions for which instruction shall be offered. The college shall provide instruction for the educational and qualification degree "professional bachelor in ......"

There are 37 public (24 universities, 12 specialized higher schools and 1 self-contained college) and 14 private higher schools (4 universities, 2 specialized higher schools and 8 self-contained colleges). There are 22 higher schools situated in the capital as the rest are distributed in various regions of the country.

The management of the system is implemented at state/public administration level and at institutional level. The state is responsible for elaboration and implementation of long-term national policy and establishment of environment guaranteeing academic autonomy of the higher schools, quality of training, and scientific research. The management of higher schools is implemented in accordance with their right of academic self-governance. The state assists to the process through resource allocation on a competitive basis.

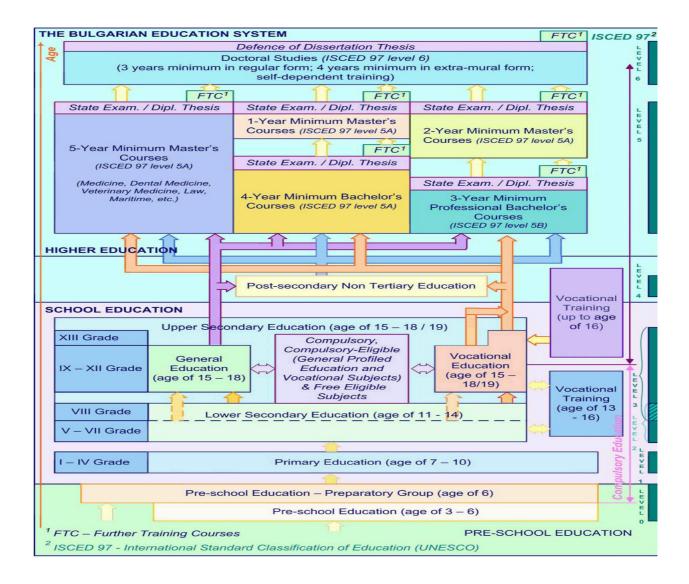
As a result of our active participation in the Bologna process the following key characteristics have been introduced in Bulgaria:

- 3-degree higher education system
  - o Bachelor comprises two levels "professional bachelor in …." (ISCED 5B) and "bachelor" (ISCED 5A);
  - o Master (ISCED 5A);
  - o Doctor (ISCED 6).
- A credit accumulation and transfer system;
- European diploma supplement.
- Bulgaria is actively working on building up appropriate environment for modernizing
  the higher education system, taking into account the demands of the society and the
  business. Good practices are examined and disseminated. Possibilities for introduction
  of new managerial models have been investigated targeted to better financial
  consolidation/strengthening of higher education institutions.

The priority areas for intervention are as follows:

- Elaboration and application of a new funding model which stimulates competition and the development of higher education institutions: The new model aims at increasing the total size of public funds spent on higher education, incl. the state subsidy. This funding model should lead to competition between higher schools not only in the process of attracting students, but when determining the tuition fees and the enrolment conditions;
- Ensuring efficient and transparent management: The higher schools in Bulgaria are public institutions enjoying academic autonomy. The necessity for strengthening the autonomy in the financial area is recognized as well as the need for establishment of additional mechanisms for publicity and transparency of management. To this end a Board of Trustees shall be established within each public higher school, under Article 35a of the Higher Education Act. The Board consists of seven members who are

- donors to the higher school (personalities of active public stance, representatives of employers, professional, sectoral and trade union organizations, representatives of the Student Council and of the Minister of Education, Youth and Science);
- Ensuring a reliable system of quality assurance: Its objective is endorsement of efficient quality criteria for external evaluation and accreditation, incl. post-accreditation monitoring and control, as well as efficient criteria used by the quality assurance systems at institutional level. Currently the criteria for external evaluation and accreditation are endorsed by the National Agency for Evaluation and Accreditation which is also responsible for post-accreditation monitoring and control. The internal evaluation of the quality of education is ensured by internal systems for evaluation and maintenance of the quality of education and of the academic staff. The Ministry of Education, Youth and Science exercises indirect control (tracking out formal parameters procedures, number of students, teacher/students ratio etc.);
- **Development of higher schools as scientific research centers.** The focus here should be on the establishment of scientific infrastructure, ensuring state support for participation in major international projects, encouragement the participation of scientists from different institutions in joint projects. Another essential moment is the increase in expenditures for scientific research and concentration of resources in government priority areas;
- Ensuring better conditions for mobility of students and academic staff. Some of the main aspects in this process are strengthening training in foreign language, efficient application of the System for accumulation and transfer of credits, introduction of programmes and courses with foreign language of instruction, etc.



Higher Education in Bulgaria attracts more and more students but this trend is considered as still weak in comparison with the other EU. Some of the main reasons behind this trend are the relatively low level of completion rates from secondary schools and the shortage of alternative tertiary sector (polytechnics, etc.).

1/ TEACHING	Bulgar	ia									
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Academic staff per 1000 inhabitants											
relative to the average	:	:	:	:	:	:	1.69	1.75	:	:	:
Number of students per 1000											
inhabitants	28.4	28.9	28.7	27.8	25.5	25.6	25.2	25.8	:	:	:
Number of students (graduate and post-				_,,,							
graduate) per 1000 inhabitants											
From public institutions					•			•	·	·	
From private governement-dependent		•	•	•	•	•	•	•	•	•	•
institutions											
From private independent institutions	i i										
Ratio of students per academic staff		•	•		•	•	14.9	14.7	•	•	
Number of graduates per 1000	•	•	•	•	•	•	17.7	17.7	•	•	•
inhabitants	4.56	4.81	5.13	5.34	5.64	5.25	5.07	4.98			
Ratio of graduates per 1000 academic	4.30	4.01	3.13	3.34	3.04	3.23	3.07	4.90	•	•	•
staff							3.0	2.8			
	•	•	•	•	•	•	3.0	2.8	•	•	:
Standardized recruiter view indicator											
(graduates' employability as perceived											
by recruiters)	:	:	:	:	:	:	:	:	:	:	:
Standardized peer view country											
indicator (quality perceptions among											
peers)	:	:	:	:	:	:	:	:	:	:	:
PISA scores	:	:	:	:	:	:	:	:	:	:	:
Average total time spent by students in	4	4	4	4	4	4	4	4	4	4	4
order to obtain a BA degree	years	years	years	years	years	years	years	years	years	years	years
										5	5
										years	years
	5	5	5	5	5	5	5	5	5	or	or
	years	years	years	years	years	years	years	years	years	4+1	4+1
Average total time spent by students in	or	or	or	or	or	or	or	or	or	or	or
order to obtain a MA degree	4+1	4+1	4+1	4+1	4+1	4+1	4+1 t	4+1	4+1	3+2	3+2
Remuneration of a tenured university											
professor with 10 year seniority	:	:	:	:	:	:	:	:	:	:	:
	•										
2/ RESEARCH											
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Publications per 1000 inhabitants	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.09	:	:	
1 donedions per 1000 initialitants	1998-	1999-	2000-	2001-	2002-	2003-	0.00	0.07	•	•	•
	2002	2003	2004	2005	2002	2003					
Quality of research (position in the ISI	2002	2003	2004	2003	2000	2007					
	1.00	2.2	2.40	2 (2							
citation index)	1.89	2.3	2.49	2.63	:	:					
% of research done in cooperation with											
industry	:	<u>:</u>	<u>:</u>	<u>:</u>							
ALEXEL ANAMONY DA GEORG											
3/ EXPLANATORY FACTORS											
FOUND RELEVANT FOR											
EFFICIENCY											
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Main categories of composite											
indicator											
Funding Rules Indicator	:	:	:	:	:	:	:	:	:	:	:
S S	•										

Evaluation Indicator Staff Policy Indicator	:	:	:	:	:	:	:	:	:	:	:
Starr Folicy findicator	•	•	•	•	•	•	•	•	•	•	•
4/ EXPENDITURE											
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total public expenditure on tertiary											
education institutions as a percentage of											
GDP	:	1.14	1.16	1.15	1.14	1.13	1.03	1.00	:	:	:
Total expenditure per student (€)	:	:	:	:	:	:	:	:	:	:	:
Private expenditure on tertiary											
education institutions as a percentage of											
GDP	:	:	:	:	:	:	:	:	:	:	:
Total expenditure on education as a											
percentage of GDP	4.28	4.46	4.19	3.78	4.03	4.23	4.51	4.51	:	:	:
Private expenditure on education as a											
percentage of GDP	0.60	0.73	0.77	0.70	0.69	0.67	0.64	0.62	:	:	:
Funds from non-public sources as % of											
total income (fees, earned income,											
investment, other)	:	:	:	:	:	:	:	:	:	:	:
Tuition fees as average of the cost of											
tuition	:	:	:	:	:	:	:	:	:	:	:
Percentage of funds received by private											
government-dependent institutions											
from public sources	:	:	:	:	:	:	:	:	:	:	:
Total public expenditure on grants,											
loans, and other programmes to cover											
education and/or maintenance of											
students (universal programmes / by											
categories such as merit or socio-											
economic status)	:	:	:	:	:	:	:	:	:	:	:

Source: Eurostat, OECD, UOE and Member States.

Public spending on education	2002	2003	2004	2005	2006	2007	2008
GDP - thous. BGN	32401613	34627545	38822636	42797407	49360950	56519818	66728103
Total expenditure - thous. BGN	1353367	1504681	1652373	1814829	1941167	2179214	2768392
Tertiary education institutions -							
thous. BGN	311141	356378	379634	404326	452228	494996	597334
Total expenditure - percentage of							
GDP	4.18%	4.35%	4.26%	4.24%	3.93%	3.86%	4.15%
Tertiary education institutions -							
percentage of GDP	0.96%	1.03%	0.98%	0.94%	0.92%	0.88%	0.90%

Source: Ministry of Finance

## 2. Structure of institutions and funding arrangements

Bulgarian higher education system is based on three degrees – Bachelor, Master and Doctor (PhD). Until 1995, the first two stages were combined in a single integrated degree. Higher education is provided in 51 universities, specialized higher schools and colleges – public and private.

There are three types of institutions of higher education and research:

- Universities having a task in education and in research.
- Specialized higher schools having a task in education and in research also
- Colleges are expected to have rather vocational character then other higher education institutions and to develop applied research activities.

Higher education institutions have pedagogical and scientific autonomy.

Studies on PhD degree can be provided also in research institutes within the Bulgarian Academy of Sciences and other research organizations.

Research work shall be an integral part of the activities of faculty members. Research at higher schools shall aim at the advancement of science or applied research products as well as at the advancement of education. The organisation and governance of research shall be regulated by the higher school's Rules of Operation. Higher schools shall encourage research work and projects in high priority spheres. Higher schools shall be entitled to plan and conduct joint research projects with other higher schools, scientific organisations and institutions, depending on their interests and the interests of research. Research work shall be conducted also by the specially appointed persons, as well as by the students, doctoral candidates and trainees engaged in specialised studies. Research shall be financed with subsidies from the state budget and additional funds. Higher schools shall be entitled to use the funds allocated for research purposes to pay salaries to faculty members and researchers working under fixed-term contracts, as well as to remunerate students and postgraduates involved in the financed research assignment.

## 3. Governance and regulatory framework

Bulgarian higher education system is functioning in accordance with the Higher Education Act, Development of Academic Staff in the Republic of Bulgaria Act as well as with the resulting secondary legislation.

The State shall exercise its functions in the management of higher education through the National Assembly and the Council of Ministers. The State shall provide conditions for unrestricted development of higher learning, as well as conditions for access to higher education through:

- elaborating and implementing national policies for the development of higher learning and ensuring higher schools' academic autonomy;
- overseeing the quality of specialist training and research;
- subsidizing tuition at public higher schools; providing, under certain conditions, scholarships and dormitories for students;

- creating and maintaining a system of granting loans for the purposes of paying tuition
  fees and for support and providing, under certain conditions, social benefits for
  undergraduate and graduate students, doctoral candidates (doctoral candidates), and
  trainees engaged in specialised and professional studies;
- providing property to public higher schools and granting tax and other concessions to all higher school in the performance of the activities set forth in Article 6 hereof;
- organising the operations of the National Agency for Assessment and Accreditation;
- prescribing the terms of formal recognition applicable to diplomas granted by institutions of higher learning both in this country and abroad.

The National Assembly takes decisions to establish, transform or close higher schools – public or private. The National Assembly appropriates the subsidy for each state owned/public higher school on an annual basis with the State Budget Act.

The Council of Ministers takes decisions to establish, transform or close faculties and affiliated faculties of the state higher schools; it approves the state requirements for obtaining a degree and annually establishes the number of students to be enrolled in each higher school.

The Ministry of Education, Youth and Science is the state body implementing the national policy in higher education, that exercises control over the higher schools as to the observance of the Higher Education Act. The Minister of Education, Youth and Science shall:

- make proposals to the Council of Ministers on the opening and transformation of higher schools, their primary units and affiliates upon a positive assessment given to the respective project by the National Agency for Assessment and Accreditation;
- perform coordinating functions in the relationship between the autonomous higher schools and the state;
- make arrangements for keeping an information system, including:
  - o a register of higher schools recorded wherein shall be data concerning their primary units, affiliates and the professional areas and specialties opened by them:
  - o a register of the full- and part-time faculty of higher schools;
  - a register of all existing students and doctoral candidates and drop-outs by educational degrees and professional areas; a register of the alumni.
  - o a register of the banks which grant loans under the Granting Loans to Student and Doctoral Candidate Loans Act.
- make arrangements for recognition and legitimization of diplomas of persons who have graduated abroad;
- appoint acting Rectors of new or transformed public higher schools to serve until elections are held for the office but no longer than six (6) months;

exercise control over higher schools as regards compliance with the Higher Education
Act, whereby statements of findings shall be drawn up within a month of the
inspections with recommendations and time limits prescribed for the removal of the
violations; in the case of failure to fulfill the recommendations within the prescribed
time limits, the Minister of Education, Youth and Science shall make a proposal to the
National Agency for Assessment and Accreditation to withdraw the accreditation.

The National Evaluation and Accreditation Agency under the Council of Ministers is the specialized government body for quality evaluation, accreditation and control of the activities of the higher schools. The National Agency for Assessment and Accreditation shall exercise post-accreditation monitoring and supervision of:

- the capacity of the institution and its primary units and affiliates to ensure high quality of education and research through an internal system for quality assessment and assurance;
- the fulfillment of the recommendations given in the course of the assessment and accreditation;
- the observance of the capacity of the higher school and the capacity of professional areas and specialties of regulated professions.

Higher schools shall enjoy academic autonomy. It shall be such autonomy where the intellectual freedom of the academic community and the creative nature of academic instruction, research and artistic creation shall find expression as supreme values.

The academic self-government finds expression in:

- the electiveness of all bodies with a fixed term of office;
- the right of any higher school to regulate its constitution and activities in its own Rules of Operation (Rulebook) in keeping with this Act;
- the independent choice of faculty, admission requirements and forms of training students and postgraduates;
- the independent development and implementation of curricula and research projects;
- the choice of specialties to be taught;
- the right to announce competitions and appoint faculty under the terms and conditions set forth in the Development of Academic Staff in the Republic of Bulgaria Act;
- the right to raise funds and independently decide on the terms and conditions for their appropriation;
- the right to independently conclude contracts with the state or with other users for basic and applied research, as well as for upgrading the qualifications of specialists of higher education;
- the right to association with higher schools and other organizations while performing the activities under Item 8;

- the right to construct, hold or use facilities requisite for educational and research activities, or for provision of welfare services to students, faculty staff, doctoral candidates and employees;
- the right to maintain international co-operation, conclude contracts and agreements, and have membership of international organizations.

The authority vested with the right to assert the common interests of higher schools before the state and government authorities shall be the Rectors' Conference, which shall:

- put forward viewpoints and recommendations as to issues relative to higher learning and science;
- express an opinion about the draft state budget in its section concerning higher education and science;
- express an opinion about the draft Classifier of Academic and Professional Areas;
- present viewpoints as to the criteria of conferring scientific (academic) ranks and scientific (academic) titles.

The Rectors' Conference shall be represented by a Chairperson elected from among its members.

The governing bodies of higher schools are the General Assembly, the Academic Board and the Rector. The governing bodies of higher schools shall be elected for a four-year term.

A higher school's General Assembly shall be made up of delegates of all full-time faculty, of administrative staff delegates, and of delegates of the students and doctoral candidates enrolled in all of its units. The total number of General Assembly members and the procedures of electing them shall be laid down in the higher school's Rules of Operations (Rulebook).

A higher school's General Assembly shall:

- elect by secret ballot a Chairperson and a Deputy Chairperson of the General Assembly from among the habilitated GA members for the term of its powers;
- adopt or amend the higher school's Rules of Operations;
- determine the number of Controlling Board members and shall elect by secret ballot the Chairperson, the Deputy Chairperson, and the members of the Controlling Board for the term of its powers;
- elect the Rector by secret ballot;
- determine the number of the Academic Board members and elect such members by secret ballot;
- discuss and adopt the Rector's annual report on the state of the higher school;
- be represented by its Chairperson.

The Academic Board is the authority vested with the governance of a higher school's educational and research activities through:

- determining the higher school's educational policy, adopting the programme for the term of its powers and supervising its implementation;
- adopting an annual report on the activities and an annual report on the financial and physical indicators of the higher school;
- taking decisions as to the establishment, transformation or closure of departments, chairs and auxiliary units of the higher school;
- determining the specialties, forms and degrees of learning and proposing annually to the Minister of Education, Youth and Science the number of students and doctoral candidates to be enrolled;
- approving or changing the qualification descriptions and curricula of specialist training for the various degrees or at the higher school's colleges;
- determining the higher school's research policies and taking decisions on major issues as to the organisation and contents of research activities;
- determining the General Assembly's composition and the manner and organisation of electing its members;
- determining the higher school's human resources policy, approving the job descriptions of the faculty and adopting rules for the assessment of faculty members;
- electing Vice Rectors on a motion of the Rector;
- taking decisions on associating with other higher schools and scientific organisations;
- adopting annually the higher school's budget and overseeing its implementation;
- proposing annually to the Minister of Education, Youth and Science the amount of the application and tuition fees for students and doctoral candidates;
- awarding the doctor honoris causa honorary title;
- adopting the rules for particular educational, scientific, creative or research and production activities carried out by the higher school;
- validating a system of assessing and maintaining the quality of instruction and faculty's performance at the higher school and exercising control over its application and improvement
- electing members of the Board of Trustees.

Elected to the offices of Rector, Dean and Director of an affiliate or college shall be habilitated persons who, upon their election, shall occupy the position under a full-time contract of employment with the higher school.

#### The Rector shall:

- represent the higher school;
- be by right a member of the Academic Board and its Chairperson;
- conclude and terminate employment contracts:

- render final decisions on any matters regarding the admission, dismissal or transfer of students, doctoral candidates and trainees engaged in specialised studies;
- draw up and submit to the Academic Board for consideration and approval the higher school's annual report with the financial and physical indicators, as well as the results of the operation of the internal quality assessment and assurance system; the reports and the annual report with the financial and physical indicators of the higher school shall be published within three months of their adoption;
- put forth the candidacies of habilitated faculty members to the Academic Board to elect one or more Vice Rectors;
- appoint and dismiss an Assistant Rector who may be from outside the faculty of the higher school;

Higher schools shall establish auxiliary consultative bodies at their discretion. The terms and conditions of their establishment shall be laid down in each higher school's Rules of Operation (Rulebook).

The authority vested with internal controlling functions as to a higher school's overall operations shall be the Controlling Board.

Each public higher school shall have a Board of Trustees. The Board of Trustees shall assist the higher school in the efficient and transparent management and in the provision of high-quality education and instruction. The Board of Trustees shall consist of seven members who are donors to the higher school, personalities of active public stance, representatives of employers, professional, sectoral and trade union organizations, representatives of the Student Council and of the Minister of Education, Youth and Science.

The Board of Trustees shall give its opinion on:

- key issues related to the development of the higher school;
- the draft programme for the term of office;
- the draft budget of the higher school;
- the draft amendments to the rules of the higher school;
- the draft proposals, concerning the number of students and doctoral candidates admitted for instruction and the amount of the application and tuition fees;
- the annual report on the condition of the higher school, the annual report with the financial and physical indicators of the higher school, the annual financial report and the report on the execution of the budget revenues and expenditures;
- proposals for the introduction of scholarships by the higher school.

Private higher schools shall be allowed to have different structure, management model and mode of designating their governing bodies providing they do not thus wise violate academic freedoms.

Any issues regarding a higher school's constitution and activities that are not stipulated herein shall be regulated by the higher school's Rules of Operation and by other sets of rules set up by such school.

## 4. System's strengths and weaknesses

#### Strengths:

- Higher Education Act adopted in 1995, latest amendments September 2009;
- Adopted: Ordinance on the state requirements for the admission of students in the Bulgarian higher schools; Ordinance on the state requirements for acquisition of higher education at Bachelor, Master and "Specialist in.." educational and qualification degree; Ordinance on the state requirements for admission of doctoral candidates; Ordinance on the state requirements for recognition of the acquired educational degree and completed certain periods of studies in foreign higher schools; Ordinances on the state requirements for the contents of all principal documents issued by higher schools and attached European diploma appendix under the model developed by the European Commission, Council of Europe and UNESCO- European Centre for Higher Education (CEPES); Ordinances on applying of a system for accumulation and transfer credit points within higher schools (since 2004), which introduces the European Credit Transfer System (ECTS); Rules on the state requirements for the organization of distance learning form at higher schools (since 2004). These documents, together with the rules for attaining higher education for the regulated professions in compliance with the Sector Directives of the EU are major grounds for the improvement of the quality of high education when introducing European standards and practices;
- 3-cycle system of training has been introduced: Bachelor Master Doctor (Bologna process);
- A Classifier of Academic and Professional Areas has been developed;
- The Ministry of Education, Youth and Science is maintaining an information system
  that comprises of: a Register of the higher schools; a Register of the academic staff at
  higher schools; a Register of all existing students and doctoral candidates and dropouts by educational degrees and professional areas; a Register of the alumni; a
  Register of the banks which grant loans under the Granting Loans to Student and
  Doctoral Candidate Loans Act;
- Developed systems for assessment and maintenance of the quality of education and of the academic staff within the universities that account students' opinion;
- joint degree programmes with leading European universities has been introduced, finishing with issuance of a separated diploma by both universities;
- National Evaluation and Accreditation Agency has been established as an independent agency under the Council of Ministers.

#### Weaknesses:

- System fragmentation and lack of complete vision (strategy) for the development of higher education;
- Lack of balance between the autonomy of the universities and the level of control, exercised by the state;
- Lack of compliance between the supplied education and the labor market needs; the planning of the students' admission is not in compliance with the needs of the economy;
- Lack of synchronization between the different institutions responsible for the higher education;
- Lack of reliable system for quality control (not efficient procedures for accreditation and pos-accreditation monitoring);
- Outdated legislation;
- Ageing academic staff, weak motivation and insufficiently high social status quo of the academic staff; lack of interest towards academic career;
- Lack of a tie between the level of education and the social status quo of the specialist with higher education;
- Lack of various funding sources of higher education; inefficient system for funding and allocation of the state subsidy;
- Inadequate commitment between performance evaluation and the way of funding of the state owned/public higher schools;
- Lack of legal prerequisites for exercising of an efficient control and sanctions when inefficient management and illegitimate activities of higher schools occur;
- Lack of commonly adopted rating system of higher schools;
- Lack of scientific research during student's training; lack of innovations; inefficient link between higher schools and science;
- Inefficient academic staff mobility (internal and external) lack of conditions and motivation.

		Stude	ents by qua	lification d	egree, citize	nship and s	ex			
Number	1999/2000	2000/2001	2001/2002	2002/2003	2003/2004	2004/2005	2005/2006	2006/2007	2007/2008	2008/2009
Total	261321	247006	228394	230513	228468	237909	243464	258692	264463	27424
Professional bachelor	18461	16369	16646	14801	16294	18432	23608	26953	26169	2772
Bachelor and Master	239769	227223	207750	211272	207340	214398	214693	226923	233941	24257
Doctor	3091	3414	3998	4440	4834	5079	5163	4816	4353	394
Male	111650	107925	105133	108804	108578	113969	113308	119738	118139	12176
Professional bachelor	6515	6344	6871	6377	6999	8348	10938	13066	12021	1215
Bachelor and Master	103507	99861	96242	100249	99212	103069	99805	104244	103947	10769
Doctor	1628	1720	2020	2178	2367	2552	2565	2428	2171	192
Female	149671	139081	123261	121709	119890	123940	130156	138954	146324	15248
Professional bachelor	11946	10025	9775	8424	9295	10084	12670	13887	14148	1557
Bachelor and Master	136262	127362	111508	111023	108128	111329	114888	122679	129994	13488
Doctor	1463	1694	1978	2262	2467	2527	2598	2388	2182	202
<b>Bulgarian students</b>										
Total	253204	238876	220396	222488	220182	229229	234468	249341	255123	26454
Professional bachelor	18172	16039	16289	14452	15950	18071	23187	26584	25848	2741
Bachelor and Master	232245	219768	200522	204008	199732	206459	206462	218232	225152	23341
Doctor	2787	3069	3585	4028	4500	4699	4819	4525	4123	372
Male	106840	103139	100259	104117	103651	108874	107948	114229	112450	11573
Professional bachelor	6351	6153	6686	6210	6838	8168	10714	12858	11828	1195
Bachelor and Master	99091	95515	91852	96033	94681	98416	94903	99134	98603	10201
Doctor	1398	1471	1721	1874	2132	2290	2331	2237	2019	176
Female	146364	135737	120137	118371	116531	120355	126520	135112	142673	14881
Professional bachelor	11821	9886	9603	8242	9112	9903	12473	13726	14020	1545
Bachelor and Master	133154	124253	108670	107975	105051	108043	111559	119098	126549	13140
Doctor	1389	1598	1864	2154	2368	2409	2488	2288	2104	195
Foreign students										
Total	8117	8130	7998	8025	8286	8680	8996	9351	9340	969
Professional bachelor	289	330	357	349	344	361	421	369	321	31
Bachelor and Master	7524	7455	7228	7264	7608	7939	8231	8691	8789	915
Doctor	304	345	413	412	334	380	344	291	230	22
Male	4810	4786	4874	4687	4927	5095	5360	5509	5689	603
Professional bachelor	164	191	185	167	161	180	224	208	193	19
Bachelor and Master	4416	4346	4390	4216	4531	4653	4902	5110	5344	568
Doctor	230	249	299	304	235	262	234	191	152	15
Female	3307	3344	3124	3338	3359	3585	3636	3842	3651	366
Professional bachelor	125	139	172	182	183	181	197	161	128	12
Bachelor and Master	3108	3109	2838	3048	3077	3286	3329	3581	3445	347
Doctor	74	96	114	108	99	118	110	100	78	7

Source: National Statistical Institute

	Teaching staff by type of higher schools, scientific title, sex and employment												
Number	1999 /2000	2000 /2001	2001 /2002	2002 /2003	2003 /2004	2004 /2005	2005 /2006	2006 /2007	2007 /2008	2008 /2009			
Total	26735	23329	23888	21004	22532	22621	23933	23436	23207	22672			
of which:													
female	11370	9459	10359	8947	9866	9917	10725	10376	10651	10470			
Professors of which:	2447	2179	2155	1933	2185	2008	2313	2383	2343	2320			
female Associate	467	376	384	344	429	362	501	508	551	576			
professors of which:	6840	6350	6661	6602	6766	7101	7250	7401	7256	7094			
female	2118	2018	2141	2152	2363	2477	2531	2683	2776	2801			
Assistants of which:	12264	10467	11102	10048	10078	10156	10265	9803	9619	9382			
female	5703	4720	5462	4962	4884	4997	5149	4882	4883	4809			
Lecturers of which:	4930	3821	3732	2370	3455	3330	4072	3829	3980	3869			
female	2929	2103	2246	1479	2179	2071	2531	2295	2436	2279			
Researchers of which:	254	512	238	51	48	26	33	20	9	7			
female	153	242	126 OF WHI	10 CH: UNDE	11 ER LABOU	10 R CONTR	13 ACT	8	5	5			
Total	16781	15609	14949	12917	13411	13308	13608	14008	13660	13735			
of which:									(277				
female	6714	6284	6347	5481	5796	5795	5950	6201	6277	6370			
Professors of which:	1388	1294	1236	1076	1119	1027	1043	1121	1067	1208			
female Associate	235	203	227	178	195	188	206	226	234	298			
professors of which:	4461	4395	4419	4293	4531	4511	4636	5047	4803	4843			
female	1310	1315	1413	1387	1546	1515	1583	1805	1795	1883			
Assistants of which:	9211	8126	7845	6424	6469	6547	6688	6607	6528	6580			
female	4073	3621	3732	3164	3234	3230	3304	3327	3355	3445			
Lecturers of which:	1467	1517	1211	1073	1244	1197	1208	1213	1253	1097			
female	943	1005	849	742	810	852	844	835	888	739			
Researchers of which:	254	277	238	51	48	26	33	20	9	7			
female	153	140	126	10	11	10	13	8	5	5			

Source: National Statistical Institute

Graduates tertiary education by qualification degree, citizenship and sex												
Number	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
Total	44851	46718	47504	50599	47277	45957	46038	45353	49165	54910		
Professional bachelor	8017	5103	4754	4745	3573	3844	4034	4779	5098	5549		
Bachelor and Master	36484	41216	42374	45469	43303	41721	41476	39991	43446	48760		
Doctor	350	399	376	385	401	392	528	583	621	601		
Male	15183	16611	17804	21395	19611	19147	18928	18108	<i>19701</i>	21189		
Professional bachelor	1871	1374	1433	1714	1376	1425	1638	1693	2113	2101		
Bachelor and Master	13090	15002	16153	19500	18041	17529	17017	16141	17307	18806		
Doctor	222	235	218	181	194	193	273	274	281	282		
Female	<i>29668</i>	30107	<i>29700</i>	29204	27666	<i>26810</i>	27110	27245	29464	33721		
Professional bachelor	6146	3729	3321	3031	2197	2419	2396	3086	2985	3448		
Bachelor and Master	23394	26214	26221	25969	25262	24192	24459	23850	26139	29954		
Doctor	128	164	158	204	207	199	255	309	340	319		
Bulgarian students												
Total		45437		49458	46052		44546	44059	47838	53222		
Professional bachelor	7948	5027	4673	4645	3474	3744	3955	4687	4993	5451		
Bachelor and Master	35230	40035	41071	44459	42193	40481	40113	38830	42245	47205		
Doctor	326	375	340	354	385	374	478	542	600	566		
Male	14426	15869	16966	20687	18933	18410	18119	17380	18993	20313		
Professional bachelor	1841	1335	1387	1655	1319	1382	1603	1648	2052	2044		
Bachelor and Master	12386	14319	15393	18878	17433	16848	16282	15485	16675	18014		
Doctor	199	215	186	154	181	180	234	247	266	255		
Female	29078		29118	28771	27119	26189		26679	28845	32909		
Professional bachelor	6107	3692	3286	2990	2155	2362	2352	3039	2941	3407		
Bachelor and Master	22844	25716	25678	25581	24760	23633	23831	23345	25570	29191		
Doctor	127	160	154	200	204	194	244	295	334	311		
Foreign students												
Total	1347	1281	1420	1141	1225	1358	1492	1294	1327	1688		
Professional bachelor	69	76	81	100	99	100	79	92	105	98		
Bachelor and Master	1254	1181	1303	1010	1110	1240	1363	1161	1201	1555		
Doctor	24	24	36	31	16	18	50	41	21	35		
Male	757	742	838	708	678	737	809	728	708	<i>876</i>		
Professional bachelor	30	39	46	59	57	43	35	45	61	57		
Bachelor and Master	704	683	760	622	608	681	735	656	632	792		
Doctor	23	20	32	27	13	13	39	27	15	27		
Female	<i>590</i>	539	582	433	547	621	<i>683</i>	566	619	812		
Professional bachelor	39	37	35	41	42	57	44	47	44	41		
Bachelor and Master	550	498	543	388	502	559	628	505	569	763		
Doctor	1	4	4	4	3	5	11	14	6	8		

Source: National Statistical Institute

## **Explanatory factors for efficiency**

## 1. Staff Policy

#### **1.1.** Wages

The Council of Ministers shall adopt the rules for determining the remuneration of persons working at public higher schools.

## 2. Output flexibility

#### 2.1. Course content and exams

Higher schools independently define the educational content, the syllabi and curricula for all specialities and by educational qualification degree in compliance with the state requirements and the obtained programme accreditation. Higher schools have the freedom to determine the educational methods.

#### 2.2. Offer of short studies and other diversifies studies

The shortest term for attainment higher education ("professional bachelor in...") in the Bulgarian higher schools is three years.

#### 2.3. Student choice

Different forms of studies are conducted, incl. part-time and distance learning.

Training in a new specialty, different from the prior training is possible. It is common practice training in Master's Degree to be in a different specialty from the attained with the Bachelor Degree.

#### 2.4. Numerus clausus

The number of students in each higher school is determined annually with a Decision of the Council of Ministers under a proposal of the Minister of education, youth and science in compliance with the needs of the labor market and the capacity of the higher school, determined by the National Agency for Assessment and Accreditation.

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#### 2.5. Regional/ European/ global mobility

There are no restrictions to the transfer of students between programmes and between different higher education institutions.

The enrollment and training of students, doctoral candidates and trainees engaged in specialized and professional studies – citizens of the Member States of the European Union and of the European Economic Area is performed under the terms and procedures determined for the Bulgarian citizens. Recognition of higher education with professional qualifications acquired at foreign institutions of higher education is performed under the terms and procedures of the Rules on the state requirements for recognition of higher education and completed periods of training at foreign institutions of higher education, by a special commission which sit in session at least once a month.

The appointment of the teaching staff having academic rank is right of the autonomy of which higher schools in the Republic of Bulgaria are entitled.

Certain conditions have been established in Bulgaria for an active participation of the Bulgarian students and academic staff in the European mobility programmes.

#### 3. Evaluation

#### 3.1. Institutional evaluation

The National Agency for Assessment and Accreditation under the Council of Ministers is a specialized state body for assessment, accreditation and control of the quality of the activities carried out by the higher schools.

In compliance with Higher Education Act requirements, higher schools shall ensure the quality of education and research through an internal system for assessment and assurance of the quality of academic instruction and faculty, including also student-opinion polls conducted at least once a year.

The results of the accreditation are made public in a bulletin, issued by the National Agency for Assessment and Accreditation and through Internet.

Post-accreditation control of the accreditated institutions is implemented by specialised unit within the National Agency for Assessment and Accreditation.

## 4. Funding rules

#### 4.1. Public funding

In accordance with Article 91 of the Higher Education Act the subsidy received by the public higher schools shall provide funds for:

- Maintenance cost of tuition;
- the scientific or artistic and creative activities characteristic of the higher school at the amount not less than 10 percent of the maintenance cost of tuition;
- publication of textbooks and scientific works;
- welfare costs of students;
- capital investment.

The subsidy for the maintenance of tuition shall be determined on the basis of:

- the differentiated rates per student by professional fields as approved by the Council of Ministers;
- the number of students and doctoral candidates admitted;
- the results of the accreditation assessment of the higher school and its specialties.

The resources shall be disbursed to public higher schools on the basis of the students and doctoral candidates admitted for tuition in accordance with the data provided by higher schools to the register of all existing students and doctoral candidates and drop-outs by educational degrees and professional areas. The resources shall not be disbursed for the maintenance of the tuition of:

- students and doctoral candidates admitted for tuition against payment;
- students and doctoral candidates trained for the acquisition of the same or lower educational and qualification degree;
- students and doctoral candidates beyond the time limits of their tuition in accordance with the curriculum;
- foreign students and doctoral candidates, except for students and doctoral candidates who are citizens of Member States of the European Union and the European Economic Area, students and doctoral candidates who are Bulgarian expatriates and students and doctoral candidates admitted under intergovernmental agreements providing for tuition maintenance costs at the expense of the Bulgarian State.

Where the capacity of the higher school, the capacity of the professional area or the specialty of regulated profession has been exceeded, the state subsidy for the following year shall be reduced by the amount for the maintenance of the tuition of the surplus students and doctoral candidates

In compliance with Article 64 research shall be financed with subsidies from the state budget and with additional funds. Higher schools are entitled to use the funds allocated for research

purposes to pay salaries to faculty members and researchers working under fixed-term contracts, as well as to remunerate students and postgraduates involved in the financed research assignment. The terms of spending the funds are laid down in the higher school's Rules of Operation.

In compliance with Article 91 of the Higher Education Act for scientific or artistic and creative activities higher schools get subsidy from the state budget at the amount not less than 10 percent of the maintenance cost of tuition;

Resources for financing of projects are allocated also by Fund "Scientific Research" and Operational Programme "Human Resources Development" of the European Structural Funds (for example under the scheme "Support for the development of doctoral candidates, post doctoral candidates, trainees engaged in specialized studies and young scientists").

#### 4.2. Impact of quality assessments on funding

The results of the assessment during the accreditation of the higher school and its specialties are one of the factors on the basis of which the subsidy for maintenance cost of tuition is determined.

#### 4.3. Private funding

#### 4.3.1. Tuition fees and/or households

In compliance with Article 95 of the Higher Education Act students, doctoral candidates and trainees engaged in specialized studies are required to pay tuition in equal installments at the beginning of each semester. The tuition fees in public higher schools are determined by the Council of Ministers on an annual basis and shall not exceed thirty percent (30%) of the norms set for the respective specialty. The tuition fees of the students and doctoral candidates admitted against payment may not be lower than 70 percent of the rates established with the respective norms.

Under certain terms and conditions set out in a law, students and doctoral candidates have the right to take a credit for payment of the tuition fees and for maintenance costs.

The following categories are exempted from paying any fees for studying at public higher schools:

- Orphans;
- Disabled persons with long-term disabilities and reduction of the ability to work by 70 percent or more;
- Disabled war veterans;
- Persons raised at orphanages until they become of age;

- Cadets in military higher schools;
- Doctoral candidates in the final two years of their doctorate.
- students and doctoral candidates admitted under terms and conditions set out in an act of the Council of Ministers, where the act provides for such exemption;

#### 4.3.2. Business, other

In compliance with the Higher Education Act budget revenues of higher schools shall consist of:

- State budget subsidies;
- Financial assistance from municipalities;
- Donations, bequests, inheritance, sponsorship;
- Own revenues from:
  - o Research, consultancy, creative, therapeutic and sports activities as well as industrial property rights, copyright and other related rights;
  - o Proceeds from application and tuition fees
  - o Postgraduate degree;
  - o Administrative services to non-students
  - o Other activities related to the process of learning
  - o Revenues from real estate properties

#### 4.3.3. Grants/loans

Students with score excellent (6) are eligible for a scholarship. Scholarships are granted under the terms and conditions set in a Decree issued by the Council of Ministers. Scholarships are granted also under the project "Students' scholarships and awards", co-financed by the Human Resources Development Operative Programme funded by the European Structural Funds.

Granting Loans to Student and Doctoral Candidate Loans Act has been adopted in 2008. The act regulates the terms and conditions for giving credit to students and doctoral candidates with state financial support.

Students which are part of groups under social risk are exempted from payment of tuition fee in the public higher schools. Under the terms and conditions of 2 Council of Ministers Decrees social scholarships are allotted, determined on the basis of the family income of the eligible student.

## 5. Impact on Employability

Higher schools have the right to independently sign contracts with the state or with other users (incl. representatives of the business) for the accomplishment of scientific and applied research as well as for raising qualification of specialist with higher education. Besides, each public higher school shall have a Board of Trustees, consisting of representatives of employers, professional, sectoral and trade union organizations. There is willingness for cooperation in the area of mutual development of curriculums for the different specialties.

One of the mechanisms for accelerating the dialogue between the educational institutions and business organizations are the career centers at the higher schools. They have a significant role in the contemporary education and are major tool for overcoming the barriers in the communication between the businesses, academic circles and the students. Their major function next to the professional orientation and preparation of the students is supporting the processes of selecting students for internships' positions, vacancies and ensuring feedback between the different stakeholders. Such career centers function at almost all higher schools in Bulgaria.

### 6. Recent and planned reforms of the tertiary education system

#### **6.1. Description of recent reforms**

The main characteristics of the reform started at the beginning of the transition period (1990) and gaining purposive character with the adoption of the Higher Education Act (1995) are as follows:

- Committing and ensuring academic autonomy of higher schools;
- Development of mechanisms for ensuring the quality of higher education;
- Ensuring equal access for life to higher education for all social groups in the society;
- Implementation of mechanisms for efficient public funding
- Inclusion of the users of higher education in policy elaboration and in the procedures for ensuring its quality. Building up partnerships between the high schools and businesses.

Changes in the Bulgarian higher education system in the context of the Bologna process:

- 3-cycle system: Bachelor Master Doctor has been introduced;
- Classifier of the areas of higher education and the professional areas has been developed. The classifier introduces commonly accepted in the world educational practice areas towards bachelor's programmes should be orientated;
- In 1996 the National Evaluation and Accreditation Agency has been established with the objective to:
- Assesses on the basis of unified criteria educational and scientific activity and the management of the quality in higher schools;

- Specialized state authority vested with the accreditation of higher schools as training institutions and their training programmes by professional areas for attaining educational-qualification degrees, as well as doctoral programmes;
- Mobility certain conditions have been established for the participation of Bulgarian students and the academic staff in the European programmes for mobility;
- Credit system a Decree has been developed and adopted for the implementation of a system for gaining and transferring credit points (2004);
- A provision for issuance of European diploma supplement has been set within the Higher Education Act.
- Under development is National Qualification Framework for higher education in the context of the system for life-long learning;
- An Act for Recognition of Professional Qualifications has been adopted 2008.

#### **6.2.** Planned reforms (or reference to ongoing policy debate)

Some of the priority areas for intervention are:

- Elaboration and implementation of a new model for financing the system to stimulate competition and development of higher education institutions.
- Ensuring efficient and transparent steering/management.
- Ensuring reliable systems for quality assessment.
- Development of higher schools as scientific centers.
- Ensuring better conditions for mobility of the students and academic staff.
- others