



INSTITUTIONS OF RESEARCH AND TERTIARY EDUCATION IN CENTRAL AND SOUTH EAST EUROPE

Developments, Structures and Perspectives of these Institutions for their
Integration into the European Higher Education and Research Area

FINAL REPORT

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Table of Contents

List of Abbreviations	7
Executive Summary	9
I. Introduction: Research Problems, Hypotheses and Project Goals	20
1. The Political, Economic and Cultural Context: The Agenda for Change	20
2. The Analytical Framework	23
3. Methods and Methodology	26
II. Developments, Structures and Perspectives of Central and South East European Higher Education and Research Institutions for their Integration into the European Higher Education and Research Area	31
1. ERA - The European Research Area	31
1.1. The Birth of a New Concept in European RTD-Policy	31
<i>1.1.1. The Year 2000 as a Turning Point: ERA and Lisbon Strategy</i>	<i>31</i>
<i>1.1.2. European Research Policy from 2002 to 2006: After ERA is before ERA</i>	<i>33</i>
<i>1.1.3. The Year 2007: A New Era for the ERA</i>	<i>34</i>
1.2. The Concept of the ERA	35
1.3. The Legal Framework of the ERA	37
<i>1.3.1. The Legal Basis of Community Policy on RTD</i>	<i>37</i>
<i>1.3.2. The Legal Character of the Framework Programme</i>	<i>39</i>
<i>1.3.3. The Institutional Framework of the ERA</i>	<i>41</i>
1.4. The 7th Framework Programme as the cornerstone of ERA 2007-2013	44
2. Teaching needs Research: The Link to the European Higher Education Area	47
2.1. The Bologna Process and its Political Impact	47
<i>2.1.1. From Bologna to London or how to make University Reforms attractive</i>	<i>47</i>
<i>2.1.2. Key Areas of the Bologna Process</i>	<i>49</i>
2.2. EU Policy in Higher Education	52
<i>2.2.1. The Legal Basis of Higher Education Policy on EU Level</i>	<i>52</i>
<i>2.2.2. Objectives of the EU Policy on HE in the Framework of the Lisbon Strategy</i>	<i>53</i>
<i>2.2.3. ERASMUS, TEMPUS and Others: Success Stories of EU Policy on HE</i>	<i>55</i>
2.3. The Concept of the European Higher Education Area (EHEA).....	56
<i>2.3.1. The EHEA as the Principal Goal of the Bologna Process</i>	<i>56</i>
<i>2.3.2. Interference of EU Policy on Higher Education and the Bologna Process.....</i>	<i>58</i>
<i>2.3.3. The University as the Cornerstone of the EHEA: The European Commission's Concept of University</i>	<i>59</i>
2.4. The Legal Framework of the EHEA.....	59
3. European Approaches towards East and South East Europe in Research and HE	61
3.1. Political Integration of South East Europe by the Means of Research and HE Cooperation	61
3.2. Austria's Commitment	62

III. Institutions, Structures and Functions of Research and Tertiary Education in South East Europe: A Comparative Analysis of Empirical Findings from the SEE Country Reports	64
1. The Institutional Setting of Universities in SEE and Its Challenges	64
1.1. The Political Context	64
1.2. System-wide Regulation and Policy Planning	66
1.2.1. Croatia	66
1.2.2. Bosnia and Herzegovina	68
1.2.3. Serbia/Montenegro	70
1.2.4. Kosovo	72
1.2.5. Macedonia	72
1.2.6. Albania	74
1.2.7. Romania	75
1.2.8. Bulgaria	76
1.2.9. Greece	76
1.3. Financing and Budgeting	78
1.3.1. Croatia	78
1.3.2. Bosnia and Herzegovina	78
1.3.3. Serbia/Montenegro	78
1.3.4. Kosovo	79
1.3.5. Macedonia	79
1.3.6. Albania	79
1.3.7. Romania	80
1.3.8. Bulgaria	80
1.3.9. Greece	80
1.3.10. Comparison	81
1.4. Internal Governance and Management Structures	81
1.4.1. Croatia	81
1.4.2. Bosnia and Herzegovina	82
1.4.3. Serbia/Montenegro	83
1.4.4. Kosovo	84
1.4.5. Macedonia	84
1.4.6. Albania	85
1.4.7. Romania	86
1.4.8. Bulgaria	86
1.4.9. Greece	87
2. Performance of Functions	88
2.1. Autonomy and Accountability	88
2.1.1. Conceptualizations: State-control – State-supervision – Market-orientation	88
2.1.2. Comparative Conclusions on the Institutional Settings in SEE	90
2.2. Research and Technological Development	94
2.2.1. Croatia	94
2.2.2. Bosnia and Herzegovina	95
2.2.3. Serbia	96
2.2.4. Montenegro	96
2.2.5. Kosovo	96
2.2.6. Macedonia	97
2.2.7. Albania	97
2.2.8. Romania	98
2.2.9. Bulgaria	99

2.2.10. Greece	99
2.2.11. Comparative Conclusions	100
2.3. Teaching	106
2.3.1. Croatia	106
2.3.2. Bosnia and Herzegovina	107
2.3.3. Serbia/Montenegro	108
2.3.4. Kosovo	109
2.3.5. Macedonia	110
2.3.6. Albania	111
2.3.7. Romania	112
2.3.8. Bulgaria	112
2.3.9. Greece	113
2.3.10. Comparative Conclusions	114
2.4. Internationalization	117
2.4.1. Croatia	119
2.4.2. Bosnia and Herzegovina	119
2.4.3. Serbia/Montenegro	119
2.4.4. Kosovo	119
2.4.5. Macedonia	120
2.4.6. Albania	120
2.4.7. Romania	120
2.4.8. Bulgaria	121
2.4.9. Greece	121
2.4.10. Comparative Conclusions	121
2.5. Inter-ethnic Cooperation	121
2.5.1. Croatia	121
2.5.2. Bosnia and Herzegovina	122
2.5.3. Serbia/Montenegro	122
2.5.4. Kosovo	123
2.5.5. Macedonia	123
2.5.6. Albania	124
2.5.7. Romania	124
2.5.8. Bulgaria	124
2.5.9. Greece	124
2.5.10. Comparative Conclusions	124
2.6. Slovenia and the Ukraine as Benchmarks for Comparison	125
3. Academies of Sciences in South East Europe	127
3.1. Academy of Sciences: Concept and Short History	127
3.2. Comparative Analysis of the Academies of Sciences in East and South East Europe	129
3.2.1. Slovenia	129
3.2.2. Croatia	130
3.2.3. Bosnia and Herzegovina	131
3.2.4. Serbia	132
3.2.5. Kosovo	133
3.2.6. Montenegro	134
3.2.7. Macedonia	135
3.2.8. Albania	136
3.2.9. Greece	136
3.2.10. Bulgaria	138
3.2.11. Romania	139

3.2.12. <i>Ukraine</i>	140
3.3. Comparative Analysis of Crucial Issues	141
3.3.1. <i>Common Heritage and Common Challenges</i>	141
3.3.2. <i>Manager of Science</i>	142
3.3.3. <i>Relationship to Universities</i>	143
3.3.4. <i>Advisor to Society</i>	144
3.3.5. <i>Learned Societies</i>	144
3.3.6. <i>International Cooperation</i>	145
3.3.7. <i>Reform Processes</i>	145
IV. Conclusions and Recommendations	147
1. In search of a “Common” European Higher Education and Research Area	147
2. The University System	148
3. The Research System	150
4. Cultural and Societal Impacts	151
5. Policy Recommendations: What should be done	152
6. General Conclusions	153
V. Appendix	155
1. Bibliography	155
2. Technical and Organisational Information on the Project	166
2.1. Research Trips and Interviews	166
2.1.1. <i>Macedonia and Kosovo (17 to 22 April 2006)</i>	166
2.1.2. <i>Ukraine (11 October 2006)</i>	168
2.1.3. <i>Romania (24 to 29 October 2006)</i>	168
2.1.4. <i>Slovenia (19 April 2007)</i>	170
2.1.5. <i>Croatia (26 to 27 April 2007)</i>	171
2.1.6. <i>Bosnia and Herzegovina (28 April to 1 May 2007)</i>	172
2.1.7. <i>Greece (28 May to 3 June 2007)</i>	173
2.1.8. <i>Oxford/England (16 to 27 July 2007)</i>	174
2.1.9. <i>Ukraine (16 to 22 September 2007)</i>	174
2.1.10. <i>Bosnia and Herzegovina (14 to 18 November 2007)</i>	175
2.2. Workshops and Final Conference	176
2.2.1. <i>Research Workshop on 24 to 25 November 2006 in Graz</i>	176
2.2.2. <i>Junior Round Table on 28 June 2007 in Graz</i>	176
2.2.3. <i>Final Conference on 29 to 30 June 2007 in Graz</i>	176
2.2.4. <i>Workshop on 17 November 2007 in Sarajevo</i>	177
2.2.5. <i>Programmes</i>	178
2.3. Project Meetings	189
2.4. Public Relations and Dissemination	190
2.4.1. <i>Presentations and Participation at Conferences</i>	190
2.4.2. <i>Public Relations, Homepage</i>	191
2.4.3. <i>Publications</i>	192
3. Country Reports	194
Albania	194

Bosnia and Herzegovina	226
Bulgaria	248
Croatia	276
Greece	332
Kosovo	369
Macedonia	380
Montenegro	410
Romania	426
Serbia	470
Slovenia	481
Ukraine	489
4. Questionnaire	498
5. Summaries of the Commissioned Articles on University Development in Europe to be published in Volume I	506
5.1. Walter BERKA: Wissenschafts- und Kunstfreiheit als „Prozessmotor“ der Innovation	506
5.2. Hellmut FISCHMEISTER: Die Max-Planck-Institute als Beispiel außeruniversitärer Forschungseinrichtungen	507
5.3. Peter Claus HARTMANN: Die Universität der frühen Neuzeit im Heiligen Römischen Reich	508
5.4. Werner HAUSER: Lehrerausbildung Neu: Pädagogische Hochschulen	509
5.5. Sigurd HÖLLINGER: Die österreichische Reform der Universitäten in europäischer Perspektive	510
5.6. William M. JOHNSTON: Hochschulbildung in den Vereinigten Staaten Amerikas als Herausforderung für die Universitäten in Europa und Großbritannien	511
5.7. Helmut KONRAD: Idee und Genese der österreichischen Privatuniversitäten im internationalen Vergleich	512
5.8. Jürgen MITTELSTRAB: Leibniz, Kant, Humboldt – die Universität in der Aufklärungswelt	513
5.9. Michael MITTERAUER: Die Anfänge der Universität im Mittelalter. Räume und Zentren der Wissenschaftsentwicklung	514
5.10. Gerd ROELLECKE: Gesellschaft – Staat – Universität	515
5.11. Walter RÜEGG: Die Universität in der „Moderne“ des 19. und 20. Jahrhunderts	516
5.12. Franz STREHL: Universitätsmanagement – Ansätze, Probleme	517
5.13. Heribert WULZ: Die rechtlichen Aspekte der Universitätsorganisation. Österreich als Paradigma am Beginn des 21. Jahrhunderts	518
6. Wolfgang MANTL: Is there a Common European University? A General Conclusion	519

List of Abbreviations

ALLEA	European Federation of National Academies of Sciences and Humanities
ANUBiH	The Academy of Sciences and Arts of Bosnia and Herzegovina
Art.	Article
ASA	The Academy of Sciences of Albania
ASHAK	The Kosova Academy of Sciences and Arts
BAS	The Bulgarian Academy of Sciences
CANU	The Montenegrin Academy of Sciences and Arts
CARNet	Croatian Academic Research Network
CE	Central Europe
CEEPUS	Central European Exchange Program for University Studies
COMENIUS	part of the Lifelong Learning Programme with focus on the first phase of education, from pre-school and primary to secondary schools
COST	cooperation europeenne dans le domaine de la recherche scientifique et technique
CREST	Scientific and Technical Research Committee
DG	Directorate General
EASA	European Academy of Sciences and Arts in Salzburg
EC	European Community
ECTS	European Credit Transfer System
EIT	European Institute of Technology
EHEA	European Higher Education Area
ENEKO	Centre for Energy and Ecology in Montenegro
ERASMUS	part of the Lifelong Learning Programme with focus on the higher education with the aim to create a European Higher Education Area and foster innovation throughout Europe
ERASMUS	
MUNDUS	part of the Lifelong Learning Programme with focus on cooperation with third countries in the field of HE
ENQA	European Association for Quality Assurance in Higher Education
ERA	European Research Area
ERC	European Research Council
ERI-SEE	Education Reform Initiative South East Europe
ESF	European Science Foundation
ESU	European Students' Union
EU	European Union
EUA	European University Association
EURAB	European Research Advisory Board
EURASHE	European Association of Institutions in Higher Education
EUREKA	European network developing cooperation between SMEs, research centres and universities for industrial innovation
EUROCORES	European Collaborative Research Projects
EUROPASS	An initiative of the European Commission seeking to remove obstacles to mobility due to a lack of transparency of vocational qualifications
EQF	European Qualifications Framework
FBiH	Federation of Bosnia and Herzegovina
FORTH	Foundation for Research and Technology
FP	Framework Programme
GDP	Gross Domestic Product

GRUNDTVIG	part of the Lifelong Learning Programme with focus on the adult education
HAZU	Croatian Academy of Sciences and Arts
HE	higher education
IACSEE	Inter-Academy Council for South East Europe
ICG	International Crisis Group
IGO	International Governmental Organization
IMF	International Monetary Fund
INGO	International Non Governmental Organizations
INTERREG	European Regional Development Fund
LASA	Law on the Academy of Sciences of Albania
LINGUA	transversal programme which aims to promote language learning and the linguistic diversity in Europe
MASA	Macedonian Academy for Sciences and Arts
MINERVA	European Program aiming at the promotion of the European collaboration in the field of the open and the remote education and in the field of the technologies of information and of the communication in the education
NAS	The National Academy of Sciences of Ukraine
NATO	North Atlantic Treaty Organization
NCP	National Contact Points
NGO	Non Governmental Organizations
OECD	Organization for Economic Co-operation and Development
OMC	Open Method of Coordination
OSCE	Organization for Security and Co-operation in Europe
PPP	Public Private Partnership
REHEQA	Register of European Higher Education Quality Assurance Agencies
RS	Republika Srpska
RTD	Research and Technological Development
SANU	Serbian Academy of Sciences and Arts
SAP	Stabilisation and Association Process
SASA	The Slovenian Academy of Sciences and Arts
SC	United Nations Security Council
SEE	South-East Europe
SEEU	South East European University in Tetovo
S&T	Science and technology
SWOT-Analysis	strengths, weaknesses, opportunities and threats analysis
SFRY	Socialist Federal Republic of Yugoslavia
TEMPUS	The Trans-European mobility scheme for university studies
UCLA	University of California in Los Angeles
UDMR	Democratic Union of Hungarians in Romania
UK	United Kingdom
UKIM	Ss. Cyril and Methodius University in Skopje
UNDP	United Nations Development Programme
UNESCO CEPES	European Centre for Higher Education in Bucharest
UnivSOE	Institutions of Tertiary Education in Central and South East Europe
UNMIK	United Nations Mission in Kosovo
US	United States
VANU	Vojvodinian Academy of Sciences and Arts
WBC	Western Balkans Countries

Executive Summary

1. Research and tertiary education face **new challenges**, not only in South East Europe, but all over Europe through ongoing **processes** of **internationalization** and **market-orientation** with new areas and needs of competitiveness. These trends and challenges together with deep cuts in public spending have also reinforced public debates on effectiveness, efficiency and accountability of institutions of research and tertiary education vis-à-vis the arenas of state, market and society.
2. Against the prejudice that individual academic freedom and institutional autonomy of universities and academies of sciences form unaccountable “ivory towers” we have to see that **three “ideal-types” of universities** dominate European history since 1789: there is the **Humboldtian** model which stands for an unbiased search for “truth” through basic research and general education in order to enhance intellectual zeal and enrich personal talent, hence the request to combine research and teaching personally and institutionally. In stark contrast, the “**Napoleonic**” model stands for the “production” of professional and technical cadres to serve the needs of the nation state and her national economy. The “**Anglo-Saxon**” model with the sequence of undergraduate colleges in “liberal arts” followed by specialised graduate programs in schools of law, medicine etc. already provides for a “mix” of both former models combined with much more effort not only to “teach” theory and knowledge, but also to train the methods and methodologies of research in practice. Also models of **academies of sciences** can be sub-divided into **three ideal-types**: Basically, every academy is a “**learned society**”, i.e. an association of scientists for science where they can meet and exchange ideas beyond or within academic disciplines. Secondly, academies can also perform the function of an “**advisor to society**” in order to serve government and society at large with science-based advice on issues of public interest. The third type of academies can be called a “**manager of science**” which means that academies themselves operate a number of research institutes. All of these types of academies face the same challenges like universities with regard to autonomy, accountability, efficiency and effectiveness.

3. The countries of SEE (SEECs) face, however, additional problems because of **multiple transition processes** from authoritarian political regimes to multi-party democracy and rule of law, from centrally planned to market economies and, in the aftermath of the dissolution of SFRY, the **consequences of a serious of violent conflicts and wars** with infrastructures in research and tertiary education destroyed, researcher, teachers and students becoming refugees or internally displaced persons, and institutions ethnically cleansed and finally segregated.
Special transition processes after the fall of communism are still ongoing in Albania, Bulgaria, Romania and Ukraine. Also Greece and Slovenia are confronted with specific modernisation processes.
4. The **analytical and methodical framework** elaborated for the analysis of the institutional framework of research and tertiary education in SEECs can be summarised as follows: first of all, the **normative standards** following from a broad understanding of **European integration** in the research and tertiary education sector and the effort to create an ERA and EHEA are elaborated; secondly, the two phases of communism and post-communism are distinguished and analysed with regard to **transformation processes** in the **external and internal relations** of universities and academies of sciences of SEECs. Based on a **functional, neo-institutional approach**, institutions of research and tertiary education are not seen as “insular” entities, but performing the **functions of autonomy, accountability, efficiency and effectiveness** in their relationships towards the state, market and society at large. These functions then serve **also** as **benchmarks of comparison** in a policy cycle which is composed of system-wide regulation and policy planning, a mix of state and private funding, and accountable internal governance and (separate, professionalized) management as areas of analysis. Based on this analysis of institutional developments, the performance of research, education, internationalization and inter-ethnic cooperation is analysed in a country-by-country and comparative way followed by general conclusions and recommendations for future reform processes.
5. The entire **research project and methodology** is based on the formation of an interdisciplinary and inter-cultural research team at Graz University, supported by collaborators and a network of research partners in SEECs and the Ukraine. Data collection and empirical research in Graz and abroad was based on a preliminary

questionnaire and carried out by field-research through site-visits with in-depth interviews and discussions in focal groups and workshops in order to elaborate country specific reports. Workshops and a final conference in Graz served the tasks of testing hypothesis and evaluation of findings from the empirical research and to elaborate comparative analysis and policy recommendations. The final results of academic research will be published in two volumes with NOMOS publishers.

6. With regard to the **development of the concept of an ERA and EHEA**, the year 2000 was a turning point with the EU Commission's Communication "Towards a European Research Area" in order to achieve an internal market of research and its inclusion into the **Lisbon Strategy** in order to make Europe the world's most competitive knowledge-based economy by 2010. In the so-called **Barcelona-objective** from 2002 the European Council then agreed on spending of 3% of the GDP on research. Apart from that the Commission called for the improvement of member states' involvement in **European activities and tools** such as the 6th and 7th Framework Programme for R&D and created also a European Research Council. The aspects of the "ERA vision" from the Green Paper, issued by the Commission in 2007, can serve also as **normative benchmarks**: a) realising a single labour market for researchers; b) developing world-class research infrastructures; c) strengthening research institutions; d) sharing knowledge; e) optimising research programs and priorities; f) enhancing international cooperation in S&T. Other important **players** are the European Science Foundation, the European University Association and the European Federation of National Academies of Sciences and Humanities.

7. According to the Humboldtian philosophy teaching must be research-driven: **Research and tertiary education shall institutionally not be separated**. The ERA therefore needs to be **linked with an EHEA**. Seen from this perspective the **Bologna process** which was launched in 1999 must be integrated with the emerging ERA. Normative standards developed step by step for the overall goal of mobility as a prerequisite of an EHEA were ECTS, diploma supplements, three cycles of studies and agencies for quality assurance. Programs launched in order to achieve mobility are ERASMUS, ERASMUS MUNDUS, LINGUA, MINERVA, LEONARDO DA VINCI and TEMPUS for East and South Eastern Europe. In the triangle of **research, education and innovation**, special attention was given again by the European

Commission to the role of universities in the Lisbon strategy. In addition, the Commission stresses the **societal role** of universities with regard to the linguistically and culturally diverse Europe. **Austria** played and still plays an important role with the so-called Enhanced Graz Process and two projects, namely the South East European ERA-Net and the Specific Support Action ERA West Balkan establishing National Contact Points for the FPs.

8. From the **comparative analysis** of the empirical findings of the **institutional setting** of research and tertiary education through universities in SEECs we can highlight the following results: **Conceptually**, the question is raised how universities perform the transformation process from a system of strict state and party control to state-supervision and market-orientation since also a **democratic political system** cannot provide for “full independence” of universities, but **requires** from their performance **legality** in terms of system-wide regulation and policy planning, **accountability** towards different constituencies, i.e. students, the labour market or society at large, and, finally, **efficiency and effectiveness** in performing the main tasks of research and education against all the trends for exclusiveness and elitism, inertia, mediocrity and academic amateurism.

9. As far as **institutional autonomy** and **accountability** are concerned, all universities of SEECs still have to tackle with the **communist legacy** of **strong executive domination** by Ministries of Science, Education, Technology and Development not only in the sphere of system-wide regulation and policy planning, but also with regard to internal governance and management. On the other hand, all universities of the former SFRY republics suffer from the fact, that only faculties enjoyed the status of legal persons so that **universities** – not being “integrated” - more resembled **weak “confederations.”** With the exception of Croatia and Macedonia which introduced lump-sum **budgeting** only recently, the respective line ministry could thus influence internal governance and management by directly financing and controlling the spending of academic institutions even on faculty and sub-faculty level. Moreover, only Bulgaria and Croatia enjoy institutional autonomy with regard to **admission policies** whereas in all other countries this is pre-determined by the Government or respective Ministry following the logic that – via input budgeting – state funded universities receive the costs of teaching through salaries for the teaching staff. It goes

without saying that this system of budgeting is hardly linked to **out-put evaluation** through agencies for quality assurance so that the work of these bodies – established in all SEECs – remains dysfunctional. All SEECs allow also for additional **tuition fee** paying students which make up to 60% of the entire university budget. It goes without saying that the system of selection of additional tuition fee paying students together with entrance exams controlled by the academic staff is both prone for wide-spread corruption and the root cause of strong resistance of “richer” faculties against the “integration” of universities. As far as **academic promotion and staff recruitment** is concerned, all universities enjoy the right to academic promotion, but only in Bulgaria university bodies can freely decide on staff employment including professors. Effective **internal strategic planning** by university bodies is reported only from Croatia, Montenegro, Macedonia and Bulgaria. The only country which includes – according to the “market-oriented” model – also **representatives of the economic sector** in the composition of university bodies is Albania. All SEECs have also established Councils of Higher Education and Research as **advisory bodies** for system-wide policy planning, monitoring and evaluation which are, however, split up in two bodies in all former Yugoslav republics. Albania, Bulgaria, Montenegro and Romania provide also for the representation of economic actors, mainly employers’ associations, in these bodies. Against the legacy of strong domination of the state executive bodies, only Albania, Croatia, Greece, Macedonia and Montenegro seem to have achieved beyond the formal establishment of advisory bodies also some “**effective**” **participation of academia** in system-wide policy planning and evaluation.

10. As far as **research and technological development** is concerned, the communist legacy of institutional separation between universities mainly focussing on teaching and academies of science and non-university public institutions doing research can still strongly be felt in Croatia, Serbia and Kosovo. In all of the other countries **universities do basic as well as applied research**. In most countries we find also public research institutions in close relation to the government. In Albania 24 research institutes are directly administered by ministries. In the countries affected by war, much of the research **infrastructure** has been **destroyed** and many researchers became refugees or internally displaced persons. But also in other SEECs research infrastructure – due to economic transition - suffered from **insufficient investment** so

that also research done by industry and companies drastically decreased in the post-communist phase. Several countries also set **national priority areas** in research with regard to nation-building efforts such as Albanology in Kosovo and Macedonia or Bulgaria with regard to her history and identity-formation. However, as far as re-orientation of research towards “marketable” products is and cooperation with economic actors is concerned, only Albania, Croatia, Montenegro and Romania have developed **national strategies or agencies** dealing also with Public-Private-Partnerships. The **massive brain-drain** of researchers from all SEECs towards “the” West is still ongoing. **Brain-gain programs** have, so far, not produced any serious results. This process, together with **strong resistance from old “cadres”** at universities and academies against the return of better educated and trained researchers from the diaspora with better language skills and hiring freezes imposed due to financial constraints pose an imminent danger for all SEECs that two or three generations of young researchers will be lost in the very difficult transition process so that they all report already now on **major problems** with regard to language and **management skills** for the participation in international research programs. With regard to **scientific output** publications according to scientific disciplines and patterns of specialisation reveal **comparative advantages of Western Balkan countries** in comparison to the new EU member states in ecology/environment, engineering, pharmacology and social sciences. Comparative advantages in comparison to the 15 old member states can be seen in ecology/environment, computer science, mathematics, chemistry, engineering, material sciences, agricultural sciences, plant/animal sciences and social sciences. Data on state financing of R&D in % of the GDP reveal huge disparities: by far the biggest amount of money is spent in Croatia with 1.24%, followed by Greece, Bulgaria, Romania and Serbia with around 0.5%. Montenegro, Albania and Bosnia-Herzegovina spend below 0.20%. Kosovo’s data with 0.5% cannot be reliable.

11. As far as **teaching** is concerned, all SEECs have a **binary institutional structure** with universities focusing on “general education” and a more theoretical approach and “higher schools” or academies and colleges with stronger practical orientation and training for professions and labour-market needs such as police academies or schools of tourism. Most of the countries have also polytechnic universities. Albania and Romania established also specialised “post-graduate” schools as Magistrates’ Schools

for the judiciary. With the exception of Croatia and Greece we find also **private universities** in all countries which have been established for rather different reasons: In Serbia and Macedonia, private universities were established for political reasons, i.e. in opposition to governmental pressures or for ethnic conflict management. All of these countries allowed for the establishment of profit-oriented private universities with **huge problems of quality assurance**. In addition, the US is developing a network of universities and colleges after the model of American universities in the middle East in order to siphon off the best human capital from this region for further education on MA and PhD level in the US whereas the EU – literally – nowhere flies her flag through European Documentation Centres, libraries or other infrastructure incentives except mobility programs. As far as **admission policies** are concerned, almost all countries of the region apply the system of “**numerus clausus**” with a pre-determined quota annually fixed by the government. In addition, universities respectively faculties can admit additional tuition-fee paying students. All SEECs have introduced the various elements of the **Bologna process** elaborated above. **ECTS** as well as quality assurance is in use in all countries. In practice, however, there are tremendous problems within national boundaries, let alone beyond them on the regional level. All countries use a **three cycle system**, but as a rule PhD students are “mentored” individually by a professor after the medieval system of master-disciple. **Interdisciplinary programs** at this level can be found only in Bulgaria and other single universities such as Novi Sad, Bitola, the private SEE University in Tetovo or the universities situated in Tirana. With regard to employment policies, staff development and inter-generational change the same holds true what has been elaborated already above on research and development. All SEECs participate in the respective mobility programs of the EU, but there is again a **lack of capacity in project management**.

12. With regard to **internationalization**, the **European Framework programs** in **research** and **mobility programs** for students and staff have had the **greatest effect**. Effective participation in these programs - which goes beyond mere declarations of willingness to accept SEECs in these programs - is thus of utmost importance for linking them to the emerging ERA and EHEA. Austrian initiatives in this respect have been highlighted already above. Lack of infrastructure, brain-drain, missing management capacities are, however, still huge obstacles in effective participation so

that **special support for WBCs is still needed**. In addition, Albania and Romania participate in a Black Sea university network and Montenegro, Albania and Greece also in Mediterranean networks. **Regional cooperation and mobility** is, however, **weakly developed** in and between BiH, Serbia, Montenegro, Kosovo and Bulgaria in strong contrast to Romania, Croatia and Macedonia.

13. As far as the role of universities for **inter-ethnic cooperation** is concerned, there still is a **strong legacy** in place from the **nation-building efforts** of the newly independent states after 1989 and the **wars** in the Balkans in the 1990ies. In Bosnia-Herzegovina and Kosovo universities are still strictly segregated along ethno-national lines. In stark contrast, the **SEE University in Tetovo** with programs taught in three languages, namely Macedonian, Albanian and English, was established on the initiative of the former OSCE High Commissioner on National Minorities, Max van der Stool, as a role “**model**” to help overcome the linguistic and national conflicts in Macedonia. “**Traditional**” **minority protection** instruments are established in all of the SEECs through affirmative action measures, in particular for Roma students, and language and history education programs taught in the minority language whereas bilingual education is – contrary to needs - established only for the numerically biggest minorities.
14. A closer look into **Slovenia** and the **Ukraine** as **benchmarks of comparison** for the development of universities in SEECs reveals that Slovenia is not that far ahead in reform in comparison to the more advanced SEECs such as Croatia or Macedonia. Lump-sum budgeting was introduced in Slovenia only in 2005 and universities were “integrated” through the reforms from 2004 to 2006. Outstanding, however, is the number of 277 business companies with R&D teams. In stark contrast, the Ukraine is still trapped in the legacy of the former communist system with strong state-control, insufficient funding, resistance against reform from the old “cadres” and even stronger barriers in mobility through the Schengen regime.
15. The main types of **academies of sciences** were elaborated above. A comparative analysis in SEECs shows that they face the **same problems as universities** with regard to the communist legacy having been highly dependent from the communist party systems in terms of ideology and financial affairs. The majority of academies

still operate their own research institutes according to their task as “manager of science” with the number of institutes ranging from 182 for the Ukrainian Academy to 4 for the Bosnian Academies whereas the Kosovar Academy does not manage any institute. The majority of these institutes deal with basic research and natural or technical sciences, whereas institutes dealing with social sciences and the humanities are very often focussing on national culture and history. Due to their communist legacy, the academies of Bulgaria, Romania and the Ukraine are still vested with the power to award PhD degrees. The core of academies of sciences in SEECs are, in all cases, **learned societies** with, however, **big problems** due to the **small number** of members (Kosovo 26, Macedonia 38, Bosnia and Herzegovina 49) and **age** as well as **gender structure**. An important challenge for reform will thus be the election of younger and female members. International cooperation is one of the potentials strengths of SEE academies, the Inter-Academy Council for South East Europe and the membership with ALLEA are examples of good practice. Like in some other parts of Europe, most SEE academies face the challenge to transform themselves into internationally recognized centres of excellence and to provide also a “shelter” for the humanities under the strong pressure for competitiveness and market-orientation of research.

16. **In conclusion**, we can find also in SEECs an institutionally mixed setting of “state” universities and private universities and an ongoing differentiation between research-driven universities and universities of applied sciences as well as between (natural) sciences and the humanities. However, due to the need for reconstruction and reconciliation of war-torn states, economies and societies, the sector of research and tertiary education is under much more reform stress:

- With regard to the **legal and institutional setting**, the **university systems need** at the same time **more autonomy** from state executive centred domination in both policy planning and internal governance **and more integration** against obstruction of reform by faculty anarchy, i.e. a more balanced system of state-supervision with effective participation of university bodies. Moreover, **representation and participation of economic actors** in advisory or supervisory bodies at the level of system-wide policy planning and/or internal governance should be established in all countries to restart the relationship between economy and research and tertiary education under new, democratic auspices also in terms of financing through PPPs. **Private universities**

which are often uni-disciplinary and merely profit-oriented at the brink of corruption and fraud **need strict accreditation procedures and quality assurance**. Finally, also a much better **balance** should be developed between **state** and **private** universities, **universities of applied sciences** and **academies** of sciences and arts.

- With regard to **research, teaching and internationalization** it becomes clear that country and culture specific **balances** between the **Humboldtian** and **Anglo-Saxon** university models have to be looked for. There is **no alternative to** mutual inspiration by **research-oriented teaching combined with practice oriented research** and the three cycle model of BA, MA and PhD programs. Universities as centres of excellence need, however, also **interdisciplinary programs with graduate schools** in addition to the medieval interpersonal relationship of professor – disciple. Moreover, due the consequences of war and transformation, all SEECs need also **much more material support** from the EU and her member states in the **reconstruction of destroyed research infrastructure** and “**human capital**” lost through the still ongoing brain-drain and/or ethnic cleansing and segregation. The necessary **inter-generational change** of research and teaching staff must also be fostered through enhanced student and staff **mobility** and **joint degree programs** which cannot remain a one-way street towards “the” West, but must lead through “full and effective partnership” in EU programs to the integration of the SEECs university systems into the emerging ERA and EHEA. However, also **regional cooperation** in SEE itself must be fostered.

- **Academies of sciences** perceive themselves often as the “highest” institution of science and research in a given country. Due their more often than not rather weak research output they will have to seek new roles in the national research systems for their legitimation. Moreover, they **have to overcome their serious age and gender problems** through the election of more – to attain “critical mass” -, younger and female members.

- With regard to **inter-ethnic cooperation**, universities have to play a much more prominent role. The private **South East European University** in Tetovo/Macedonia with trilingual education can serve as a **role model** in this respect. Much more attention should thus be given in EU policies and programs to **foster intercultural and multilingual universities** and programs.

17. In addition we **propose** therefore the **following measures** to the **Austrian Ministry** of Science:

- establish an advisory board in the Ministry for the support of Western Balkan universities;
- establish cooperation offices for research and tertiary education in all of the WBCs;
- support the establishment of a model university of applied sciences in the region;
- establish foundations for visiting scholar programs and scholarships;
- exempt research and tertiary education from the Schengen visa regime.

I. Introduction: Research Problems, Hypotheses and Project Goals

1. The Political, Economic and Cultural Context: The Agenda for Change

Research and tertiary education face **new challenges**, not only in South-East Europe, but all over Europe and the other OECD countries through the processes of globalisation. Demographic trends, migration patterns, technological, socio-economic and political developments from industrial to post-industrial societies and markets as well as waves of democratization have created new areas of competition and new needs for competitiveness. In her desperate struggle to catch-up with the US, the “knowledge-based” society and economy has become the mantra of the EU, plagued by an ageing population, high figures of unemployment and low rates of economic growth. This has left its impact on the research and tertiary education sector in the EU member states and, in particular, on the role which universities, academies of sciences and other institutions should play in such an environment.

The last two decades have shown at least **two general trends** of change for European universities and other institutions of research and tertiary education: first, in parallel to the process of European integration, there is a renewed process of **internationalization** of research and teaching at the tertiary level trying to overcome the legal, institutional, and cultural barriers and thereby “exclusive” effects of nation-state formation in all parts of Europe over the last two hundred years by providing for mobility of students and professors, based on the assumption that the encounter of cultural differences will not only foster one-sided knowledge transfer, but creativity and thus innovation itself for everybody participating in this encounter.¹ Secondly, going hand in hand with financial problems for state budgeting of research and tertiary education in the overall decline of the economic growth rates as well as the trends for deregulation and privatisation, there is a strong shift to “**market**”-**orientation** which reinforced a public debate on efficiency, effectiveness, and accountability which has a strong impact also on the institutions of research and tertiary education as can be seen from governmental programs and demands with regard to funding, quality assurance, and professional management structures. Tax payers’ money can no longer simply be spent for “abstract” academic freedom and constitutionally guaranteed institutional autonomy of

¹ In our research context Iva Slaus and Krunoslav Pisk have created the formula that “cultural diversity is as essential as biological diversity” since cultures are not static but change so that compatibility with globalisation and a knowledge-based society require the capacity to change without losing its value, cf. *ibid.*, *The Future of South-Eastern Europe in 2050: R&D Needs in the Region*, in Martin F. Gajdusek, et.al. (eds.), *Science Polic and Human Resources Development in South-Eastern Europe in the Context of European Integration*, 2006 (Federal Ministry of Education, Science, and Culture publication).

universities, but the market logic of “value-for-money” now dominates also policy planning in the sector of research and tertiary education.

Hence, the **philosophy of “the” university** is re-visited worldwide under the constraints of financial problems, the massive increase of numbers of students and thus the political demands for market-orientation, greater accountability and hence new governance and management structures.

When trying to understand these challenges, we have to take into account also the **historic developments**² and have to see that there never was a “uniform” European concept of university after 1789. Based on the medieval model of professor-based corporate governance, we can distinguish “**three**” **ideal-types** of university further developed in the 19th century under the respective political and cultural conditions: these are the Humboldtian, Napoleonic and Anglo-Saxon universities and their respective cultural, professional and methodical modes of education. Until the very day, the name of Humboldt stands for the need for an unbiased search for “truth” through basic, fundamental research and general education to enhance intellectual zeal and enrich personal talents, hence the necessary combination of research and education based on theoretical knowledge with its - against state interference - constitutionally and institutionally guaranteed “autonomy” by academic self-government. The “Napoleonic” model exemplified through the Grandes Ecoles stands for the “production” of professional and technical cadres to serve the needs of the nation state and her national economy. The Anglo-Saxon model with the sequence of under-graduate colleges in “liberal arts” followed by specialised graduate programs in schools of law, medicine etc. already provides for a “mix” of both the Humboldtian and Napoleonic philosophies and functions, combined with a methodical mode of education which is not only focussing on contents, but also the methods and methodologies for research and intellectual work.

When confronting these philosophies with the new challenges of globalisation and the needs for a “knowledge-based” society and markets beyond national boundaries, it becomes quite obvious that none of these “models” would fit perfectly, but that all public discourse is

² See in particular William M. Johnston, How Higher Education in the United States Challenges Universities in Europe and the United Kingdom; Jürgen Mittelstraß, Leibnitz, Kant, Humboldt – die Universität in der Aufklärungswelt; Gert Roellecke, Gesellschaft – Staat – Universität; and Walter Rüegg, Die Universität in der “Moderne” des 19. und 20. Jahrhunderts, all in Wolfgang Mantl (ed.), Phänomenologie des europäischen Wissenschaftssystems, Baden-Baden (Nomos) 2008 (forthcoming) which were commissioned in the framework of this research project.

circling around the **“concrete” mix** of these **philosophies and functions** and the **necessary institutional consequences** which have to be drawn from such a “policy” mix.

This holds true also for the ongoing reform processes of universities, academies of sciences and other institutions of research and tertiary education in **South East Europe**. However, all of the countries of this region have a different starting point for the recent reform processes in this sector due to their **different political history** of the last fifty years under communist regimes of, moreover, different shades.³ Whereas Albania was totally isolated under the “stone-age” communism of Enver Hoxha and Romania remained a highly centralised, unitary state with a neo-Stalinist communist regime and strict political control until the very end of the Ceausescu regime, the former Socialist Federal Republic of Yugoslavia had devolved political power according to the 1974 federal constitution to the level of the Republics. Moreover, the Titoist doctrine of workers’ self-management was also applied to the sector of research and education. Hence, based on the doctrines of federalism and socialist self-management, a highly decentralised institutional framework had been created.

After the fall of communism in 1989, any discussion of the reform of the research and tertiary education sector has to take into account not only the **legacy of the communist regimes**, but also the **manifold variables of multiple transition processes** from authoritarian political regimes to multi-party democracy and rule of law, a more or less centrally planned economy to a market economy and, in the aftermath of the dissolution of SFRY, the consequences of a series of violent conflicts and wars in Croatia in 1991, Bosnia-Herzegovina 1992 till 1995, the Federal Republic of Yugoslavia in 1999 and Macedonia in 2001.⁴ These conflicts and wars had also serious consequences for the research and tertiary education sector: Libraries and laboratories were destroyed; many researchers, teachers and students became refugees or internally displaced persons; institutions were ethnically cleansed and became finally segregated; in many cases “normal” research and teaching activities became simply impossible. Hence, reconstruction of state and economy as well as reconciliation of ethnically divided societies are not only “general” problems, but also of great importance for the research and education sector: research and teaching infrastructures have to be re-established, the loss of “human capital” through the wars and ethnic cleansing and ongoing “brain-drain”

³ See, for instance, Sten Berglund/Frank Aerebrot, *The Political History of Eastern Europe in the 20th Century*, Cheltenham (Edward Elgar Publishers) 1997.

⁴ See from a comparative perspective Joseph Marko, *Constitutions and Good Governance: Challenges for Reconstruction and EU-Integration*, in Stefano Bianchini et.al. (eds), *Regional Cooperation, Peace Enforcement, and the Role of the Treaties in the Balkans*, 2007. pp 65 - 77.

to Western countries must be fought against, and the institutional setting of research and tertiary education activities must be reformed under the double legacy of communism and the need for reconstruction and reconciliation.

2. The Analytical Framework

Despite of all these variations, the **analytical framework**, initially developed for the analysis of higher education in Central and Eastern Europe⁵, can also be used here in a refined way in order to identify the historic legacy of the “communist” model of higher education and the institutional challenges for the research and higher education sector in post-communist transition in SEE:

	COMMUNIST	POST-COMMUNIST
Main characteristics	Aims, tasks, and resources in research and teaching centrally planned and top-down allocated by state and party	Normative guarantee of “absolute” academic freedom and institutional autonomy: academic ivory towers, fully fledged competition for state funding and on the market or what?
System-wide regulation	Compulsory and detailed party/state regulation	The role of the state: budget provider without legislative framework legislation, executive policy planning and supervision?
Planning/system approach	Instrument of political control	None or policy planning and co-ordination of implementation at national level?
Accountability	Mainly to political authority (Communist Party)	None or accountability for “products” vis-à-vis students, market demands; tax-payers;
Autonomy	Hardly any or at the discretion of the political authorities	“Absolute” autonomy versus accountability
Incentives	Achievement of the goals set by party: promotion or sanction	Reputation (excellence) and material prospect: selfish academic egocentrism (ivory tower) versus institutional reputation and income-generation

⁵ See Peter Scott, Higher Education in Central and Eastern Europe: An Analytical Report, in UNESCO/CEPES, Ten Years After and Looking Ahead: A Review of Transformations of Higher Education in Central and Eastern Europe, Bucharest 2000, p. 346.

Financing and budgeting	Totally state dependent; rigid line-item budgeting	Multiple sources and instruments of financing and budgeting
Relation to labour market	Close co-ordination with state- set manpower planning	None (Humboldt), direct (for profit institutions) or indirect (market-orientation): interaction of internal and external forces
Internal governance and management structure	Externally determined and politically controlled (nomenklatura)	Academic “representatives” governance versus professional management
Strategic planning	Almost none at institutional and sub-unit level	Essential for institutional well-being

In addition to the possible political, economic and cultural functions which universities and the entire sector of research and tertiary education perform and the challenges stemming now from the communist legacy and the need for re-construction and reconciliation all of which refer to the national legal and political level, we have to take into account two additional **territorial levels** and hence challenges, but also chances:

The Copenhagen criteria for full membership in the EU, established for the so-called “Eastern Enlargement” of the EU already at the European Council meeting in 1993, did not include regional co-operation as conditionality and benchmark for the assessment by the European Commission. This was introduced only with the Stability Pact for South East Europe and the Stabilisation and Association Process for the “leftovers”, namely the Western Balkan countries⁶, i.e. Croatia, Bosnia-Herzegovina, Serbia and Montenegro, including Kosovo, Macedonia and Albania. Supranational **regional co-operation**, the very idea of “European” integration, is therefore a challenge and chance also for research and tertiary educational activities and institutions. Can they contribute through cross-border co-operation and interregional cooperation in the SEE area to reconstruction, reconciliation and overall political, economic and cultural reform?

Finally, this leads to the **European level** and perspective as such.⁷ The role of research and tertiary education in the endeavours for political stabilisation of the region was already recognized in 1998 under the Austrian EU Presidency which initiated the so-called Graz Process. This process resulted in a great number and variety of activities and inputs for strengthening the institutions of research and tertiary education in the region.

⁶ See Joseph Marko, The Stabilisation and Association Process for the Western Balkan Countries, in Herbert Kröll (ed.), Austrian – Greek Encounters Over the Centuries, Innsbruck (Studienverlag) 2007, pp 100 – 118.

⁷ This will be elaborated in detail in the next sub-chapter.

The **Lisbon Strategy**, set out by the European Council in Lisbon in March 2000, highlights the importance of research and development in generating economic growth, enhancing social cohesion and creating more and better jobs in Europe. To that end, the establishment of a **European Research Area** was integrated into the Lisbon Agenda as a core element with the goal of creating a “knowledge-based” society in order to enhance European competitiveness. In addition, the 2002 Barcelona European Council has set the goal of raising overall research investment in the EU member states from 1.9% of the GDP to around 3% by 2010. With the framework programs to foster research activities, also a “European” policy was developed to create a “European Research Area” which suffered and still suffers from insufficient funding and territorial fragmentation of research with no “internal” market in this sector. The Commission’s Green Paper 2007 now foresees a single labour market for researchers, “world-class” infrastructure, the strengthening of research institutions, the optimizing of programs and priorities and international cooperation for S&T activities.

As far as the reform of **tertiary education** is concerned, the **Bologna Declaration** 1999 triggered a major reform process for institutions and activities: the transformation into two cycles of studies to be completed with a bachelor and master degree was obviously intended to make the European study programs comparable to the Anglo-Saxon world and instruments such as diploma supplements, the European Credit Transfer System (ECTS) and quality assurance all serve the goal of comparability and fostering student mobility. All these measures from the Bologna declaration have been taken over into the legislation of SEE countries since 2003. The Berlin communiqué of 2003 introduced with the link between research and teaching and PhD programs as a third study cycle two additional essential elements to the Bologna process. The EU Council meeting 2005 not only repeated the overall goal of competitiveness which is to follow from the **triangle education, research, innovation**, but also the hope that educational cooperation enhances peaceful and democratic societies, in particular in SEE, and contributes to “cultural and linguistic diversity.”

The developments on European level for the creation of the knowledge-based society with the Lisbon Strategy and the Bologna process have immediately got **relevance also for the SAP** for Western Balkan Countries insofar as the WBCs got access to Community programs which foster research and tertiary education, in particular the TEMPUS program as well as the Framework Programs for Research and Technological Development (RTD). Due to the violent conflicts and their consequences research and tertiary education had played only a marginal role in the domestic and regional political agendas throughout the 1990ies in the

former Yugoslav republics. Policymakers both in Brussels and in the region have only recently recognized the need for reform of this sector so that the South East European Education Reform Initiative (ERI-SEE) could be launched in 2003 under the auspices of the Stability Pact.

The **overall analytical goal** of the research project is thus threefold:

- First, to **analyse the development of the normative standard setting by the Bologna process and the Lisbon Strategy** and the consequences which result from these processes for the integration of SEE countries into a European Research and Higher Education Area;
- Secondly, to **analyse the institutional settings and processes** within and between organisations of research and tertiary education in all of the **South East European countries** in their relation to the systems of state, society and economy and to describe developments with regard to the analytical framework developed above, thereby identifying common trends or country-specific deviations;
- Thirdly, to **identify the challenges and needs for future reform processes**, both at the European level and in the region, for a full integration of SEE countries into the EHEA and ERA and to develop specific policy recommendations not only for the Austrian EU Presidency, but also a set of topics for future research and consulting.

3. Methods and Methodology

These overall goals of the research project require the following **research methodology**:

First of all, an **interdisciplinary and intercultural diversified research team** was created: The **core team** at the University of Graz was composed of three senior researchers, responsible for the conceptualisation of the analytical framework - based on literature review on the historic development of institutions of research and tertiary education in Europe - and the elaboration of a questionnaire which operationalizes the conceptual framework for the conduct of empirical and country specific data collection as well as the overall scientific and administrative co-ordination.

This core team is composed of:

- o. Prof. Dr. Wolfgang Mantl,
- Prof. Dr. Joseph Marko, and
- Research Assistant Dr. Hedwig Kopetz.

The core team was supported by **collaborators** of the Competence Centre for South East Europe of the Faculty of Law at Graz University and a **network of research partners** in the South East European countries and the Ukraine, both of them composed of senior and junior researchers who were responsible for data collection in SEE countries, the organisation of site-visits and the elaboration of country specific reports:

- Amra Abaz, Graz-Sarajevo (Bosnia-Herzegovina)
- Prof. Dr. Bogdan Aurescu, Bucharest (Romania)
- Branka Bošnjak, PhD, Podgorica (Montenegro)
- Sergiu Constantin, MA, Bozen (Romania)
- Mag. Anna Fedorchenko, Graz-Lviv (Ukraine)
- Dr. Arben Hajrullahu, Prishtine (Kosovo)
- Zaim Hallunaj, Tirana (Albania)
- Prof. Okšana Holovko-Havrysheva, Lviv (Ukraine)
- Zoran Ilievski, MA, Skopje (Macedonia)
- Margarita Kastanara, Graz-Athens (Greece)
- Marko Kmezić, M.A., Graz-Belgrade (Serbia)
- Katharina Konschegg, Graz (Austria)
- Prof. Dr. Anna Krasteva, Sofia (Bulgaria)
- Mag. Eva Lahnsteiner, Graz-Berlin (Germany)
- Mag. Slobodanka Milikić, Graz-Banja Luka (Bosnia-Herzegovina)
- Mag. Marianne Pasterk-Reisinger, Graz (Austria)
- Dipl.jur. Antonija Petričušić, Graz-Zagreb (Croatia)
- Mag. Isabella Poier, Graz (Austria)
- Dr. Klaus Poier, Graz (Austria)
- Dr. Michaela Salamun, Graz (Austria)
- Bozhana Stoeva, PhD, Madrid (Spain)-Sofia (Bulgaria)
- Prof. Dr. Monica Vlad, Sibiu (Romania)
- Mag. Ana Zivanovic, Graz-Ljubljana (Slovenia)

In addition, a **network of senior researchers and stakeholders** with experience in research and tertiary education governance and management issues was established in order to interpret and assess the results of the empirical findings, in particular through a mid-term and final conference:

- Prof. Jasna Bakšič-Muftić, Sarajevo
- Prof. Dr. Walter Berka, Salzburg (Dean of the Law Faculty)
- Sektchef Mag. Friedrich Faulhammer, Wien (Ministry of Sciences, Research and Education)
- Mag. Marijana Grandits, Brussels, Stability Pact for SEE
- Prof. DI Manfred Horvat, Wien
- Prof. Gjorge Ivanov, Skopje (Ambassador to Greece)
- Prof. Refik Kadia, Shkoder
- Prof. Dr. Helmut Konrad, Graz (former Rector of the University of Graz)
- Prof. Dr. Janez Kranjc, Ljubljana (former Dean of the Faculty of Law)
- Prof. Anna Krasteva, Sofia
- Prof. Dr. Josip Kregar, Zagreb (Dean of the Faculty of Law)
- Prof. Gazmend Ljboteni, Prishtine

- Prof. Dr. Fuada Stanković, Novi Sad
- Doc. Radovan Stojanović, Podgorica,
- Prof. Sonja Tomović, Podgorica
- Prof. Dr. Dražen Vikić-Topić, Zagreb (Deputy Minister for Science and Technology)
- MinR Dr. Barbara Weitgruber, Wien (Ministry of Sciences, Research and Education)
- Mag. Heribert Wulz, Wien (Secretary General of the Austrian Rectors' Conference)

Based on the formation of the research teams and literature review undertaken by the core team and its collaborators, a **questionnaire** was elaborated to serve for the empirical data collection and the elaboration of the country specific reports which can be found in the Appendix.

Based on the **preliminary results of data collection**, members of the core team with the support of the team of junior researchers undertook the following **site-visits** in order to conduct qualitative in-depth **interviews** with stakeholders in most of the countries of concern:

- Macedonia and Kosovo: 17 – 22 April 2006;
- Romania: 24 – 29 October 2006;
- Croatia: 26 – 27 April 2007;
- Bosnia and Herzegovina: 28 April – 1 May 2007;
- Greece: 28 May – 3 June 2007;
- Ukraine: 16 – 22 September 2007;
- Bosnia and Herzegovina: 14 – 18 November 2007.

During these site-visits more than 50 qualitative interviews were conducted as can be seen from the detailed overview in the Appendix.

Moreover, several **workshops** and a final **international conference** were organised:

The first research workshop on 24 – 25 November 2006 in Graz served the purpose to establish the research team and network of junior and senior researchers and to discuss the conceptualisation and preliminary hypotheses for empirical research as well as to fine-tune the questionnaire.

The following Junior Round Table on 28 June 2007 in Graz was organised in order to discuss the results from the qualitative interviews from the site-visits, to up-date country specific developments and to discuss observations from the site-visits and results from the empirical analyses from a comparative perspective.

The final conference took place on 29 – 30 June 2007 in Graz in order to present the results from the country reports to the network of senior researchers and stake-holders from CE and SEE countries for a critical evaluation of the results. With this conference, in particular the conceptual and analytical frameworks were re-visited, the comparative analysis tested and preliminary policy recommendations elaborated. Moreover, the conference also served the purpose to disseminate the results to important stakeholders in Austria.

On 17 November 2007 a last workshop with the team of junior researchers was organised in Sarajevo in order to discuss the relationship of religions and/or churches with the research and higher education sector in SEE in more detail as this had been done before, to fine-tune the comparative analysis and policy recommendations and to discuss possible follow-up activities.

Throughout the entire research project a **series of talks and interviews** were given by the members of the core team as can be seen in detail from the Appendix in order to **disseminate** the research results.

The final academic **results** will be **published** in two volumes with the NOMOS publishers by the end of 2008.

As can be seen from this methodological research process, the entire **research concept** is methodically based on a **de-constructive – neo-institutional approach** which combines normative and empirical analyses with prospective considerations:

- Based on the preliminary understanding of the role of universities in the **historic development** of research and teaching in Europe, the various **functions of universities and other institutions of research and tertiary education** served as the starting point for the elaboration of the questionnaire outlined above. This questionnaire then serves as the guideline for both the collection of empirical data in order to analyse the country specific institutions and processes and the use of the comparative method, since not institutions, but functions performed can be **compared** thereby enabling us to identify also functional equivalents and to assess strengths, weaknesses, opportunities and threats (**SWOT** analysis).

- The results of these empirical-analytical studies were tested in two ways: on the ground in the SEE countries through **site-visits**, **qualitative interviews** and **focal group discussions** with stakeholders in the research and tertiary education sector and, secondly, through a **final conference** with both the junior and senior researchers and stake-holders in order to re-assess the preliminary conceptualisation of the analytical framework and the assessments through the SWOT analysis.
- Based on this twofold process of reflection of both the empirical and normative results, finally **policy recommendations** are elaborated.

II. Developments, Structures and Perspectives of Central and South East European Higher Education and Research Institutions for their Integration into the European Higher Education and Research Area

1. ERA - The European Research Area

1.1. The Birth of a New Concept in European RTD-Policy

The year 2007 has seen the start of the 7th EU Research Framework Programme, the world's largest research funding programme, which will last from 2007 to 2013. It represents a new paradigm of European research funding activities as it contains for the first time a special institution dedicated to the funding of basic research – “frontier research” – following the unique criteria of excellence of the submitted project proposals: The European Research Council will provide European funds to research teams carrying out fundamental research in every possible discipline including the social sciences and humanities. Some other novelties are included as for instance the possibility for full participation of researchers from so-called third countries or new thematic priorities such as security research. In total an increased budget allows more funding activities than ever before. European research as a new label will thus become more and more reality and as a consequence the European Research Area – Europe perceived as a single market of research. This development, however, goes back to the year 2000 and even beyond.⁸

1.1.1. The Year 2000 as a Turning Point: ERA and Lisbon Strategy

In January 2000 the by-then newly formed European Commission under its President Romano PRODI issued a Communication named “Towards a European Research Area”⁹ introducing a new concept of European RTD-policy. The main objective of the so-called “European Research Area” is to achieve an internal market of research in Europe.¹⁰ This vision is strongly linked with the Belgian Commissioner Philippe BUSQUIN, a scientist himself, who declared the construction of a common area for research in Europe his main task as commissioner.¹¹ The innovative aspect of the concept consisted in emphasising the necessity of better coordination of research efforts in Europe in order to overcome fragmentation and duplication of research processes, in sketching the ideal of one single European research as

⁸ For an overview of the history of EU research policy cf. e.g. Attilio STAJANO, *Research, Quality, Competitiveness. European Union Technology Policy for the Information Society*. New York 2006, 289-295.

⁹ EUROPEAN COMMISSION, Communication COM(2000) 6 *Towards a European Research Area* (18/01/2000).

¹⁰ Cf. Álvaro de ELERA, *The European Research Area: On the Way Towards a European Scientific Community?*, in: *European Law Journal* 12 (2006), 559-574 (559).

¹¹ Philippe BUSQUIN, Interview in: *Cordis Focus* 139, 29 November 1999, 1; see also BUSQUIN's personal website http://www.europa.eu.int/comm/archives/commission_1999_2004/busquin/index_en.html.

common effort of the member states offering therefore a common frame for all research and research funding activities which so far have been tackled by the means of the relatively limited Framework Programmes. Since research has always been considered to be a sort of national treasury it can be understood that this holistic approach met different critiques mainly from the member states.¹²

At first, however, the idea of fostering research and innovation was highly welcomed by the member states meeting at the European Council in Lisbon on 23 and 24 March 2000. On their search for providing a new impetus to the European competitiveness by strengthening employment, economic reform and social cohesion the member states agreed on the meanwhile famous **Lisbon Strategy**. They formulated in the conclusions that they wanted to make Europe to the world's most competitive knowledge-based economy by 2010. As a consequence, they explicitly supported the concept of ERA and encouraged Council and Commission to achieve its objectives. Yet, the member states emphasised on the need for flexibility and decentralisation and therefore called for the adoption of an **Open Method of Coordination (OMC)** instead of supporting the instruments foreseen by the Commission which included not only informative and political but also financial and legal instruments.¹³ Nevertheless, the concept of a common European Research Area was born and had gained political support.

Immediately afterwards the Commission presented its proposal for the 6th Framework Programme¹⁴ perceiving this instrument as one of the necessary elements to construct ERA. In addition to that, the concept of European Added Value was introduced to justify European actions and measures of research funding. Later on and during the year 2001 the Commission delivered a whole set of documents developing different aspects of ERA.¹⁵ However, the debate on the FP6 turned out to be very problematic, since the member states, national research groups and national research administrative units showed opposition to major changes in the design of the FP compared to previous FPs. When the FP6 was finally

¹² Concerning the critique see below. Cf. also de ELERA, *The European Research Area*, 563-566.

¹³ de ELERA, *The European Research Area*, 563.

¹⁴ EUROPEAN COMMISSION, COM(2000) 612.

¹⁵ Relations between science and society, mobility, its international and regional dimensions, the role of the Joint Research Centres (JRC) etc. Cf. EUROPEAN COMMISSION: SEC(2000) 1973, COM(2001)215, COM(2001) 331, COM(2001) 346, COM(2001) 549, COM(2001) 792.

approved¹⁶ with the objective of being the main instrument to implement ERA it was evident that it continued to play the most important role in European research policy and that the ambitions of ERA had to be lowered.

1.1.2. European Research Policy from 2002 to 2006: After ERA is before ERA

Although the concept of ERA lost political power the necessity of strengthening research and innovation activities throughout Europe gained more and more public support. The summit of the European Council meeting in Barcelona in March 2002 therefore agreed on the objective of spending 3% of the GDP on research. 2/3 of the necessary investments should be financed by the private industry. This so-called **Barcelona-objective** has in the meantime encouraged many member states to increase seriously their investments in RTD and to reform their research and innovation systems.¹⁷ Five years later it can be stated that the funding of research has generally increased in many member states. Austria for example increased the total (public and private) national expenditure on civil R&D (GERD) from 1.91% of GDP in 2000 to 2.42% in 2005 and 2.54% in 2007.¹⁸ The EU-average of 1.84% of GDP in 2005, however, lags still behind the main players like e.g. USA (2.67%), Japan (3.17%) or South Korea (2.99%).¹⁹

The European Commission continued to promote the concept of ERA also after the decision on FP6 by stressing the ongoing importance of more effective research coordination.²⁰ Apart from that, the Commission called for the improvement of member states' involvement and the consolidation of the conceptual and policy framework of the ERA. Yet, this communication named "*The ERA: providing a new momentum*"²¹ (2002) represented the last effort of the Commission to relaunch the concept of ERA as a whole since the Council emphasised again on the independent role of national research policies and called for the OMC.²² In practice the 6th Framework Programme (2003-2006) shaped the emerging research area on its own.

¹⁶ Decision No 1513/2002/EC of 27 June 2002 of the European Parliament and the Council. The FP6 was divided in two other specific sub-programmes, namely "Integrating and Strengthening the ERA" and "Structuring the ERA".

¹⁷ This was e.g. the case in Austria. Legal and organisational reforms of the research funding structures were accompanied by an important increase of financial means for RTD. Cf. e.g. the establishment of the Austrian Council for Research and Technology Development (RFTE) in 2000, an advisory body to the government, vested with the competence to give recommendations on the allocation of the new funds.

¹⁸ In 2007 Austria was estimated to spend 6,83 billion Euro on RTD. See STATISTIK AUSTRIA, *Globalschätzung 2007: Bruttoinlandsausgaben für F&E* (16. April 2007), <http://www.statistik.at> (5.1.2008).

¹⁹ Cf. EUROPEAN COMMISSION, *Key Figures 2007 on Science, Technology and Innovation*, 24. See http://ftp.cordis.europa.eu/pub/era/docs/keyfigures_2007.pdf (6.1.2008).

²⁰ EUROPEAN COMMISSION, COM(2002) 499 *More research for Europe*.

²¹ EUROPEAN COMMISSION, COM(2002) 565 *The ERA: providing a new momentum*.

²² EUROPEAN COUNCIL, *Conclusions of 26 November 2002*, Council document 5742/03.

Especially the new network funding scheme ERA Net turned out to be a successful tool of linking existing research groups and research administrators from different levels all over Europe.

Generally speaking, it can be stated that after 2002 the concept of ERA lost its motivating power as a roofing concept for European research policy and the successful 6th Framework Programme took its place as the most important policy instrument. However, the debate on the future of European research continued and involved more and more actors both from academia as well as from industry. Research and innovation were understood as an important condition of improving European competitiveness. But more and more the opinion gained public support that research can only flourish on the ground of excellent basic research without direct applications possible. Therefore the public debate circulated around the necessity of establishing a European institution of funding excellent basic research. In 2005 the Commission presented its proposal for the 7th Framework Programme named “*Building the ERA of knowledge for growth*”²³ including for the first time a **European Research Council** as a basic research funding body. The year 2006 was mainly characterised by the preparations for the FP7 which was finally adopted in December 2006.

1.1.3. The Year 2007: A New Era for the ERA

The 7th Framework Programme for Research, Technological Development and Demonstration²⁴ has been launched in January 2007 and will cover for the first time a period of seven years (2007-2013). It will provide more financial funds for research activities than ever before in the history of Community research funding. With the start of the FP7 and the establishment of the European Research Council there is no discipline or type of research excluded anymore from European funding – apart from certain ethically problematic research fields such as embryonic stem cell research.²⁵ Apart from that a *European Institute of*

²³ EUROPEAN COMMISSION, COM(2005) 118 *Building the ERA of knowledge for growth*.

²⁴ Decision No 1982/2006/EC of the European Parliament and of the Council of 18 december 2006.

²⁵ Cf. e.g. the list of exclusions in Art. 3 of the specific programme “Ideas” (establishing the European Research Council), Council Decision No 2006/972/EC of 19 december 2006, O.J. 2006 L 400/243: “1. All research activities carried out under the Specific Programme shall be carried out in compliance with fundamental ethical principles. 2. The following fields of research shall not be financed under this programme: – research activity aiming at human cloning for reproductive purposes, – research activity intended to modify the genetic heritage of human beings which could make such changes heritable, – research activities intended to create human embryos solely for the purpose of research or for the purpose of stem cell procurement, including by means of somatic cell nuclear transfer. 3. Research on human stem cells, both adult and embryonic, may be financed, depending both on the contents of the scientific proposal and the legal framework of the Member State(s) involved. Any application for financing for research on human embryonic stem cells shall include, as appropriate, details of licensing and control measures that will be taken by the competent authorities of the Member States as well as details of the ethical approval(s) that will be provided. As regards the derivation of human embryonic stem cells,

Technology shall be established in 2008 serving as the flagship of European research by linking excellent research groups with industrial actors. In reality the European Research Area is thus emerging. It was not less than consequent that Commissioner Janez POTOČNIK, who has arrived with the Commission under President José Manuel BARROSO in 2004, announced in January 2007 to assess and then to relaunch the concept of ERA: He called for “a new era for the ERA.”²⁶ As a first step the Commission presented a Green Paper²⁷ in April 2007 and opened a public debate on the success and shortcomings of the ERA so far established. Results were presented at a high-level conference in Lisbon in October 2007. New initiatives of the Commission to promote ERA have been announced for 2008. Besides, the reform Treaty of Lisbon was signed on 13th December 2007 by the member states, including for the first time the concept of the ERA as the objective of the common European research policy in its newly formulated Article 163.²⁸

The vision of Commissioner BUSQUIN dating from 2000 therefore sees a new spring. The challenges, however, have not ceased to exist. With the enlargement of the European Union in 2004 and 2007 the integration of the scientific communities and industries of the new member states into the common European area for research is still an ongoing process which needs full support and commitment from both sides, the Union and the new member states. Apart from that, scientific cooperation turned out to be a fruitful accession tool also for potential and future member states. This holds especially true for the stabilisation and European integration of South-Eastern Europe.²⁹

1.2. The Concept of the ERA

As Commissioner BUSQUIN stated in its preface to the basic document of introducing the concept of the European Research Area in 2000 its main aim is “to contribute to the creation of better overall framework conditions for Research in Europe”³⁰. The observation of three

institutions, organisations and researchers shall be subject to strict licensing and control in accordance with the legal framework of the Member State(s) involved. 4. The fields of research set out in paragraph 2 shall be reviewed for the second phase of this programme (2010-2013) in the light of scientific advances.”

²⁶ Janez POTOČNIK, FP7 – Tomorrow’s answers start today. Speech/07/9 at the launch of the 7th Framework Programme in Berlin, 15 January 2007. See http://ec.europa.eu/commission_barroso/potocnik/news/speeches_en.htm (5.1.2008).

²⁷ EUROPEAN COMMISSION, COM(2007) 161 final Green Paper *The European Research Area: New Perspectives* (04/04/2007).

²⁸ The ERA concept was first included in the draft of the European Constitution in 2002: Article III-248 states that the ultimate objective of the European research policy will be to achieve a European research area. Yet, the FP remains the main tool of research policy. Cf. de ELERA, *The European Research Area*, 565.

²⁹ See below.

³⁰ EUROPEAN COMMISSION, Communication COM(2000) 6 *Towards a European Research Area*, Preface.

principal weaknesses of research in Europe led to the idea of envisaging ERA: insufficient funding of research activities in general, the lack of an environment to stimulate research and exploit results, and the fragmentation of research activities all over Europe as well as the dispersal of resources. Therefore the objective of ERA combines three related and complementary concepts according to the original idea:

- “the creation of an ‘internal market’ of research, an area of free movement of knowledge, researchers and technology with the aim of increasing cooperation, stimulation competition and achieving a better allocation of resources;
- a restructuring of the European research fabric, in particular by improving coordination of national research activities and policies, which accounts most of the research carried out and financed in Europe;
- the development of a European research policy which not only addresses the funding of research activities, but also takes account of all relevant aspects of other EU and national policies.”³¹

Seven years later, in 2007, the main aim of the ERA concept reached new political importance. Commissioner Janez POTOČNIK announced at the launch of the FP7 on 15th January 2007 in Berlin to review how the ERA is working. He explicitly enumerated the following aspects which he wanted to assess: How easy it is for researchers to move between facilities and organisations, to have their qualifications recognised, to take the benefits with them, to maintain their career development, to find new opportunities in both the public and private sectors, to easily access funding sources, to use the most advanced infrastructures etc.³² The idea of a “common market where the key new currency of knowledge can pass freely”³³ is thus still the core issue of the ERA concept.

As a consequence the Green Paper issued in April 2007 focused on the following aspects of the “ERA vision”: 1) Realising a single labour market for researchers, 2) developing world-class research infrastructures, 3) strengthening research institutions, 4) sharing knowledge, 5) optimising research programmes and priorities, and 6) international cooperation in science and technology (S&T). A preliminary analysis of the results of the public debate which was held between May and August 2007 showed that the majority of the stakeholders generally

³¹ Cf. the homepage of ERA at <http://cordis.europa.eu/era/concept.htm> (6.1.2008).

³² Janez POTOČNIK, FP7 – Tomorrow’s answers start today. Speech/07/9 at the launch of the 7th Framework Programme in Berlin, 15 January 2007.

³³ Janez POTOČNIK, FP7 – Tomorrow’s answers start today. Speech/07/9 at the launch of the 7th Framework Programme in Berlin, 15 January 2007.

supports the ERA vision by highlighting the importance of “sharing knowledge”. Critique was formulated e.g. concerning the way of regulation at European level. Stakeholders do not favour binding legislative actions at European level but prefer flexible, voluntary and bottom-up cooperation schemes, networking and the exchange of best practices. Apart from that, social benefits such as statutory pension rights, health and unemployment benefits seem to be the most problematic social security obstacles for mobile researchers within the EU.³⁴ The Commission has announced to tackle some of the raised issues by new proposals in 2008 in order to improve the realisation of the ERA.

As formulated officially in the Green Paper 2007 the ERA concept combines mainly three aspects which shall be enumerated once again: 1) a European “internal market” for research, where researchers, technology and knowledge freely circulate, 2) effective European-level coordination of national and regional research activities, programmes and policies, and 3) initiatives implemented and funded at European level.³⁵

1.3. The Legal Framework of the ERA

1.3.1. The Legal Basis of Community Policy on RTD

The legal basis of the Community policy on research and technological development is currently laid down in Title XVIII comprising Articles 163 to 173 of the European Community Treaty in its version of the Treaty of Nice. This title contains objectives and activities of a common European RDT-policy, in particular the legal basis of the multiannual framework programmes. It represents the basis for all Community activities in the area of research and technological development (Art. 163 (3) EC Treaty).

This legal basis for a common RTD-policy was only introduced in 1986 by the Single European Act (Art. 24) which entered into force on 1st July 1987. Before, there were only separated research policy competencies laid down in the three different treaties of the European Communities. The coordination of national research policies on a European level and common policy activities started in the 1970ies, especially with the decisions of the Council dating from 14 January 1974, laying down the principles of a common RDT-policy.³⁶ Minor changes of the current chapter dedicated to research and technological development

³⁴ For further results cf. EUROPEAN COMMISSION, *The European Research Area: Green Paper Consultation - Preliminary results* (September 2007), 3.

³⁵ EUROPEAN COMMISSION, COM(2007) 161 final Green Paper *The European Research Area: New Perspectives* (04/04/2007), 2.

³⁶ Cf. e.g. Decision of the Council, O.J. 1974 No C 7/2.

were introduced by the reform of Maastricht as well as the Treaty of Amsterdam.³⁷ The Treaty of Nice left the part unchanged. The draft of the European Constitution, however, enlarged the chapter dedicated to research and technological development (especially to matters of space) and even integrated the concept of the European Research Area as the final objective of community RTD-policy (Art. III-248).³⁸ In the meantime the reform treaty called “Treaty of Lisbon”³⁹ was signed on 13th December 2007 by the EU leaders and shall enter into force after the ratification processes in the member states. The changes prepared by the draft of the constitution were integrated into the Treaty of Lisbon to a large extent.⁴⁰

A closer look to the content of the chapter shows the following general aspects: The Community is not vested with an exclusive legal competence in the field of research and technological development. Art. 3 lit. n EC Treaty stipulates that the activities of the Community shall include “the promotion of research and technological development”. Consequently, research is formulated as a field in which the Community should mainly devote itself to coordinating national efforts and complementing it. Research is therefore a complementary competence.⁴¹ Thus, the principle of subsidiarity (Art. 5 (2) EC Treaty) has to be applied. In research policy it is linked with the concept of the European Added Value: Activities of the EU would be allowed only in cases where they create such added value. Nevertheless, an integrated research policy is legally possible. The Treaty of Lisbon, however, dedicates special importance to RTD and space by classifying them as a special case of shared competences.⁴²

The Treaty stipulates the general objective of European activities, namely strengthening the scientific and technological bases of Community industry and encouraging it to become more competitive at international level as well as promoting all research activities deemed

³⁷ Maastricht introduced the promotion of research and technological development in Art. 3 lit. n EC-treaty and added a second objective in Art. 163 para. 1 EC-treaty. Amsterdam changed the necessity of unanimity and introduced the qualified majority in Art. 166 and Art. 172 EC-treaty.

³⁸ E.g. the matters of space were included, also reflected in the title of the chapter in the Constitution (Art. III-248 to III-255).

³⁹ Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community, signed at Lisbon, 13 December 2007, O.J. 2007 No C 306/01. According to Art. 1 of the Treaty of Lisbon the title of the EC Treaty shall be replaced by “Treaty on the Functioning of the European Union”.

⁴⁰ Therefore e.g. Title XVIII will also refer to “space”.

⁴¹ de ELERA, *The European Research Area*, 571.

⁴² A new paragraph 3 in the newly formulated Art. 2 C (shared competences) deals with RTD and space (cf. Art. 12 of the Treaty of Lisbon): “In the areas of research, technological development and space, the Union shall have competence to carry out activities, in particular to define and implement programmes; however, the exercise of that competence shall not result in Member States being prevented from exercising theirs.”

necessary by virtue of other chapters of the Treaty (Art. 163 EC Treaty).⁴³ In order to pursue these objectives certain activities are proposed which shall complement the activities carried out in the member states. These are in particular the implementation of research programmes as well as the promotion of cooperation in the field of Community research with third countries, the dissemination and optimisation of the results of activities in Community research as well as the stimulation of the training and mobility of researchers in the Community (Art. 164 EC Treaty). Coordination of research policies and activities between the Community and the member states is explicitly stipulated whereas the right of initiative concerning coordination activities stays with the Commission (Art. 165 EC Treaty). The majority of rules in chapter XVIII of the Treaty (Art. 166-172), however, is linked with the Framework Programme as the principal instrument of research policy.

1.3.2. The Legal Character of the Framework Programme

The multiannual framework programme is setting out all the activities of the Community in the promotion of research and technological development. According to Art. 166 EC Treaty, which constitutes the main legal basis, the framework programme shall establish the scientific and technological objectives to be achieved by the activities provided for in Art. 164 and fix the relevant priorities, shall indicate the broad lines of such activities, shall fix the maximum overall amount and the detailed rules for Community financial participation and the respective shares in each of the activities provided for. However, the implementation of the FP is carried out through so-called *specific programmes* developed within each activity (Art. 166 (3) EC Treaty). Each specific programme defines the detailed rules for implementing it, fixes its duration and provides for the means deemed necessary. Whereas the FP as a whole is adopted by the Council, acting in accordance with the procedure referred to in Art. 251 EC Treaty (this means co-decision with the European Parliament)⁴⁴ after consulting the Economic and Social Committee, the specific programmes are adopted by the Council only, acting by a

⁴³ The Treaty of Lisbon (Art. 136) replaces Art. 163 para. 1 EC Treaty by the following description of the EU RTD-policy objective referring explicitly to the concept of the ERA: "The Union shall have the objective of strengthening its scientific and technological bases by achieving a European research area in which researchers, scientific knowledge and technology circulate freely, and encouraging it to become more competitive, including in its industry, while promoting all the research activities deemed necessary by virtue of other Chapters of the Treaties." Also in Art. 163 para. 2 EC Treaty the Treaty of Lisbon contains the following amendment in the spirit of the ERA: "permitting researchers to cooperate freely across borders".

⁴⁴ The Treaty of Lisbon generally strengthens the position of the European Parliament which also led to changes of Art. 251 EC Treaty which became the "ordinary legislative procedure" (cf. Art. 2 lit. c, 239 Treaty of Lisbon).

qualified majority on a proposal from the Commission and after consulting the European Parliament and the Economic and Social Committee (Art. 166 (1), (4) EC Treaty).⁴⁵

Necessary for the implementation of the framework programmes are furthermore rules for the participation of undertakings, research centres and universities as well as rules governing the dissemination of research results. Both are laid down by the Council, acting in accordance with the procedure referred to in Art. 251 EC Treaty and after consulting the Economic and Social Committee (Art. 167, Art. 172 (2) EC Treaty).

So-called supplementary programmes may be decided on involving the participation of certain member states only (Art. 168 EC Treaty). Special attention will gain Art. 169 EC Treaty in the future. This provision provides the possibility for the Community to participate in research and development programmes undertaken by several member states, including participation in the structures created for the execution of those programmes – in agreement with the member states concerned.⁴⁶ This has not been used quite often so far but will gain importance due to the necessary follow-up organisation of successful EU-funded research projects, especially networking projects (e.g. ERA Net projects of the FP6).

International research cooperation is laid down in a special provision. Art. 170 EC Treaty stipulates that the Community may make provision for cooperation in Community research with third countries or international organisations in implementing the framework programme.⁴⁷

A potential for future developments is included in Art. 171 EC Treaty which stipulates that the Community may set up joint undertakings or any other structure necessary for the efficient execution of Community research, technological development and demonstration programmes.

⁴⁵ In order to increase the potential of the ERA the Treaty of Lisbon (Art. 138) contains the following amendment of a new paragraph 5 to Art. 166 EC Treaty: “As a complement to the activities planned in the multiannual framework programme, the European Parliament and the Council, acting in accordance with the ordinary legislative procedure and after consulting the Economic and Social Committee, shall establish the measures necessary for the implementation of the European research area.”

⁴⁶ The Council adopts the provisions, acting in accordance with the procedure referred to in Art. 251 (co-decision of the European Parliament) and after consulting the Economic and Social Committee (Art. 172 (2) EC Treaty).

⁴⁷ The Treaty of Lisbon stipulates in its Art. 141 that the reference to Art. 300 EC Treaty in Art. 170 EC Treaty will be deleted.

Finally, the Commission has to send a report to the European Parliament at the beginning of each year, including information on research and technological development activities and the dissemination of results during the previous year, and the work programme for the current year (Art. 173 EC Treaty).

These provisions, laid down in Art. 163 to Art. 173 EC Treaty, fix the legal framework of the European activities in the promotion of research and technological development and form thus the legal basis of the emerging research area. It can be observed that the majority of the rules is dedicated to the framework programme and its implementation (Art. 166 to Art. 172 EC Treaty). The framework programme therefore plays a crucial role in shaping and building the European Research Area. However, the legal framework is complemented by an institutional framework which has been established during the years based on decisions of secondary Community law. Some of these bodies influence the decision-making process of the framework programmes and give general advice on research policy strategy (e.g. EURAB) whereas others influence the conducting of research itself (e.g. Ethical Committee, ERC). As a consequence, these institutions shall be presented shortly.

1.3.3. The Institutional Framework of the ERA

Science and research are characterised by an inherent element of innovation and novelty. Future developments are therefore hard to predict. Nevertheless, politics have to agree on the framework conditions in order to permit scientists conducting their research and providing them with the necessary funds. As on the national level also on EU level there are certain advisory bodies working on policy strategy recommendations and general advice.

The first advisory body at Community level has been established already in 1974.⁴⁸ The **Scientific and Technical Research Committee (CREST)**⁴⁹ consists of representatives of the member states and of the Commission (chair). Its main task is to provide general advice and support in research and technology policy issues to the Commission and to the Council. Besides, CREST supports the coordination of research policies of the member states as it is stipulated in Art. 165 EC Treaty.⁵⁰

⁴⁸ Decision of the Council, 14 January 1974, O.J. 1974 No C 7/2; Decision of the Council, 28 September 1995, O.J. 1995 No C 264/4.

⁴⁹ CREST stands for *Comité de la recherche scientifique et technique*.

⁵⁰ Axel KALLMAYER, Art. 163 EGV, Rn. 5, in: Christian CALLIESS/Matthias RUFFERT (eds.), *Kommentar zum EU-Vertrag und EG-Vertrag*, 3rd ed. 2007; Henning EIKENBERG, Art. 166 EGV, Rn. 8, in: Eberhard GRABITZ/Meinhard HILF (eds.), *Das Recht der Europäischen Union*, 28th delivery (October 2005).

With the arrival of the new concept of the European Research Area in 2000 the Commission established a new advisory body in 2001 with the main task to support the Commission in issues of the realisation and implementation of the ERA. The **European Research Advisory Board (EURAB)**⁵¹ consists of 45 members who are all independent experts from the scientific community and of the European industry.⁵² EURAB can be seen as the representatives of the scientific community influencing Community research policy developments. EURAB was especially active in collaborating with the European Convention leading to the enlarged chapter on research and technological development and space in the European Constitution.⁵³ Apart from that, EURAB worked on the preparation for the European Research Council (ERC), the first independent funding body for basic research (“frontier research”) on the European level. Therefore, EURAB can be qualified as an important voice in shaping the ERA even if some critique concerns its composition and the way its members are appointed (namely by the Commission itself).

Apart from these advisory bodies the emerging ERA will be characterised by its own institutions. The **European Research Council (ERC)** will play an important role since it provides European funding (“fresh money”) for European basic (“frontier”) research projects which can also be proposed by only national teams. Thus the label of ERC-funded research projects will create a new category of excellence since selected applicants have been successful in a Europe-wide competition. Frontier research means a new category of research at the edge of current knowledge, it means investigator-driven research which can also lead to applications. The ERC consists of an independent Scientific Council with 22 honourable members representing the European scientific community in all its disciplines and a lean executive agency⁵⁴. The ERC is accountable to the Commission which guarantees the autonomy of the ERC. The Scientific Council adopts the general strategy and the working programme and is responsible for the independent selection process of proposals based on the single criteria of excellence. The ERC shall implement the specific programme “Ideas” of the FP7. The specific programme “Ideas”, which has been adopted according to Art. 166 (4) EC Treaty on 19 December 2006⁵⁵, provides thus the legal basis for the ERC. The ERC came into being with the general start of FP7 on 1st January 2007 and has launched its first call for

⁵¹ Decision of the Commission, 27 January 2001, O.J. 2001 No L 192/21.

⁵² Henning EIKENBERG, Art. 166 EGV, Rn. 14, in: GRABITZ/HILF (eds.), *Das Recht der Europäischen Union*, 28th delivery (October 2005). Cf. <http://ec.europa.eu/research/eurab/>.

⁵³ Cf. Art. III-248 to Art. III-255 Constitution.

⁵⁴ The executive agency is organised in accordance with the Council Regulation No 58/2003/EC of 19 December 2002, O.J. 2003 No L 11/1.

⁵⁵ Decision of the Council No 2006/972/EC of 19 December 2006, O.J. 2006 No L 400/243.

proposals at the end of February 2007 targeted at high potential young researchers (ERC Starting Independent Researcher Grants).⁵⁶ Later calls shall be dedicated to more experienced researchers (ERC Advanced Investigator Grants).⁵⁷ The ERC shall therefore contribute to raise the attractiveness of Europe as a place for outstanding research also in the field of basic research. Since there are no top-down thematic priorities, research from all disciplines including the humanities and social sciences shall be supported. The ERC can be qualified as a kind of scientific element within the generally industry-oriented Community research funding policy. The influence on the general architecture of the European Research Area will be interesting to assess in the next years.

Whereas the ERC will act as a funding body, the envisaged **European Institute of Technology (EIT)** shall serve as the flagship of European research institutions linking actors from the industry with research teams in interdisciplinary and transdisciplinary “innovation communities” spread over Europe. Its establishment has been inspired by the Massachusetts Institute of Technology. However, the final approval of the EIT is expected during the year 2008.⁵⁸

As an important player the **European Commission** shall be mentioned being the engine of coordinating and inventing European Community research policy, implementing the framework programme and developing new instruments. The institutional framework of the ERA is mainly shaped by the activities of the European Commission especially by its Directorate-General Research which also includes the Joint Research Centre as a Community-owned research institution with different institutes all over Europe (also in the rang of a DG).⁵⁹

However, there are many more actors influencing the European research scenery. Apart from the research institutions and universities hosting the researchers as the central part of all research activities there are many actors on an intergovernmental and NGO-basis

⁵⁶ In December 2007 the ERC awarded its first prestigious starting grants to approximately 300 successful young scientists out of more than 9000 candidates who had submitted proposals during the year. Cf. ERC, Press Release IP/07/1928 of 14 December 2007, at <http://erc.europa.eu/> (8.1.2007).

⁵⁷ For further information cf. the website <http://erc.europa.eu/>.

⁵⁸ Cf. the communication of the Commission COM(2005) 24 *Working together for Growth and Jobs: a new Start for the Lissabon Strategy*; COM(2006) 276 final *The European Institute of Technology: further Steps towards its creation*, and the proposal for a Regulation of the EP and the Council COM(2006) 604 final/2. See also <http://ec.europa.eu/education/policies/educ/eit/>.

⁵⁹ Concerning the role of the Commission cf. e.g. Sieglinde GRUBER, *Der Bologna-Prozess und der Weg zu einem gemeinsamen Forschungsraum Europa*, in: Werner FIEDLER/Eike HEBECKER (eds.), *Promovieren in Europa. Strukturen, Status und Perspektiven im Bologna Prozess*. Opladen 2006, 35-41.

complementing thus the activities of the Community and of the member states. The following shall be mentioned as the most important ones:⁶⁰ **COST**⁶¹ (1971) represents a complementary network for coordinating research activities between its member states (34 European states plus Israel as cooperating state). **EUREKA** (1985) was established as an intergovernmental initiative with the aim to better coordinate high technology research in order to raise the European competitiveness. The **European Science Foundation (ESF)**⁶² was founded in 1974 as an international non-governmental association of research funding institutions⁶³ with a special focus on the improvement of cooperation in basic research. The activities are based on special research programmes including the support concerning the organisation of research conferences and the mobility of researchers. Apart from that, the ESF contributes to the building of ERA by policy advice and recommendations. Not only research funding bodies are organised on a European level but also research institutions have organised themselves on a European scale. This is e.g. the case for the European universities gathered in the **European University Association (EUA)**⁶⁴ or the European Academies of Sciences linked together in the association of **All European Academies**, the European Federation of National Academies of Sciences and Humanities (**ALLEA**)⁶⁵. These non-governmental platforms try to influence decision-making processes in research and higher education issues on the European level and thus guarantee that the needs and opinions of the concerned actors are considered.

As a conclusion it can be stated that the institutional framework of the ERA is a pluralistic puzzle of different actors contributing in different ways to the integration of European research activities and research policy developments. However, the principal instrument of constructing ERA in the period of 2007 to 2013 will be the FP7.

1.4. The 7th Framework Programme as the cornerstone of ERA 2007-2013

The Seventh Framework Programme of the European Community for research, technological development and demonstration activities (2007-2013) was adopted on 18 December 2006 by

⁶⁰ For the following see also Hedwig KOPETZ, articles referring to research and development, in: Lukas BAUER/Konrad LACHMAYER (eds.), *Praxiswörterbuch Europarecht* (forthcoming).

⁶¹ COST stands for *Coopération européenne dans le domaine de la recherche scientifique et technique*. Cf. e.g. Henning EIKENBERG, Art. 170 EGV, Rn. 20-24, in: GRABITZ/HILF (eds.), *Das Recht der Europäischen Union*, 28th delivery (October 2005); <http://www.cost.esf.org/>.

⁶² ESF-Statutes of 1st December 2006, cf. <http://www.esf.org/>.

⁶³ Concerning Austria the FWF (Austrian Science Fund) and the Austrian Academy of Sciences are members of the ESF.

⁶⁴ See <http://www.eua.be>.

⁶⁵ See <http://www.allea.org>.

the European Parliament and the Council in accordance with Art. 166 (1) EC Treaty.⁶⁶ It aims at raising European competitiveness by stimulating research and at consolidating the European Research Area. For the first time a framework programme will cover a period of seven years, namely 1st January 2007 to 31st December 2013. In total 50 521 Mio. EUR are provided for research funding activities. The FP7 is therefore the world's largest multinational research funding programme. In comparison to FP6 (2002-2006) FP7 continues its broad approach but contains more funding opportunities. After a wide-ranging public consultation including different actors from the scientific community, the industry as well as the above mentioned advisory bodies, four main objectives have been identified. These objectives correspond to the four main specific programmes around which the FP7 is structured: Cooperation, Ideas, People, and Capacities. Furthermore two other specific programmes are dedicated to the direct actions of the Joint Research Centre and the actions covered by the Euratom Framework Programme.⁶⁷

The specific programme *Cooperation* aims to stimulate cooperation and improve links between industry and research within a transnational framework. It covers ten thematic priorities and is vested with the majority of funds (32 413 Mio. EUR). Multinational European research teams compete in calls for proposals for winning project funding. The *Ideas* Programme is intended to enhance exploratory research and is implemented by the new and autonomous ERC (7 510 Mio. EUR at disposal). The *People* Programme continues and reinforces the existing Marie Curie actions aiming at enhancing mobility and training opportunities for European researchers, especially young researchers (4 750 Mio. EUR at disposal). Finally, the *Capacities* Programme is intended to increase investment in research infrastructure, in particular in less successful regions (4 097 Mio. EUR at disposal).

Whereas the FP7 takes over many features of previous programmes that had have a positive effect on European research like e.g. the projects run by European partner groups, it also introduces some new measures. The main innovations are the simplification of the procedures for participation in the programme, the creation of the ERC, the improved cooperation with industry via the Joint Technology Initiatives combining private investment and public funding, and the support of a European research infrastructures policy.

⁶⁶ Decision No 1982/2006/EC of the European Parliament and of the Council concerning the Seventh Framework Programme of the European Community for research, technological development and demonstration activities (2007-2013), O.J. 2006 No L 412/1.

⁶⁷ Cf. e.g. <http://ec.europa.eu/research/fp7/>; <http://cordis.europa.eu/fp7/>; <http://europa.eu/scadplus/printversion/en/lvb/i23022.htm> (5.3.2007).

According to the Commission the FP7 should play a fundamental role in growth and employment in the years to come. By developing the knowledge triangle formed by research, education and innovation policies, knowledge should be placed at the service of a dynamic economy and social and economical progress.⁶⁸

Although the necessity and advantage of Community-funded research at a large scale is generally not disputed, there is also some critique especially on the administrative obstacles and regulations linked with European funds.⁶⁹ To manage European funds requires professional project management. Many institutions still have to develop these capacities, especially university institutes are often not well prepared and supported to cope with these special challenges.⁷⁰ Nevertheless it is undoubted that research still has to take place within university institutes confronting thereby not only professors in their function as experienced scientists but also students in their role as young researchers with the process of searching new phenomenons and developing new hypotheses. Universities play therefore a crucial role in the education and training of the researchers of tomorrow.⁷¹ University teaching has to be linked with (basic) research. Yet, research and teaching are too often seen separated which is also reflected on the European scale with the originally rather separated concepts of the European Research Area on the one hand and the European Higher Education Area on the other hand. We are convinced that both concepts have to be developed together.

⁶⁸ <http://europa.eu/scadplus/printversion/en/lvb/i23022.htm> (05/03/2007).

⁶⁹ Cf. e.g. EUROPEAN COMMISSION, The European Research Area: Green Paper Consultation - Preliminary results (September 2007).

⁷⁰ Although universities are more and more developing support services for the research project management.

⁷¹ The German philosopher Jürgen MITTELSTRAß especially underlined the mission of the university as the most important training field for young researchers. Cf. e.g. Jürgen MITTELSTRAß, Die unzeitgemäße Universität, in: Jürgen MITTELSTRAß, Die unzeitgemäße Universität, Frankfurt/Main 1994, 11-29 (18). See also Hedwig KOPETZ, Forschung und Lehre. Die Idee der Universität bei Humboldt, Jaspers, Schelsky und Mittelstraß, Vienna-Cologne-Graz 2002, 93-110. Cf. also Wolfgang MANTL, Universitätspolitik und Universitätsrecht: Drei Bausteine des Wandels, in: zfhr 2 (2003), 1-7.

2. Teaching needs Research: The Link to the European Higher Education Area

2.1. The Bologna Process and its Political Impact

2.1.1. From Bologna to London or how to make University Reforms attractive

“Bologna” has become a synonym of university reforms throughout Europe during the last nine years. Although the main orientation of its reform proposals is broadly accepted, there has always been a controversial debate at the same time.⁷² Bologna does not only evoke positive feelings but it may also be perceived as a threat to national higher education traditions. But how did the so-called Bologna Process⁷³ start?

In order to celebrate the 800th anniversary of the *Université de Sorbonne* in 1998 the higher education ministers of France, Italy, Germany and the United Kingdom met in Paris and signed a declaration aiming at the harmonisation of the architecture of the European higher education systems in order to enhance Europe's global attractiveness as a place to study and foster European students' mobility. This so-called **Sorbonne Declaration**⁷⁴ of 25 May 1998 was the initiative of four important member states of the European Union based on their own commitment and ambition. Since higher education is not a competence of the European Community but of the member states the European Commission was not involved. Nevertheless, this initiative of the four had a big impact on other European countries who wanted to join them. Consequently, one year later the ministers of higher education of 29 (!) European countries signed a declaration in Bologna – the **Bologna Declaration**⁷⁵ dating from 19 June 1999 – with the aim of creating a **European Higher Education Area (EHEA)** by fixing common steps necessary for achieving this goal. The meanwhile famous **Bologna**

⁷² Cf. e.g. the critical contribution of Voldemar TOMUSK, *The End of Europe and the Last Intellectual*, in: Voldemar TOMUSK (ed.), *Creating the European Area of Higher Education. Voices from the Periphery*, Dordrecht 2006, 269-303.

⁷³ There is in the meantime a huge amount of literature concerning the Bologna Process. Cf. e.g. Voldemar TOMUSK (ed.), *Creating the European Area of Higher Education. Voices from the Periphery*, Dordrecht 2006; Guy NEAVE/Peter MAASSEN, *The Bologna Process: An Intergovernmental Policy Perspective*, in: Peter MAASSEN/Johan P. OLSEN (eds.), *University Dynamics and European Integration*, Dordrecht 2007, 135-153; Georg BOLLENBECK/Waltraud >Wara< WENDE (eds.), *Der Bologna-Prozess und die Veränderung der Hochschullandschaft*. Heidelberg 2007; Anke HANFT/Isabel MÜNKENS (eds.), *Bologna und die Folgen für die Hochschulen*. Bielefeld 2005. See also <http://www.bmwf.gv.at/euinternationales/bolognaprozess/ueberblick/>. For the following cf. Friedrich FAULHAMMER, *Der Bolognaprozess – Weg zu einem Europäischen Hochschulraum*, in: *zfh* 4 (2005), 57-64.

⁷⁴ Joint declaration on harmonisation of the architecture of the European higher education system, Paris, the Sorbonne, May 25 1998. Cf. http://www.bologna-berlin2003.de/pdf/Sorbonne_declaration.pdf.

⁷⁵ The European Area of Higher Education. Joint declaration of the European Ministers of Education convened in Bologna on the 19th of June 1999. Cf. http://www.bmwf.gv.at/fileadmin/user_upload/europa/bologna/bologna_engl.pdf.

Process was thus launched.⁷⁶ Apart from the different objectives a system of periodical reports and benchmarking was adopted.

In Bologna ministers agreed to meet again two years later, in 2001, in **Prague**. After that, they gathered in **Berlin** (2003), **Bergen** (2005) and **London** (2007) in order to assess progress towards the EHEA. Each conference represented a further step in the coordination of higher education systems in Europe and saw the integration of new members. Croatia was accepted as a member together with Turkey and Cyprus at the Prague ministerial summit in 2001. At the Berlin Conference in 2003 Albania, Bosnia and Herzegovina, Macedonia and Serbia and Montenegro were adopted. Bulgaria, Greece, Romania, and Slovenia have been among others founding members of the process. Therefore, since 2003 the whole region of South East Europe has been participating in the Bologna Process. Montenegro was welcomed as an independent state and member at the London Conference in May 2007.

In the meantime, 46 European countries are members in this intergovernmental initiative which is conducted out of the formal decision-making framework of the European Union. This turned out to be an advantage as also non EU member states are therefore full members of the process. The legally non-compulsory political commitment of the ministers is the driving force of this Europe-wide coordination process based on the principle of consent in decision making.

The Bologna Process is institutionally supported by the so-called **Bologna Follow-up Group** consisting of ministerial representatives of each signatory country as well as the European Commission and other stakeholders including the European University Association (EUA), the European Association for Quality Assurance in Higher Education (ENQA), the European Students' Union (ESU)⁷⁷, the European Association of Institutions in Higher Education (EURASHE), and the Council of Europe. Since the 2005 Bergen summit the Education International Pan-European Structure and the Union of Industrial and Employers' Confederations attend the Bologna Follow-up Group. The Group produces a work

⁷⁶ Dave CARTER identifies at least four major events which had contributed to the launch of the Bologna Process: 1) the start of the ERASMUS mobility programme on 1st July 1987, 2) the adoption of the Magna Charta Universitatum on 18 September 1988 in Bologna, 3) the Lisbon Convention agreed on 11 April 1997 and 4) the Sorbonne Declaration of 25 May 1998. Cf. Dave CARTER, What the Bologna Process says about Teaching and Learning Development in Practice. Some Experience from Macedonia, in: TOMUSK (ed.), Creating the European Higher Education Area, 141-167 (142).

⁷⁷ In May 2007 it was decided to change the former name "The National Unions of Students in Europe (ESIB)" into "European Students' Union (ESU)". See <http://www.esib.org/>.

programme. Member countries pursue their own follow-up activities according to the ministerial communiqué of the summits. Besides, there is the *Bologna Process Board*, a smaller group with the task to prepare the next summit.⁷⁸ Both groups are administered by the *Bologna Secretariat* which is held by the country preparing the next ministerial summit. This has been the UK from 2005 to 2007 since in 2007 the ministerial conference took place in London. In both groups, the Council of Europe, the EUA, EURASHE, ESU, Education International Pan-European Structure and the Union of Industrial and Employers' Confederations take part as consultative members. The next conference will take place on 28-29 April 2009 at the universities of Leuven and Louvain-la-Neuve (Belgium).⁷⁹

2.1.2. Key Areas of the Bologna Process

Having in mind the higher education systems of the United States and Japan, the main opponents of the EU so far, the European ministers realised that they had to coordinate and improve the national higher education systems towards one European higher education system in order to improve its quality and enhance its attractiveness for students from outside Europe. This idea led to the Sorbonne Declaration (1998) and endorsed the Bologna Declaration (1999) launching the Bologna Process.

Student mobility across Europe is seen as a key element of dynamisation. Therefore a common structure (undergraduate/graduate; bachelor – master – PhD) is envisaged in order to facilitate mutual recognition of degrees and remove obstacles for mobility.⁸⁰ Aiming not only at structural reforms but also at improving the quality of higher education in general, the Bologna Process thus is expected to contribute to the general Lisbon strategy of delivering stronger lasting growth and creating more and better jobs in Europe.⁸¹ Ministers have formalised the objectives of the Bologna Process into **10 action lines** over the course of the ministerial summits in Bologna, Prague and Berlin.

⁷⁸ The Bologna Board consists of the hosting countries of the previous and the forthcoming ministerial summits, and representatives of the acting, previous and succeeding EU Presidencies. Also the European Commission and the other mentioned Europe-level organisations are involved. The Board is chaired by the host of the next ministerial conference.

⁷⁹ Information concerning the preparations for the upcoming Ministerial Conference in Leuven 2009 can be found at <http://www.ond.vlaanderen.be/hogeronderwijs/bologna/>.

⁸⁰ Cf. e.g. Ulrich TEICHLER, *Gestufte Studiengänge und Studienabschlüsse: Studienstrukturen im Bologna-Prozess*, in: HANFT/MÜSKENS (eds.), *Bologna und die Folgen für die Hochschulen*, 6-27.

⁸¹ Cf. for this general overview the information is available at the Bologna Process Secretariat of the London summit 2007: http://www.europeunit.ac.uk/bologna_process/.

The **Bologna Declaration (1999)** contains six of ten action lines:

1. Adoption of a system of easily readable and comparable degrees
2. Adoption of a system essentially based on two cycles
3. Establishment of a system of credits (ECTS)
4. Promotion of mobility
5. Promotion of European cooperation in quality assurance
6. Promotion of the European dimension in higher education

In addition to that the **Prague Communiqué (2001)** formulates the following three priorities:

7. Lifelong learning
8. Higher education institutions and students
9. Promoting the attractiveness of the European Higher Education Area

The **Berlin Communiqué (2003)** added a tenth key element and promotes thereby the necessary link between teaching and research:

10. European Higher Education Area and European Research Area – two pillars of the knowledge based society.⁸²

The first action line has been implemented by the **Diploma Supplement**, an annex to the diploma explaining the value of the reached degree in order to facilitate mutual recognition and comparison throughout Europe. This useful document is still not standard throughout Europe.⁸³

A big debate was caused by the proposal to introduce a study system of **two cycles** throughout Europe. This endorsed a lot of changes since the Anglo-American model of bachelor and master does not represent a European tradition on the continent. There are still some study lines opposing to the proposed models of 3+2 or 4+1. This is especially the case for studies of law throughout Europe.⁸⁴ The main argument is that the labour market would not accept bachelors of law in order to fulfil legal tasks for which until now studies of at least four years used to be necessary. Future will show growing acceptance.

⁸² Cf. the list of action lines in: EUROPEAN COMMISSION, 24 January 2006 (rev2), *From Bergen to London. The EU Contribution*, 9.

⁸³ Cf. for instance the experience of the Ukrainian student Anna FEDORCHENKO who mentioned at the UnivSOE Workshop on 24/25 November 2006 that diploma supplements are promised but still not realised in Ukraine. The Ukraine has joined the Bologna Process officially in at the Bergen Conference in 2005.

⁸⁴ Cf. for the debate e.g. in Austria Stefan GRILLER/Michaela SEIFERT, "Bologna-Prozess", *Europäischer Binnenmarkt und österreichisches Berufsrecht: Katalysatoren oder Gefahren für die Reform der Juristenausbildung in Österreich?*, in: JBl 128 (2006), 613-626; concerning Germany see e.g. Matthias KILIAN, *Die Europäisierung des Hochschulraumes*, in: JZ 61 (2006), 209-217.

Since Berlin (2003) the **doctoral studies** came into the centre of attention and were added as a third cycle to the existing two. PhD candidates are considered to be both, students as well as early-stage researchers who have to be accompanied in a serious way in order to promote excellent research and learning already in the beginning of a potential scientific career.⁸⁵ This is also the place where the two concepts, the concept of ERA and EHEA, are forming an interface which still has to be improved throughout Europe.

In the meantime the use of the **European Credit Transfer System (ECTS)** in order to make the workload of courses comparable is as accepted as the necessity of **quality assurance** and a European cooperation hereon.

The promotion of **mobility**, of the **European dimension** in HE as well as the promotion of **lifelong learning** shall contribute to the personal skills of the human resources in the universities preparing for the labour market or the academia itself.

The Ministerial Conference in London (May 2007) highlighted the importance of the social dimension of higher education. Ministers agreed to report back in 2009 on national measures to widen participation in higher education. Apart from that mobility was stressed as one of the key objectives of the Bologna Process. Besides, Ministers adopted a proposal for a Register of European Higher Education Quality Assurance Agencies (REHEQA) and acknowledged the importance of the global dimension of the EHEA by approving a document called “The Strategy for the EHEA in a Global Setting”.⁸⁶

In general, the ten action lines of the Bologna Process are accepted by the signatory countries since consensus is the principle of decision making. However, the real problems occur in implementing these objectives which requires not only the adoption of new laws but also the application of these laws. This turns out to be quite difficult, especially in the countries of South East Europe as we will analyse below. The objective of the Bologna Process is to achieve a common European Area of Higher Education by 2010 as it has been fixed at the Prague summit in 2001 in clear accordance with the general goal of the Lisbon strategy as well as the Barcelona objective (3% GDP spent on RTD by 2010).⁸⁷ The term of the

⁸⁵ Cf. e.g. Werner FIEDLER/Eike HEBECKER (eds.), Promovieren in Europa. Strukturen, Status und Perspektiven im Bologna-Prozess. Opladen 2006.

⁸⁶ Cf. the London Communiqué (May 2007). See also at http://www.europeunit.ac.uk/bologna_process/london_2007.cfm (14.1.2008).

⁸⁷ Cf. FAULHAMMER, Der Bolognaprozess, 60.

“European Higher Education Area” has also been adopted as the objective of the EU higher education policy and shall be examined in the following.

2.2. EU Policy in Higher Education

2.2.1. *The Legal Basis of Higher Education Policy on EU Level*

In 1992, with the Maastricht Treaty, higher education policy was integrated for the first time explicitly into the activities of the European Community (cf. Art. 3 (1) lit. q EC Treaty: Activities of the Community shall include “a contribution to education and training of quality and to the flowering of the cultures of the Member States”).⁸⁸ Therefore, Title XI “Social policy, education, vocational training and youth” contains in its Chapter 3 the legal basis for the education and higher education policy (Art. 149 EC Treaty) as well as for a vocational training policy (Art. 150 EC Treaty) of the Community.⁸⁹

However, the general underlying principle of these regulations is that “the responsibility of the Member States for the content of teaching and the organisation of education systems and their cultural and linguistic diversity” is fully respected (Art. 149 (1) EC Treaty). Apart from that, the principle of subsidiarity has to be applied (Art. 5 (2) EC Treaty).⁹⁰ According to Art. 149 (1) first phrase the Community “*shall contribute to the development of quality education by encouraging cooperation between Member States and, if necessary, by supporting and supplementing their action*”.⁹¹ As a consequence, higher education policy of the Community is mainly dedicated to **coordination** and **support** of the member states’ activities, it has a

⁸⁸ Before, higher education policy activities were developed quasi as an annex to realising the freedom of persons working in other member states concerning the possibility of their children to attend schools without being discriminated. Cf. e.g. Directive 77/486, O.J. 1977, No L 199/32. Concerning the recognition of degrees in higher education cf. Directive 92/51, O.J. 1992, No L 209/25. Besides, also the European Court of Justice developed a strict prohibition of discrimination in education issues (Diskriminierungsverbot). Cf. especially ECJ 1985, 593ff., Cs. 293/83 “Gravier”. See Thomas OPPERMANN, *Europarecht. Ein Studienbuch*, 3rd edition, Munich 2005, § 28, Rz 6-8. Recently, this jurisdiction concerned also the Austrian regulation of access to the university system.

⁸⁹ The Treaty of Lisbon foresees own titles for social policy (new Title X) and education (new Title XI). Title XI will be called “Education, Vocational Training, Youth and Sport”. Cf. Art. 123 Treaty of Lisbon. The new Art. 5a EC Treaty stipulates that the Union shall take into account requirements linked to the promotion of ... a high level of education, training and protection of human health. Cf. Art. 17 Treaty of Lisbon.

⁹⁰ OPPERMANN, *Europarecht*, § 28 Rz 11.

⁹¹ The Treaty of Lisbon did not change this provision. Article 149 EC Treaty was amended by adding the Union's contribution to the promotion of European sporting issues (cf. Art. 124 Treaty of Lisbon). However, the new Art. 2 E reads now as follows: “The Union shall have competence to carry out actions to support, coordinate or supplement the actions of the Member States. The areas of such action shall, at European level, be: (a) protection and improvement of human health; (b) industry; (c) culture; (d) tourism; (e) education, vocational training, youth and sport; (f) civil protection; (g) administrative cooperation.” Cf. Art. 12 Treaty of Lisbon.

complementary role to play.⁹² This explains why the Bologna Process has to take place outside from strict Community activities.

Nevertheless, the Community has developed a couple of effective support activities shaping on its own the European Higher Education Area. These measures were inspired by the objectives laid down in Art. 149 (2) EC Treaty saying that Community action shall be aimed at developing the *European dimension* in education with a special focus on the teaching of the *languages of the member states*, at encouraging *mobility of students and teachers* which also includes the *academic recognition of diplomas and periods of study*, at promoting *cooperation* between educational establishments, at developing *exchanges of information and experience* on issues common to the education systems of the member states, at the encouraging the development of *youth exchanges* and of socio-educational instructors, and at encouraging the development of *distance education*. Apart from that, the Community and the member states shall foster **cooperation with third countries** and international organisations in the field of education, especially the Council of Europe (Art. 149 (3) EC Treaty).

Concerning the allowed measures to be taken by the Council Art. 149 (4) EC Treaty stipulates clearly that any harmonisation of the laws and regulations of the member states shall be excluded but incentive measures shall be adopted, according to the procedure of co-decision (Art. 251 EC Treaty), after consulting the Economic and Social Committee and the Committee of the Regions. Besides, the Council is allowed to adopt recommendations acting by a qualified majority on a proposal from the Commission.

A special vocational training policy supporting and supplementing the action of the member states is foreseen in a similar way by Art. 150 EC Treaty.

2.2.2. *Objectives of the EU Policy on HE in the Framework of the Lisbon Strategy*

Since the European Community is not vested with legal competences for the content, organisation and regulation of higher education in the member states its main activities consist in inspiring and encouraging the European dimension of national higher education systems. Council, Commission and Parliament have adopted different documents of *soft law character* such as recommendations, communications, conclusions or work programmes

⁹² For a legal analysis of the community competences in education and vocational training cf. Christina Maria BECHTER, *Zuständigkeiten und Handlungsmöglichkeiten der Europäischen Gemeinschaft in der Bildungspolitik*, PhD Thesis, Vienna 2006, 63-84.

reflecting a basic consent of national higher education positions. These measures form a specific EU policy on higher education. However, within the framework of the **Lisbon Strategy**, which should lead Europe to the most competitive and dynamic knowledge-based society in the world by 2010⁹³, higher education, in particular the role of the universities, has gained importance on the political agenda. Heads of States and Government asked for “not only a radical transformation of the European economy, but also a challenging programme (...) for modernisation of social welfare and education systems”⁹⁴. In 2002, they set the objective of “making (European) education and training systems a world quality reference by 2010”⁹⁵.

In order to ensure their contribution to the Lisbon Strategy EU ministers in charge of higher education adopted in 2001 a *report on the future objectives of education and training* systems and thereby agreed for the first time on shared objectives to be achieved by 2010. In 2002 the Education Council and the Commission endorsed a *10-year work programme* to be implemented through the so-called *open method of coordination*. These agreements, which are also approved by the European Council, constitute the coherent Community strategic framework of cooperation in the fields of education and training (“**Education and Training 2010**”). This work programme integrates all actions in the fields of education and training at European level, including vocational education and training.

Three major goals shall be achieved by 2010: (1) to improve the quality and effectiveness of EU education and training systems, (2) to ensure that they are accessible to all, and (3) to open up education and training to the wider world. Thirteen specific objectives shall help to implement these goals.⁹⁶ The Commission monitors the implementation process by publishing evaluation reports⁹⁷ as well as indicators and benchmarks⁹⁸.

A recent priority of the Commission’s initiatives is the **European Qualifications Framework (EQF)**. This instrument shall facilitate the transfer and recognition of qualifications held by individual citizens, by linking qualification systems at the national and

⁹³ Conclusions of the European Council, Lisbon, March 2000.

⁹⁴ Conclusions of the European Council, Lisbon, March 2000, paragraph 2.

⁹⁵ Conclusions of the European Council, Barcelona, paragraph 43.

⁹⁶ Cf. the overview at http://ec.europa.eu/education/policies/2010/et_2010_en.html (9.3.2007).

⁹⁷ See for instance EUROPEAN COMMISSION, Communication, *Education & Training 2010: the success of the Lisbon strategy hinges on urgent reforms* (11.11.2003).

⁹⁸ Cf. EUROPEAN COMMISSION, Communication COM(2007) 61 final *A coherent framework of indicators and benchmarks for monitoring progress towards the Lisbon objectives in education and training* (21.2.2007); O.J. 2002 No C 142/1; cf. also OPPERMANN, *Europarecht*, § 28 Rz 23.

sectoral levels and enabling them to relate to each other. The EQF shall act as a translational device and shall become one of the principal European mechanisms intended to facilitate citizen mobility for work and study.⁹⁹

2.2.3. *ERASMUS, TEMPUS and Others: Success Stories of EU Policy on HE*

Yet, the key element of EU policy on HE represent the different **action programmes** developed by the Community and legally based on Art. 149 EC Treaty for general (higher) education and on Art. 150 EC Treaty for vocational training. The Community creates the framework conditions and contributes to the financing whereas the member states are implementing the programmes via their national education authorities. For the period from 2000-2006 (“second generation”) 1,8 billion Euro were foreseen for the programme **SOKRATES**¹⁰⁰ covering the action fields COMENIUS (secondary education), **ERASMUS** (higher education) and ERASMUS MUNDUS (cooperation with third countries in the field of HE), GRUNDTVIG (lifelong learning), LINGUA (language skills), and MINERVA (distance learning).¹⁰¹ In particular the ERASMUS programme has motivated thousands of European students to study for one or more semesters in another European country and thus can be qualified as one of the big success stories of European higher education policy.

The professional value of ERASMUS mobility may not be underestimated since a temporary study period in another European country helps to enhance international competences and mobility also for future professional positions. Besides, a study has shown that the professional value of ERASMUS for former students and teachers from Central and Eastern European countries is substantially higher than for those from Western European countries.¹⁰² Making an allusion to the outstanding humanist Erasmus of Rotterdam (1469-1536), himself a truly European scholar, the programme title ERASMUS is an acronym meaning at the same time *European Community Action Scheme to the Mobility of University Students*.

In the field of vocational training the programme LEONARDO DA VINCI¹⁰³ enhances European mobility.

⁹⁹ See http://ec.europa.eu/education/policies/2010/et_2010_en.html (9.3.2007).

¹⁰⁰ O.J. 2000 No L 28/1.

¹⁰¹ OPPERMANN, *Europarecht*, § 28 Rz 24-25.

¹⁰² Cf. the study Oliver BRACHT/Constanze ENGEL/Kerstin JANSON/Albert OVER/Harald SCHOMBURG/Ulrich TEICHLER, *The Professional Value of ERASMUS Mobility*. International Centre for Higher Education Research Kassel, Final Report November 2006, xxiiif.

¹⁰³ O.J. 1999 No L 146/33. For the period 2000-2006 1,8 billion Euro were foreseen.

For the countries of East and South East Europe the EU has initiated the **TEMPUS programme** for university reforms in order to improve curricula including the necessary changes emerging from the Bologna Process, teaching methods and teaching infrastructure by mutual learning and coaching between universities from TEMPUS eligible countries and EU member states. TEMPUS is therefore the EU's flagship programme for higher education cooperation with Europe's neighbours. Currently there are 26 TEMPUS partner countries from the Western Balkans, Eastern Europe, Central Asia, North Africa and the Middle East. TEMPUS III¹⁰⁴ has been in force for the period from 2000 to 2006. The new phase of the TEMPUS programme called TEMPUS IV will cover the period from 2007 to 2013, the annual budget is expected to be in order of 50 million Euros. By fostering institutional cooperation between European universities and their counterparts in the neighbouring countries TEMPUS has funded 6500 projects involving 2000 universities in the past 17 years.¹⁰⁵

Since 1989 the *Jean Monnet Action* enhances higher education and research to issues of European integration ("Jean Monnet Chairs"). The *Robert Schuman Action* encourages lawyers to deepen their knowledge in European Community law.

2.3. The Concept of the European Higher Education Area (EHEA)

2.3.1. The EHEA as the Principal Goal of the Bologna Process

The creation of "the European area of higher education as a key way to promote citizens' mobility and employability and the Continent's overall development"¹⁰⁶ was set as a common European goal already in the *Sorbonne Declaration of 1998*, signed by the Ministers on higher education of France, Germany, Italy and UK. In the following, several European countries accepted the invitation to commit themselves to achieving the objectives set out in the declaration which led to the adoption of the Bologna Declaration in 1999 and thereby the launch of the Bologna Process. The Bologna Declaration also refers explicitly to the **Bologna Magna Charta Universitatum of 1988**. This document contains fundamental principles concerning the organisation and self-understanding of European universities, it emphasises in particular on universities' *autonomy* and *independence*. The Magna Charta was elaborated by a couple of European universities in 1988. Its citation in the Bologna Declaration

¹⁰⁴ O.J. 1999 No L 120/30.

¹⁰⁵ Cf. the press communication TEMPUS: towards a new boost for the EU's international cooperation in higher education, IP/07/273 (Brussels, 2 march 2007). More information available at <http://ec.europa.eu/tempus>.

¹⁰⁶ Cf. Bologna Declaration, 19 June 1999.

demonstrates that the Bologna Process involves not only national higher education authorities but especially the universities as actors of reform.

Therefore it can be concluded that constructing and consolidating the **European Higher Education Area** by 2010 is the principal goal of the intergovernmental Bologna Process. The reforms are intended to make European higher education more compatible and comparable and at the same time more competitive and attractive for European citizens but also for citizens from other continents.¹⁰⁷ Increasing the international competitiveness of the European system of higher education is a declared objective of the Bologna Declaration as it states that “the vitality and efficiency of any civilisation can be measured by the appeal that its culture has for other countries.”¹⁰⁸

The characteristic of the Bologna Process is its **Europe-wide dimension** encompassing also countries of EU’s neighbourhood (e.g. Ukraine). Therefore these countries are also included into the far-reaching approach of the Bologna Declaration intended to build upon and strengthen Europe’s intellectual, cultural, social, scientific and technological potential. The democratic and political effect of higher education and educational cooperation is thus explicitly taken into account, in particular with regard to South East Europe: “The importance of education and educational co-operation in the development and strengthening of stable, peaceful and democratic societies is universally acknowledged as paramount, the more so in view of the situation in South East Europe.”¹⁰⁹

The concept of the EHEA is thus a truly European endeavour transpassing the frontiers of the current European Union member states. It bears in it the chance to expand intellectual, cultural, social, technological, economic and finally democratic development of society also to the European countries currently still facing processes of multiple transition. The EHEA has therefore also a political dimension of deepening European integration and fostering general positive development.

At the same time, the European Commission is supporting the objective of the EHEA according to its legal competencies of coordination and supplementing the member states’ activities as well as by cooperation with third countries (cf. Art. 149 EC Treaty).

¹⁰⁷ Cf. http://ec.europa.eu/education/policies/educ/bologna/bologna_en.html (9.3.2007).

¹⁰⁸ Bologna Declaration, 19 June 1999.

¹⁰⁹ Bologna Declaration, 19 June 1999.

2.3.2. *Interference of EU Policy on Higher Education and the Bologna Process*

In addition to the activities of the member states the European Commission seeks to contribute to the reform processes of the European higher education systems. Since the European Commission is a member of the Bologna Follow-Up Group and the Bologna Board it participates actively in the Bologna Process and supports thereby its principal goal of strengthening the European Higher Education Area. In the European Commission's contribution to the Bologna Process dating from January 2006 the Commission has identified three big reform areas: (1) curricular reform (three cycle system, recognition, mobility), (2) funding reform (diversified university income, tuition fees, grants and loans, EU funding), and (3) governance reform (university autonomy, strategic partnerships, quality assurance).¹¹⁰ The communication enumerates several activities of the Commission supporting Bologna (European Qualifications Framework for Lifelong Learning, European Register of Quality Assurance Agencies, European Quality Labels, EUROPASS, joint doctorates etc.).¹¹¹

Apart from these Bologna-related activities the Commission is pursuing the "Education & Training 2010" work programme adopted in 2002. This integrated policy framework covers not only the Bologna contributions of the Commission but as different activities as for instance lifelong learning strategies, enhanced cooperation in vocational education and training and adult education or the project of a *European Institute of Technology*.¹¹²

Special attention is paid to the **role of universities** since they play a crucial role in creating a "Europe of knowledge". The European Commission identifies the main functions of universities: delivery of education, research activities and drivers of innovation. Europe's 4000 universities should modernise themselves in order to contribute in a better way to the Lisbon Agenda for more growth and jobs. The most important documents concerning the universities issued by the European Commission are the following: *Delivering on the modernisation agenda for universities: education, research and innovation* (COM(2006) 208 final, 10.5.2006), *Mobilising the brainpower of Europe: enabling universities to make their*

¹¹⁰ Cf. EUROPEAN COMMISSION, From Bergen to London. The EU Contribution, 24 January 2006 (rev2), 1.

¹¹¹ For further details see EUROPEAN COMMISSION, From Bergen to London. The EU Contribution, 24 January 2006 (rev2) and the references.

¹¹² Cf. the overview of the main policy initiatives and outputs resulting from the work of the European Commission in the field of education and training since the Lisbon European Council in March 2000 EUROPEAN COMMISSION, 'Education & Training 2010'. Main policy initiatives and outputs in education and training since the year 2000, January 2007. Cf. http://ec.europa.eu/education/policies/2010/doc/compendium05_en.pdf (9.3.2007).

full contribution to the Lisbon Strategy (COM(2005) 152 final, 20.4.2005), and *The role of the universities in the Europe of knowledge* (COM(2003) 58 final, 5.2.2003).¹¹³

2.3.3. *The University as the Cornerstone of the EHEA: The European Commission's Concept of University*

Universities can be qualified as the cornerstone of the EHEA. Reforms of universities are carried out by universities themselves, supported by the national higher education authorities and national legal reforms, encouraged by the Europe-wide initiative of the intergovernmental Bologna Process. In addition to that the European Commission tries to enhance university reforms having a special concept of university in mind. This is particularly related to the Lisbon Strategy. Within this framework universities are expected to contribute to economic growth and more and better jobs in Europe. In its approach the Commission is referring to the European Council: Heads of States and Governments at the informal meeting at Hampton Court in October 2005 acknowledged R&D and universities as *foundations of European competitiveness*. According to that, the Commission identifies three main roles of universities: *education, research and innovation*. However, the Commission stresses additionally the *societal role* of universities which has to be reinforced regarding the culturally and linguistically diverse Europe. The Commission tries to strengthen the *European dimension* of university reforms highlighting the potential benefits of larger scale operation, greater diversity, intellectual richness and enhanced opportunities for cooperation and competition between institutions.¹¹⁴

2.4. The Legal Framework of the EHEA

Since the European Higher Education Area is the goal of the intergovernmental Bologna Process there is no binding legal framework. Moreover, EHEA is a construct of political commitment on a European scale – including non EU member states. Decision making is based on consent. The Communiqués issued at the different ministerial summits represent soft law documents¹¹⁵ with a political effect which cannot be underestimated. The regular report system and stocktaking process leads de facto to an effective mechanism of collaboration. Nevertheless, political declarations on the European level have to be realised by legal reforms

¹¹³ EUROPEAN COMMISSION, COM(2006) 208 final *Delivering on the modernisation agenda for universities: education, research and innovation* (10.5.2006); COM(2005) 152 final *Mobilising the brainpower of Europe: enabling universities to make their full contribution to the Lisbon Strategy* (20.4.2005), and COM(2003) 58 final *The role of the universities in the Europe of knowledge* (5.2.2003).

¹¹⁴ EUROPEAN COMMISSION, COM(2006) 208 final *Delivering on the modernisation agenda for universities: education, research and innovation* (10.5.2006), 2.

¹¹⁵ Cf. e.g. BECHTER, *Zuständigkeiten und Handlungsmöglichkeiten*, 90, 153-158.

on the national level and finally applied on the level of universities. There are no official legal sanctions for non-application except bad reputation on the European scenery. However, this does not function too badly.

As far as the European Union is concerned to contribute to the EHEA its activities are based on Art. 149 and Art. 150 EC Treaty respectively. Especially in higher education policy soft law instruments such as decisions of the Council or communications of the Commission are used very often.¹¹⁶ Unlike the Research Framework Programmes there is no specific legal basis for the action programmes in higher education such as ERASMUS or TEMPUS. They are adopted in the form of decisions and represent thus secondary Community law.

Even if the European Higher Education Area will not meet all aroused expectations by 2010 – Anne CORBETT, researcher at the London School of Economics, for example claims that “The European Higher Education Area may be set to transform the European states’ higher education institutions as fundamentally as the nation state changed the medieval universities”¹¹⁷ – it should have become clear that in future the European dimension of national higher education endeavours cannot be neglected anymore. This holds especially true for the countries of South East Europe preparing themselves for an ever closer integration into the European Union. Higher education and research may play a fundamental role in this process. This development shall be analysed in the next chapter.

¹¹⁶ Cf. e.g. BECHTER, *Zuständigkeiten und Handlungsmöglichkeiten*, 107-138.

¹¹⁷ Anne CORBETT, *Universities and the Europe of Knowledge: ideas, institutions and policy entrepreneurship in European Union higher education 1955-2005*, Houndmills 2005, 192. Cited after Johan P. OLSEN/Peter MAASSEN, *European Debates on the Knowledge Institution: The Modernization of the University at the European Level*, in: Peter MAASSEN/Johan P. OLSEN (eds.), *University Dynamics and European Integration*, Dordrecht 2007, 3-22 (6).

3. European Approaches towards East and South East Europe in Research and HE

3.1. Political Integration of South East Europe by the Means of Research and HE Cooperation

After the war and conflicts of the 1990ies linked to the break-up of the former Yugoslavia strategies of reconciliation, stabilisation and political reintegration of South East Europe and its newborn states had to be developed. After a first period of reluctance the European Union finally adopted the Stabilisation and Association Process (SAP)¹¹⁸ and offered in 1999 for the first time a prospect of EU integration for the whole region, supported by the creation of the Stability Pact for South Eastern Europe. However, during its summit in Zagreb in November 2000, the European Council underlined the inner connection between the progress in the countries of the region towards democracy, rule of law, regional reconciliation and cooperation on the one hand, and the prospect of possible accession to the EU on the other. Therefore, the SAP is based on strict criteria, namely political and economic conditions which have to be fulfilled by these countries. It is also generally based on a regional approach, meaning that regional cooperation is an indispensable prerequisite for further support. Since 2000 much progress has been made, but at the same time, growing differences among the countries of the region have become obvious.¹¹⁹ Yet, the “prospect of EU membership constitutes the most powerful political asset for enhancing stability and good-neighbourly relations in the Western Balkans. (...) Giving up the project of South-Eastern enlargement would seriously endanger the stabilisation process in the region.”¹²⁰

Already in the past, “research and technological development have played a pioneering role in European integration.”¹²¹ This had been demonstrated with the Fifth EU Framework Programme for RTD (1998-2002) in which the countries that became members of the EU on 1st May 2004 already had the same possibilities for participation as existing member states.

¹¹⁸ Cf. e.g. Gerhard JANDL, *Die Beziehungen der EU zu Südosteuropa: Der Stabilisierungs- und Assoziierungsprozess: eine Betrachtung aus politischer Sicht*. Graz: Institut für Europarecht - Graz 2003 (Schriftenreihe des Instituts für Europarecht der Karl-Franzens-Universität Graz 18).

¹¹⁹ Cf. Hedwig KOPETZ, *Democratisation of South Eastern Europe: The Role of Higher Education and Research*, in: Harald EBERHARD/Konrad LACHMAYER/Gregor RIBAROV/Gerhard THALLINGER (eds.): *Perspectives and Limits of Democracy. Proceedings of the 3rd Vienna Workshop on International Constitutional Law* (forthcoming); see also Joseph MARKO, *Zur Notwendigkeit der Europäischen Integration Südosteuropas*, in: Herwig HÖSELE/Reinhold LOPATKA/Wolfgang MANTL/Hildegunde PIZA/Manfred PRISCHING/Bernd SCHILCHER/Andreas SCHNIDER (eds.), *Steirisches Jahrbuch für Politik 2005*. Graz 2006, 79-91.

¹²⁰ Marie-Janine CALIC, *The Western Balkans on the Road Towards European Integration*. Friedrich Ebert Stiftung, *Internationale Politikanalyse Frieden und Sicherheit*, Dezember 2005, 1-15 (13).

¹²¹ Manfred HORVAT/George BONAS, *Integrating Western Balkan Countries into the European Research Area*, in: Martin Felix GAJDUSEK/Andrea Christiane MAYR/Miroslav POLZER (eds.), *Science Policy and Human Resources Development in South-Eastern Europe in the Context of European Integration*. Vienna 2006, 17-25 (18).

3.2. Austria's Commitment

It must be stressed that Austria played and still plays a leading role in promoting the integration of the Western Balkans especially on the science policy scale.¹²² In December 2000 the “Vienna Workshop” convened for the first time research and technology policy makers from South East Europe with representatives of the neighbouring countries Austria, Bulgaria, Greece, Hungary, Italy, Romania and Slovenia. It became clear that specific action programmes for the region were needed within the EU Framework Programme s. Other workshops and conferences followed.¹²³

A milestone in the rapprochement of the scientific activities of South East Europe was achieved during the Greek presidency in the first half of 2003 when the “EU-Balkan countries Action Plan in Science and Technology” was adopted in June 2003.¹²⁴ The implementation of different work programmes followed. Nevertheless the European involvement of researchers from South East Europe remained under its potential.

Two Austrian initiatives shall be mentioned because they played and still play an important role in enhancing the scientific integration of South East Europe into the European Research Area. The South East European Era-Net (SEE-ERA.NET) Project is a networking project funded under FP6 and aims at linking research activities within existing national, bilateral and regional RTD programmes. The first joint call for research projects in 2007 was highly overbooked and showed a promising potential for further research cooperation in the region.¹²⁵ Out of the experiences with the pilot joint call the project consortium representing a growing network of policy makers and funding bodies agreed on a policy paper containing strategic recommendations for better connecting South East European research teams with Europe-wide counterparts: The White Paper and the Joint Action Plan of September 2007 propose concrete joint actions by setting up of a regional RTD programme (SEE-ERA.NET repsee).¹²⁶

¹²² For an overview cf. Barbara WEITGRUBER, *The European Higher Education and Research Areas: A specific Austrian responsibility for the Western Balkan Countries? Overview of the developments in the cooperation with South Eastern Europe in higher education and research from 1998 to 2007 with a special focus on the Austrian commitment.* Presentation at the Final Conference of the UnivSOE Project 29/30 June 2007.

¹²³ Cf. HORVAT/BONAS, *Integrating Western Balkans Countries into the European Research Area*, 18-20.

¹²⁴ Cf. HORVAT/BONAS, *Integrating Western Balkans Countries into the European Research Area*, 21f.

¹²⁵ Concerning the wide-ranging activities of the SEE ERA Net project see e.g. <http://www.see-era.net/> with links to further publications.

¹²⁶ Cf. the special edition of *see-science.eu eJournal special 01 (2007)* at <http://see-science.eu/ejournal/list>.

The Specific Support Action ERA WESTBALKAN focused on establishing efficient National Contact Points (NCP) for the FP6.¹²⁷

The Austrian EU presidency of the first half of 2006 paid special attention to the advancement of the integration of South East Europe in research and higher education. Not only conferences were organised but also a “Steering Platform on Research for the Western Balkan Countries” with an own Information Office based in Vienna was created serving as a think tank and platform for the exchange of experiences and information. In the meantime – operating from January 2008 onwards – the [wbc-inco.net](http://www.wbc-inco.net) was set up permitting a sustainable continuation of the joint efforts and support for the Steering Platform funded under FP7.¹²⁸

Austria acts thereby as an important coordinator and mediator of European initiatives in favour of South East Europe. Since the majority of these coordination activities are based on personal contacts and trust the high personal commitment of the involved persons is a prerequisite and reason for the Austrian success in this field. The sustainability of political support for these initiatives is a necessary condition for further advancement.

¹²⁷ See <http://www.bit.or.at/erawestbalkan/>.

¹²⁸ See <http://www.wbc-inco.net/>.

III. Institutions, Structures and Functions of Research and Tertiary Education in South East Europe: A Comparative Analysis of Empirical Findings from the SEE Country Reports

1. The Institutional Setting of Universities in SEE and Its Challenges

Comparing the empirical findings from the country reports needs an analytical framework of the institutions and processes which – in theory – form a **policy cycle** for research and tertiary education in order to find out which functions are effectively performed or not in SEE countries, regionally or with regard to integration into the ERA and EHEA.¹²⁹ The following sub-chapter is thus subdivided into a description and analysis of the **institutional setting and processes** of research and teaching by **universities** with regard to external and internal dimensions, i.e. institutional “autonomy” and accountability through system-wide regulation and policy-planning, financing and budgeting, as well as internal governance and management structures. This part is followed then by a **functional analysis of research and technological development, teaching, internationalization, and inter-ethnic cooperation**.

1.1. The Political Context

As far as the institutional setting of universities in SEE as such is concerned, after the fall of communism the re-establishment of universities’ “**autonomy**” became the catch-word in all countries of transition. However, as we can see from the country reports, the very term “autonomy” can have rather different meanings: First and foremost with regard to the communist legacy, autonomy was the mantra used to **get rid of the direct and strict control of the communist party** which used central planning of financing, staff appointments and quota for access of students to universities as means to “produce” the necessary “cadres” for all spheres of politics, economics and culture, i.e. the civil service, the planned labour “market” or “cultural” industries such as education, media or arts and sciences. The quest for the re-establishment of (individual) academic freedom and institutional autonomy in order to get rid of direct and strict political management and control of research and tertiary education was thus legitimized not only by the reference to the common European, pre-communist history of the establishment of universities in SEE¹³⁰, but also by the notion that central planning as such and with regard to research and tertiary education failed in the end to make

¹²⁹ See also Lazar Vlasceanu/Lewis Purser, *From Words to Action: Approaches to a Program*. UNESCO/CEPES Papers on Higher Education, Bucharest 2002.

¹³⁰ This was stressed again and again by all of our senior researchers from the region as well as by interlocutors from the region in interviews and at the workshops and conferences and gives evidence of their high identification with a Greater Europe in stark contrast to junior researchers who look much more to the Anglo-Saxon world as a role model for research and teaching.

communism and communist universities “effective”, i.e. competitive enough to be able to compete with Western economies based on market systems. This holds true also for the peculiar, highly decentralised Titoist self-management system since in practice there was no real “competition” possible between self-management units, but again a strict hierarchy following the files and ranks of the communist party system.

Hence, the conditions of transition to democracy and market economy posed the problem for universities and other institutions, in particular academies of sciences and other non-university research institutions, **not** to re-establish “**autonomy**” as such, **but** to find out **which form** of autonomy and **how much freedom from state interference** they need. This raises a lot of “technical” governance and management issues beyond “philosophical” speculations on freedom and autonomy.

First of all, how much influence shall “the state” retain? Since major sectors of research and tertiary education, in particular public universities, remain to be financed mainly from the state budget, state financing also under a **democratic political system** based on the notion of rule of law **requires**

- a) “legality” and a **system-wide regulation** in terms of a constitutional and legal framework as well as **policy planning** for the institutions and processes of **governance and management** of research and tertiary education,
- b) “**accountability**” in terms of responsiveness to the needs of particular constituencies such as students, the “economy” or “civil society” as “beneficiaries”, and
- c) “**efficiency**” in terms of capacity *and* “**effectiveness**” in terms of out-put in the performance of the normatively ascribed functions.

Seen from this perspective, the “**liberalization**” from state interference **cannot end up in** “**absolute**” freedom and autonomy, but remains a delicate process of “balancing” institutional autonomy with accountability, efficiency and effectiveness through various mechanisms of system-wide policy planning on the one hand, and supervisory instruments, in particular for quality assurance, on the other.

Secondly, state interference is not the only “threat” for academic freedom and institutional autonomy. As was outlined above in the introduction, the **processes of globalisation** and **European politics** with the Lisbon Agenda created the notion of a “knowledge-based”

society and economy with a strong inclination for “innovation” and “competitiveness” as the benchmarks for research and tertiary education. When research, tertiary education and innovation are addressed as the new “triangle” of European politics, it becomes obvious that the logic of “value-for-money” for both democratic state governance as well as market economy is replaced by an essentially **different instrumentalisation** of research and tertiary education posing the question how much input from the markets and their corporate agents do we need or how much of their interference can research and tertiary education afford? Paradoxically speaking, as this question was raised by Anna Krasteva in the final conference, how much do communism and post-communism differ in their instrumentalisation of research and tertiary education? Again the devil seems to lie in the **institutional details** of policy planning and internal governance and management structures, i.e. how much influence business agents will have through participation in the decision-making processes in all forms of councils, agencies, and internal governance and management mechanisms of universities.

The following comparative analysis of the country reports¹³¹ will give first a description of the legal and institutional setting of universities and non-university research and tertiary education, followed then by the analysis of the functions performed through a comparison of the benchmarks of autonomy and accountability as well as efficiency and effectiveness in research, teaching, internationalization and inter-ethnic cooperation. In the end, policy recommendations will be elaborated on the basis of the SWOT analysis and the policy choices between autonomy and accountability and autonomy versus instrumentalisation.

1.2. System-wide Regulation and Policy Planning

1.2.1. Croatia

Autonomy is guaranteed by the Constitution for both public and private institutions. In reality autonomy was given to faculties as separate legal entities, with the **legal framework** continually changed: the 1994 Law on Higher Education was amended in 1999 and 2001; in 2003 a Law on Scientific Activities and Higher Education and a Law on Scientific Research Activities together with a Law on Recognition of Foreign Educational Qualifications replaced the older regulatory framework after the Bologna Declaration had been signed in 2001. The binary structure of higher education institutions established by the 1994 Law is still in place: there are scientific higher education institutions and professional or polytechnic educational

¹³¹ If not separately indicated through footnotes, all the information and data on the respective countries are taken over from the country reports with include detailed reference to the respective sources.

institutions which could be established by governmental decree. The “integration” of universities by establishing universities themselves as legal persons shall have been completed by 2007.

As far as **system-wide policy planning** is concerned, a National Scientific Research Program was already adopted in 1996 and amended in 1998 and 2001. In 2003 a Strategy of Development for the 21st century was adopted by the government and fine-tuned by an “Education Sector Development Plan 2005 – 2010” and a Program for “Science and Technology Policy of the Republic of Croatia 2006 – 2010.” As can be seen from the organizational chart of this program, system-wide regulation and policy planning is thus institutionally layered and diversified on **three levels**:

At the bottom of the institutional hierarchy, the first organisational pillar is composed of 104 public higher education institutions, subdivided into seven universities including 81 faculties and other constituent parts, 16 public colleges and polytechnics and 16 private schools and polytechnics. The public institutions form a Rectors’ Conference including a Committee for the Implementation and Follow-up of the Bologna Declaration and a Council of Polytechnics and Colleges. The second pillar is composed of 26 public and 13 private scientific institutions and the third pillar consists of 6 technological, research and development centres. On top of the hierarchy is the Croatian Parliament and the Ministry of Science, Education and Sports which performs the lead role in the executive branch. In addition, there are a National Science Council, a National Council for Higher Education, and the Science and Higher Education Funding Council connected to the Parliament, whereas the Innovation System Council is joined to the Ministry. The mid-layer is composed of institutions responsible for monitoring, evaluation, and system development as well as program implementation such as the Agency for Science and Higher Education, the Academic and Research Network CARNet, the Accreditation Agency, the Technology Council, the National Foundation for Science, Higher Education and Technological Development, and the Croatian Academy of Sciences and Arts.

As can be seen from the frequent changes of the regulatory framework, the **Tudjman era** was a **lost decade**. Critical research describes this era as a time with lack of concepts, absence of specialized public policies, and problems of functional regional and EU integration since the National Scientific and Research program of 1996 was never systematically implemented. Only **after the regime change** were S&T based on a broader **development strategy** and **with**

progress in the SAP also the **institutional setting** with the establishment of Councils and Agencies **broadened and diversified**. However, despite of the fact that the expert members of these Councils are appointed by the Parliament according to a sectoral and regional key on proposal of the institutions on the level of universities and other higher education and research institutions, they are – like the agencies which have been created - obviously targeted with the role of monitoring and assessing the performance record of research and higher education institutions.¹³² In actual fact, the advisory expert opinion of the Councils, supported by the operational activities of the Agency, has a decisive influence on the government's decision making to finance institutions or to close them down.

In conclusion, the political commitment to create a regulatory framework and system-wide policy planning has been implemented in Croatia by the adoption of the respective laws, strategies and development plans as well as the establishment of the intermediary level of advisory and supervisory institutions. However, **system-wide policy-making** seems to remain a **domain reserve of the executive branch** if participation is not seen as a bottom-up process, but has to be “identified and supported” by the Ministry. Croatia has for sure overcome the communist structure and effectively tackled the communist legacy with regard to system-wide regulation and policy planning in the sector of research and tertiary education by reframing the institutional set up. However, as an external evaluation has stated, there is still a “strong tendency towards **centralised management** with an excessively powerful role for the Ministry in the planning and implementation of decisions”, since the Ministry does not only decide broadly on strategy and priorities, but also on the allocation of resources at the level of subunits of universities and on individual appointments.

1.2.2. Bosnia and Herzegovina

Due to the **territorial, institutional and ethnic fragmentation** laid down in the Dayton Peace Agreement, research and tertiary education is not a national prerogative, but devolved to the level of the Entities, i.e. Republika Srpska (RS) and within the Federation of BiH (FBiH), due to her “federal composition”, even to the level of the 10 cantons as her component units. This multiple fragmentation **prevented system-wide regulation and policy planning from the very beginning by constitutional fiat**.

¹³² See Republic of Croatia-Ministry of Science, Education and Sports, Science and Technology Policy of the Republic of Croatia 2006 – 2010, Zagreb 2006, p. 18 revealingly reads “The Ministry will identify and support efforts of the S&T community to participate...”.

There are now a RS Law on Higher Education and 8 cantonal laws in this field, whereas research is regulated by laws in the RS and only in the canton of Sarajevo. In addition, there are respective laws in the District of Brcko. A Framework Law on Higher Education on state level to provide the legal basis for coordination of this sector was adopted by the BiH Parliament only in 2007 after years of political resistance from Entities' authorities.

In RS the Ministry of Education and culture is responsible for policy-making and administration of higher education, whereas in the Federation of BiH each cantonal ministry is in charge of higher education, with only five cantons with a university in place.

There are currently eight public universities, two in RS and six in the Federation of BiH, four of which have been created only after the end of the war in 1995, namely "East Sarajevo" in RS, the Croat run, so-called Mostar-West, Bihac, and Zenica in FBiH. Moreover, six "private" universities, five in RS and only 1 in the FBiH, have been established during the last three years. They are, however, not "full" universities, but resemble more professional schools for public administration, business, and communications.

A Bosnian Rectors' Conference has been founded in 2005 and its operationalization is now supported by the German Rectors' Conference in the framework of an EU Twinning-Project. In addition, there are two Academies of Sciences on Entity level, several non-university related public research institutions as well as public and private "Higher Schools" which resemble the type of colleges such as police academies, schools of tourism etc. including religious higher education institutions such as the Vrhbosna Divinity College and the Franciscan Theological College.

Universities are organisationally subdivided into faculties, institutes and (research) centres. In practice, faculties of universities, with the exception of the University of Tuzla which is already "integrated", are "independent" legal entities

As far as system-wide policy making is concerned, after signing the Bologna Declaration and trying to implement the international responsibilities taken over, the state level Ministry of Civil Affairs tried to develop more and more activities in order to effectively develop a coherent research and tertiary education policy strategy with the support of a Working Group on Higher Education, a Working Group for Development of the National Qualification

Framework and a Working Group for Quality Assurance on state level. With the support of a TEMPUS project also Centres for Quality Assurance were established at all public universities including training for staff as a means of capacity building. In addition, a state level **Agency for Development of Higher Education and Quality Assurance has been** established acting under a steering board which has to include among its members at least 50% university professors, but is not yet operational.

However, despite of these recent developments at state level, the **RS Ministry** of Education and Culture with the support of a RS Council for Quality Assurance and Development of Higher Education, composed exclusively of university professors with the right to cast votes in decisions, is mainly **exercising the power for policy planning**, implementation and monitoring for RS universities, whereas at the level of **FBiH the Ministry** of Education and Science performs **only a coordination role** for the cantonal institutions. In effect, however, the steering boards in the cantons and the HE Council in RS are used as **instruments to increase local political and/or ethnic control** over the universities.

In conclusion, the legal framework and institutional setting of **system-wide regulation and policy planning** of research and tertiary education is **in a limbo**. However, this state of affairs provides also for the possibility to include strong bottom-up participatory elements for representatives of academia from the very beginning in this process of institution-building for system-wide policy planning which is obviously driven by the prospect of EU integration and international responsibilities taken over against ongoing strong political resistance to delegate powers in this field to the state level.

1.2.3. Serbia/Montenegro

System wide regulation and policy planning in Serbia and Montenegro, forming the Federal Republic of Yugoslavia from 1992 to 2003 and a State-Union afterwards, has to tackle the **legacy of the Milosevic regime** and the **political disintegration** into two separate states in 2006, when Montenegro became an independent state in the end. The **constitutional framework** as such could only be called a **Potemkin village** at best and with the Law on Universities in 1998 the Milosevic regime ousted all academic staff from universities who did not sign a declaration of loyalty. The new Serbian constitution of December 2006 provides for academic freedom and institutional autonomy, but professors and other academic staff purged from universities and other academic institutions were to a great extent never reinstated into

their positions. The Montenegrin constitutional framework does not refer to academic freedom or institutional autonomy, but these concepts are regulated in more detail in the Law on Scientific Research Activities of 2005.

A closer look into the institutional setting in **Serbia** reveals that there is a **predominance of the executive branch** with two Ministries responsible for the sector, namely the Ministry of Education and Sports for tertiary education and the Ministry of Science for research which determines and finances research projects directly. The National Council on Higher Education is established as an advisory body whose members are formally elected by the Parliament. This body is responsible for monitoring and supervision of higher education institutions and can make proposals to the Ministry. In addition, there is an independent Conference of Universities in order to co-ordinate policy planning vis-à-vis the Ministry of Education. The Conference was given the power to nominate 10 out of the 16 members of the Council. Nevertheless, insofar as the Ministry finally appoints the members of the Council on HE, directly allocates the financial resources to the Universities and controls spending, and determines the number of students for admission, there seems to remain a political predominance exercised through the Ministry against bottom-up effective participatory influence through the Conference of Universities.

There is a **binary institutional system** of higher education institutions with six public and eleven private universities as well as so-called “Higher Schools” which will be dealt with below in the sub-chapter on teaching.

The institutional setting for system-wide regulation and policy planning in **Montenegro** seems is again **centralized**, but much simpler since there is only one university to be taken care of: The government and responsible Ministry of Education determine the National Strategy of Higher Education and provide for state funding and co-financing of private institutions. It has outsourced all preparatory, monitoring and supervising activities in this regard to a Higher Education Council the majority of whose members are appointed by the government on proposal of the University and Academy of Sciences, whereas a minority of members are nominated by the Association of Employers and the NGO sector.

1.2.4. Kosovo

The **University of Prishtine** was seen in communist times as well as during the Milosevic regime as hotbed of Albanian nationalism and dissidence. Therefore tertiary education was **strongly politicized** which remained a problem for academic freedom and institutional autonomy also under a multi-party system with the establishment of the UNMIK administration in 1999. In addition, institutions of research and tertiary education face the **legacy of decades of strong ethnic segregation**. Moreover, despite of the UNMIK administration, the territory north of the river Ibar including the divided town of Mitrovica, was never controlled by UNMIK since it never – with the exception of police forces - effectively dismantled so-called “parallel institutions” sponsored and administered by the Serb government in Belgrade. Thus, until the very day, a second university situated in North-Mitrovica is “illegally” run by Serb authorities. The following observations are thus restricted to the Kosovo-Albanian institutions.

The Ministry of Education, Science and Technology is responsible for “system-wide” regulation and policy planning. Only a year ago, also a Council for Education, Science and Technology was founded by the Ministry in order to advise the Ministry in Higher Education matters. In addition, a “Group for the Promotion of the Bologna Process” was established, composed mainly of university professors. Besides this structure of so-called “Provisional Institutions of Self-government”, there is also strong leadership exercised by international organisations via the UNMIK-Administration. In particular OSCE, Council of Europe and EU play an important, however, not always very well co-ordinated role in system-wide policy planning of the entire sector.

In conclusion, in addition to the **unclear status issue**, the **lack of coordination among international organisations** even within the UNMIK framework and the strong politicization, the executive and university system form a **closed political elite**. Many public positions in the executive are filled with university professors so that the empirical question who influences whom in system-wide policy planning and regulation does not make sense.

1.2.5. Macedonia

Due to the role which tertiary education plays in all processes of state-formation and nation-building, in particular for a young nation which came into “being” only in 1945 when the Republic of Macedonia was for the first time established as a distinct political entity within

the federal framework of communist Yugoslavia, it is no wonder that **access to and equal participation in the system of universities** proved to be a **highly sensitive interethnic issue** after Macedonia's independence in 1991. As long as the SFRY had existed, many students from Macedonia with Albanian origin undertook their studies at the University of Prishtine in neighbouring Kosovo, where courses were run in Albanian language. With the breakdown of SFRY and Macedonia's independence this was, however, no longer possible. Hence, from the very beginning, the establishment of a university with Albanian as language of instruction became one of the main political claims of Albanian parties, reinforced by the fact that the Macedonian government, based on the constitutional provision declaring the (Slav) Macedonian language as "official language", refused to introduce, in particular at the University of Skopje, courses in all subjects in Albanian language as a systematic language policy in favour of the Albanian "minority." Therefore, a new university with Albanian as language of instruction was established by Albanian intellectuals in Tetovo in 1994, however officially closed down by the police and further on run "illegally." Only after the violent clashes in Macedonia in 2001 settled by the Ohrid Agreement, this situation was overcome with the establishment of the trilingual and private South-East European University in Tetovo under the strong leadership of then OSCE High Commissioner on National Minorities, Max van der Stoep. Finally, in 2004 also a public university was established in Tetovo which runs most of the courses in Albanian language.

System-wide-regulation and policy planning is legally based on the Law for Higher Education of 2000. The Government elaborates four year programs for tertiary educational activities and submits the plan - after consultation of the Inter-University Conference, composed of all Rectors, representatives of the university senates, two deans from each university and students' representatives - for adoption to the parliament. The Ministry of Education and Science then administers this sectoral plan supported by a Fund for Tertiary Education, a Board for Accreditation and an Agency for Evaluation. The Ministry in actual fact determines the budget of the Fund which is run by a Managing Board, composed of 15 members. Seven of them are appointed by the Government on proposal of the Ministry, while eight are elected by the Inter-University Conference. This Board decides on the allocation of the budget to the institutions of tertiary education. There is, however, no legal responsibility to finance also research projects.

In conclusion, **strong centralization** remains a main characteristic of the Macedonian system which is **combined**, however, also **with a high level of participation**.

1.2.6. Albania

Despite of the fact that a new Law on Higher Education was adopted only in 2007 which replaced the 1994 law, the entire institutional setting for system-wide policy planning in the research area still **resembles to a great extent the communist system** with the executive on top of the hierarchy and 24 public research institutions which are organisationally part of different line-ministries. A former Interministerial Committee of Science and Technology was replaced by the Ministry of Science and Education. The Ministry is in charge of system-wide policy planning with a Council for Higher Education and Science and a Council of Scientific Policy and Technological Development as advisory bodies. Whereas the latter is composed of the ministerial representatives and five scientists with the Prime Minister as Head of the Council, the former is composed of the Minister of Higher Education, the Head of the Academy of Sciences, the Head of the Rectors' Conference, the Minister of Finance and 15 scientists representing all disciplines. Advice given is functionally oriented to the socio-economic development of Albania based on the assessment of the performance of universities and other institutions. The Council of Ministers finally decides on the national programs. Since 1999 six national programs on priority areas have been determined. In addition, also a Council and Agency of Accreditation were established. The Ministry – with the support of the Councils - also prepares the budget proposals, budget allocation and determination of evaluation criteria and does top-down line administration of universities and research. However, competences and organisational differentiation are not very well developed so that they remain unclear. A research fund has never been established.

There is a **binary institutional system** of tertiary education with eleven public universities and eleven private universities as well as “Higher Schools” such as a Police Academy. In addition, there is a post-graduate school, the School of Magistrates for the training of judges and prosecutors.

In conclusion, the entire institutional set-up is a **strongly centralised** system with executive leadership.

1.2.7. Romania

The autonomy of universities is guaranteed under the constitution, but interestingly not academic freedom as a human right. According to Article 32 of the Constitution, education is free of charge. Legal regulation of the entire system of research and tertiary education is rather split up into different substantive laws: the Law on Accreditation was adopted in 1993, the Law on Education in 1995 so that a draft Law on Higher Education is pending now again. The Statute on Teaching Staff of 1997 provides for individual academic freedom. The Law on the Organisation of University Studies adopted in 2004 was based on the Bologna process. In 2005 the Law and Quality Assurance was adopted. Every university is based on a specific law by which it is accredited. All of these laws were adopted under the parliamentary rules of procedure foreseen for “emergency cases” in order to exclude the respective parliamentary opposition from effective participation.

There is a **binary institutional system** of tertiary education with 56 public and 18 private universities. In addition, there are also “college-type” schools or academies and post-graduate schools, for instance for Magistrates.

The Ministry of Education and Research still is the dominant institution for system-wide regulation and policy planning, despite of the fact that there is by now a plethora of advisory bodies which, in fact, do more administration and supervision on behalf of the Ministry. The National Authority for Scientific Research which is subordinated to the Ministry supervises national research institutes and research institutes run by industry and the R&D strategy adopted in 2005. The National Research Council allocates funds on a competitive basis under strict guidance of the Ministry. The Council for Financing Higher Education gives proposals on annual budgets of the respective institutions. The Council of Principals, composed of the heads of all higher education institutions and the only independent body, played an important role in the curricula reform. The National Agency for Accreditation and Academic Evaluation in Higher Education included economic partners and was subordinated to parliament, but was replaced by the National Agency for Ensuring Quality of Higher Education, being responsible for accreditation and quality assurance.

In conclusion, the Romanian system is characterized by **strong executive leadership**. One of our senior experts came – due to the plethora of advisory bodies – to the conclusion that “more agencies result in less effectiveness.”

1.2.8. Bulgaria

The legislative framework is determined by the Higher Education Act of 1995 which is, however, amended almost every year and the Scientific Research Promotion Act of 2003.

Again the Ministry of Education and Science forms the executive centre of system-wide regulation and policy planning. Its European integration department hosts the “National Centre for Academic Acknowledgements and Mobility” responsible for diplomas and student mobility. Other tasks are again outsourced to Funds, Councils and Agencies. The Scientific Research Fund is governed by a Council which is composed of the Minister of Education and Science, representatives of the ministries of finance, economy and agriculture, seven representatives of universities and specialised tertiary schools on nomination by the Rectors’ Conference, four members of the Academy of Sciences, and two representatives of organisations of employers. The Council decides on financial support in implementation of the National Strategy for Scientific Research in line with National Plan for Economic Development. The National Strategy itself defines priority areas. The Research Fund gets its money from the state budget, own revenues, and donations. In addition, there is also a National Innovation Fund run by the Ministry of Economy and Energy.

The National Evaluation and Accreditation Agency shall replace direct executive control through regulation and enable competition. It is, however, affiliated with the Council of Ministers. The assessment is done by institutional and program accreditation.

There is a **binary institutional system** of tertiary education with 37 universities and “higher”, i.e. specialised schools as well as 5 private universities and some 16 private schools.

In conclusion, also in Bulgaria there is strong **executive leadership with some participation** from academia and more influence by economic agents and strategic orientation to economic development.

1.2.9. Greece

The executive centre for system-wide regulation and policy planning are two ministries. First, the Ministry of National Education and Religious Affairs which is supported by a National Council of Education. This Council is subdivided into a Council for Higher Education and a Council of Technological Education as advisory bodies. Secondly, the Ministry of

Development and its General Secretariat for R&T - which had been a ministry itself before - are supported by the National Council for R&T. Research proposals in the framework of R&T are “managed” by the General Secretariat. Both ministries run their own research institutions. Moreover, there are National Research Centres established by Presidential Decree. In addition there is also an Inter-University Research Council which was already established in 1992. Since 2007 comprehensive four years’ academic strategic plans are elaborated. The respective law established also a Secretary in each university with the task to coordinate and facilitate actions of university bodies.

Since 1982 the educational system has got a **binary structure**: Highest Educational Institutions (Universities) and Technological Educational Institutions (Colleges). Through a series of (continuous) legal regulation and amendments the latter were “upgraded” and equalised in status. Currently more than 60 laws and by-laws are in force. The same year brought also democratic participation and seriously affected the previous monopoly of professors in the governance and administration of universities. In 2007 there were about eight months of strikes against the introduction of private universities through constitutional amendments by a coalition of students and professors for fear of market-oriented competition as we learned by interlocutors in our site-visits. In addition, there is also a “third sector” of educational institutions with schools or “academies” for military, police or tourism.

The “Hellenic Quality Assurance Agency in Highest Education”, established in 2005, is doing seminars for rectors, but started with evaluation work only in 2007.

A Draft law on research and development presented by the Ministry foresees the establishment of a National Program for R&T to be run by an Interministerial Committee on R&T. A National Council and a National Organisation for R&T shall be established under private law and provide for more transparency in coordination and supervision.

In conclusion, the Greek system is also characterized by **strong centralisation** and executive predominance despite councils and agencies which do, however, not allow for academic participation. At the same time there are many parallel structures and in-transparency through too many bodies involved. In addition, there is also **strong inertia and conservatism** among both professors and students as we could observe from the protests against the introduction of private universities.

1.3. Financing and Budgeting

Financing and budgeting of universities must be describes and analysed as an important benchmark of institutional autonomy and accountability.

1.3.1. Croatia

Until recently the Ministry directly allocated state funds to the faculties and research institutes. With the implementation of the legal requirement to create “integrated” universities until the end of 2007, since January 2006 the universities are now funded from the state budget on the basis of **lump sum funding** so that it is now in the competence of the university organs to allocate the money to the respective component units on the basis of an in-put and out-put evaluation. State funding of R&D amounts to 1.14% of the GDP. Additional funding of universities comes from other public authorities (regions, municipalities), tuition fees, market oriented research, publication and consulting activities, and donations.

Based on their role of evaluation of the effectiveness of research and higher education teaching institutions, the Councils submit proposals on the allocation of financial resources foreseen in the budget for those activities.

1.3.2. Bosnia and Herzegovina

State **financing dramatically dropped** from 1.5% of the GDP before the war to 0.05%. Universities, due to the territorial devolution of powers, are financed from the budget of the Entities and cantons. However 90% or more of state budgeting is used for salaries of research and teaching staff. In addition universities have to raise money from student fees, services which they offer on the market, and donations. In the canton of Sarajevo the amount of additional financial resources, which is necessary to run the University, goes up to 40%. In case of the Dzemal Bijedic University in Mostar this amounts even to 60% of the university budget.

1.3.3. Serbia/Montenegro

State financing of tertiary education in Serbia amounts only to 0.4 % of the GDP. Public universities are **directly funded** by the Ministry of Education from the state budget on the basis of detailed budget plans to be elaborated by the Universities. State funding covers between 56 % and 85 % of university budgets. In addition, they generate financial resources from tuition fees, expert services and consulting activities and donations.

In Montenegro, state funding amounts to 0.04 % of the GDP. The university budget is **state funded**. In addition, it receives financial resources through tuition fees, services and donations. The number of students for admission is, however, determined by the government. Budget control is carried out by independent auditors who are appointed by the Management board.

1.3.4. Kosovo

60 % of the budget of the University of Prishtine comes from **state funds**, whereas 40% are raised by tuition fees. Since 2006, the University autonomously administers the financial resources which are generated by the university itself such as the tuition fees, revenues from services or donations. According to the government program, 0.7 % of the GDP are reserved for research, in actual fact the rate is certainly below that figure. Even the estimated 0.5 % rate seems to be overestimated.

1.3.5. Macedonia

Budgeting is done **through** the **Fund** for Tertiary Education Activities, where academics play an important role in Management structures of Boards and Agencies. Additional funds come from tuition fees, services for the market, and donations. State funding for tertiary education decreased from 1.4 % of the GDP ten years ago to 0.47 %, while the research quota is around 0.03 %. In contrast to the University of Skopje, the state funded budget of Bitola amounts to only 30 %, the rest comes from fees and donations. The private South-East European University in Tetovo receives no state funding, but operates on the basis of fees, commercial activities, consulting, and donations. The private European University in Skopje is a typical for profit teaching university without any research activities which tries to make as much gains as possible through fees.

1.3.6. Albania

Universities are almost **exclusively funded** from the **state budget**. The research quota amounts to 0.1 % of the GDP. There is strict financial audition through the Ministry. The individual budget of universities is based on the number of students and staff which means in reality in-put budgeting without link to the evaluation of standards. Accreditation and evaluation remain thus dysfunctional. However, the government predetermines numbers of students for admission and staff, so that there is no financial autonomy or material incentive whatsoever.

1.3.7. Romania

According to official figures 2.0 % of the GDP are spent on education and 0.38 % are invested into research whereby 40 % come from funds of economic agents. As far as budgeting of universities is concerned, the Romanian system is again characterized by **in-put budgeting**. The government determines quota for students of faculties to be paid from the state budget so that this number of students can study without fees. Thereby free access to universities is “guaranteed”. Within faculties, however, there is an in-fight for allocation without pre-determined criteria. Despite of existing out-put evaluation, there is **no functional relationship** between in-put budgeting and quality assurance. Moreover, universities can accept additional fee-paying students. Those fees are determined by the academic senate. Nowadays there are about 50 % fee-paying students in practice.

1.3.8. Bulgaria

The state quota for higher education is 0.8 % of the GDP, for research it is 0.48 %. There is almost no private investment. Financing is **highly centralised** in the government and makes competition between universities practically impossible. The universities elaborate their own budget through the Boards. Financial means come in addition from donations, own revenues from research, consultancy, and tuition fees.

1.3.9. Greece

All universities are 99.9 % **state funded**. Since 1963 university education is for free, but a numerous clausus system is in place. The annual budget of each university has to be approved by the Ministries of Education and Finance. The Ministry of Education decides each year on a quota for admission of students on the basis of nation-wide exams. Committees of research at each university try to raise additional financial recourses. Each university can establish its own research institutes with independent financial management. The research quota amounts to 0.6 % of the GDP.

1.3.10. Comparison

The following table shows the figures for **state financing of tertiary education and R&D** in % of the GDP

	Higher Education: % GDP	R&D: % GDP
Croatia	0.90 (2001)	1.24 (2004)
BiH	n.a.	0.05- 0.15 (2006)
Serbia	0.4	0.50 (2004)
Montenegro	0.04	0.18 (2005)
Kosovo	n.a	0.5
Macedonia	0.47	0.25 (2004)
Albania	n.a	0.17 – 0.19 (2003)
Romania	0.8 (2001)	0.46 (2006)
Bulgaria	0.6 (2001)	0.48
Greece	1.20	0.57 (2006)
Slovenia	n.a	1.59 (2006)

Source: Eurostat

This table clearly demonstrates:

Firstly, there is an urgent need to get much more and comparable data and secondly, there are tremendous differences among the various countries which need further research for explanation.

1.4. Internal Governance and Management Structures

1.4.1. Croatia

Universities are governed by an academic senate and the Rector and his collegium (Deputy Rectors). The senate is composed of the Rector, professors and other academic staff proportionally representing the component units of the university, students' representatives as well as representatives of management staff. The Rector is elected by the Senate on proposal of an electoral commission of the Senate. The Senate is responsible for strategic development planning, adopts the university budget on proposal of the Rector's collegium, approves appointments of professors and heads of the units of the university, determines the admission policy and student quotas for each year, defines and monitors quality standards, and decides on the employment plan for academic staff.

In conclusion, internal governance and management structures provide in theory for an **almost “absolute” self-government** mechanism by “academia” which resembles the old communist system of “self-administration”. The idea of professional management is not yet

discussed. Although the Senate is in theory actively engaged in strategic planning, the Ministry can exercise strong and direct influence through state funding and approval of appointments etc. Moreover, the intermediary level of Councils and Agencies is not an instrument of bottom-up participation in policy-making, but seems to be more an instrument of executive top-down control and sanctioning. Croatia has replaced direct state and central planning and line management and control through a **diversified institutional framework for policy planning and supervision** of implementation, but in actual practice the strong legacy of state executive domination remains in place so that a **balance** between bottom-up participation and top-down supervision is **not yet achieved**.

1.4.2. Bosnia and Herzegovina

Universities are governed by the Senate and the Rector and his collegium (Vice-rectors), whereas the university administration is headed by a Secretary General. The Senate is composed of professors' representatives and one student nominated by the Student Union. In addition, there are boards for research and teaching along the lines of academic disciplines which allow for strategic planning and the preparation of the decision-making process in the Senate itself. Only the University of Sarajevo has established by now a Board of Managing Board to decided on curricula and budgeting as well as a Supervisory Board responsible for financial control of the University according to law.

The division between governance and administrative tasks is mirrored in the organizational structure at faculty level. The dean and vice-deans together with the Faculty Council form the governance bodies, whereas the Secretary of the Faculty is responsible for the administration.

Ministries can exercise influence on appointments of professors and academic staff only through budgeting insofar as they can stop recruitment through not increasing the overall budget.

Due to the fact that with the exception of the "integrated" universities in Tuzla and Zenica, universities are still loose associations whereas the faculties and other academic units are "independent" legal persons, internal governance and management is determined at faculty level. Insofar as the number of students for admission is determined by the faculties, they also decide on their own revenues through tuition fees which, as has been elaborated above, may substantially contribute to the overall budget of the faculty. Since faculties decide also on the

contents of entrance exams, it goes without saying that this system does not allow for any transparency, but opens the doors for massive corruption. In conclusion, most “rich” faculties are strongly resisting “integration” through delegation of internal governance and management competence to the university level. Overall, the Bosnian system is thus characterized by “**faculty anarchy.**”

1.4.3. Serbia/Montenegro

In Serbia, universities are governed by a University Council and the Rectorate. The Rector and his deputy rectors are elected by the Council among the candidates nominated from the ranks of professors by the faculties. A student deputy rector is elected by the students’ parliament. The majority of members of the Council are elected by academic staff, a minority is appointed by the government. Faculties are governed by a Faculty Council and a Dean who is elected from the ranks of professors by the Council. The Faculty Council is composed of members elected by professors and a minority is appointed by the Government. In addition, there is a scientific board composed of all professors and assistants. Without detailed empirical observation it does not become clear, how the responsibilities are divided into management tasks and academic responsibilities. Since **universities are**, however, only **loose associations**, the real power for internal governance and management rests with the Deans and Faculty councils: they are responsible for decision-making with regard to labour contracts, curricula and finances so that the Rectors at university level perform a more ceremonial and representative role.

In **Montenegro**, the University is governed by the Senate and Rectorate. The Senate is composed of the Rector who is elected through a procedure whereby candidates are proposed on faculty level. The two candidates with most votes from all of the institutions at faculty level present their programs before the Senate who finally proposes one candidate by secret vote to the Managing Board of the University. If the Board does not agree, the entire procedure must be repeated with an interim Rector determined by the Board. In addition, members of the Senate are the Vice-rectors, one member from each academic unit and student representatives. The Managing Board is composed by a majority of members from the academic staff, government appointees, students’ representatives and a representative of the management staff. Upon the proposal of the Senate, the Managing Board determines the internal organisational structure of the faculties, the curricula, and upon proposal of the Senate and the Rector the number and positions of staff.

At the level of faculties, governing and administrative bodies are a Faculty Council and a Dean supported by Vice-deans. The Councils are composed of the Deans, Vice-deans, representatives of academic staff and students' representatives.

The University develops also a **research strategy** for an eight year period thereby determining priorities, financial resources, the number of students who should complete a PhD. This strategy has to be adopted by the government on prior assessment and advice through the Council for Scientific Research. It is, however, without detailed empirical observation not clear which body gives the initial initiative, the University bodies or the Council and whether the Montenegrin system is thus a more a top-down execution of priorities determined by a political body or indeed a participatory-supervisory model of cooperation between the University and the state representatives.

1.4.4. Kosovo

The University of Prishtine is governed and administered by a Senate, a Rectorate and a University Council. Five members of the Council are elected by the Senate, four members are appointed by the government. The Rector is elected by this Council. The Senate is composed of the Rector, the Vice-rectors, a representative from each academic unit and representatives of students as well as administrative staff. In addition, a University Commission composed of representatives of all academic units prepares all the proposals for the decision-making process in the Senate. The Senate elects the Vice-deans responsible for teaching affairs. In actual fact, the deans of the seventeen faculties are rather powerless, since the University Council decides on the budget allocation based on proposals of the faculties.

In conclusion, international governance and administration are – through the direct involvement of single parties – **strongly politicized** and under political control, obviously exercised through the University Council and the Rectorate who is under strong pressure from party politics.

1.4.5. Macedonia

There are **different governance and management structures of public and private universities**. At the University of Skopje (UKIM), the University Senate is composed of two professors from each faculty, one member from each academic unit, 10 students. The Rector, 4 Vice-rectors and the Secretary General participate without voting right. The scientific

councils of each academic unit are composed of professors, assistants, students. They elect the Senate members. The Senate adopts the budget plan and submits it to the Ministry. The budget plan has then to be approved by the Managing Board of the Fund for Tertiary Education. The Rector is the executive body for the Senate's decisions and elected by the Senate. The Rectors' Board which is composed of the Rectors plus heads of faculties and scientific institutes elects the Secretary General and forms a commission to support policy development. The UKIM Strategy for Development 2004-2010 was adopted by the Rectors' Board. Main goal of the development strategy is to implement the Bologna elements and to create an integrated University against fierce resistance in practice. The faculties are legal entities with their own funding. At faculty level the deans and scientific councils are the most important bodies. All academic staff are civil servants. Due to a hiring freeze imposed by the IMF, there was no recruitment of new academic staff over the last five years. Due to state budgeting and the civil servant status of academic staff there remains strong influence from the state executive on internal governance and management.

The private South-East European University is governed and managed by additional bodies. The University (Foundation) Board is composed of representatives of the Zurich foundation and the local University Foundation Tetovo who define the University's "mission". They also have an Executive Committee. An Advisory Board is composed of international experts. The Rectorate is responsible vis-à-vis the Foundation Board for governance and management and implements the decisions of the University Board as well as prepares and implements the budget. The Senate is composed of the Rector, Vice-rectors, Professors, Deans and Heads of academic units, two academic staff from each faculty, one student per faculty, and one management staff. The University Council is composed of the Rectorate and deans. This smaller body does policy planning and is the actual channel of communication between Rectorate, Senate and Faculties/Centres. Curricula Committees include also members from stakeholders such as business, lawyers, and judges. Each faculty runs its research centre doing mostly consulting. Since no money comes from the state budget, there is no influence of the central government on internal governance and management.

1.4.6. Albania

Public universities have a Senate and a Rectorate which is elected by the entire academic staff and students. The members of the Senate are elected from their institutions. According to reform plans also Governing Board shall be created which shall include government

members, members of interest groups and higher education institutions' representatives to be elected by the Council on Higher Education and Science. The Governing Boards shall then elect rectors and deans. These plans are severely resisted by the academic community.

Senates decide on the allocation of the budget based on a proposal from rector. In addition, there are also Science-teaching Councils responsible for curricula, and research plans on faculty level with deans and faculty councils as the most important bodies.

The elections of rectors and deans are under **strong control of political parties**. Candidates have to demonstrate their political affiliation with the parties in government. When general elections result in an "exchange" of civil servants in the ministry, this will strongly affect also university bodies.

1.4.7. Romania

For internal governance and administration, still the **old "soviet system"** without any division between representation and strategic planning on the one hand, and administration on the other seems to be in place: The Senate is headed by the Rector and composed of representatives of academic staff and students. Deans and heads of departments are ex officio members. The Rector, vice-rectors, a scientific secretary and an administrative secretary form the executive office of the Senate. The Rector is elected by the Senate and confirmed by the Minister which allows for strong political influence.

According to the new draft law the Rector shall no longer be member of the Senate and a clear division be made between governance and administration. Only the Senate shall be responsible for strategic planning. A new Board shall be composed of three members elected by the Senate, three members appointed by government and one member by the union of professors. This Board will be responsible for financial-economic coordination and administration.

1.4.8. Bulgaria

Governing and administrative bodies of the universities are a General Assembly, an Academic Board and the Rector. The Rector is elected by the General Assembly composed of professors, academic staff and students' representatives. Universities decide themselves on quota for students' admission each year. There are entrance exams for all subjects.

Faculties have the same organisational structure with a General Assembly, an Academic Board and a Dean. However, Assemblies convene in practice only once a year. The faculty Board is composed of all academic staff, students and doctoral candidates: the Board decides on all organisational issues, curricula and teaching loads, financing and employment issues. The Dean chairs the board and implements decisions.

The Academic Boards have ultimate authority in internal governance and management matters. The Rector who is elected by them owes his loyalty entirely to the academic staff of the university so that his election does not guarantee sufficient management skills and leadership qualities. This is, of course, a recipe for inertia and conservatism.

1.4.9. Greece

According to official sources the “leadership” of universities and faculties is exercised through rectors and deans, whereas “higher decision-making” is the task of senates and general assemblies, whereas “lower decision-making” and executive power is vested with the Rector’s councils and dean’s councils. Rectors and Vice-rectors are elected by all academic staff and representatives of students and management staff. Senates are composed of rectors, deans, heads of departments, academic staff representatives and students’ representatives. General Assemblies at faculty level are composed of the General Assemblies of departments composed of academic staff and students’ representatives. Also the Rectors’ and Deans’ councils include student representatives.

In conclusion, there is **almost “absolute” self-governance and administration by academia** with strong participation of students. On the other hand, through financing and budgeting the state executive authorities can exercise a strong influence when they decide on annual budgets and student admission.

2. Performance of Functions

2.1. Autonomy and Accountability

2.1.1. *Conceptualizations: State-control – State-supervision – Market-orientation*

As already outlined in the introduction with regard to the challenges and opportunities of post-communist reform, (individual) academic freedom, institutional autonomy *and* accountability are the functions as well as the benchmarks for the evaluation of the performance of national systems of research and tertiary education in terms of efficiency and effectiveness. When the institutional framework of research and tertiary education is analysed from a **process-oriented perspective**, it becomes clear from the description of institutions in this sector and their relationships that there is a **policy-cycle** which can be subdivided into two or three institutional layers:

“Traditionally” from a central European perspective, “academic freedom” of research, teaching and learning was and is guaranteed through **“institutional autonomy”** of universities and academies of sciences and art in the meaning of functional “self-government”, i.e. that the traditional bodies of a university, the Senate as organ to represent all participants in this process of research, teaching and learning, i.e. professors and students, and the Rector as executive organ, could regulate and administer within the framework of law all tasks accompanied with these **functions**, such as:

- decide on the admission of students;
- decide on tuition fees;
- develop study programs and regulate curricula and exams;
- decide on the organisational structures, i.e. the establishment of faculties, institutes, centres;
- decide on academic promotions in terms of self-cooption of the faculty staff;
- administer internal evaluation.

To decide on research topics to be pursued and the use of teaching methods is – in the Humboldtian and Anglo-Saxon tradition - part of the individual academic freedom and critically assessed at best through internal and external “peer-review.”

As can already be seen from this enumeration of tasks or competences of academic self-government, this concept allows for “full” academic freedom and democratic participation

and therefore legitimation, but is, **at the same time, prone for exclusiveness and elitism, inertia and mediocrity, as well as academic amateurism** of decision-making and management. Dependent on the respective “state-nation” concept, academic freedom and institutional autonomy therefore were never “fully” guaranteed, but combined with either the function to provide for the necessary “cadres” for the civil services or corporate business, and later on, to prepare for the needs of the liberalised labour markets. The research and tertiary education sector therefore has always faced the challenge of some form of “instrumentalisation” by “the” state - in particular since universities have been, in continental Europe, to a large extent public or state universities, financed from the state budget - or “the market forces.”

Thus, the **institutional mechanisms** of a policy-cycle in this sector form three “**ideal-types**” which can be called

- “state-controlled”,
- “state-supervised” and
- “market-based.”¹³³

In theory, in **state-controlled** university systems “the” state does not only provide a framework through law, but governs and administers directly top-down most of the tasks and competences enumerated above as essential elements of “self-government” through the respective line-ministries. Thus, institutional governance and administration through “self-government” bodies are minimized. In addition, the function and task of system-wide policy planning and regulation is strongly centralised with a strong executive dominance: i.e. the process of the expert elaboration of (national) research and education “strategies” and regulation through decision-making is dominated by the central bureaucracy. Neither parliament nor representatives of “academia” be it through voluntary association in inter-university bodies such as rectors’ conferences or in advisory bodies created by government such as councils of research and/or education will, in practice, have a strong influence on the outcome, i.e. laws or by-laws, if they exist at all.

In contrast, the “**state-supervised**” model is institutionally characterised by “effective” bottom-up participation in system-wide policy planning and regulation through representative bodies of academia which is not reduced to a merely “advisory” role as a democratic fig-leaf

¹³³ See John Taylor/Adrian Miroiu, Policy-Making, Strategic Planning, and Management of Higher Education, UNESCO/CEPES Papers on Higher Education, Bucharest 2002, pp 19 – 22.

and a much stronger say in internal governance and management, i.e. “self-government.” In addition, the role of external monitoring and evaluation of the “effectiveness” of research and teaching is no longer performed by the ministry directly, but through more or less independent executive bodies for quality assurance, so-called “agencies” for accreditation or evaluation, again with the participation of academia itself.

The “**market-based**” model can, of course, best be characterized through private and for profit universities which are interested to serve the needs of “research” and “education” markets. Since they have to earn their money on these markets, “efficiency” and “effectiveness” are the key-criteria. In order to be able to “sell” their “products” through high tuition fees, they must “guarantee” success for employability on the labour markets through their education. And since time costs money, they are interested in professional management structures versus time-consuming meetings of highly paid professors in large academic bodies with nothing essential to decide on. Thus, academic “self-government” is – seen from the theory of comparative costs – in most cases economically simply non-sense.

None of these “ideal-types” does exist in reality anywhere. It is obvious, however, from the historic perspective that the “state-controlled” university model resembles the common European past in Western, Central and Eastern Europe, whereas the “market-based” model is part of the legacy of “private” colleges and universities in the Anglo-Saxon world on the one hand, and the Napoleonic legacy for public universities in Continental Europe on the other. With the challenges of post-communism through the transition to democracy and market economy as well as of internationalisation and competitiveness through globalisation and European integration, we shall see that none of these “ideal-types” can successfully meet these challenges, but that we are – both normatively and empirically – **looking for the “right balance” of the functions and elements of these three models**. The following comparison of the institutional mechanisms of the research and tertiary education sector in the various SEE countries will therefore try to analyse the shifts and balances looked for in the policy-cycle outlined above in order to meet the basic functions of criteria of autonomy *and* accountability.

2.1.2. Comparative Conclusions on the Institutional Settings in SEE

With regard to the two or three layered institutional structure, all of the SEE countries have – obviously under the influence of EU accession or the prospect of future membership –

developed - from the respective line ministries – more or less independent **Councils or Funds for research and tertiary education** which are part of the system-wide policy planning and regulation cycle. Secondly, all countries of concern have also developed **Agencies** for accreditation, monitoring and evaluation of research and tertiary education institutions. **What makes the difference** between “state-controlled”, “state-supervised” and “market-oriented” systems is thus the institutionalised representation and participation of academic staff or economic actors in these bodies and **how “effective”** this **participation** is in effect in the decision-making process. The same criteria hold true for internal governance and management structures.

What we can now see from the description of the institutional mechanisms is the fact, that all of the countries of the former SFRY have to tackle the **legacy of strong executive dominance** on the one hand **and so-called “non-integrated” universities** on the other, i.e. that universities – lacking legal personality – were only loose associations of faculties, institutes or centres so that university bodies did not have the possibility to collect data on fee-paying students’ admission from faculties since this tuition fees can make up to 70% of the budget. As a consequence, the political power of deans rests on the allocation of money coming from these revenues so that they are not keen to delegate this power to the university level of which data collection is seen as the first step. With the exception of Tuzla and Zenica in BiH, no state university in former Yugoslavia is integrated, Croat law prescribes integration until the end of 2007, but there is like at the Macedonian universities fierce resistance against “integration” by the “richer” faculties. On the other hand, the respective line-ministry could on this basis of non-integrated universities much more interfere into internal governance and management by directly financing and controlling the spending of academic institutions. With the exception of Macedonia and Croatia, the respective **ministries** of science and education still **finance university institutions directly**. Croatia introduced lump-sum budgeting of the university only in 2006, whereas in Macedonia the Managing Board of the Fund for Higher Education allocates money from the state budget on proposal of the senates so that their seems more participatory influence from academia. Hence, only Macedonia and Croatia enjoy financial autonomy. The same holds true for Albania, Romania and Bulgaria where the respective Councils for Education and/or Research and Technology decide on the budget allocation, but in contrast to Croatia and Macedonia, without or definitely less representatives of academia in these councils.

All SEE countries have established **Councils of Higher Education and Research**. Interestingly, all former Yugoslav republics divide the sector and policy planning into bodies for education on the one hand, and bodies of research and technology on the other. The division of advisory bodies for the entire sector seems to follow the communist legacy of a strict division between universities with the almost exclusive task to provide for tertiary education, whereas research was concentrated at the Academies of Sciences and/or institutionally directly attached to ministries. A closer look into the interrelationship between line-ministries, councils as advisory bodies and participation of inter-university bodies such as rectors' conferences reveals that all SEE countries, including Greece, still tackle the legacy of strong centralization so that the executive dominance in system-wide policy planning and regulation can clearly be seen from the country reports. With regard to the orientation to the **“market-based” model**, only Montenegro, Albania, Romania and Bulgaria provide for the representation of economic actors, mainly employers' associations, in these advisory bodies. Only Macedonia, Montenegro, Croatia, Albania and Greece seem to have achieved - beyond the formal establishment of advisory bodies – also some “effective” participation of academia in policy planning by influencing the substance of decision-making processes at the level of parliaments and governments.

Internal governance and administration can be assessed after the following **criteria**:

- the competences and distribution of competences of university bodies against their direct regulation through the respective line ministry,
- the representation of government appointees or economic actors in university bodies,
- the division of governance in the meaning of internal strategic planning and management and
- the institutionalisation of this division through separate management organs.

Basic competences of internal governance are to decide on the number of students for admission on a yearly basis and the possibility to employ academic staff including professors (beside open competition and decision on academic qualification which is in all countries an essential element of academic self-government). In this respect, **only Bulgaria and Croatia enjoy institutional autonomy**. In both countries, the university bodies decide on the number of students for admission, whereas in all other countries this is predetermined by the Government or ministry following the logic that they – via input budgeting - finance state universities from the state budget for the costs of teaching through salaries of the teaching

staff. At least in two countries, in Albania and Romania, it became obvious from the country reports that this system is still in no way linked to out-put evaluation through agencies for quality assurance so that these bodies work remains dysfunctional. But the same holds probably true also for most of the former Yugoslav republics. Only in Bulgaria, university bodies decide on **staff employment including professors**, in Croatia and Romania the respective minister has to formally approve decisions made by university bodies. As we learn from the Croatian country report, this might be even worse than direct employment by the state executive, since these necessary approvals postpone the hiring of even junior researchers for at least a year or more thereby effectively hindering strategic planning and staff development. **Effective internal strategic planning** by university bodies is reported only from Croatia, Montenegro, Macedonia and Bulgaria. The only country which includes also representatives of economic actors in the composition of university bodies is Albania. BiH, Serbia, Macedonia, Albania and Bulgaria are also the only countries where – beside the traditional set-up with academic senates and rectors, whereby in all SEE countries rectors and vice-rectors are members of the senate – additional bodies are created who are obviously thought to perform **professional management tasks**. So the BiH and Macedonia employ a Secretary General both on university and faculty level, whereas in Bulgaria there is a General Assembly and Albania and Romania foresee in a draft law a “Governing Board” with the participation of government appointees. However, even if additional organs are created with the idea of more professional management taken over from the “market-based” model, the country reports in none of those countries provide evidence for a clear distinction between governance in terms of strategic planning and management by implementation of decisions. Whether such organisational systems with full participation of all bodies and actors in a circular policy cycle is more effective than a system based on a clear division of powers between “representative” bodies and “professional” managers remains an open question.

In conclusion, **all SEE countries** have developed the institutional mechanisms for the **transformation** of their research and tertiary education sector **from a “state-controlled” to a “state-supervisory” model**. However, from a process-oriented perspective, most of the countries retained a practice which allows for some form a decentralization of monitoring and evaluation, whereas a “balance” between decentralized forms including system-wide policy-planning and regulation combined with bottom-up effective participation and strong internal governance and management in the sense of a functioning “supervisory” model seems to be

achieved only in Macedonia and to be emerging to some extent also in Montenegro and Albania.

2.2. Research and Technological Development

2.2.1. Croatia

As far as institutional structures are concerned in this sector, there is still a **strong: division between universities** mainly doing teaching **and the Academy of Sciences and non-university public institutes** doing research. Besides the Academy of Sciences there are 26 National Institutes with 15 of them in the field of humanities and social sciences. The latter are basically concerned to win government sponsored projects to be able to pay salaries and, on that basis, to participate in competition for “commercial” projects sponsored by foreign programs (EU, UNDP). There is no time and money left to develop strategies for long-term and basic research. According to government plans, most of them shall be “integrated” into the universities. The research institutions decide themselves on academic qualification, but the Ministry has to approve each and every employment of young researcher. The Ministry also keeps a register of researchers.

As far as **effectiveness** of research is concerned, the output of research papers increased from 1996 to 2000 from 915 to 1607. The Government funded research projects in the following fields:

Biomedicine	28.1%
Natural Sciences	24.5 %
Engineering	18.1 %
Biotechnology	<u>9.7 %</u>
	80.4%
Humanities	10.0%
Social Sciences	<u>9.6 %</u>

The Government gives through financing mechanisms priority to development, transfer and application of new technologies. The Program for Technical Development is targeted to create PPPs. There are two sub-programs: “Test” for financing pre-commercial activities for development of technologies and “Razum” for the establishment of knowledge-based companies. There is also a Business and Innovation Centre. In addition there is a program for investments into Companies’ Equity by the Croatian Bank for Reconstruction and

Development for SMEs. Venture capital is systematically developed by the Ministry with support of the World Bank.

Throughout the 1990s there was a **strong decrease of industrial and commercial research** activities. Bigger research institutes are run in the energy, engineering, traffic and communication sectors.

Integration into ERA is foreseen by the Strategy for Development of Science in the 21st Century. Croatia actively participates in EU-programs such as FP6, Cost, and Eureka.

2.2.2. Bosnia and Herzegovina

Because of the war most of the research **infrastructure** was **destroyed**. Only universities were left over to maintain research activities. Many researchers were killed or became refugees. Due to the bad material and financial conditions there is an ongoing **huge brain-drain**. Only over the last two years we can observe again the return of researchers into commerce and the industry sector.

There is **no institutional division** between research and teaching. Both areas are covered by universities. In addition, **industrial research** was carried out in the energy sector before the war, but with the exception of the Aluminium Company Mostar and the pharmaceutical industry there are **no more research activities** after the war in this sector. By now natural sciences faculties develop cooperation with industry sector offering services through technology transfer centres. Universities were successful to maintain research in humanities, social sciences, and engineering during the war. So far there are no university-wide research strategies. Only the integrated university of Tuzla created a research fund. However, all universities **lack** trained staff with language competence and **project management skills** in order to be able to participate in international projects.

Moreover, both Entity governments also finance research of the two Academies of Sciences and Arts.

Integration into the ERA has started through participation in FP6 programs and the establishment of National Contact Points for FP7 projects.

2.2.3. *Serbia*

There is still a **strong institutional division** with universities performing mostly teaching. There are 56 non-university research institutes, not only public, but also private: some of them were founded in dissidence against Milosevic such as the G 17 Institute or the Institute for European Studies. In addition, there are two Academies of Sciences, namely the Serbian and Vojvodinian Academy. The Serbian Academy runs 10 research institutes.

With regard to the **ERA**, Serbian research efficiency and affectivity is characterized by a comparatively high rate of participation in FP6 projects.

2.2.4. *Montenegro*

There is **no strong institutional division** between teaching and research by the university and Academy of Sciences. The Council for Scientific Research does system-wide policy planning through the eight year “Strategy of scientific-research activities”, gives advice on budget allocation and determines the number of young researchers with PhD. However, in 2005 only three research projects were financed by the Ministry with participation of the economic sector. In general, the research infrastructures are badly equipped and Montenegro suffers from a strong brain-drain. As for the necessary integration into the ERA, research capacity and **management skills are widely missing**.

2.2.5. *Kosovo*

There are **almost no research infrastructure and capacities**, either at the University or the Academy of Sciences. First steps into applied, product-oriented research are carried out at the Faculty for Agriculture. The Academy of Sciences has no research institutes due to lack of financial resources. But there are non-university related research institutions for Albanology and History and **private-market oriented research institutions** such as “Riinvest” or run by the Chamber of Commerce. In addition, due to the international territorial administration by UNMIK, **also IGOs, foundations and INGOs** such the OSCE, the German Friedrich Ebert Stiftung, or ICG undertake also research activities. However, there is no comprehensive and strategic approach in research activities.

Industry and commerce do not participate in the financing of universities, nor are there PPP models. General problems are the missing infrastructure as well as low salaries, education and training due to political situation over the last two decades which all result in a **huge brain-**

drain. Research is still not high on the political agenda. As for the necessary integration into the ERA, research capacity and **management skills are widely missing.**

2.2.6. *Macedonia*

There is **no institutional division of teaching and research.** Both state universities at Skopje and Bitola have their own research institutes. No research activities are undertaken at Tetovo state university and Stip. In addition, the Academy of Sciences runs five research institutes more oriented to technology and engineering with 50 projects in 2005, funded not only by the government, but also under EU Programs, UNDP and the Austrian government. Strangely enough, the Fund for tertiary educational activities has no obligation to finance research.

University research is directly funded by the government. Macedonian history and national identity formation are seen as priorities in self-evaluation procedures. Research out-put is rarely integrated into curricula.

Infrastructure lacks investment for two decades. Financial sources of research institutes cover mostly only salaries. There is also a decrease of cooperation between universities and economy actors in the post-communist period.

At the **private South-East European University** each faculty has established its own research centre. They are, however, more oriented to provide consultancy to the local community and business. 2% of the University budget is ear-marked for research activities. The European University and other private universities do no research.

As for **integration into the ERA**, much more research capacity and management skills would be necessary.

2.2.7. *Albania*

There is **no institutional division of teaching and research.** The new legal framework provides for inter-university centres to promote international and interdisciplinary research. The Academy of Sciences runs 14 research institutes carrying out mostly applied research. 24 research institutes are attached to ministries which provide mainly services and do almost no research. Not a single patent has resulted from these activities. The Albanian Centre for International Studies, an NGO, publishes reports and journals.

The **national research priority areas** for period 2002 – 2005 and institutions conducting research are the following:

Albanology – Academy

Natural resources – Academy

Information technology – Ministry of Education and Science

Biotechnology and Biodiversity – Ministry of Education and Science

Agriculture and Food – Ministry of Agriculture

Health – Ministry of Health

In addition, social science research activities are mainly carried out at universities. Energy issues and environmental issues are covered by Agencies, but also NGOs.

Integration into ERA is quite successful through participation in EUREKA, FP 5 and 6, the NATO Scientific Program; INTERREG 2 programs and bilateral research co-operation with the Swiss Science Foundation and CE and SEE countries.

2.2.8. Romania

There is **no institutional division of research and teaching**. The National University Research Council serves as link between research and politics and allocates funds on a competitive basis to individual researchers and teams with the goal to create regional competence centres within universities. 25% - 30% of state financing goes to basic research, the rest for applied research. There are **two agencies dealing with PPP models** in research with modest results however. Economic actors barely participate in financing of universities. Only the Technical University of Cluj-Napoca home-page shows a list of research partners from industry.

The **number of researchers in enterprises is in steady decline** since 1993 from 28.000 down to 9.200. The Academy of Sciences has a strong focus on “national” issues. The **integration into the ERA** was already started with participation in EUREKA and FP6, but major problems remain with lack of financial resources, the brain-drain; and lack of capacity in research management.

2.2.9. Bulgaria

There is **no institutional division of teaching and research**. The National Scientific Research Fund allocates money in compliance with the National Plan for Economic Development. The Fund maintains also a register of scientific activities. Priority areas of National Strategy for Scientific Research are: economics, engineering and national identity.

Universities have also their own funds for research. Most university research is applied research. PPPs are insignificant. No chairs or institutes are financed by private foundations. Only a few big companies have their own research departments.

Integration into the ERA has started with EUREKA, FP 5 and 6; and NATO; but capacity problems with regard to project management still remain.

2.2.10. Greece

There is **no institutional division of research and teaching**. Despite scholarly criticism that R&T are not among the priorities of the state so far, there are not only a National Council for R&T, but also a number of institutions under private law under the supervision of Ministry of Development with the purpose of promoting research such as “Venture Capital in Advanced Technology, SA” or “Industrial Research and Technological Development Holding, SA.”

State research funding is divided into “free choice research” irrespective of practical application and “market-oriented research” which is integrated into a five-year “Development Project for Research and Development.” Basic research is thus conducted at National Research Centres and universities; but also 70% of applied research is conducted at universities. National Research Centres are set up by Presidential Decree such as the Observatory of Athens, the Foundation for Research and Technology (FORTH) with seven institutes for natural sciences and technology issues; the National Centre for Social Research, the Hellenic Pasteur Institute, the National Research Foundation with Greek Studies on the one hand and natural science institutes on the other; the Greek Centre for Marine Research and the Greek Atomic Energy Commission. The Academy of Sciences runs 13 research centres and 10 research offices.

Greece is, due to her membership in the EU, fully integrated into the ERA.

2.2.11. Comparative Conclusions

Despite of the communist legacy to **institutionally separate tertiary education and research**, this division is still to be seen **only in Croatia, Serbia and Kosovo** where universities do mainly teaching whereas research is conducted by the respective Academy of Science and Arts or other public or private research institutions. In all of the other countries, including former Yugoslav republics, universities do also basic as well as applied research. In most of the former communist countries we still find many public and “national” research institutions in rather close relation to the government, in Albania 24 research institutes are administered by the respective ministries themselves.

In conjunction with the system-wide policy planning instruments, such as national strategies and plans outlined already above, it becomes obvious that several countries set also **priority areas** in research to be publicly financed with regard to the **nation-building** efforts and problems such as Albanology in Kosovo or Macedonian or Bulgarian history and identity-formation. This prioritization of research efforts clearly mirrors the still on-going political conflicts over nation-building and even legal status of territory in this part of the region.

The other challenge from globalisation and European integration, elaborated above in the introduction, is that of orientation or **re-orientation of research towards “marketable” products and cooperation with the economic sector**. By far most advanced with regard to system-wide policy planning in this respect is **Croatia** with her program for technological development in the framework of the Strategy for Development of Science in the 21st century in order to create public-private-partnerships for the development of new technologies and the financing of pre-commercial activities and the establishment of knowledge-based companies, inter alia with risk capital from the national and international banking system. Only in Romania there are also two agencies dealing with PPP models without, however, great success.

Nevertheless, due to the involvement in the political crises and wars in the Balkans, **research** carried out in Croatia **by industry and companies drastically decreased** in comparison to 1990 so that serious research is conducted now only in the energy, engineering, traffic and communication sectors. The same holds true for Bosnia and Herzegovina, even more affected by the four-year war and the ongoing problems in re-construction of the state and economy so that recognizable research is done only in one aluminium company in Mostar and the energy

sector as such. But also from the Romanian country report we learn that the number of researchers in the industrial and commercial sector dropped from ca. 30.000 in 1990 to 9.200 in 2006, i.e. more than two thirds. In striking contrast to Serbia which still suffers strongly from the Milosevic era and the international boycott of her economy in the 1990ies and the ongoing political turmoil with regard of her political orientation towards the EU, Montenegro seems to have recognized these challenges and turned around her strategy institutionally as well as with regard to policy-planning through eight-years' strategies for scientific research activities. The same holds true for Albania and Bulgaria which identified economics, engineering, biotechnology and biodiversity, national resources and agriculture as areas of national priority for research.

When we look into the internal institutional structures, i.e. **material infrastructure, research staff and out-put, in terms of “efficiency” and “effectiveness”**, the following comparison can be made: In the countries or regions of countries affected by war, also much of the research infrastructure has been destroyed in the course of violent conflicts and many researchers became refugees or internally displaced persons. However, the wars in the Western Balkan countries did not only directly affect material infrastructure and human capital, but also the economies of these countries. The combined effect of wars and economic transition brought a total break-down of former state-run companies in many economic sectors as can be seen, for instance, in Central and South Serbia in the textile or automotive industries. But also the figures on the decline of researchers in the economic sector in Romania quoted above show drastically the effects of economic transition as such, without violent ethnic conflicts or social unrest. With regard to infrastructure, all countries in SEE therefore do not only suffer from destruction and problems of financing re-construction, but also from the transition process as such with no or insufficient investment into buildings, machinery, or laboratories, etc.

As far as “**human capital**” is concerned, all of the SEE countries suffer from the **brain-drain** caused by violent conflict and/or lack of economic perspectives. Brain-gain programs have not produced any serious results anywhere, even in case of the most-advanced efforts, namely the Croatian government's program to attract scientists in the Croatian Diaspora in Western Europe, Northern America and Australia with favourable, i.e. privileging, economic conditions for return. In particular in the war affected countries we could observe through our site-visits and from interviews a vicious circle for even well-intended brain-gain programs:

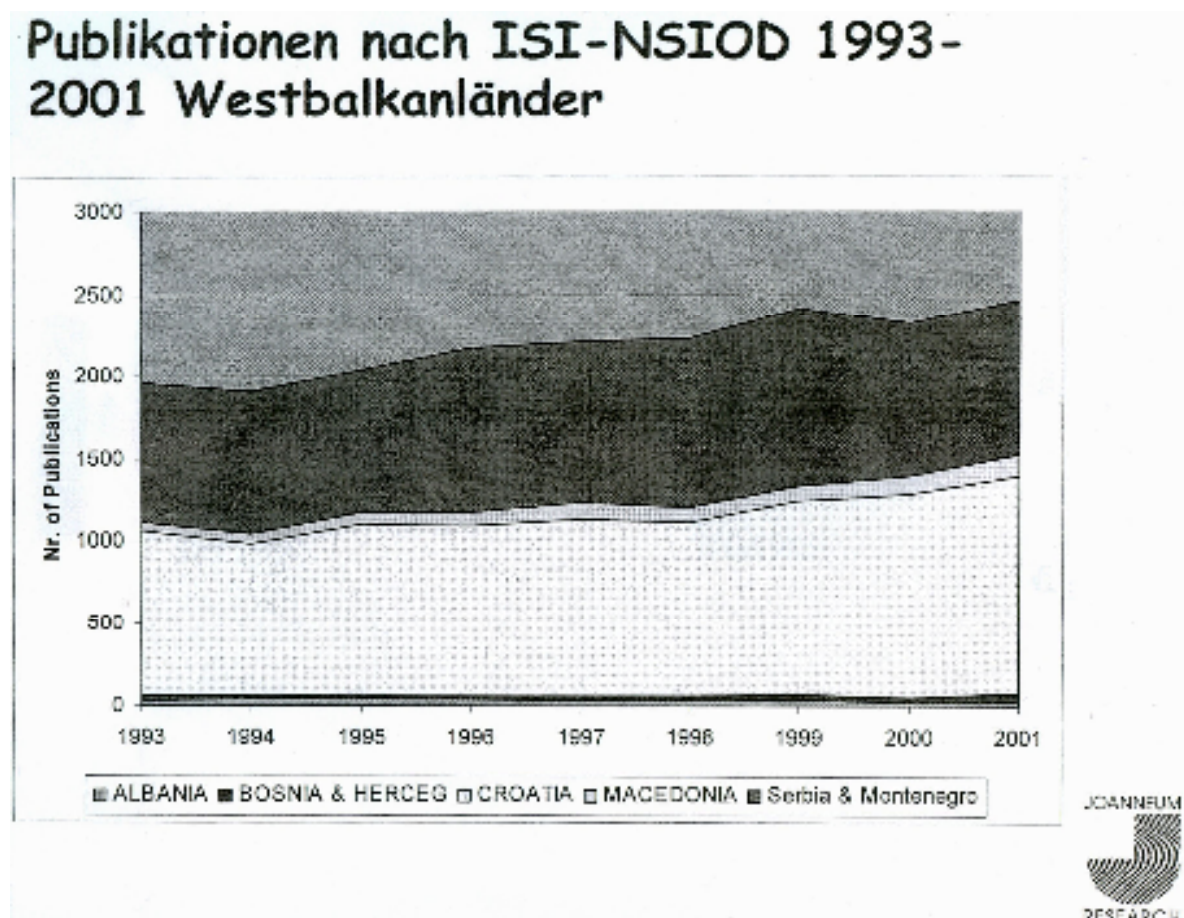
people who fled from the war to Central and Western Europe or Northern America are too often perceived by those who stayed at home during the wars as “traitors” who had a much more comfortable life in “the West.” In addition, people who have studied in the West and got therefore a much better education and, in most cases, have thus also much better language skills, would be too strong competitors on the very restricted labour markets for research and tertiary education. Therefore, as we could observe, the **older generation of scientists** who was not only socialized, but also trained during communist times, **forms a “closed” elite** which will block all efforts of returnees and/or young researchers to get a job with universities or other research institutions. At Graz University we have about 1000 students from both Kosovo and Bosnia-Herzegovina each. But out of all students graduating at Graz Law School over the last decade only one of them was ready to return to BiH after he was offered a job paid twice the salary as a Bosnian citizen would normally earn in the law enforcement bodies. He had, however, to fight in a lawsuit against the University of Sarajevo for two years to get his master degree from Graz University officially recognized. After five years working experience with constitutional law and human rights issues, he is nevertheless still denied by Sarajevo Law School to lecture a course on these subjects. In comparison to the scientific staff including professors employed there, he is, of course, much better qualified not only due to his practical work experience with regard to national and international human rights cases, but also due to his language skills speaking fluently English and German. Two professors from Bosnia and Herzegovina who made their scientific careers in Great Britain and Germany respectively, have - despite of the fact that they would be eager to return - no chance to be called back to Sarajevo University since they are considered “persona non grata” because of their career paths. The same holds true, of course, to a lesser extent in Kosovo.

In Macedonia we learned about the **strong financial constraints**, in particular imposed by the IMF. There is now a general hiring freeze in force in the civil service for more than five years which seriously affects any staff development at universities and public research institutions so that a full generation of young researchers will be lost in the very difficult dual transition process, not only with regard to university reform in general in economic and management terms, but also in the intergenerational turn-over by the necessity to replace the old communist cadres. In Croatia and Kosovo we learned from the country reports and the site visits and interviews about the **strong influence** exercised by either the executive power or the **political parties** not only with regard to the election of highest university bodies, but also for each staff position down to junior researchers which seriously hampers strategic planning

in staff development and thus capacity building. All SEE country reports therefore highlight **major problems in regard to language and management skills** necessary for project management in the participation in international research programs such as EUREKA and FP 5, 6 and 7.

With regard to **scientific out-put**, data commissioned from Joanneum Research¹³⁴ in the framework of this project demonstrate the following:

1. Publications according to ISI-NSIOD 1993 – 2001 Western Balkan Countries

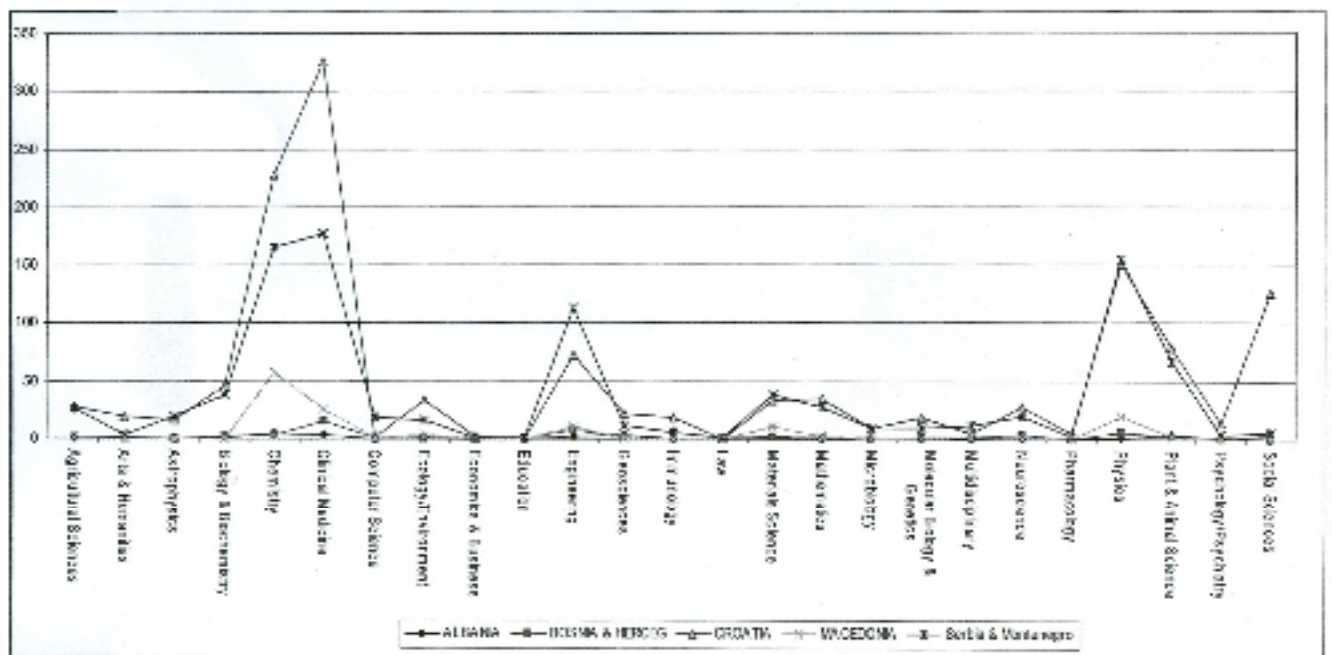


This graph demonstrates that both Croatia and Serbia/Montenegro are far ahead of all of the other WBCs in numbers of publications in general. Croatia, despite of the much smaller number of inhabitants vis-à-vis Serbia/Montenegro, is again more “productive” in the publication out-put. A more detailed analysis according to scientific disciplines is given by the next graph.

¹³⁴ Cf. Christian Hartmann/Michael Dinges, Fakten zur Wirtschaft und Forschung der Westbalkanländer. Vorläufige Studienergebnisse.

2. Publications according to scientific disciplines, 2001

Publikationen nach Disziplinen, 2001

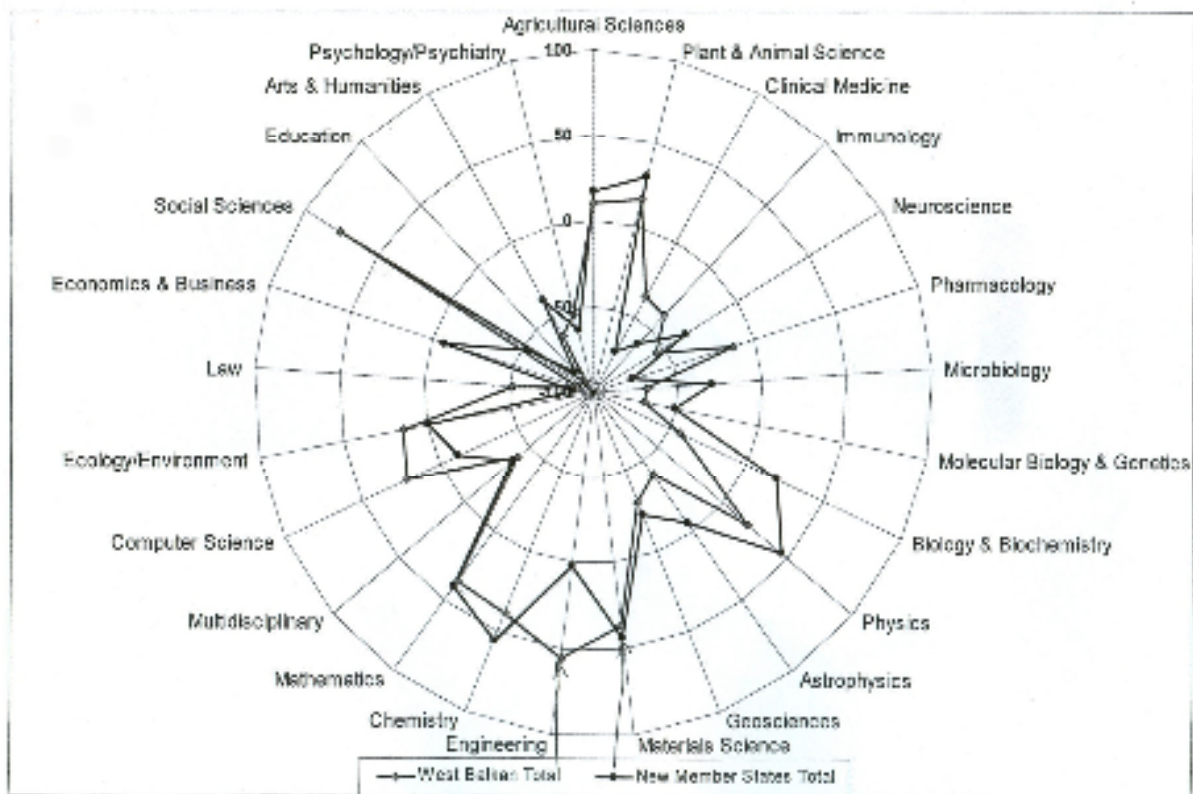


This graph again demonstrates that both Croatia and Serbia/Montenegro have a very strong output in the natural sciences whereas social sciences, law, economics and arts and humanities are very weak.

A comparison with publications from the new EU member states and the old EU member states demonstrates the **comparative advantages** and human capital available in the WBCs:

3. Patterns of Scientific Specialisation of WBCs in comparison to New Member states, Publications 1993 – 2001

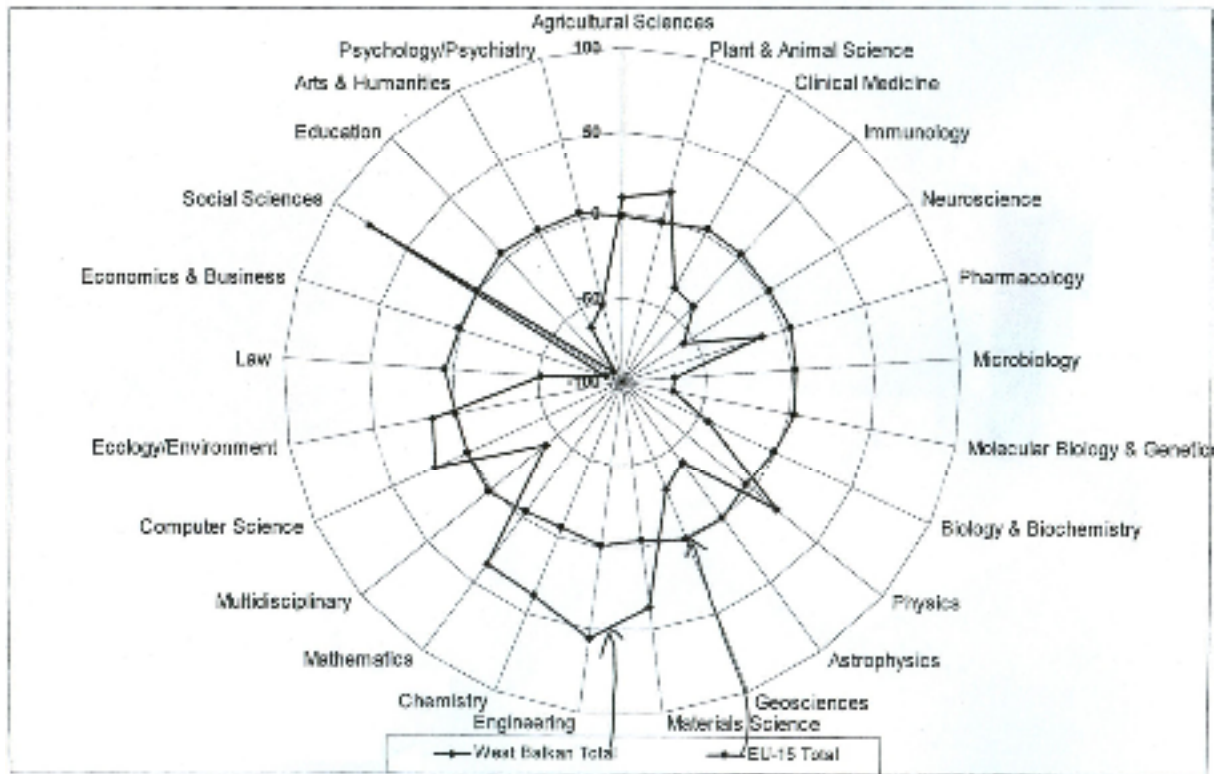
Wissenschaftliches Spezialisierungsmuster - Westbalkan vs. Neue Mitgliedsstaaten Publikationen 1993-2001



This graph demonstrates that the WBCs can offer comparative advantages in ecology/environment, engineering, pharmacology and social sciences.

4. Patterns of Scientific Specialisation of WBCs in comparison to Old Member states, Publications 1993 – 2001

Wissenschaftliche Spezialisierungsmuster der Westbalkanländer vs. EU-15, Publikationen 1993-2001



This graph demonstrates that the WBCs could offer comparative advantages in ecology/environment, computer science, mathematics, chemistry, engineering, material sciences, agricultural sciences and plant/animal sciences as well as social sciences

2.3. Teaching

2.3.1. Croatia

There are six **universities** and six **polytechnics** as well as **schools of so-called “higher education.”** They are specialised in the preparation for a certain profession. Six of them are public, eleven are private. In addition there are a police academy and colleges for teacher training. There are **no private universities**; two of the six public universities were established only recently, namely Zadar and Dubrovnik and a seventh university will be established in Pula. The location of these universities can be explained by the need to offer tertiary education in those regions as well. Nevertheless, 76% of all graduate students are still

enrolled at the University of Zagreb. **Student admission** is regulated by the Ministry in cooperation with the universities. They establish the criteria for admission, i.e. the overall number of places and procedures, whether there are entrance exams, requirement of special skills or grades from high school are taken into consideration. The Ministry then “pays” the tuition fees for a certain number of best students, whereas all the others admitted have to pay the fees themselves as full- or part-time students. With regard to study programs, Croatia implements the **Bologna** declaration since 2005: all universities have introduced ECTS and there is also internal as well as external quality assurance. Croatian universities also offer three cycles, including the PhD level. However, there are no doctoral programs developed, but PhD students are individually “mentored” by professors. There are almost no joint degree programs established so far. Adult and Life Long Learning is promoted by the government. With regard to recruitment of teaching staff, the hiring freeze for young people seriously affects also tertiary education and makes the transformation from teacher-oriented teaching to active learning methods more difficult. Croatia is also very actively engaged in the integration into the EHEA through participation in programs such as TEMPUS and CEEPUS.

2.3.2. Bosnia and Herzegovina

There are eight **public** and six **private universities**. In addition there are also **schools of higher education** for teacher training and police academies. The number of students for admission and entrance exams is determined by faculties and the system of tuition fees follows the same model as in Croatia. About 60% of the amount of tuition fees is thus paid from the state budget for the best students. However, due to the **ethnic and political fragmentation**, there is no mutual recognition of diplomas and no comparison with regard to quality standards possible. In conclusion, mobility of students and teaching staff within BiH is almost impossible. Despite of the fact that three cycles are possible, in comparison only few students graduate with a Master degree and even less with a PhD. Moreover, in RS 300 diplomas issued by private universities had to be annulled. As we learned from our interviews, the latest legislative reform produced, however, counter-productive results. A very well trained junior researcher in the field of sociology with a lot of experience in international research projects, inter alia with UCLA, was denied admission as a PhD student at the University of Sarajevo for not matching the newly established “criteria” which almost none of the university professors in BiH will be able to fulfil such as publication of three scholarly articles in an international, reviewed journal. **University curricula and text books** not only in politically or nationally sensitive areas are in no way unified, but mostly taken over from

Serbia and Croatia respectively. All together there are only three interdisciplinary programs run together with universities in Rome and Bologna.

As far as **teaching methods** are concerned, many professors are – mostly for financial reasons – “on circuit”, i.e. they teach every week at two or more universities throughout either the Federation of BiH or RS. Low salaries paid at universities are therefore no motivation for young people to pursue an academic career. Moreover, hierarchies are very strict since many old professors, unable to adapt to the new circumstances, are obviously frightened to get competition from young and better trained junior staff. Teaching “ex cathedra” and oral exams remain the traditional teaching method in many disciplines and offer teaching staff the opportunity to increase their salaries. As we learned from our interviews and site-visits, many text-books are not available in book-shops, but only at a faculty store. Only when we found out that each and every student has to buy a text-book in a faculty store and take it with her to the exam where the professor will sign it so that it cannot be used again, we understood the logic of the “monopoly” of faculty stores.

As far as **integration into the EHEA** is concerned, the Bologna declaration was signed, but is not yet implemented. Some of the universities also participate in Tempus programs.

2.3.3. *Serbia/Montenegro*

There are six **public** and 11 **private universities** in Serbia as well as so-called “**Higher Schools.**” Private universities and tertiary education institutions were founded for rather different reasons. On the one hand, the professors of Belgrade Law School who were ousted from their positions by Milosevic founded a new, private faculty of law. There was no lustration after 2000 until the very day so that they could or were not willing to return. On the other hand, **private universities are** founded as **profit oriented** universities and, as we were told in interviews, several of them such as the Karic-University, founded by two brothers and Serb “oligarchs”, simply sell diplomas. However, unlike RS in BiH, there were no cases reported that diplomas were annulled.

With regard to **study programs**, there are three cycles including the PhD level. PhD students are, however, individually tutored by professors, there are no programs. As far as interdisciplinary study programs are concerned, there is a Centre for Interdisciplinary Studies established in Novi Sad. Also Serb universities are only slowly “modernizing” **teaching**

methods. “General” education remains priority versus profession oriented training and there is also a slow transformation from teacher centred to learner oriented activities in courses and seminars. Due to the international sanctions in place against the Milosevic regime, several generations of students had no chance to study abroad. As the international co-ordinator of the EU Stability Pact, Erhard Busek, therefore reports, 80% of Serb students have never left Serbia so far, despite of Serbia’s participation in TEMPUS, CEEPUS and Copernicus programs.

In **Montenegro** there is only one **public** university, the faculties of which are, however, located in several places throughout the country. In addition, there are two **private** faculties and institutions for teacher training. In stark contrast to Serbia, however, student mobility leads to a strong **brain-drain**. Montenegro started to implement the Bologna declaration in 2005. There are three cycles with PhD students, however, individually tutored. Transdisciplinary programs exist in the field of economics. Due to the strong brain-drain, low salaries and bad infrastructure equipment, also Montenegro faces a big problem to renew its academic staff. The average age of professors is 55. **Teaching methods** are “traditional”, teacher-oriented providing for “general education.” Also Montenegro participates in TEMPUS and CEEPUS for integration into the EHEA.

2.3.4. *Kosovo*

There is only one **public** university situated in Prishtine which had been founded in the late 1960ies when the territorial autonomy of Kosovo, after the ousting of the former Serb minister of the Interior, Rankovic, had been enhanced and national suppression of Albanian identity was given up in the cultural sphere. Faculties of economics and for technical sciences of the University of Prishtine are situated in other cities such as Peja/Pec, Mitrovica and Ferizaj. Over the last couple of years, altogether 50 **private universities** were accredited as we learned from an interview with the head of the UNMIK accreditation board. Most of them, however, do **not fulfil any quality assurance criteria** so that at least 30 of them will be closed down again in the near future. The University in North Mitrovica, financed and administered by the Belgrade authorities, is not recognized under the UNMIK legislative framework. There are entrance exams for a quota of 5000 students per year with 30.000 candidates so that there is strong competition for access to the university.

The **Bologna** declaration was officially incorporated into law, but implementation is very slow. There are three cycles and a transdisciplinary program in preparation. All younger staff has been trained in Western Europe or the US and there is also a strong barrier for young people to enter academic careers since old professors are frightened and political parties strictly control employment policies. In order to raise their income many professors have several jobs at the same time so that they often neglect their teaching obligations. Teaching **methods** are usually based on teaching “ex catedra” and oral exams.

2.3.5. *Macedonia*

There are four **public universities**, all of them founded after 1945. The last one in the municipality of Stip was founded only in 2007. The “history” and “story” of the public university in Tetovo with its “legalisation” in 2004 has been elaborated above when describing the political and national background of the entire system of tertiary education. As in the case of Croatia, there is the same system of tuition fees. There are, however, no entrance exams with the exception of medicine and fine arts.

The **Bologna** declaration is in the process of implementation with curricula development, quality assurance and ECTS at many faculties. Nevertheless, credit transfer is not possible between faculties even within the University of Skopje due to the lack of “integration” of the universities. There are three cycles’ at all public universities. PhD students are individually tutored. There is also an interdisciplinary Master program in Public Administration at the University of Bitola. The **most advanced** university is, however, the privately funded and administered **South East European University in Tetovo** which developed a full range of graduate and post-graduate as well as joint degree programs with Western European and US universities and has also introduced a strong labour market orientation in curricula development and annually organises a “Business Fair” for students. In stark contrast, the private European University has no PhD program and the New York University seems to be more a Potemkin façade than anything else.

As already mentioned above for problems of research, also teaching is seriously affected by the **hiring freeze** so that Macedonia has meanwhile lost two generations in staff development. Only with the help of the Soros Foundation which still offers scholarships to young graduates, for instance the Institute of Political Sciences at the Law School of Skopje University can maintain young researchers as tutors and lecturers. An additional problem stems from the fact

that due to lack of financial resources, many assistants or even associate professors are only employed on the basis of short labour contracts, for instance at the University of Bitola. **Teaching methods** are mainly teacher-oriented, critical thinking and training of skills is the exception instead of the rule.

Both mechanisms for internal and external evaluation of tertiary education are in place and Macedonia participates also in the EHEA through TEMPUS and CEEPUS programs.

2.3.6. *Albania*

There are eleven **public universities** in Albania. Three of them have been established only in 2006, namely in Durrës, Fier and Berat with faculties for teacher training and applied sciences. Obviously there was a need to offer regional possibilities for teacher training. Also former polytechnics, in particular for agriculture, had been upgraded to universities. Moreover there are eleven **private universities and “Higher Schools”** such as the Police Academy and the Military Academy. In addition there is a post-graduate school, the **School of Magistrates** for the training of judges and prosecutors. Private universities exclusively are specialised schools preparing students for the respective professions. So do **polytechnic** and agricultural universities. Admission to universities is determined by the Ministry through a quota system. Since 2006 there are no entrance exams any longer.

The **Bologna** declaration has been incorporated into law, but implemented only at some faculties so far. Since 2005 all universities have introduced the three cycle system, but only the three universities in Tirana offer fully fledged MA and PhD studies. Moreover, there is an interdisciplinary Master in Public Administration and a Master in European Studies.

Due to the problems of transition in general with the full break-down of the state in 1997 and consequently the economic circumstances, more than **50% of the staff** in tertiary education **emigrated** between 1991 and 2005, with waves of emigration in 1991-93 and 1998. Career prospects and incentives for an academic career are therefore non-existent. There are internal and external evaluation mechanisms in place and Albania is also participating in EU programs such as TEMPUS, CEEPUS and ERASMUS.

2.3.7. Romania

Today there are 56 **public** and 18 **private universities**; some **private colleges** for teacher training; **public academies** like police and military academies; and schools for post-graduate studies such as the National **Institute for Magistrates** and the National Centre for Technical and Vocational Education and Training Development. The mushrooming of tertiary education institutions in Romania with originally 31 institutions in 1989 had reached a peak in 2001 with 141 such institutions. However, 33 private universities were closed down again for not matching the necessary **quality standards**. The ministry fixes the annual quota for student admission of those students whose tuition fees are paid by the state financing with now 3500 students per year. In addition, universities accept paying full- and part-time students who make between 45% - 55% of the entire student body. There are entrance exams, some of the universities take additionally grades from high schools into account.

The **three cycle system** was introduced in 2005. There are Joint Degree programs with Austria, Germany and France. In addition, also the Academy of Sciences and Arts as well as National Research Institutes are entitled to offer PhD programs. There is also a distinction made between “scientific” and “professional” PhDs. In addition we find life long learning and distance learning programs established.

Also Romania suffers from a **huge brain-drain** since more than twice the number of researchers and staff in tertiary education in Romania can be found working abroad. There are plans of the government to establish a brain-gain program. Already in 1997, Romania was supported financially by the World Bank and the EU in the accession preparations with a project for the development of quality teaching and post-graduate programs. Internal as well as external evaluation exists. There is student mobility with a ratio of 5:1 for out-going students since Romania participates in TEMPUS and ERASMUS programs. In addition, Romania participates in the Education Reform Initiative South East Europe (ERI-SEE).

2.3.8. Bulgaria

There are altogether 37 **public** institutions of tertiary education composed of **universities and “higher schools”** offering specialised education. In 1995 five **private universities** had been accredited, but the Slavic University in Sofia was closed down again. Altogether there are 16 private institutions of tertiary education. In public universities about 200.000 students are enrolled, in private universities and colleges about 50.000. All universities autonomously

determine students' admission and the procedures of entrance exams. Private universities had taken the lead in implementing credit systems and standardised entrance exams. Three cycles of study programs were already introduced after 1995. Today also interdisciplinary programs exist on all three levels.

Despite of the fact that a National Resource Development Centre and a National Resource Centre for Vocational Guidance have been established, private universities face difficulties to maintain their full-time staff and at public universities the average-age of teaching staff is more than 40. Academic **staff development** is thus also a major problem at Bulgarian institutions. As far as **teaching methods** are concerned, universities provide for general education, whereas higher schools offer labour-market oriented specialised training. Also internal and external evaluation mechanisms have been established. Bulgaria is participating in ERASMUS, Socrates and Leonardo

2.3.9. Greece

Since the early 1980ies there are 23 **public universities**, composed of so-called "Highest Educational Institutions" and polytechnic universities. The second type of institutions are "Technological Educational Institutions" with a much more practice- and labour market oriented education. In addition there are "**higher schools**" or **academies** such as the Merchant Marine Academy, Tourist education schools, or the Police Academy as well as private universities including franchisees of foreign universities such as the University of Indianapolis which are, however, not accredited by the state. The admission policy in Greece is based on the system of "numerus clausus" with the government determining a fixed quota. Individual admittance then is calculated according to the grades achieved in national level exams in the final high school year. Due to the political history elaborated above with the strong influence of students' syndicalism until the very day, tuition fees are a taboo topic. Both **professors** who fear competition **and students'**, who fear the break down of free access to university education, formed a strong coalition last year to **fight governments' plans to introduce private universities** through a constitutional amendment. For more than eight months in late 2006 and 2007 teaching at most universities was interrupted through continuous strikes of students and/or staff.

In stark contrast to the new EU member states in SEE and the prospective member states of the Western Balkan, the introduction of **Bologna faces open resistance** from both academia

and professional associations which refuse to recognise the employability of students' having graduated from a first three year cycle. ECTS was introduced in 2005, but as far as study programs are concerned, at almost all Greek universities the "traditional" system of (at least) four year undergraduate studies, followed by 1 or two year "post-graduate" studies and again at least three years for a PhD is still in place. Despite of the fact that 3 + 2 or 4 + 1 would mathematically be in conformity with the Bologna declaration, students fight against it, since in practice "employability" is now at least in theory recognized after four years, whereas the introduction of Bologna would bring in their opinion a prolongation of studies. Recruitment and staff development as well as the transition of teaching methods from a strictly teacher-oriented to a learner-oriented system face similar difficulties as the other SEE countries. Only since 2005 there is also a comprehensive system of internal and external evaluation established. Greece participates in all EU programs.

2.3.10. Comparative Conclusions

All countries have a **binary institutional structure** of tertiary education institutions with universities focusing on "general education" and a more theoretical approach and "higher schools" or academies and colleges with a stronger practical orientation and training for professions and their labour-market needs. These are police and military academies, but also schools for tourism or agriculture. In addition, most of the countries run also polytechnic universities. Some countries have "upgraded" their higher schools in the field of technical sciences into universities. In addition some countries do have also specialised "post-graduate" schools such as the Magistrates' School in Albania and Romania. Several countries such as Croatia, Macedonia and Albania have also founded new public universities only recently in order to meet regional demands for tertiary education institutions. With the exception of Croatia and Greece, we find in all countries also a range of **private universities** established for different reasons. In Serbia and Macedonia private universities and other institutions of tertiary education have been established for political reasons, i.e. in opposition to governmental pressures or for ethnic conflict management. In striking contrast all countries also face the establishment of profit-oriented private universities with the **problems of quality assurance**, not to speak of outright corruption through selling of diplomas. Hence, in Republika Srpska, Romania and Bulgaria a number of such private universities were closed down already by the government, but not yet in Serbia or Kosovo.

In addition, in almost all SEE countries private universities were also established under the **umbrella of US** universities or by the Association of American Universities. Most of these US universities recognise first cycle credits and/or diplomas from their “outposts” in SEE countries, in particular, if there is also faculty from the US based university teaching there. In doing so, they try to attract the brightest students from these countries to pursue second and third cycle studies, i.e. Master and PhD programs in the US. Obviously this must be seen in connection with the general active immigration policy in order to attract the intellectual potentials and best trained students also from the SEE region in order to enhance US competitiveness on a global scale. The **Lisbon Agenda and Bologna Declaration** with the plan to create a unified European labour market for research and educational activities through the “European Research Area” and the “European Higher Education Area” is - seen from this perspective - only a **weak copy of the US efforts**, still fully hampered by ongoing national-state and European bureaucratic barriers following, for instance, from the Schengen visa regime which has been totally counter-productive for the Lisbon and Bologna goals. Two examples might serve as anecdotal evidence in this regard: only two years ago one of the authors of this report was, after having won the public tender, commissioned by the European Training Foundation based in Torino/Italy to deliver a report on “Access of Ethnic Minorities to Education, Training and the Labour Market in the Western Balkan Countries.” This study had to be carried out by a consortium of Italian and Austrian institutions within six months with site-visits, interviews and workshops of the team of researchers from Central Europe and the region. It was envisaged to organise the workshops in Graz for logistical reasons. However, due to the exclusive visa regime applied by Italian and Austrian embassies in the region, it was not possible to arrange for visa two months in advance. As a consequence, the organisation of the workshops had to be moved to Zagreb and two senior researchers frankly declared never again to cooperate with an Austrian tertiary education institution after their experience how they had been treated at the Italian and Austrian embassies. Secondly, wherever we visited universities in the region, except for Serbia we saw huge boards indicating a US centre when entering the main building or the university library. The European Union, in stark contrast, is barely visible. None of the candidate countries respectively future candidate countries possesses a European Union Documentation Centre or similar institutions at their universities.

As far as **admission policy** is concerned, almost all countries of the region apply the system of “*numerus clausus*” with a pre-determined quota for admission annually fixed by the

government. In addition, universities can regulate the admission of additional students paying tuition fees either as part- or full-time students. This possibility gives public universities the opportunity to substantially contribute to the financial resources needed for the operation of the universities. However, as was indicated already above, under the sub-chapter for research, most of these additional financial resources are spent for the salaries of staff and – in addition with the autonomous determination of entrance exams or exam procedures in general – open the doors for corruption, openly visible in BiH and Kosovo.

All countries have introduced the various elements of the **Bologna declaration**. In particular the ECTS system is in use in all countries as well as quality assurance mechanisms. Nevertheless, for country-specific reasons academic credits are not transferable within BiH and Macedonia, be it the ethnic-political fragmentation or the “independence” of faculties and their strong resistance against “integration” of the university. Greece is the only country in which the implementation of the three cycle system is openly fought against as has been described above in detail. All other SEE countries have introduced or, better said, transformed their study programs with different “success” however. Almost all of the countries did not develop PhD programs, but PhD students are still “mentored” individually by a professor after the medieval system of “master” - disciple. Romania has kept the Soviet style distinction of two types of PhDs, a more “scientific” PhD and a “professional” PhD insofar as PhDs can be awarded not only by universities, but also by the Academy of Sciences and National Research Institutes. Only the Bulgarian country report shows the existence of interdisciplinary programs established at the level of all three cycles. Usually, only single universities run interdisciplinary programs at the highest level, such as Novi Sad, Bitola, the SEE University or the universities situated in Tirana.

With regard to **employment policies and staff development**, Croatian and Macedonian universities suffer from a hiring freeze. All SEE countries show, however, the same serious problem, namely the lack of employment of young scientists and systematic efforts of scientific staff development. This is not only caused by **financial constraints**, which were in the case of Macedonia even imposed by the IMF, or **political control**, but also by **resistance of the academic “establishment” itself**. Young people, even more so if they were trained in Western European countries or the US and therefore have additional language skills, are seen as unwelcome competitors by the older generations which have to suffer from low salaries and inconvenient or even destroyed infrastructure, so that they misuse their university

positions to carry out other jobs with disastrous consequences for the efficiency and effectiveness of teaching. Moreover, due to war or transition problems, several countries like Bosnia-Herzegovina, Montenegro, Kosovo, Albania and Romania suffer also from a huge **brain-drain**. But only Croatia has developed a comprehensive effort to bring back successful scientists abroad as part of its “national” human capital and Romania will obviously soon follow with a brain-gain program as a “national” effort, whereas refugees from wars are too often seen as “traitors” of the national body and effectively hindered to return.

Finally, all SEE countries **participate in EU programs** and try to become integrated into the EHEA. However, several country reports again show that there is – despite of the efforts of SEE.ERA-net or ERI-SEE – still a lack of capacity in project management in order to strengthen participation in EU programs by, for instance, taking the position of lead-institutions in consortia.

2.4. Internationalization

The European **Framework Programmes** for Research, Technological Development and Demonstration (FP) represent the **most powerful instrument** of linking European research activities and constructing thereby the European Research Area.¹³⁵ Currently the Seventh Framework Programme (2007-2013) launches its calls for proposals. The right to participate in the FP constitutes a fundamental condition of participation in the well-funded European research system. Generally, full participation in the Framework Programmes is linked to EU membership, but also participation as an associated country is possible which is, however, linked to a financial contribution, the “entrance fee”. Since research cooperation is also seen as a preparatory instrument for political integration the opening of the EU Framework Programmes for prospective member states and candidate countries is of utmost importance and can also be called a preaccession measure.

The fact that on 13th June 2007 three countries from the Western Balkans, namely Croatia, Serbia and Macedonia (and Turkey), signed a Memorandum of Understanding with the Commission concerning the association to the FP7 (valid from 1st January 2007) can be seen as one of the major successes of the Steering Platform on Research for the WBC. Commissioner POTOČNIK always emphasised that “the doors” for the Western Balkan Countries to participate in the EU Framework Programmes are “wide open for all Balkan

¹³⁵ See above.

countries". He also stressed this invitation in his welcome letter to the final conference of the UNISEE project on 29/30 June 2007 in Graz.¹³⁶ Croatia and Turkey had already participated as associated countries in FP6; for Serbia and Macedonia it is the first time to participate as an equal member. From 1st January 2008 onwards also Albania and Montenegro are participating on equal footing in FP7 on the basis of Memoranda of Understanding signed in autumn 2007. In the meantime, also Bosnia and Herzegovina has agreed to ask for association to the FP7 in January 2008. After that all WBC will be associated members to FP7 and will be able to benefit from the calls and capacity building measures targeted to the needs of South East Europe. In the Sixth Framework Programme (2002-2006)¹³⁷ participants from the WBC were offered for the first time broad financial possibilities to participate in EU research funding. Since information on the conditions and administrative necessities for participation was quite low in WBC special National Contact Points were created and trained (this was the major focus of the ERA WESTBALKAN).

The process of regional association to the European Framework Programmes had already started in 1999 when the ten Central European Countries (Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic and Slovenia) became associated to the then Fifth Framework Programme for RTD (1998-2002).¹³⁸ Gained benefits from a full participation comprise significant political and administrative experience for future full membership in the EU, direct RTD cooperation with all EU member states, unlimited access to European know-how, stimulation of competitiveness and economic growth, possibilities for gaining new markets through RTD cooperation, creation of new jobs.¹³⁹ These benefits may not be underestimated in the process of approaching to full EU membership. Nevertheless, **participation of South East European research teams** in European research projects is **still confronted with many obstacles**, especially insufficient research infrastructure and lacking human resources. **Special support** for WBC within the European research system is therefore **still needed**.¹⁴⁰

¹³⁶ Janez POTOČNIK, Welcome Address to the participants of the Final Conference of the UnivSOE project on 29/30 June 2007 in Graz.

¹³⁷ See e.g. <http://cordis.europa.eu/fp6/>.

¹³⁸ See e.g. <http://cordis.europa.eu/fp5/>.

¹³⁹ Concerning the participation of Central European Countries in the 4th and 5th Framework Programme for RTD cf. SCHUCH, The Integration of Central Europe into the European System of Research, (here 51).

¹⁴⁰ Cf. in this respect the expertise organised by the SEE ERA.Net as well as by the Information Office for the Steering Platform, e.g. INFORMATION OFFICE OF THE STEERING PLATFORM ON RESEARCH FOR THE WESTERN BALKAN COUNTRIES see.science.eu (ed.): Needs/Offer Matrix and Analysis. Vienna 2007.

2.4.1. Croatia

Croatia is member of the European Science Foundation (ESF) since 2000 and actively participates in her EUROCORES programs. Croatia is also actively involved in all EU research and education programs and has concluded 49 bilateral agreements with the following countries indicating her priority: Slovenia, United Kingdom, Italy, Germany, France and the US. Nevertheless, external evaluation has shown that even Croatia is lacking capacity in project management. Since 1971 the Inter-University Centre for Post-graduate Studies in Dubrovnik runs several programs which contribute to full international integration of Croatia.

2.4.2. Bosnia and Herzegovina

Despite of the efforts of the Office of the High Representative and OSCE, participation in international programs in BiH is not very well developed due to the ethnic and political fragmentation of the country. BiH universities cooperate in EU programs, but very often lack capacity with regard to management and language skills. Moreover, mobility of students and academic staff is seriously hampered by the EU Schengen regime which was and is discriminatorily applied against Bosnian citizens by Slovene and Croatian border authorities in the pre-accession phase.

2.4.3. Serbia/Montenegro

Due to the sanctions against the Milosevic regime, international relations of Serbian universities were severely hampered. Only since 2000, the political isolation is overcome. Thus, Serbia holds membership in the EUA, Danube Rectors' Conference and the Balkan University Network and participates actively in EU research programs. There are bilateral cooperation agreements with 52 states.

Also Montenegro is member of EUA and the Mediterranean Countries' Universities network. Bilateral research projects are mainly carried out with Slovenia and Macedonia. Since 2002 eight projects were carried out under TEMPUS. However, there is a huge brain-drain, whereas incoming students are mainly from former Yugoslav republics.

2.4.4. Kosovo

Despite of the UNMIK administration with major international organisations working on the ground, international cooperation of the University of Prishtine was not really further

developed. Several universities from Austria and Germany helped in training and supervision of PhD candidates, but did not develop cooperation further. There is regional cooperation with the universities in Skopje, Podgorica, Tirana and Shkoder and the establishment of the private SEEU in Tetovo even attracted the best trained young academic staff from Prishtine University who therefore lost them. The “illegal” university in North Mitrovica seems to be internationally isolated. The privately run American University of Kosovo brings in faculty from the US, but is only in the early stages of developing Joint Degree programs with US universities.

2.4.5. Macedonia

Both universities in Skopje and Bitola are integrated into EU research and education programs in contrast to the public universities in Tetovo and Stip. Bitola is also engaged in a cooperation with a Dutch NGO partner to organise international summer schools. The University in Skopje has concluded bilateral cooperation agreements with 75 universities. The SEEU is, of course, due to her history, the university where all the trends of internationalization with regard to mobility of students and staff and participation in international research and study programs are best developed.

2.4.6. Albania

Albanian universities are fully integrated into European networks such as EUA, CRE, SEEU, ERI-SEE as well as with the Black Sea Universities Network and with Mediterranean universities (CUM, UNIMED, AIMOS, MEDECA). In addition there are bilateral cooperation agreements with the neighbouring countries and the region as well as with Ukraine and Egypt.

2.4.7. Romania

Romanian universities are fully integrated into European programs (Leonardo II, Socrates II, TEMPUS, ERASMUS, FP 6 and ERI-SEE) and the Black Sea University Network. In addition, the regional UNESCO-CEPES office is situated in Bucharest. Romanian universities have also concluded some 200 bilateral cooperation agreements with universities from about 100 states. In comparison, Romania seems to have the most active academic staff mobility.

2.4.8. Bulgaria

Bulgarian universities are fully integrated into European programs (Leonardo, Socrates, Erasmus, Comenius, Minerva, Lingua). Foreign students, however, come mostly from Greece, Macedonia and Romania.

2.4.9. Greece

Greek universities are fully integrated into European programs (Socrates, Erasmus, Leonardo, Tempus) and have concluded bilateral cooperation agreements with 73 countries.

2.4.10. Comparative Conclusions

The country reports demonstrate that **all SEE countries are well integrated into European networks** and participate more or less effectively depending on staff capacity building efforts. Astonishingly, even one of the most advanced countries, namely Croatia which is already negotiating for EU membership and has already closed the chapter on education, reports of **problems with staff capacity building**. In addition, Albania and Romania are also participating in the Black Sea network whereas a number of countries such as Montenegro, Albania and Greece are also actively participating in Mediterranean networks. As far as bilateral cooperation is concerned, Romania and Macedonia take the lead in the conclusion of cooperation agreements covering a broad range of countries. In particular Serbia and Kosovo, however, **lack bilateral cooperation** with neighbouring countries **or** countries from the **region** whereas Croatia and Greece form the middle-ground in activity. With regard to students or staff **mobility**, the huge problems stemming from brain drain have been elaborated already above. However, despite of this problem, mobility seems to be weakly developed by BiH, Montenegro, Serbia Kosovo and Bulgaria in strong contrast to Romania which ranks highest in this field followed by Croatia and Macedonia.

2.5. Inter-ethnic Cooperation

2.5.1. Croatia

There are no ethnic conflicts at Croatian universities any longer, but there is also no special focus in order to contribute to ethnic conflict or diversity management. There are strong relationships between the Croat dominated university in Mostar-West and Croatian universities which seem to contribute to the ethnic homogenization processes carried out in BiH during and after the war.

2.5.2. *Bosnia and Herzegovina*

In BiH universities are still strongly **ethnically as well as territorially separated**. RS universities are almost ethnically homogenous Serb universities. The universities in the Federation of BiH are strictly separated between Croat and Bosniak universities with the separation of the University of Mostar into the Bosniak Dzemal Bijedic University (East) and the Croat University (West), the most visible symbol where all efforts of the International Community to contribute to inter-ethnic reconciliation by university cooperation or even reuniting them have definitively failed. The multi-religious and cultural atmosphere in Sarajevo has disappeared and also the University is an almost homogenous Bosniak university by now with only few Serbs or Croats left remaining invisible among the student body or staff. Until recently, also curricula and text-books at university level were imported either from Serbia or Croatia. An Action Plan for Roma adopted by the government in 2004 did provide for scholarships, but is not yet implemented.

2.5.3. *Serbia/Montenegro*

Universities in Serbia were one of the platforms for the ethno-national mobilization under Milosevic. Due to the **lack of any lustration and no return of professors ousted under Milosevic**, universities remain strongholds of Serb nationalism. The only university with the image of **multi-culturalism** is the University in **Novi Sad** in the autonomous province of Vojvodina which runs also programs in the Hungarian language. But, as we learned from site-visits and interviews, the effectiveness for the preservation of Hungarian culture and language is not given. This can be seen from the empirical indicator that none of the academic staff on the level of assistant professors belongs to the Hungarian minority. In addition, the Belgrade government refused to cooperate with UNMIK in Kosovo in her effort to integrate the university in North Mitrovica into the Kosovo tertiary education system. Academic staff and infrastructure are paid by the Belgrade authorities to uphold this system of “reversed” parallel institutions in this sector and thereby to maintain the political claim of sovereignty over Kosovo territory.

The University in **Montenegro** does not give concern for ethnic conflict, nor is it actively involved in programs for inter-ethnic education. Among the staff of 593 persons, there are only 3 Albanians, 3 Muslims and 6 Croats.

2.5.4. Kosovo

Already under communist regime, the institutions of (tertiary) education were **ethnically segregated** between Kosovo Albanians and Serbs. Under the Milosevic regime the University of Prishtine was ethnically cleansed. Only after “settling” the conflict in 1999 by SC Resolution 1244, the universities in Kosovo could “normalize” their activities, i.e. start to undertake scientific education and research. But due to the ongoing territorial conflict, the ethnic situation is now simply “reversed” since there are no Serb students or academic staff left at Prishtine University and no Kosovo Albanian students and staff allowed to study and teach at Mitrovica University. Within the governmental efforts for minority protection, there is now also the Faculty of Business operating in Peja in Bosniak language and a faculty for teacher training in Prizren with Turkish as language of instruction.

2.5.5. Macedonia

The political conflict between the Slav speaking Macedonian and Albanian Macedonian community with regard to the establishment of a separate university with Albanian as language of instruction has been described in more detail already above. The “settlement” of this conflict with the **establishment of the private SEEU** and finally with the “legalisation” of the state university has definitely **improved the overall inter-ethnic situation in Macedonia**. The SEEU was conceived by their founders as a “model” of inter-ethnic cooperation in the sector of tertiary education by the requirement to operate in three languages, i.e. not only Macedonian and Albanian, but also English. SEEU also introduced a quota system for the Roma community. The student body of 6000 students is thus composed of 4500 Albanian speaking students, 1300 Macedonian speaking students and 100 Turkish speaking students and 20 Roma. However, it is too early to assess which impact teaching in three languages actually has. Two site-visits on the campus give the impression that this is a fully modernized campus university with all necessary infrastructure where students thus live harmoniously together. But it remains to be seen which impact the university will have on the regional and national level due to the problems to find jobs on the regional and national labour market. However, one of the most dubious facts we learned from our site-visits is the complete unwillingness of university bodies and staff to cooperate with the state University of Tetovo which is situated only 500 meters away and would be in desperate need of support in any field.

2.5.6. Albania

Officially, there are neither specific problems with regard to inter-ethnic living together at Albanian universities, nor are there any particular efforts undertaken in this sense. The only exception is a four-year teacher training program in Greek language at the University of Gjirokastra under the government's program for minority protection. The 2003 Roma strategy providing for quotas at university level is not implemented.

2.5.7. Romania

The biggest hopes and problems with regard to inter-ethnic relations are connected with the **Babes-Bolyai University in Cluj**. In 1995, study programs with Hungarian and German as language of instruction were introduced so that 15 out of 21 faculties run study programs in Hungarian and Romanian language, whereas 9 faculties teach in Romanian and German. Moreover, on the executive board, 20 minority members are represented. However, the UDMR, one of the Hungarian parties in Romania kept claiming the separation of the university and the establishment of a university exclusively using Hungarian as language of instruction which led to major crises, but was never accepted by the Romanian government. Thus, a private university "Sapientia" was established, but is not sustainable since more and more Hungarian students leave the university again. The university in Sibiu runs also some courses in German.

2.5.8. Bulgaria

No facts and figures are provided by the country report except the existence of seminars and research projects in the field of conflict management.

2.5.9. Greece

No facts and figures are provided by the country report.

2.5.10. Comparative Conclusions

As far as inter-ethnic relations are concerned, there still is a **strong legacy** in place from the **nation-building efforts** of the newly independent states after 1989 **and the wars** in the Balkans in the 1990ies. Serbia, Kosovo and Bosnia-Herzegovina remain severely affected from ethnic conflicts and wars despite all reconstruction and reconciliation efforts by the international community. Universities are still strictly **separated along ethno-national lines** and ethnically homogenized internally. In stark contrast, the South East European University

in **Tetovo** was established by the initiative of the OSCE High Commissioner on National Minorities as a “**model**” **university** to help overcome the linguistic and national conflicts in Macedonia. However, it is too early to assess the impact of tri-lingual tertiary education for inter-ethnic relations in the Albanian settled region in Macedonia itself and within the greater region of Macedonia, Kosovo, Serbia and Bosnia-Herzegovina which remain for better or worse inter-connected in many ways until the very day. Also other universities with the image of providing “best practice” for a multi-cultural approach in tertiary education and research can be singled out, namely Novi Sad and Cluj. However, a closer look reveals that practice only partially fulfils theoretical expectations.

Traditional minority protection instruments are established through affirmative action measures, in particular on behalf of Roma students, in some countries and colleges for teacher training in the respective minority languages in Kosovo and Albania

2.6. Slovenia and the Ukraine as Benchmarks for Comparison

Despite of the fact that **Slovenia** could itself successfully keep away from the wars in the ex-Yugoslav republics and join the other former communist Central and East European states in the Eastward enlargement process of the European Union from the very beginning which was successfully completed by full membership in 2004, all benchmarks and indicators on the transformation of the research and tertiary education sector prove that Slovenia is **not that far ahead of SEE countries in her reform process as might have been expected**. There is a dramatic increase of institutions, in particular with private higher education institutions and also the number of students has more than doubled since 1991 from 19.1% to 41.1% in 2005 per thousand inhabitants. Despite of a first reform phase from 1993 to 2004, however, only with the implementation of the Bologna process major substantial reforms are made. Also the former state-centred system became transformed into a state-supervised system only recently with the establishment of Councils and Agencies supporting system-wide policy planning, financing and quality assurance. However, the mix of state executive domination by the respective Ministry and participation of academia and economic agents is not different from the more advanced SEECs. This is also true for financing with 1.33% of the GDP spent for tertiary education and 1.49% for research and development over the last four years. Also lump-sum budgeting was introduced only in 2005 and the “integration” of universities carried out only from 2004 to 2006. **Outstanding** is, however, the number with 277 **business companies with R&D teams** which proves that Slovenia’s economic success under

communism could be transformed also into the post-communist period against the regress we could observe, for instance, in Romania at the same time. Also in teaching Slovenia – having always been oriented to Great Britain and the US since the 1960ies – has a strong record so that the implementation of the Bologna process does not create any major obstacles we could not find also in other Central and West European countries. Going hand in hand with this observation is also the **strong international performance** of Slovene institutions or research and tertiary education. Since Slovenia is a typical national state, there are no problems of interethnic co-operation, but on the other hand, there is also “benign” neglect with regard to old and new minorities in the research and tertiary education sector with the exception of the National Institute for Ethnic Studies which has a strong record in research in this field.

In strong contrast to the observations on Slovenia, the sector of research and tertiary education in the **Ukraine is in many ways still trapped in the legacy of the former communist system**. As we learn from the country report, already the legal framework is incomplete and inconsistent. System-wide regulation and policy planning as well as budgeting and internal governance and management show a strong domination by the state executive so that a transformation of the entire system from state-centred to state-supervised is only in the beginning. At the same time insufficient funding does not motivate academic staff on all levels. Together with the resistance from old-age “cadres”, there is no incentive for a younger generation to pursue academic careers. The Ukrainian institutions cooperate with EU member states’ institutions through Tempus, but internationalization is very much hampered by the missing prospect of full EU membership and the Schengen regime.

In conclusion, the results from these two countries which were selected as benchmarks for comparison of the situation of SEECs clearly demonstrate that the transformation and reform of research and tertiary education in this region is very well underway under the pressure of globalization and market-orientation if one takes into account the much worse starting conditions from the wars in the Balkans. Nevertheless, there are many deficiencies as will be elaborated in more detail in the conclusions and recommendations so that the SEECs definitely need more support from the EU in this catch-up process.

3. Academies of Sciences in South East Europe

3.1. Academy of Sciences: Concept and Short History

Gottfried Wilhelm LEIBNIZ (1646-1716) introduced the modern concept of an Academy of Sciences into the scientific organisational discourse of his time taking inspiration from Renaissance-Italian and even antique models of learned societies.¹⁴¹ “Theoria cum praxi” was his motto interpreting the sciences as helpful instruments to better deal with the challenges of the everyday life. The sciences should have a forum where the best and eminent scholars and representatives of all disciplines would come together and discuss solutions of important problems of the time. Since the public consult of the Academy would serve the people in general this high-level institution should enjoy the political protection of the highest political authority. LEIBNIZ, therefore, asked different kings of his period for a royal support of his Academy plans. Finally, his idea came true in Berlin where the *Churfürstlich Brandenburgische Societät der Wissenschaften* was founded in 1700.

Important Academies of that time were the Royal Society (1660) in London, the Académie française (1635) and the Académie des sciences (1666) in Paris inspiring many other foundations of Academies all over Europe in the 17th and 18th century. Austria took some 150 years longer to finally establish the Austrian Academy of Sciences in 1847 in Vienna. “Possessing” an Academy became an important element of the national pride and identity since Academies dedicated themselves to a growing extent to the promotion of national culture, cultural heritage and research apart from the promotion of sciences in general.

Today, three main types of Academies may be observed corresponding to the three main functions of an Academy in the research landscape of a state:¹⁴²

1) The basis of every Academy is a **learned society**, i.e. an association of scientists for science. The core idea is that the Academy provides a platform where scientists can meet and freely exchange experiences and ideas on science and research. Although interdisciplinarity is a characteristic of the entire Academy the learned society may be divided into sections or departments (or "classes") in order to facilitate productive discussion among representatives

¹⁴¹ For the following cf. Hedwig KOPETZ, Die Österreichische Akademie der Wissenschaften - Aufgaben, Rechtsstellung, Organisation, Vienna-Cologne-Graz 2006 (Studien zu Politik und Verwaltung Bd. 88), 1-3, 28-48.

¹⁴² According to Albert W. KOERS, presently General Counsel of the InterAcademy Council (IAC) who is the author of the background paper MOLDOVAN ACADEMY OF SCIENCES/UNESCO (ed.), Academies of Sciences in today's world: roles and organization. Venice 2007, see <http://www.wbc-inco.net/doc/2173.html>, 9-12.

of similar disciplines. Excellent members are the core of an excellent learned society. The election of new members is therefore the most important administrative procedure of a learned society since decorating eminent scientists with the honour of being elected a member of the Academy is a central function - as well as awarding prizes, grants and scholarships for outstanding scientists and hereby the promotion also of younger researchers. The leadership of a learned society is in the hands of scientists; independence is one of the most significant assets of a learned society.

2) The second model or "archetype" of an Academy is that of an "**advisor to society**".¹⁴³ Like the learned society the advisor to society is an association of scientists elected to membership on the basis of scientific merit but the target audience encompasses not only scientists but also government and society at large. The mission of the Academy as advisor to society is to serve the public by providing science-based advice on issues of public interest like e.g. climate change or stem cell research or strategies of national science policy in general. Therefore, the Academy maintains close relationships with the government and society which can harm its independence as a learned society.

3) The third type of an Academy is that of a "**manager of science**".¹⁴⁴ In addition to the role as a learned society and advisor to society Academies can operate a number of research institutes. Then they are acting as an association of scientists for science, government, society and the conduct of actual research. As a consequence, they need a completely different organisation – and larger budget – than Academies acting only as a learned society or advisor to society. The management of the research institutes and the whole organisation is a complex task. This often requires professional management in addition to the scientific leadership on the top of the Academy carried out by elected members. Moreover, the number of scientific staff of the Academy will be much higher according to the personnel of the research institutes. The dependence on state funding is one of the weak points of the Academy as a manager of science.

Today, the majority of countries are vested with one or more Academies of Sciences which reflect one or more of the three archetypes described. In most cases they are learned societies

¹⁴³ MOLDOVAN ACADEMY OF SCIENCES/UNESCO (ed.), Academies of Sciences in today's world: roles and organization, 10-11.

¹⁴⁴ MOLDOVAN ACADEMY OF SCIENCES/UNESCO (ed.), Academies of Sciences in today's world: roles and organization, 11-12.

on the basis serving also as advisors to the public. Some do also run research institutes. In most countries Academies of Sciences are corporations or societies with autonomy and self-government, legally based on special laws, and mainly financed by the state.

3.2. Comparative Analysis of the Academies of Sciences in East and South East Europe

3.2.1. Slovenia

The Slovenian Academy of Sciences and Arts (SAZU, engl. SASA)¹⁴⁵ with its present structure was **founded in 1938** although efforts for an Academy were already made in the second half of the 19th century and even before. Already in the 17th century a predecessor of the Academy, the Academia Operosorum, had been established as a learned society of churchmen and lay intellectuals.¹⁴⁶

In accordance with the law of 1994 which ensures the autonomy and freedom of democratic conduct the SASA can be qualified as a public law association with self-government.¹⁴⁷

SASA is **mainly a learned society** also acting as an advisor to society by formulating recommendations on science policy issues. SASA has a maximum of 60 full and 30 associate members. The limitation refers to members under 75 years of age. SASA also has a maximum of 90 corresponding members from abroad. At present there are 78 full and 27 associate members, as well as 84 corresponding members from scientific organisations abroad.¹⁴⁸ Elections are based on achievements in science and take place every second year.

SASA is active in different branches of research as reflected in its six sections: 1) historical and social sciences, 2) philological and literary sciences, 3) mathematical, physical, chemical and technical sciences, 4) natural sciences, 5) arts, 6) medical sciences.

The **management bodies** of SASA are the assembly of full and associate members, the presidency and the president. Administration is headed by an executive director.

¹⁴⁵ See the official website at <http://www.sazu.si/>.

¹⁴⁶ Cf. http://www.slovenija.si/science/the_slovenian_academy_of_sciences_and_arts/ (13.3.2008).

¹⁴⁷ For the following cf. Ana ZIVANOVIC/Marianne PASTERK-REISINGER, UnivSOE Country Report Slovenia (2007), 35-37.

¹⁴⁸ Cf. <http://www.sazu.si/en/o-sazu.html> (13.3.2008).

SASA established different committees in which members of the Academy are actively carrying out research.¹⁴⁹ Apart from that SASA was the founder of several important research institutes (e.g. Inštitut Jožef Stefan) but separated them from the management of the Academy. SASA also founded the Scientific Research Center of SASA, an association of different research institutes which operate independently but in close connection with the Academy.¹⁵⁰ A long-term programme is dedicated to “Natural and Cultural Heritage of the Slovenian Nation”.¹⁵¹ SASA also has an important scientific library.

SASA is active in **international cooperation** on the regional as well as European scale.

3.2.2. Croatia

In Croatia there are **three Academies** of Sciences: the Croatian Academy of Sciences and Arts, the Academy of Medical Sciences and the Croatian Academy of Engineering. In the following we will concentrate on the Croatian Academy of Sciences and Arts (HAZU).¹⁵² The founding of the Academy is strongly linked with the national movement of the 19th century and was finally realised due to the initiative of Bishop Josip Juraj STROSSMAYER (1815-1905). His wish was to “*bring together the best minds...and find a way in which books in the national languages could be produced in the Slavic South*”.¹⁵³ The statutes were finally approved by Emperor Franz Joseph I. in 1866.¹⁵⁴ The Yugoslav Academy of Sciences and Arts was renamed to the Croatian Academy of Sciences and Arts (HAZU) first in 1941 and then in 1991.¹⁵⁵

The Academy consists of full, corresponding, honorary and associate members. The initial number of 16 full members in **1866** was raised steadily until currently 160 full members. There may be up to 100 associate members. Election is based on scientific merit.

There are nine **departments** ranging from arts and music to social, medical, natural and technical sciences.

¹⁴⁹ E.g. Committee for Ethnic Minority Studies, Committee for Sustainable Development.

¹⁵⁰ Cf. <http://www.sazu.si/en/o-sazu.html> (13.3.2008).

¹⁵¹ For an overview of the activities of the Academy see e.g. SLOVENSKE AKADEMIJE ZNANOSTI IN UMETNOSTI (ed.), Letopis. The Yearbook of the Slovenian Academy of Sciences and Arts vol. 56/2005, Ljubljana 2006, 269-272 (270).

¹⁵² See the official website at <http://www.hazu.hr/>.

¹⁵³ See <http://www.hazu.hr/ENG/Founding.html>.

¹⁵⁴ Although STROSSMAYER called his Academy a “Yugoslav” one the idea of assembling all scientists from the Slavic South was not really realised because after the establishment of the Yugoslav Academy in Zagreb also Academies in Bulgaria and Romania were established. Cf. <http://www.hazu.hr/ENG/Founding.html>.

¹⁵⁵ For the following cf. Antonija PETRIČUŠIĆ, UnivSOE Country Report Croatia (2006), 48f.

HAZU also conducts research in **own research institutes** spread in the whole country and possesses museums, art galleries and a library. HAZU gives public advice, organizes scientific conferences and cooperates internationally. The Academy is mainly financed by the state.

3.2.3. *Bosnia and Herzegovina*

The Academy of Sciences and Arts of Bosnia and Herzegovina (ANUBiH)¹⁵⁶ was founded by law in **1966** arising from its predecessor, the Scientific Society established in 1951. ANUBiH is located in Sarajevo. According to the founding law ANUBiH is charged with the responsibility for the overall development of science and arts in the country. The Academy adopts its own statute. It can be qualified as a public law association with forms of self-government. After the proclamation of Bosnia and Herzegovina as an independent state in 1991 ANUBiH became the national Academy – which did not work without tensions.¹⁵⁷ The consequences of the Bosnian war and the new quasi-federal structure of the state after the Dayton agreement in 1995 also were reflected in the foundation of the Academy of Sciences and Arts of the **Republika Srpska**¹⁵⁸ founded in Banja Luka in 1996.

The Academy's electoral assembly elects full and correspondent members by secret ballot, and domestic and foreign members by acclamation. At present there are 34 full members (called Academicians) and 14 corresponding members (in total 48).¹⁵⁹ The supreme governing body is the assembly. The presidency and the executive board are chosen by the assembly.

The Academy is divided into six **departments**: 1) social sciences, 2) medicine sciences, 3) technical sciences, 4) natural sciences and mathematics, 5) literature, 6) arts. The departments are authorized to assemble formal work groups (commissions, committees¹⁶⁰) to study and evaluate various aspects of scientific and artistic activities. ANUBiH publishes several

¹⁵⁶ Cf. the official homepage at <http://www.anubih.ba/>.

¹⁵⁷ Today this fact does not facilitate public funding.

¹⁵⁸ See the official website at <http://www.anurs.org/>.

¹⁵⁹ Cf. <http://www.anubih.ba/index.php?option=content&lang=eng&Theme=membership&Level=1&ItemID=6> (13.3.2008). - MOLDOVAN ACADEMY OF SCIENCES/UNESCO (ed.), *Academies of Sciences in today's world: roles and organization* (2007), 18, says that there are 49 members in total at the moment.

¹⁶⁰ E.g. Committee for Scientific, Technological and Social Development of Bosnia and Herzegovina.

periodical editions.¹⁶¹ The Academy also operates four **research units** (e.g. the Centre for Balkan Studies has a long tradition going back to the Austrian-Hungarian rule of BiH).¹⁶²

ANUBiH also organises scientific conferences on subjects of public interest as e.g. the seminar “Renewable Energy Sources in BiH and European Perspectives” in October 2007 and is engaged in regional and European contacts. ANUBiH hosted the meeting of the presidency and programme committee of the Inter-Academy Council for South Eastern Europe in October 2007 in Sarajevo.¹⁶³

The Academy of Sciences and Arts of the **Republika Srpska (RS)**¹⁶⁴ understands itself as the highest representative institution for science and art within RS. There are 36 members¹⁶⁵ (regular, corresponding and foreign) who are grouped in four departments: 1) social sciences, 2) literature and arts, 3) natural, mathematical and technical sciences, 4) medical sciences. The Academy also runs research institutes in which approximately 150 researchers are engaged. It is mainly financed by the entity government of the RS.¹⁶⁶

3.2.4. *Serbia*

In Serbia there are **two Academies** of Sciences:¹⁶⁷ the Serbian Academy of Sciences and Arts (SANU)¹⁶⁸ was founded by law of 1 November **1886** as the Serbian Royal Academy. In 1947 it was renamed to the current name “Serbian Academy of Sciences and Arts”. In 2004 the Vojvodinian Academy of Sciences and Arts (VANU) was re-established which can be qualified as a proof of the lasting value of an Academy – also in terms of the political expression of an elite – as well as the important contribution of science, culture and arts for the development of a society. Both Academies can be qualified as public law institutions with forms of self-government.

¹⁶¹ See <http://www.interacademies.net/?id=4247> (13.3.2008).

¹⁶² The other centres are the Philosophical Research Centre, the Centre for lexicography and lexicology, the Centre for coordination of medical research. Cf.

<http://www.anubih.ba/index.php?option=content&lang=eng&Theme=units&Level=1&ItemID=5> (14.3.2008).

¹⁶³ Cf. [http://www.anubih.ba/aktuelnosti/IACSEE%20meeting\[1\]eng.pdf](http://www.anubih.ba/aktuelnosti/IACSEE%20meeting[1]eng.pdf) (14.3.2008).

¹⁶⁴ See the website at <http://www.anurs.org/>. Its legal basis is a law of the Republika Srpska already from 1993 (26/93).

¹⁶⁵ MOLDOVAN ACADEMY OF SCIENCES/UNESCO (ed.), *Academies of Sciences in today's world: roles and organization*, 18, says that there are 35 members at the moment (2007).

¹⁶⁶ Cf. Slobodanka MILIKIĆ, *UnivSOE Country Report Bosnia and Herzegovina* (2007), 42.

¹⁶⁷ Cf. for the following Marko KMEZIC, *UnivSOE Country Report Serbia* (2006), 18f.

¹⁶⁸ See the official website at <http://www.sanu.ac.yu/>.

At SANU there are eight **departments**, open to all disciplines: 1) technical sciences, 2) medical sciences, 3) literature and language, 4) social sciences, 5) fine arts and music, 6) historical sciences, 7) mathematics, physics and geo sciences and 8) chemical and biological sciences.

Members are elected by the Assembly as the highest administrative body on the basis of scientific achievement. Full members and corresponding members form the Assembly.

SANU is not only a **learned society** but also active in **research**. Members of SANU are involved in research projects in various commissions; moreover, SANU also operates 10 research institutes dedicated to different disciplines with a focus in the humanities but also in the natural sciences.

SANU is also an **advisor to society** and gives public consult. In the past its close link to politics contributed to the conflicts of the break-up of the Former Yugoslavia. Still today, some SANU members are taking part in political daily life in Serbia, thus creating the image of the Academy involved in politics.¹⁶⁹ SANU is financed by the budget of the Republic of Serbia. KMEZIC observed that SANU seems to consist of two “wings”: the representatives of the natural sciences on the one hand and the representatives of the social sciences and humanities on the other. Whereas the natural scientists want the Academy to be a purely scientific body, the social scientists still see the Academy as an expression of Serbian statehood as already at the end of the 1980ies. “SANU works under the heavy burden of the events related to the collapse of former Yugoslavia. It therefore lacks legitimacy to act as a factor of societal integration at the time which may be unjustified to majority of SANU members, especially from the natural sciences ‘wing’.”¹⁷⁰

In the meantime SANU is active in **international cooperation** and even participates in EU funded projects. There are strong links to universities.

3.2.5. *Kosovo*

The Kosova Academy of Sciences and Arts (ASHAK)¹⁷¹ goes back to an association of sciences and arts founded in **1974**. In 1978 a Law on the establishment of the Kosova

¹⁶⁹ Cf. KMEZIC, UnivSOE Country Report Serbia, 21.

¹⁷⁰ KMEZIC, UnivSOE Country Report Serbia, 22.

¹⁷¹ See the official website at <http://www.ashak.org/>.

Academy of Sciences and Arts was adopted.¹⁷² In a Serbian law of 1992 the dissolution of the Kosova Academy was practically foreseen. Yet, the Academy continued its work in secrecy until 1999. In 2004 a new Law on the Academy of Sciences and Arts of Kosovo was adopted.¹⁷³ The Kosova Academy can be qualified as a public law association with forms of self-government.

The Assembly is the highest decision-making body which also adopts the statute and elects new members as well as the president. Currently there are 19 full members and 6 corresponding members.¹⁷⁴ The Academy has also foreign and honorary members who are not part of the decision-making body. At present there are four **sections**: 1) section of language and literature, 2) section of social sciences, 3) section of natural sciences, 4) section of arts. The Academy is open to all disciplines. ASHAK understand itself as a pure learned society. As a consequence, there are **no own research institutes**.

In future, a better financial basis shall be achieved – at the moment there are not any funds for awarding prizes or grants – and cooperation with sister Academies in the region and in Europe shall be improved.

3.2.6. *Montenegro*

The Montenegrin Academy of Sciences and Arts (CANU)¹⁷⁵ was founded in **1973**. Its legal basis is the Law on the Montenegrin Academy of Sciences and Arts from 1994.¹⁷⁶ The Academy can also adopt its own statutes.¹⁷⁷

CANU has three **divisions**: 1) division of social sciences, 2) division of natural sciences and 3) division of arts. Presently there are 32 full members, 10 associate members and 28 foreign members. Full and associate members create the working body of the Academy. Members of the Academy are elected by secret voting on the basis of scientific achievements every third year (sic!).

¹⁷² For the following cf. Arben HAJRULLAHU, UnivSOE Country Report Kosova (2007), 14f.

¹⁷³ Law on the Academy of Sciences and Arts of Kosovo, No 2004/19, 16 June 2004; UNMIK/REG/2004/25, On the Promulgation of the Law on the Academy of Sciences and Arts of Kosovo, 28 July 2004.

¹⁷⁴ MOLDOVAN ACADEMY OF SCIENCES/UNESCO (ed.), Academies of Sciences in today's world: roles and organization, 18, says that there are 26 members in total at the moment (2007).

¹⁷⁵ See the official website at <http://www.canu.cg.yu/>.

¹⁷⁶ The first Law on the Montenegrin Academy of Sciences was adopted in 1976.

¹⁷⁷ Cf. for the following Branka BOSNJAK, UnivSOE Country Report Montenegro (2006), 19f.

CANU is in its core a **learned society**, i.e. an association of scientists dedicated to the promotion of science which is also realised by awarding prizes to young researchers for example. At the same time CANU conducts **research** in the form of projects and in own institutes (Institute of language and literature “Petar Petrovic Njegos” and Center for Energy and Ecology – ENEKO), publishes scientific results and organises scientific meetings – and gives suggestions and opinions to the state bodies. CANU supported the University of Montenegro in its effort to establish strong research institutes within the university. CANU has signed several agreements of cooperation with other Academies and is also involved in European associations (ALLEA etc.). The Academy is financed by the state of Montenegro.

3.2.7. *Macedonia*

The Macedonian Academy of Sciences and Arts (MASA)¹⁷⁸ was founded by law in **1967** “as an exclusive scientific and artistic institution that should encourage development of science and arts”. In 1996 the Assembly of the Republic of Macedonia enacted a Law for the Macedonian Academy of Sciences and Arts.¹⁷⁹ MASA also adopts its own statute and can therefore be described as a public law association with some forms of self-government.¹⁸⁰ MASA awards an annual prize for the best young scientist in the country.

MASA has regular members, foreign members and honorary members. They are elected every third year by secret ballot for a life long membership. Currently (2007), there are 38 regular members, 28 foreign members and one honorary member. From all of the members, 8 are under the age of 70, 3 members are under the age of 60 and there are no members under the age of 50.

The main organs of the MASA are the Assembly consisting of all members with only the regular members having the right to vote and the Presidency (currently nine members).

MASA has five **departments**: 1 Linguistic and Literary Science, 2 Social Sciences, 3 Mathematical and Technical Science, 4 Biological and Medical Science, 5 Arts. There are also five **research centres**¹⁸¹ within the MASA as well as an archive and a library. MASA is

¹⁷⁸ See the official homepage <http://www.manu.edu.mk/>.

¹⁷⁹ Republic of Macedonia, Official Gazette No 13/96.

¹⁸⁰ Cf. Zoran ILIEVSKI, UnivSOE Country Report Macedonia (2007), 16.

¹⁸¹ E.g. the Research Centre for Energy, Informatics and Materials which is successful in international research participation.

mainly financed by the state,¹⁸² publishes reports to the government and the public and is engaged in scientific regional and international cooperation.

3.2.8. *Albania*

The Academy of Sciences of Albania (ASA)¹⁸³ was founded in **1972** and unified 25 **scientific research institutions**.¹⁸⁴ The legal basis of the Academy is Law No. 9655 of 11 December 2006 on the Academy of Sciences of Albania (LASA). The Academy has also adopted new statutes and can therefore be described as a public law institution with forms of self-government or autonomy.

There are four categories of members: not more than 30 regular members (“Akademik”), not more than 15 associated members as well as foreign members and honorary members. The 45 regular and associated members form the Senate. Elections take place once in four years when there is a vacant seat (sic!). The Assembly is the highest directing organ and consists of the permanent members as well as the directors of the research institutions and other persons. Managing organs are the Executive Council and the Managing Board (Presidency). The President of the Academy is appointed by the President of the Republic (sic!).¹⁸⁵

ASA comprises two **sections**: 1) section of social and albanological sciences and 2) section of natural and technical sciences. Election to membership is based on scientific merit.

ASA also conducts research in own research units dedicated to fields of natural sciences as well as the humanities (9 institutes, 4 centres), awards prizes and offers advice to the government in issues concerning the development of the country.

3.2.9. *Greece*

The Academy of Athens¹⁸⁶ was founded by constitutional decree of 18th March **1926** as an Academy of Sciences, Humanities and Fine Arts.¹⁸⁷ Its name is a reference to Plato’s Academy and the spiritual glory of ancient Athens. The first attempt to establish an Academy in Greece was made in 1824, during the Greek Revolution. Underlying this and later efforts,

¹⁸² The annual budget of MASA is around 777.000 Euro. Cf. ILIEVSKI, Country Report Macedonia, 19.

¹⁸³ See the official homepage at <http://www.academyofsciences.net/>.

¹⁸⁴ Cf. for the following Michaela SALAMUN/Zaim HALLUNAJ, UnivSOE Country Report Albania (2007), 35f.

¹⁸⁵ Art. 11 LASA.

¹⁸⁶ Cf. the official website <http://www.academyofathens.gr/>.

¹⁸⁷ For the following cf. Margarita KASTANARA/Anastasios MORAITIS, UnivSOE Country Report Greece (2007), 32-25.

the era's ideology which connected national independence and the development of education, is revealed.

The Academy has the legal status of a legal person under public law, operates according to its own charter (from 1929 with amendments) and is supervised by the Ministry of Education and Religious Affairs. It is the highest research foundation in Greece.

According to its regulation, the Academy is composed of three **sections**: 1) sciences (Mathematics, physics, history of physics, applied exact sciences, medicine), 2) humanities and fine arts (literature, history, fine arts, language, archaeology), 3) ethical and political sciences (theology, philosophy, law, political, economical and social sciences).

The members of the Academy are ordinary, honorary, associate, foreign or corresponding. Overall there are 65 ordinary members, 25 of whom belong to the first section, 25 to the second, and 15 to the third. There are 40 associate members, 40 foreign members, and 250 corresponding members. The election of ordinary members takes place following a public announcement. According to an unwritten rule the Academicians must be residents of Athens.¹⁸⁸

The Council of the Academy consists of the President, the Vice President, the Secretary General, the Secretary for Proceedings, the Secretary for Publications. The President's tenure of office is annual. The Vice President of the preceding year becomes *ex officio* the next President of the Academy.

There are **three main purposes** of the Academy: first, the cultivation and advancement of the sciences, humanities and fine arts, second, the conduct of scientific research and study and third, the offer of learned advice to state in these areas.

At present there are 13 **research centres** and 10 research offices in operation dedicated to fundamental research mainly in the humanities (Greek cultural heritage etc.). The Academy is also active in international contacts and exchanges.

¹⁸⁸ See <http://www.academyofathens.gr/ecPortal.asp?id=191&nt=19&lang=2> (15.3.2008).

3.2.10. Bulgaria

The Bulgarian Academy of Sciences (BAS)¹⁸⁹ was established in Sofia on 6th March 1911 by transformation of its predecessor, the Bulgarian Learned Society, which was founded in 1869 in Braila, Romania.¹⁹⁰ In compliance with the new law of 1991 the BAS carried out a difficult, but necessary reform process during the 1990ies on its own initiative.¹⁹¹ According to the law the autonomy of the Academy was strengthened (e.g. the statute can be adopted independently by the assembly of the Academy without the confirmation of the state authorities). The BAS can be qualified as a public law association with forms of self-government.

The board of the Academy comprises the President, two Vice-Presidents and the Scientific Secretary General as well as the Scientific Secretaries of the six natural science sections and the Scientific Secretary of the social and humanity sciences section. There is also an Executive Council with 11 members and the General Assembly of the Academy.

Members are elected because of scientific merits. The Academy awards prizes and grants and is involved in political counselling with regard to research policies.

Research is carried out in different **research institutes** which are also engaged in EU and NATO research projects. The focus is put on natural and technical sciences, but there is also research dedicated to Bulgarian culture and folklore. The research institutes are also engaged in (higher) education by training of PhD candidates and participants of “olympiads” of sciences.

The Academy can decide autonomously on its research programmes but is legally and financially dependent on the state. The main strategic objective of the Bulgarian Academy of Sciences is to ensure and maintain the highest possible level of science, interdisciplinary, international competitiveness and high national self-confidence in agreement with the needs of the socio-economic and spiritual development of the Bulgarian society and with the

¹⁸⁹ Cf. the official website <http://www.bas.bg/> (no introduction in English!).

¹⁹⁰ Cf. for the following Bozhana STOEVA, UnivSOE Country Report Bulgaria (2007), 21-25.

¹⁹¹ Concerning the background cf. Kostadinka SIMEONOVA/Magdalena IVANOVA/Stoika GRIVEKOVA/Sergei ROSHKOV: Kontextbedingungen der Transformation des Wissenschaftssystems in Bulgarien. In: Renate MAYNTZ/Uwe SCHIMANK/Peter WEINGART (eds.): Transformation mittel – und osteuropäischer Wissenschaftssysteme. Opladen 1995, 1044-1124 (1058f).

European and world trends of the organisation of scientific research. The mission has also always been to conserve and disseminate Bulgarian culture, promote sciences and education, the national traditions and interests, corresponding to the needs of the society and defending democratic values through research and education.

The BAS has an own Office of International Relations and keeps scientific relations with mainly European Academies.

3.2.11. Romania

There are **several academies** of sciences in Romania. The most important one is the Romanian Academy¹⁹² - calling itself a “symbol of national spirituality, a forum of recognition, a space of fundamental research”¹⁹³ – which was founded in **1866** under the name “Romanian Academic Society” as part of a wide-sweeping modernisation process after the union of Wallachia and Moldavia in 1859.¹⁹⁴ In 1879, the society was transformed into a public institution called “Academia Româna”. After the break-up of the communist regime the law of 1990 introduced elements of autonomy and democratic conduct into the organisational structure of the Academy.¹⁹⁵ In 2001, a new law was passed concerning the organisation and procedures of the Romanian Academy. Furthermore, there is the statute of the Academy. The Academy can be qualified as a public law association with forms of self-government.

The Academy is ruled by the general assembly meeting at least once a year. In the meantime the Academy is governed by the presidential committee including the president, the vice-president and the general secretary, as well as the presidents of the different scientific sections. The board of directors is in charge of the management and the administration of the Academy. The board comprises the president, four vice-presidents and the general secretary. The general secretary is elected for a five-year-term, all other board members operate on four-year-terms. The Academy has sublets in Timisoara, Iași and Cluj.

¹⁹² See the official website at <http://www.acad.ro/>.

¹⁹³ See at <http://www.acad.ro/def2002eng.htm> (15.3.2008).

¹⁹⁴ Cf. for the following information Eva LAHNSTEINER/Bogdan AURESCU/Monica VLAD, UnivSOE Country Report Romania (2006/2007), 38-42.

¹⁹⁵ For the background cf. Anca DACHIN/Ileana IONESCU-SISESTI/Steliana TOMA/Adrian TOIA/Gheorghe ZAMAN: Dynamic Changes in the Romanian Research and Development System. In: Renate MAYNTZ/Uwe SCHIMANK/Peter WEINGART (es.), Transformation mittel- und osteuropäischer Wissenschaftssysteme. Opladen 1995, 977-1043 (994f, 1003f).

There are 13 **sections** dedicated to 13 different branches of sciences comprising many disciplines ranging from the sciences to medicine and humanities. The sections are headed by different presidents and also conduct research. The focus is laid on Romanian cultural heritage (literature and folklore) as well as on natural sciences.

There are 181 members (including ordinary as well as associated members) elected for life. Requirements of election are the Romanian citizenship, at least 65 years of age (sic!) for regular members (associate members are up to 65 years old) and extraordinary scientific, literary or artistic accomplishments. Members receive Euro 330,- before tax in compensation per month and other privileges like e.g. first class train tickets.

Within the Academy there are 66 **institutes and research centres** in Romania with a large variety from immunology to South-East-European Studies. Among the tasks of the Academy are the support of sciences and arts, the special focus on the cultivation of the Romanian language (rules of orthography) and protection of the Romanian culture, scientific and cultural events as well as the organisation of research, postgraduate and doctorate studies and grants of awards and diplomas.

Due to the age restrictions current members of the Academy are mainly male members who served under the communist regime; there are very few female members as well as members of national minorities. The Academy used to play also a political role reflecting the scientific “elite” and establishment. It can be expected that the slow change of members will also endorse slow changes of tasks and organisation.

3.2.12. Ukraine

In Ukraine there are **several academies** of Sciences. The National Academy of Sciences of Ukraine (NAS)¹⁹⁶ was founded in **1918** by law and is therefore the oldest and biggest Academy in the country with a special status. Others are dedicated to singular disciplines and have been established more recently: e.g. the Academy of Medical Sciences¹⁹⁷, the Academy of Educational Science¹⁹⁸ (1992) or the Academy of Agricultural Sciences.¹⁹⁹

¹⁹⁶ See the website at <http://www.nas.gov.ua/> (no English version on the first page!).

¹⁹⁷ See the website at <http://www.amnu.kiev.ua/>.

¹⁹⁸ See the website at <http://www.apsu.org.ua/>.

¹⁹⁹ For the following cf. Oksana HOLOVKO-HAVRYSHEVA, UnivSOE Country Report Ukraine (2006), 14-17.

The NAS represents the highest research institution in the state. It can be qualified as a public law association with forms of self-government concerning its own activities.²⁰⁰ It is mainly financed by the state, but there are also extra-budgetary funds and programme-related funds.

The NAS has three **sections and 13 departments** for different disciplines within them. There are six regional centres with several **research institutes**. Whereas the main function of the NAS seems to be fundamental research activities including the training of younger researcher (PhD, Doctor of Science) there is nevertheless a **learned society** on its basis consisting of about 543²⁰¹ full members (Academicians) and corresponding members. There are also 172 foreign members (in 2006).²⁰² The President of the Academy has been in office since 1962 (sic!).²⁰³

In 2006 the NAS operated 173 research institutions and had 43.613 employees in total – 16.813 were qualified as R&D employees. Concerning the disciplines the focus is put on natural and technical sciences whereas only 14% of the budget is allocated to social sciences and humanities.²⁰⁴

3.3. Comparative Analysis of Crucial Issues

After the short presentation of the Academies of Eastern and South Eastern Europe in a consecutive way there shall be presented a selection of crucial issues in comparative perspective which are of common interest for the Academies in SEE on their way towards the European Research Area.

3.3.1. Common Heritage and Common Challenges

As mentioned above Academies of Sciences played a **major role within the communist research system** acting as highly potential research fabrics with numerous research institutes.

²⁰⁰ Cf. Boris MALIZKII/Alexander NADIRASCHWILI, Die Umgestaltung des ukrainischen Wissenschaftssystems im Zuge der gesamtgesellschaftlichen Transformation, in: Renate MAYNTZ/Uwe SCHIMANK/Peter WEINGART (eds.), Transformation mittel- und osteuropäischer Wissenschaftssysteme. Opladen 1995, 636-711, (668-672).

²⁰¹ Cf. MOLDOVAN ACADEMY OF SCIENCES/UNESCO (ed.), Academies of Sciences in today's world: roles and organization, 18 (for the situation in 2007).

²⁰² According to http://en.wikipedia.org/wiki/National_Academy_of_Science_of_Ukraine (13.3.2008).

²⁰³ His name is B.E. Paton. See http://en.wikipedia.org/wiki/National_Academy_of_Science_of_Ukraine.

²⁰⁴ Nevertheless 33% of the monographs and 52,2% of the papers published in 2006 were published in the sector of social sciences and humanities. – For the statistics cf. NATIONAL ACADEMY OF SCIENCES OF UKRAINE (ed.), Brief Annual Report 2006, Kyiv 2007 (available at http://www.nas.gov.ua/NR/rdonlyres/24056002-C0F4-4879-BAEC-CBF7D995AF48/0/2006_engl.pdf), 26-30. – Cf. MOLDOVAN ACADEMY OF SCIENCES/UNESCO (ed.), Academies of Sciences in today's world: roles and organization, 18, for the situation in 2007 (182 research institutes, 16.349 researchers at these institutes, 39.190 staff in total).

At the same time they were deeply involved in science policy and had close links to the government and communist party. The institution was therefore highly politicised and dependent - not only in financial matters but also ideologically.²⁰⁵ Almost all analysed countries shared the communist experience and are thus confronted with the big challenge of transforming their Academy of Sciences into a modern institution reflecting excellence and independence in science and research while facing at the same time sincere reductions in budget and funding which also affects the research sector in general. This transformation process has started in the 1990ies but is still not finished.

3.3.2. *Manager of Science*

When applying the three main models of Academies on the Academies of Science in South East Europe there can be found out that still today the **majority of Academies fulfil the function of a manager of science** which can be explained by their communist past. This means that the majority of SEE Academies still operate own research institutes which, however, vary in size, organisation and thematic approach. Whereas the **research output** of some institutes seems to be rather poor²⁰⁶ others are recognised as European centres of excellence which are actively involved in European funded projects. This is e.g. the case for some well-reputed institutes of the Bulgarian Academy of Sciences²⁰⁷ or the Macedonian Academy of Sciences and Arts²⁰⁸. The Slovenian Academy of Sciences and Arts was the founder of several research institutes but separated them from the Academy in the recent past. Kosovo does not have any research institutes.

The **number of research institutes** ranges from 182 for the National Academy of Sciences of Ukraine to 4 for the Academy of Sciences and Arts of Bosnia and Herzegovina. The Academy of Kosovo does not manage any research institutes at all. **Thematically**, the **majority** of

²⁰⁵ For the background cf. e.g. Uwe SCHIMANK, Die Transformation der Forschungssysteme der mittel- und osteuropäischen Länder: Gemeinsamkeiten von Problemlagen und Problembearbeitung, in: Renate MAYNTZ/Uwe SCHIMANK/Peter WEINGART (eds.), Transformation mittel- und osteuropäischer Wissenschaftssysteme. Opladen 1995, 10-39 (15f).

²⁰⁶ This was found out by a study of the Academia Europea for the level of activity of the Croatian Academy of Sciences and Arts. Cf. e.g. Antonija Petricusic, UnivSOE Country Report Croatia, 48 referring to a study of the Academia Europea.

²⁰⁷ Cf. Simeon ANGUELOV/Naum YAKIMOV, Bulgarian Science on the Eve of Accession to the European Union, in: INSTITUTE FOR PROSPECTIVE TECHNOLOGICAL STUDIES (IPTS) (ed.), The Central- and Eastern European Network of Academies of Sciences. A special IPTS report. December 2006, 20-24.

²⁰⁸ Cf. e.g. the Research Centre for Energy, Informatics and Materials of the Macedonian Academy of Sciences and Arts. See Jordan POP-JORDANOV/Natasa MARKOVSKA, Scientific Excellence Indicators of European Integration: the Example of MANU, in: INSTITUTE FOR PROSPECTIVE TECHNOLOGICAL STUDIES (IPTS) (ed.), The Central- and Eastern European Network of Academies of Sciences. A special IPTS report. December 2006, 40-46.

research institutes are dedicated to **natural or technical sciences** but there are also many institutes dedicated to social sciences and humanities, very often focusing on national culture and history of the respective country (e.g. the Centre for Balkan Studies in Sarajevo).

In most cases fundamental research is prevailing. However, especially in the rather big Academies in Ukraine, Bulgaria and Romania, applied research is also conducted, even with relation to industry.

3.3.3. *Relationship to Universities*

According to the original distribution of tasks within the state-socialist system of research Academies were in charge of carrying out research and universities provided the basis of higher education.²⁰⁹ **Specialisations as e.g. a PhD**, however, were therefore often linked to the Academies which offered the training for young researchers and PhD candidates. Still today, Academies in Eastern and South East Europe are often vested with the competence to grant a PhD (especially important in Bulgaria, Romania, Ukraine where the Academies are still charged with the training of specialised scientists). In Western Europe the right to grant a PhD is restricted to universities. For the future, however, the reintegration of some institutes of fundamental research into the universities will constitute an important challenge. As a consequence, also the **relationship between universities and Academies will have to change** on the basis of a mutual recognition as research-based institutions. In fact, the separation of teaching and research has negative effects on the quality of a university and its students whereas the fruitful link of teaching with research had already been pointed out by Wilhelm von HUMBOLDT and many others after him,²¹⁰ constituting the basis of the successful European and Anglo-American type of a university.

²⁰⁹ Cf. e.g. Uwe SCHIMANK, Die Transformation der Forschungssysteme der mittel- und osteuropäischen Länder: Gemeinsamkeiten von Problemlagen und Problembearbeitung, in: Renate MAYNTZ/Uwe SCHIMANK/Peter WEINGART (eds.), Transformation mittel- und osteuropäischer Wissenschaftssysteme. Opladen 1995, 10-39 (14f).

²¹⁰ Cf. e.g. Jürgen MITTELSTRAß, Gibt es (noch) eine Idee der Universität? In: Jürgen MITTELSTRAß, Wissen und Grenzen. Philosophische Studien. Frankfurt am Main 2001, 161-179; Wolfgang MANTL, Wettbewerb als "condition of excellence" der Universität. In: Emil BRIX/Thomas FRÖSCHL/Josef LEIDENFROST (eds.), Geschichte zwischen Freiheit und Ordnung. Gerald Stourzh zum 60. Geburtstag. Graz-Vienna-Cologne 1991, 443-458.

3.3.4. *Advisor to Society*

All Academies in South East Europe act as **advisors to society** to a larger or smaller extent. This task encompasses the publication of advisory reports²¹¹ on different issues, the organisation of high-level meetings of experts with actors of the political field or the public consult by the President or the members of the Academy in statements in the media. In fact, the interdisciplinary association of experts and scientists within the Academy permits the organisation of high-level advice on almost every subject of potential public interest. This may efficiently support the transformation process of the country – the condition, however, is that politicians pay attention to the offered advice.

The Croatian Academy of Sciences and Arts has established several Research Councils consisting of members of the Academy and dedicated also to this purpose. The Research Council of Public Administration, Judicature and Rule of Law for example is actively engaged in organising regular expert meetings with politicians and representatives of the ministries on issues of public administration reform and other necessary reform steps on the way of preparing Croatia for EU membership.

3.3.5. *Learned Societies*

The core of the Academies of Sciences in South East Europe, however, constitutes **in all cases a learned society**. In its ideal form this is a forum for scientific and academic exchange with the capacity of foresight concerning the relevance of upcoming scientific challenges as well as the research sector in general of a country and thus the competence centre for learned advice to the government. Yet, in order to fulfil this task some conditions have to be met.

A learned society should be based on a broad range of disciplines. The multi- and interdisciplinarity of the Academy assembly is therefore one of the most important assets. A characteristic of South Eastern European Academies constitutes the fact that they elect in most cases also representatives of arts and sciences which can stimulate the intellectual debate.

Moreover, a **critical mass** of members is **needed**. Some Academies of South East Europe, however, are rather small (e.g. Kosovo 26 members, Macedonia 38 members, Bosnia and

²¹¹ The number of advisory reports varies significantly. See MOLDOVAN ACADEMY OF SCIENCES/UNESCO (ed.), *Academies of Sciences in today's world: roles and organization*, 13.

Herzegovina 49 members etc.). Another **problem** is the **age and gender structure** of the academies. Most members are older than 60 years (and apart from that mostly male) and are not linked to the most recent scientific developments anymore. Nevertheless they have a lot of experience, also communist experience. Thus, an important challenge for future adoptions of the Academies will be the election of younger – and also female – members. Apart from that, election processes shall take place in a transparent and democratic manner. An excellent Academy can only be made of excellent members.

3.3.6. International Cooperation

International cooperation represents one of the **potential strengths** of Academies in Eastern and South East Europe. Academicians could function as important links between different research communities, first in the region of the former Yugoslavia and the South East European area including Romania and Bulgaria as well as Hungary, Greece, Ukraine etc. Personal contacts are a condition for the establishment of lasting research contacts and cooperations. In this respect it is highly positive that Academies in SEE have already become active in establishing **regional links and cooperations**. As an example the Inter-Academy Council for South East Europe (IACSEE) may be mentioned which assembles the presidents of the Academies of South East Europe approximately once a year to the exchange of information and discussion. Presidents of Academies are likely to influence still today their governments that increased funding for research and development as well as higher education is seriously needed in order to boost progress and development of the countries in South East Europe.

Apart from that the European Academy of Sciences and Arts in Salzburg (EASA) has established the Central-European Network of Academies which also constitutes an important platform. In addition, the majority of Academies of South East Europe are also members within ALLEA, the European Federation of Academies of Sciences and Humanities. Besides, bilateral cooperation agreements exist and are steadily expanded.

3.3.7. Reform Processes

Although the principal **transformation processes** of the research systems have already started in the 1990ies these developments have **not finished** yet. On the contrary, the increased participation at the European research scene which is mainly structured by the ongoing FP7 requires additional organisational reforms of the Academies in South East

Europe. The balance of the distribution of tasks between Academies and universities has to be found in a new way. The role of the Academies of Sciences as an advisor to society and government is an important one, also for the future. However, for this purpose the Academies are responsible to transform themselves in centres of excellence and internationally linked institutions.

In times of utilitarian thinking of sciences Academies may at the same time represent a **“shelter” for the humanities** which are not of specific economic purpose but constitute the cultural heritage and richness of the respective country.

In conclusion, Academies of Sciences may represent the rational voice of sciences and humanities – and arts – in the different societies of South East Europe and thus can contribute to cooperation, reconciliation and sustainable development of South East Europe facilitating hereby the common ambition of approaching and integrating into the European Union.

IV. Conclusions and Recommendations

1. In search of a “Common” European Higher Education and Research Area

Taking up again the “ideal-types” of the Humboldtian, Napoleonic and Anglo-Saxon university systems which were sketched out in the introduction in bold strokes as possible “models” for the organization of research and tertiary education in the triangular context of state, market and civil society demands, we could see from the comparative assessment of the situation of the sector of research and tertiary education in South East European countries that **universities, academies of sciences and other related research and higher education institutions face the very same problems** and have to respond to the same challenges as their **Western and Central European counterparts**. Despite of fifty years of European integration, there is no uniform “European” model of research and tertiary education. Depending on the respective national tradition, we could always find an institutionally mixed setting of “state” universities and private universities, an ongoing differentiation of research driven universities and universities of applied sciences as well as of (natural) sciences and humanities.

However, due to the need for re-construction of war-torn states, societies and economies on the one hand, and the rapid transformation from communism to democracy and market economy, the research and tertiary education sector in **SEE countries** is **under much more stress** to respond to the overall trends, i.e. internationalization and market-orientation, going hand in hand with competition and the need for professional management. In addition, SEE countries have to overcome the communist legacy. Moreover, research and education have even suffered in the immediate period after the fall of communism since they have not been on top of the political agenda of all post-communist countries. Reconstruction of state authority and the economy were of more urgent need. The destruction of infrastructure through war or lack of investments, the absolute low figures of investment into R&D in general, and the loss of human capital through the tremendous brain-drain have got the attention of both national governments and international organisations only recently. Hence, a summary conclusion of the analysis of universities and the research systems shows the **following problems and challenges:**

2. The University System

Legal Reforms. In the majority of SEE countries new laws on higher education have been adopted according to general European trends in the previous years. The **main challenge**, though, lies in the **implementation** of the laws, which requires much more political acceptance and training on the part of the administrative staff of universities and research institutions as well as the state authorities. **Bologna** has become a synonym of university reform, also in the SEE region. Although all countries have embarked on the Bologna process, there is also much scepticism among our research and interview partners in the region whether the Bologna process will lead to substantial reforms or remains on the surface.

The autonomy of the university system remains a challenge throughout the whole region. Due to the communist legacy, at the same time a high degree of domination by the state executive on the one hand and institutional anarchy of faculties on the other remain the traditional barrier for reform so that the organisational **balancing of state-control, state-supervision and market-orientation is still highly fragile** in most countries. At the same time political parties influence the universities and their administration to an ongoing large extent. Hence, a better protection of individual academic freedom and institutional autonomy for the younger scientific generations needs awareness raising through public debate and cannot be left to a coalition of obstructionist political elites and university functionaries.

The **organisation and management** of universities have **to be improved**. Reforms are discussed under the keywords of the “integrated university” and the “entrepreneurial” or “managerial university”. The special South East European problem of an extended legal personality of the faculties and a weak university prohibits an efficient and effective management and **requires** a major effort in **capacity building** for participation in fundraising on the European level. New models of a “federal university” like the Oxford and Cambridge model have to be developed.

A general policy of **access to universities** is a highly sensitive political issue and subject of further discussion since entrance exams and procedures are likely to be affected by corruption under the existing financial conditions.

Financial Aspects. In general, universities are seriously lacking the necessary and proper funds despite of the fact that tuition fees contribute in a large proportion to university budgets in the region. Differences exist in promoting excellent students by reducing the fees. **Public Private Partnerships** in the R&D sector are **still the exception**. In particular the relations between universities and economic actors which paradoxically broke down in the post-communist phase should be strengthened again in order to increase the employability of the students as well as the financial support without becoming dependent.

Private Universities and the Need for Quality Assurance. The democratisation of higher education after the fall of communism has led to the establishment of private universities, most of which are in the fields of business and law. Since they are often uni-disciplinary, most of them cannot be called a university *stricto sensu*. High tuition fees lead to the social expectation of guaranteed education-for-money which means in reality to be able to “buy” diplomas. Consequently, private universities are likely to be confronted with weak quality performance. Very often only foreign private universities, which are recognised in their home countries (esp. the US), offer Higher Education at high standards. Nevertheless, there are also good examples of private universities acting in accordance with common standards.

Conflicts of Interests. Since many professors have to fulfil several teaching obligations on different Higher Education Institutions (public and private) in order to earn enough money for a decent living of their family they are confronted with conflicts of interests generally harming the quality of their work. Also students are often obliged to earn money in different ways to pursue their academic efforts.

Corruption and nepotism represent serious problems in the region of SEE, also in the field of HE and research. Since excellence is decisive this can be very harmful to the sciences and the HE process in toto.

A good balance between public universities, private universities and **universities of applied sciences** should be developed.

3. The Research System

Enhancing Research by Combining Teaching and Research

Universities must not only be seen as teaching institutions but also as centres of excellent research. Therefore the **support of young researchers** has to be increased through funds for studies abroad etc.

Country specific and Joint PhD programmes and doctoral studies should be developed according to common European standards.

The **mobility of students and researchers** on all level has to be increased. International and European researchers and teachers should be attracted to a growing extent.

The combination of **humanities and sciences** has characterised the European university and research system until now. Both are important for the proper formation of the individual and a balanced development of the system in general. The different traditions in SEE should be taken care of.

Basic research and applied research are both necessary for the innovation systems also in SEE.

European funding of research is possible and should be tried more often by European project consortia including partners from SEE.

Donor-dependent private research institutions (think tanks). Gravitation towards (mostly) foreign donors also affects the behaviour of private think tanks: In some cases there is a risk of offering slightly biased results, and not truly independent research on an international level, due to a lack of academic training and supervision. At the same time, private research institutions have become even more important research actors since the universities have been neglecting research over the past few years.

Centres of excellence are needed as crystallisation of high level research and training place for younger researchers. Concentration of experienced disciplines, innovative new small specialities in order to be Europe-widely competitive.

Lack of Cooperation between Universities and Economy, Lack of Inter-regional Cooperation. The academic sphere is still perceived as being separate from its economic surroundings. Therefore, links between universities and businesses are still seldom and mostly emerge in the information technology and electronic industries. Apart from that, inter-regional cooperation between universities is still underdeveloped, mainly due to the break-up of inter-institutional cooperation caused by the ethnic conflicts of the 1990's. A trend of hesitance to rebuild the links is noticeable more than 10 years after the termination of the conflict in the majority of the region.

Academies of Sciences. Academies of Sciences perceive themselves as the highest institution of science and research in the country. They are combining the functions of learned societies, advisors to society and managers of research by operating different research institutes. Their research focus is often directed to (former) national interests. The research output is partly very good, partly rather weak. Generally, they have to seek out a new role in the national research systems if they want to legitimize a position at the scientific and academic forefront of society.

4. Cultural and Societal Impacts

The **role of civil society** for the development and support of universities and research institutions must not be underestimated. The **media** can be important partners for raising the public awareness of the importance of research and HE.

The **role of universities in the post-conflict and post-communist society** may be changing. Universities should be a “spring of culture” combining the different needs and interests of society. In order to fulfil this role, universities have to communicate with the surrounding society and hosting communities to a growing extent.

Urban and Rural Regions. Universities may have slightly different functions according to their location in urban or rural regions.

Minorities. Universities should especially care for inter-ethnic cooperation. The private SEE University in Tetovo can serve as a role model in this respect. Universities should also be much more aware of minorities and their chances to have access to higher education. This should include courses in minority languages as well as research in minority relevant fields.

Also EU policies and programs should take care of intercultural and multilingual universities and programs to a much greater extent.

The **religious influence** is often neglected or horrified as “fundamentalist”. However, religion influences the university life to different extents and can play not only a separating but also an integrating role.

5. Policy Recommendations: What should be done

In SEECs:

- Raise **public awareness** through a political debate on the necessity of investments in research and higher education as a condition of integration into the European “knowledge-based society”.
- Improve **research conditions** in order to encourage the return of expat researchers, and foster their integration into the national scientific community.
- **Continue the reform processes according to Bologna**, but at the same time adjust them to specific, local needs. Pay attention to a serious implementation of laws and a reasonable timeframe.
- Strengthen the **autonomy** of universities in financial, legal and also political terms.
- **Quality assurance** of public and private universities is a must. Autonomy is linked to accountability.
- **Enhance the research capacities of universities**, since research and teaching may not be separated (*Wilhelm von Humboldt*). Look for a **balance of sciences and humanities**.
- **Open** the national research and university systems **to foreign researchers and students** and encourage own people to study and conduct research abroad. Apply pressure for the lifting of requirements that limit academic mobility (visa).
- Make full use of the eligible **EU funds** (FP7, TEMPUS etc.). Look for regional and Europe-wide cooperation (SEE ERA Net, see-science.eu etc.).
- Reforms of **Academies of Sciences** are necessary in order to preserve their characteristic strengths as long-term research institutions in the sciences *and* humanities.

By the Austrian Ministry of Science:

- Establish an **advisory board** in the Ministry for the support of WBCs
- Establish **cooperation offices** for research and tertiary education in all of the WBCs
- Support the establishment of a **model university of applied sciences** in the region
- Establish foundations for **visiting scholar programs** and **scholarships**
- **Exempt** research and tertiary education **from the Schengen visa regime**.

6. General Conclusions

If the EU is serious with the “Lisbon Agenda”, **research and higher education need** thus a **new priority status** on the **political agenda** all over Europe, but in particular in the SEE countries and the support of the old member states through an enhanced effort to integrate them as quickly as possible into the developing ERA and EHEA. The US and her efforts to establish American universities in many SEE countries in order to siphon off the best human capital from the region are the best evidence that SEE is rich in human capital, but desperately lacking material reconstruction of infrastructure and a stop of the massive brain-drain. In this context, cultural diversity - “the” characteristic trait of all of Europe – must be seen as an additional asset in the global competition for human capital as the main productive force for innovation.

ERA and EHEA are not a one-way street. What SEE partners really need is **partnership** with Western and Central European research and teaching institutions through joint degrees, common research projects and team-work and to bring not only American, but also European students, researchers and lecturers to the region. In particular the newly launched FP7 should be strengthened and ERASMUS opened to the entire region. Only through viable cooperation between Western and Central as well as SEE counterparts can the European Higher Education and European Research Area be expanded to SEE.

At the same time, this will also help to **overcome the “Western” bias** in European university development with the new challenge of instrumentalisation of research and innovation by neo-liberal ideologies of globalisation. **Universities**, both in South-East, Central and Western **Europe must remain** aware of themselves as **independent and critically thinking institutions**, constantly aware of their important role in backing the information of a new civil society and in shaping the future **functional elites** of their countries. Universities thus have a

role in building bridges and contributing to the enhancement of social and cultural cohesion among different peoples within single countries and beyond national borderlines. Interethnic cooperation may be realised through the establishment of multilingual universities, but also through different multi-linguistic programmes which can be integrated into the curricula of universities. Democracy and rule of law are therefore indispensable framework conditions for achieving transparent, inclusive, accountable and autonomous universities.

Peace – rule of law – democracy – prosperity – minorities -
knowledge-based society and innovation – autonomy and accountability –
cooperation and integration

V. Appendix

1. Bibliography

ANGUELOV, Simeon / YAKIMOV, Naum: Bulgarian Science on the Eve of Accession to the European Union. In: Institute for Prospective Technological Studies (IPTS) (ed.), The Central- and Eastern European Network of Academies of Sciences. A special IPTS report. December 2006, 20-24.

BASSLER, Terrice (ed.): Learning to change: the experience in South East Europe. Budapest-New York 2005.

BAUER, Lukas / LACHMAYER, Konrad (eds.): Praxiswörterbuch Europarecht (forthcoming).

BECHTER, Christina Maria: Zuständigkeiten und Handlungsmöglichkeiten der Europäischen Gemeinschaft in der Bildungspolitik. Wirtschaftsuniv., PhD Thesis, Vienna 2006.

BERGLUND, Sten / AEREBROT, Frank: The Political History of Eastern Europe in the 20th Century, Cheltenham (Edward Elgar Publishers) 1997.

BERKA, Walter: Autonomy of Universities in the European Perspective. In: Marko, Joseph / Kopetz, Hedwig (eds.): Integration of South East Europe into the European Higher Education and Research Area. Results of the UnivSOE Project 2005-2008 (in preparation).

BOLLENBECK, Georg / WENDE, Waltraud >Wara< (eds.): Der Bologna-Prozess und die Veränderung der Hochschullandschaft. Heidelberg 2007.

Bologna Declaration. Joint declaration on harmonisation of the architecture of the European higher education system, Paris, the Sorbonne, May 25 1998. Cf. http://www.bologna-berlin2003.de/pdf/Sorbonne_declaration.pdf.

BRACHT, Oliver / ENGEL, Constanze / JANSON, Kerstin / OVER, Albert / SCHOMBURG, Harald / TEICHLER, Ulrich: The Professional Value of ERASMUS Mobility. International Centre for Higher Education Research Kassel, Final Report November 2006.

BRIX, Emil/FRÖSCHL, Thomas/LEIDENFROST, Josef (eds.): Geschichte zwischen Freiheit und Ordnung. Gerald Stourzh zum 60. Geburtstag. Graz-Vienna-Cologne 1991.

BUSQUIN, Philippe: Interview. In: Cordis Focus 139, 29 November 1999.

CALIC, Marie-Janine: The Western Balkans on the Road Towards European Integration. Friedrich Ebert Stiftung, Internationale Politikanalyse Frieden und Sicherheit, Dezember 2005.

CALLIESS, Christian / RUFFERT, Matthias (eds.): Kommentar zum EU-Vertrag und EG-Vertrag. 3rd ed. Munich 2007.

CARTER, Dave: What the Bologna Process says about Teaching and Learning. Development in Practice: Some Experience from Macedonia. In: Tomusk, Voldemar (ed.): Creating the

European Area of Higher Education: Voices from the Periphery. Dordrecht 2006 (Higher Education Dynamics 12), 141-167.

CORBETT, Anne: Universities and the Europe of Knowledge: ideas, institutions and policy entrepreneurship in European Union higher education 1955-2005. Houndmills 2005.

DACHIN, Anca / IONESCU-SISESTI, Ileana / TOMA, Steliana / TOIA, Adrian / ZAMAN, Gheorghe: Dynamic Changes in the Romanian Research and Development System. In: Mayntz, Renate/ Schimank, Uwe/ Weingart, Peter: Transformation mittel- und osteuropäischer Wissenschaftssysteme. Opladen 1995, 977-1043.

DE ELERA, Alvaro: The European Research Area: On the Way Towards a European Scientific Community? In: European Law Journal 12 (2006), 559-574.

EBERHARD, Harald / LACHMAYER, Konrad / RIBAROV, Gregor / THALLINGER, Gerhard (eds.): Perspectives and Limits of Democracy. Proceedings of the 3rd Vienna Workshop on International Constitutional Law. Vienna 2008.

EIKENBERG, Henning: Art. 166 EGV, Rn. 8, in: Eberhard Grabitz/Meinhard Hilf (eds.), Das Recht der Europäischen Union, 28th delivery, 2005.

EUROPEAN COMMISSION: Communication COM(2000) 6 *Towards a European Research Area*.

EUROPEAN COMMISSION: COM(2002) 499 *More research for Europe*.

EUROPEAN COMMISSION: COM(2002) 565 *The ERA: providing a new momentum*.

EUROPEAN COMMISSION: COM(2003) 58 final *The role of the universities in the Europe of knowledge*.

EUROPEAN COMMISSION: Communication, *Education & Training 2010: the success of the Lisbon strategy hinges on urgent reforms* (11.11.2003).

EUROPEAN COMMISSION: COM(2005) 24 *Working together for Growth and Jobs: a new Start for the Lissabon Strategy*.

EUROPEAN COMMISSION: COM(2005) 118 *Building the ERA of knowledge for growth*.

EUROPEAN COMMISSION: COM(2005) 152 final *Mobilising the brainpower of Europe: enabling universities to make their full contribution to the Lisbon Strategy*.

EUROPEAN COMMISSION: COM(2006) 208 final *Delivering on the modernisation agenda for universities: education, research and innovation*.

EUROPEAN COMMISSION: COM(2006) 276 final *The European Institute of Technology: further Steps towards its creation*.

EUROPEAN COMMISSION: 24 January 2006 (rev2), *From Bergen to London. The EU Contribution*.

EUROPEAN COMMISSION: Key Figures 2007 on Science, Technology and Innovation, 24. See http://ftp.cordis.europa.eu/pub/era/docs/keyfigures_2007.pdf.

EUROPEAN COMMISSION: Communication COM(2007) 61 final *A coherent framework of indicators and benchmarks for monitoring progress towards the Lisbon objectives in education and training*.

EUROPEAN COMMISSION: COM(2007) 161 final Green Paper *The European Research Area: New Perspectives*.

EUROPEAN COMMISSION: The European Research Area: Green Paper Consultation - Preliminary results (September 2007).

EUROPEAN COUNCIL: Conclusions of 26 November 2002, Council document 5742/03.

EUROPEAN PARLIAMENT: Decision No 1982/2006/EC concerning the Seventh Framework Programme of the European Community for research, technological development and demonstration activities (2007-2013), O.J. 2006 No L 412/1.

FAULHAMMER, Friedrich: Der Bolognaprozess – Weg zu einem Europäischen Hochschulraum. In: Zeitschrift für Hochschulrecht, Hochschulmanagement und Hochschulpolitik 4 (2005), 57-64.

FAULHAMMER, Friedrich: The impact of the Bologna Process on European Universities after the Ministerial Summit of London May 2007. In: Marko, Joseph / Kopetz, Hedwig (eds.): Integration of South East Europe into the European Higher Education and Research Area. Results of the UnivSOE Project 2005-2008 (in preparation).

FAYL, Gilbert / UNGER, Felix: The Central- and Eastern European Network: An Instrument to Assist the European Integration Process. In: INSTITUTE FOR PROSPECTIVE TECHNOLOGICAL STUDIES (IPTS) (ed.), The Central- and Eastern European Network of Academies of Sciences. A special IPTS report. December 2006, 3-10.

FIEDLER, Werner / HEBECKER, Eike (eds.): Promovieren in Europa. Strukturen, Status und Perspektiven im Bologna-Prozess. Opladen 2006.

FOLVAROCHNY, Igor: Development of Higher Education Reform in the Ukraine. In: Leitner, Erich (ed.): Educational Research and Higher Education Reform in Eastern and Central Europe. Frankfurt/M. 2006 (Beiträge zur vergleichenden Bildungsforschung 6), 195-206.

GAJDUSEK, Martin Felix / MAYR, Andrea Christiane / POLZER, Miroslav (eds.): Science Policy and Human Resources Development in South-Eastern Europe in the Context of European Integration. Vienna 2006.

GELLERT, Claudius: Social Changes, Politics and Higher Education. In: Leitner, Erich (ed.): Educational Research and Higher Education Reform in Eastern and Central Europe. Frankfurt/M. 2006 (Beiträge zur vergleichenden Bildungsforschung 6), 11-22.

GENOV, Nikolai: Ethnicity and educational policies in South Eastern Europe. Münster 2005 (Gesellschaftliche Transformationen / Societal Transformations 7).

GESELLSCHAFT ZUR FÖRDERUNG DER FORSCHUNG (ed.): Research and Development in South East Europe. A Cross-National Comparative Study for Albania, Bosnia and Herzegovina, Bulgaria, Croatia, FYR of Macedonia, Romania, Serbia and Montenegro. Vienna-Graz 2006.

GESELLSCHAFT ZUR FÖRDERUNG DER FORSCHUNG (ed.): Innovation and Research in Bulgaria on the Eve of EU Accession: Lessons from a Peer Country - AUSTRIA. Vienna-Graz 2007.

GUZZETTI, Luca: A brief history of EU Research Policy. Office for Official Publications of the EC 1005.

GRABITZ, Eberhard / HILF, Meinhard (eds.): Das Recht der Europäischen Union. Munich 2006.

GRILLER, Stefan / SEIFFERT, Michaela: „Bologna-Prozess“, Europäischer Binnenmarkt und österreichisches Berufsrecht: Katalysatoren oder Gefahren für die Reform in Österreich? In: JBl 128 (2006), 613-626.

GRUBER, Sieglinde: Der Bologna-Prozess und der Weg zu einem gemeinsamen Forschungsraum Europa. In: Fiedler, Werner / Hebecker, Eike (eds.): Promovieren in Europa. Strukturen, Status und Perspektiven im Bologna-Prozess. Opladen 2006, 35-41.

HANFT, Anke / MÜSKENS, Isabel (eds.): Bologna und die Folgen für die Hochschulen. Bielefeld 2005.

HENDRICOVA, Jana: Typical Features of Education and Education Reforms in Central Europe. In: Leitner, Erich (ed.): Educational Research and Higher Education Reform in Eastern and Central Europe. Frankfurt/M. 2006 (Beiträge zur vergleichenden Bildungsforschung 6), 75-85.

HOLOVKO-HAVRYSHEVA, Oksana: Obstacles and Chances for Younger Researchers at Eastern European Universities. In: Marko, Joseph / Kopetz, Hedwig (eds.): Integration of South East Europe into the European Higher Education and Research Area. Results of the UnivSOE Project 2005-2008 (in preparation).

HORVAT, Manfred / BONAS, George: Integrating Western Balkan Countries into the European Research Area. In: Gajdusek, Martin Felix / Mayr, Andrea Christiane / Polzer, Miroslav (eds.): Science Policy and Human Resources Development in South-Eastern Europe in the Context of European Integration. Vienna 2006, 17-25.

- HÖSCH, Edgar / NEHRING, Karl / SUNDHAUSSEN, Holm (eds.): Lexikon zur Geschichte Südosteuropas. Vienna et al. 2004.
- HÖSELE, Herwig / LOPATKA, Reinhold / MANTL, Wolfgang / PIZA, Hildegunde / PRISCHING, Manfred / SCHILCHER, Bernd / SCHNIDER, Andreas (eds.): Steirisches Jahrbuch für Politik 2005. Graz 2006.
- HÜFNER, Klaus: Higher Education Reform Processes in Central and Eastern Europe. Frankfurt/M.: Peter Lang 1995.
- HUMMER, Waldemar: Der tertiäre Sektor im "Europäischen Hochschul-, bzw. „Forschungsraum“: Doktoratsstudien – Sinn, Motivation und Rahmenbedingungen (Teil 1). In: Zeitschrift für Hochschulrecht, Hochschulmanagement und Hochschulpolitik. 3 (2004), 41-50.
- HUMMER, Waldemar: Der tertiäre Sektor im "Europäischen Hochschul-, bzw. „Forschungsraum“: Doktoratsstudien – Sinn, Motivation und Rahmenbedingungen (Teil 2). In: Zeitschrift für Hochschulrecht, Hochschulmanagement und Hochschulpolitik. 3 (2004), 79-89.
- INFORMATION OFFICE OF THE STEERING PLATFORM ON RESEARCH FOR THE WESTERN BALKAN COUNTRIES see-science.eu (ed.): Needs/Offer Matrix and Analysis. Vienna 2007.
- INSTITUTE FOR PROSPECTIVE TECHNOLOGICAL STUDIES (IPTS) (ed.): The Central- and Eastern European Network of Academies of Science. A special IPTS report. December 2006.
- ISAK, Hubert: Research and Higher Education in the Stabilisation and Association Agreements with the Western Balkan Countries. In: Marko, Joseph / Kopetz, Hedwig (eds.): Integration of South East Europe into the European Higher Education and Research Area. Results of the UnivSOE Project 2005-2008 (in preparation).
- JANDL, Gerhard: Die Beziehungen der EU zu Südosteuropa: Der Stabilisierungs- und Assoziierungsprozess: eine Betrachtung aus politischer Sicht. Graz: Institut für Europarecht - Graz 2003 (Schriftenreihe des Instituts für Europarecht der Karl–Franzens-Universität Graz 18).
- JOHNSTON, M. William: How Higher Education in the United States Challenges Universities in Europe and the United Kingdom, in Mantl Wolfgang (ed.): Phänomenologie des europäischen Wissenschaftssystems, Baden-Baden (Nomos) 2008 (forthcoming).
- KALLMAYER, Axel: Art. 163 EGV, Rn. 5, in: Christian Calliess/Matthias Ruffert (eds.), Kommentar zum EU-Vertrag und EG-Vertrag, 3rd ed, 2007.
- KILIAN, Matthias: Die Europäisierung des Hochschulraumes. In: JZ 61 (2006), 209-217.

- KOPETZ, Hedwig: Forschung und Lehre. Die Idee der Universität bei Humboldt, Jaspers, Schelsky und Mittelstraß. Vienna-Cologne-Graz 2002 (Studien zu Politik und Verwaltung 78).
- KOPETZ, Hedwig: Die Österreichische Akademie der Wissenschaften – Aufgaben, Rechtsstellung, Organisation. Vienna-Cologne-Graz 2006 (Studien zu Politik und Verwaltung 88).
- KOPETZ, Hedwig: Democratisation of South Eastern Europe: The Role of Higher Education and Research. In: Eberhard, Harald / Lachmayer, Konrad / Ribarov, Gregor / Thallinger, Gerhard (eds.): Perspectives and Limits of Democracy. Proceedings of the 3rd Vienna Workshop on International Constitutional Law. Vienna 2008, 91-108.
- KOPETZ, Hedwig: articles referring to research and development, in: Bauer, Lukas / Lachmayer, Konrad (eds.): Praxiswörterbuch Europarecht (forthcoming).
- KOZMA, Tamas: New Challenges of Tertiary Education in East-Central Europe. In: Leitner, Erich (ed.): Educational Research and Higher Education Reform in Eastern and Central Europe. Frankfurt/M. 2006 (Beiträge zur vergleichenden Bildungsforschung 6), 131-143.
- KRASTEVA, Anna: Universities as Civil Society Actors. In: Marko, Joseph / Kopetz, Hedwig (eds.): Integration of South East Europe into the European Higher Education and Research Area. Results of the UnivSOE Project 2005-2008 (in preparation).
- KUMP, Sonja: Renewal of Higher Education in Slovenia with Special Attention to Quality. In: Leitner, Erich (ed.): Educational Research and Higher Education Reform in Eastern and Central Europe. Frankfurt/M. 2006 (Beiträge zur vergleichenden Bildungsforschung 6).
- LEITNER, Erich (ed.): Educational Research and Higher Education Reform in Eastern and Central Europe. Frankfurt/M. 2006 (Beiträge zur vergleichenden Bildungsforschung 6).
- LIENHART, Stefan: Wissen als der Rohstoff des 21. Jahrhunderts: Welchen Beitrag können Science Parks in Südosteuropa leisten? Master Thesis, Karl-Franzens-University of Graz, Graz 2007.
- LJETOPIS HRVATSKE AKADEMIJE (ed.): Za Godinu 2006. Knjiga 110. Zagreb 2007.
- MAASSEN, Peter / OLSEN, Johann P. (eds.): University Dynamics and European Integration. Dordrecht 2006 (Higher Education Dynamics 19).
- MALIZKIJ, Boris / NADIRASCHWILI, Alexander: Die Umgestaltung des ukrainischen Wissenschaftssystems im Zuge der gesamtgesellschaftlichen Transformation. In: Mayntz, Renate / Schimank, Uwe / Weingart, Peter: Transformation mittel- und osteuropäischer Wissenschaftssysteme. Opladen 1995, 636-711.

- MANTL, Wolfgang: Wettbewerb als “condition of excellence” der Universität. In: Emil BRIX/Thomas FRÖSCHL/Josef LEIDENFROST (eds.), *Geschichte zwischen Freiheit und Ordnung. Gerald Stourzh zum 60. Geburtstag*. Graz-Vienna-Cologne 1991, 443-458.
- MANTL, Wolfgang: Universitätsrecht und Universitätspolitik: Drei Bausteine des Wandels. In: *Zeitschrift für Hochschulrecht, Hochschulmanagement und Hochschulpolitik* 2 (2003), 1-7.
- MANTL, Wolfgang: The Role of Universities and Science in the Process of European Integration - using Austria as an Example. In: Ulrich, Silvia / Schnedl, Gerhard / Pirstner-Ebner, Renate (eds.): *Funktionen des Rechts in der pluralistischen Wissensgesellschaft*. Festschrift für Christian Brünner zum 65. Geburtstag. Vienna-Cologne-Graz 2007, 135-143.
- MARKO, Joseph: Zur Notwendigkeit der Europäischen Integration Südosteuropas. In: HÖSELE, Herwig / LOPATKA, Reinhold / MANTL, Wolfgang / PIZA, Hildegunde / PRISCHING, Manfred / SCHILCHER, Bernd / SCHNIDER, Andreas (eds.): *Steirisches Jahrbuch für Politik* 2005. Graz 2006, 79-91.
- MARKO, Joseph: The Stabilisation and Association Process for the Western Balkan Countries. In: Herbert Kröll (ed.): *Austrian – Greek Encounters Over the Centuries*, Innsbruck (Studienverlag) 2007, 100-118.
- MARKO, Joseph / KOPETZ, Hedwig (eds.): *Integration of South East Europe into the European Higher Education and Research Area. Results of the UnivSOE Project 2005-2008* (in preparation).
- MARKO, Joseph: Constitutions and Good Governance: Challenges for Reconstruction and EU-Integration, in Stefano Bianchini et. Al. (eds.), *Regional Cooperation, Peace Enforcement, and the Role of the Treaties in the Balkans*, Ravenna 2007, 65-77.
- MARKO, Joseph: The Stabilisation and Association Process for the Western Balkan Countries, in Herbert Kröll (ed.), *Austrian - Greek Encounters Over the Centuries*, Innsbruck (Studienverlag) 2007, 100 – 118.
- MAYNTZ, Renate / SCHIMANK, Uwe / WEINGART, Peter (eds.): *Transformation mittel- und osteuropäischer Wissenschaftssysteme*. Opladen 1995.
- MITTELSTRAß, Jürgen: *Die unzeitgemäße Universität*. Frankfurt/M. 1994.
- MITTELSTRAß, Jürgen: Die unzeitgemäße Universität. In: Mittelstraß, Jürgen: *Die unzeitgemäße Universität*. Frankfurt/Main 1994, 11-29.
- MITTELSTRAß, Jürgen: *Wissen und Grenzen*. Philosophische Studien. Frankfurt/Main 2001.
- MITTELSTRAß, Jürgen: Gibt es (noch) eine Idee der Universität? In: Jürgen MITTELSTRAß: *Wissen und Grenzen*. Philosophische Studien. Frankfurt/Main 2001, 161-179.

MITTELSTRAß, Jürgen: Leibnitz, Kant, Humboldt – die Universität in der Aufklärungswelt; Gert Roellecke, Gesellschaft – Staat – Universität in Mantl Wolfgang (ed.): Phänomenologie des europäischen Wissenschaftssystems, Baden-Baden (Nomos) 2008 (forthcoming).

MOLDOVAN ACADEMY OF SCIENCES / UNESCO (eds.): Academies of Sciences in today's world: roles and organization. With special attention to the Academies of Eastern and South Eastern Europe. Venice 2007 (<http://www.wbc-inco.net/doc/2173.html>).

MUELLER, Wolfgang / PORTMANN, Michael (eds.): Osteuropa vom Weltkrieg zur Wende. Vienna 2007 (Zentraleuropa-Studien. Hrsg. v. Arnold Suppan u. Grete Klingenstein 10).

NEACSU, Ioan: Higher Education in Romania. The Imperatives of Reform - New Paradigms, New Options, New Strategies. In: Leitner, Erich (ed.): Educational Research and Higher Education reform in Eastern and Central Europe. Frankfurt/M. 2006 (Beiträge zur vergleichenden Bildungsforschung 6), 207-218.

NATIONAL ACADEMY OF SCIENCES OF UKRAINE (ed.): Brief Annual Report 2006, Kyiv 2007 (available at http://www.nas.gov.ua/NR/rdonlyres/24056002-C0F4-4879-BAEC-CBF7D995AF48/0/2006_engl.pdf).

NEAVE, Guy / MAASSEN, Peter: The Bologna Process: An Intergovernmental Policy Perspective, in: Maassen, Peter / Olsen, Johan P. (eds.): University Dynamics and European Integration. Dordrecht 2007 (Higher Education Dynamics 19), 135-153.

OECD: Science and Technology Policy. Review and Outlook 1994. Paris 1994.

OLSEN, Johan P. / MAASSEN, Peter: European Debates on the Knowledge Institution: The Modernization of the University at the European Level, in: Maassen, Peter / Olsen, Johan P. (eds.): University Dynamics and European Integration. Dordrecht 2007 (Higher Education Dynamics 19), 3-22.

OPPERMANN, Thomas: Europarecht. 3rd ed. Munich 2005.

OSWALD, Irma [Red.]: Das neue Humanpotenzial: Mittel-, Ost-, und Südosteuropa auf dem Weg zur Wissensgesellschaft: (enthält Beiträge der Konferenz Das neue Humanpotenzial: Mittel-, Ost-, und Südosteuropa auf dem Weg zur Wissensgesellschaft 3. - 4. Februar 2003). Wien: IDM 2003. (Informationen für den Donauraum und Mitteleuropa; Sonderheft 8, 2003).

PLACHT, Milena: Balkan - Kompetenz in Österreich: Aktivitäten österreichischer Institutionen in Südosteuropa. Vienna 2007 (Studien des Institutes für den Donauraum und Mitteleuropa 2007 1).

POP-JORDANOV, Jordan / MARKOVSKA, Natasa: Scientific Excellence Indicators of European Integration: the Example of MANU. In Institute for Prospective Technological Studies (IPT)

(ed.): The Central- and Eastern European Network of Academies of Sciences. A special IPTS report. December 2006, 40-46.

POPOV, Nickolay B.: Higher Education Reform in Bulgaria. In: Leitner, Erich (ed.): Educational Research and Higher Education Reform in Eastern and Central Europe. Frankfurt/M. 2006 (Beiträge zur vergleichenden Bildungsforschung 6), 219-229.

POTOČNIK, Janez: FP7 – Tomorrow's answers start today. Speech 07/9 at the launch of the 7th Framework Programme in Berlin, 15 January 2007. See http://ec.europa.eu/commission_barroso/potocnik/news/speeches_en.htm.

POTOČNIK, Janez: Welcome Address to the participants of the Final Conference of the UnivSOE project on 29/30 June 2007 in Graz.

REINALDA, Bob: The Bologna process - harmonizing Europe's higher education: including the essential original texts. Foreword by Hans-Dieter Klingemann. Opladen et al. 2005.

REPUBLIC OF CROATIA-MINISTRY OF SCIENCE, EDUCATION AND SPORTS, SCIENCE AND TECHNOLOGY: Policy of the Republic of Croatia 2006 – 2010, Zagreb 2006, p. 18

ROST, Erika et al.: White Paper on Gaps, Overlaps, and Opportunities in View of the Extension of Bilateral RTD Programmes and Initiatives towards Multilateral Approaches. In: Transition Studies Review 14 (2007), 205-261.

RÜEGG, Walter, Die Universität in der "Moderne" des 19. und 20. Jahrhunderts, in Mantl Wolfgang (ed.), Phänomenologie des europäischen Wissenschaftssystems, Baden-Baden (Nomos) 2008 (forthcoming).

SCHIMANK, Uwe: Einleitung: Die Transformation der Forschungssysteme der mittel- und osteuropäischen Länder. Gemeinsamkeiten von Problemlagen und Problembearbeitung. In: Mayntz, Renate / Schimank, Uwe / Weingart, Peter: Transformation mittel – und osteuropäischer Wissenschaftssysteme. Opladen 1995, 10-39.

SCHUCH, Klaus: The Integration of Central Europe into the European System of Research: An empirical study of the participation of Central European countries in the 4th and 5th European Framework Programme for RTD. Vienna 2005.

SCOTT, Peter: Higher Education in Central and Eastern Europe: An Analytical Report, in UNESCO/CEPES, Ten Years After and Looking Ahead: A Review of Transformations of Higher Education in Central and Eastern Europe, Bucharest 2000, p. 346.

SIMEONOVA, Kostadinka / IVANOVA, Magdalena / GRIVEKOVA, Stoika / ROSHKOV, Sergei: Kontextbedingungen der Transformation des Wissenschaftssystems in Bulgarien. In: Mayntz, Renate / Schimank, Uwe / Weingart, Peter: Transformation mittel – und osteuropäischer Wissenschaftssysteme. Opladen 1995, 1044-1124.

SLOVENSKE AKADEMIJE ZNANOSTI IN UMETNOSTI (ed.): Znanosti in Umetnosti ob Sestdesetletnici. Biografski Zbornik. Ljubljana 1998.

SLOVENSKE AKADEMIJE ZNANOSTI IN UMETNOSTI (ed.): Letopis. The Yearbook of the Slovenian Academy of Sciences and Arts vol. 56/2007. Ljubljana 2006.

SPORN, Barbara: Adaption Processes at Universities: Organizational Implications of a Complex Environment. In: Leitner, Erich (ed.): Educational Research and Higher Education Reform in Eastern and Central Europe. Frankfurt/M. 2006 (Beiträge zur vergleichenden Bildungsforschung 6), 64-72.

STAJANO, Attilio: Research, Quality, Competitiveness. European Union Technology Policy for the Information Society. New York 2006, 269-272.

STANKOVIC, Fuada: Entrepreneurialism at the University of Novi Sad. In: Higher Education in Europe 31 (2006), 117-128.

STANKOVIC, Fuada: Research and Higher Education as Avant-garde of Regional Cooperation, Reconciliation and European Integration in South East Europe. In: Marko, Joseph / Kopetz, Hedwig (eds.): Integration of South East Europe into the European Higher Education and Research Area. Results of the UnivSOE Project 2005-2008 (in preparation).

TAYLOR, John / MIROIU, Adrian: Policy-Making, Strategic Planning, and Management of Higher Education, UNESCO/CEPES Papers on Higher Education, Bucharest 2002, pp 19 – 22.

TEICHLER, Ulrich: Gestufte Studiengänge und Studienabschlüsse: Studienstrukturen im Bologna-Prozess. In: Hanft, Anke / Müskens, Isabel (eds.): Bologna und die Folgen für die Hochschulen. Bielefeld 2005, 6-27.

TOMUSK, Voldemar (ed.): Creating the European Area of Higher Education: Voices from the Periphery. Dordrecht 2006 (Higher Education Dynamics 12).

TOMUSK, Voldemar: The End of Europe and the Last Intellectual, in: Tomusk, Voldemar (ed.): Creating the European Area of Higher Education. Voices from the Periphery. Dordrecht 2006 (Higher Education Dynamics 12), 269-303.

VLAD, Monica: Vulnerable Aspects of Educational Reform in Romania. In: Marko, Joseph / Kopetz, Hedwig (eds.): Integration of South East Europe into the European Higher Education and Research Area. Results of the UnivSOE Project 2005-2008 (in preparation).

VLASCEANEU, Lazar / Purser Lewis: From Words to Action: Approaches to a Program. UNESCO/CEPES Papers on Higher Education, Bucharest 2002.

WEITGRUBER, Barbara: The European Higher Education and Research Areas: A specific Austrian responsibility for the Western Balkan Countries? Overview of the developments in

the cooperation with South Eastern Europe in higher education and research from 1998 to 2007 with a special focus on the Austrian commitment. In: Marko, Joseph / Kopetz, Hedwig (eds.): Integration of South East Europe into the European Higher Education and Research Area. Results of the UnivSOE Project 2005-2008 (in preparation).

WESTERHEIJDEN, Don: Researchers and Policy Makers in Higher Education in East and Central Europe. In: Leitner, Erich (ed.): Educational Research and Higher Education Reform in Eastern and Central Europe. Frankfurt/M. 2006 (Beiträge zur vergleichenden Bildungsforschung 6), 40-49.

WULZ, Heribert: European Higher Education and Research Areas - The Role of Rectors' Conferences. In: Marko, Joseph / Kopetz, Hedwig (eds.): Integration of South East Europe into the European Higher Education and Research Area. Results of the UnivSOE Project 2005-2008 (in preparation).

ŽAGAR, Mitja: South-East European Ethnic Minorities in Science and Higher Education: the Broader Context, Remarks and Recommendations. In: Gajdusek, Martin Felix / Mayr, Andrea Christiane / Polzer, Miroslav (eds.): Science Policy and Human Resources Development in South-Eastern Europe in the Context of European Integration. Vienna 2006, 231-240.

ZGAGA, Pavel: The Importance of Education in Social Reconstruction. Six Years of the *Enhanced Graz Process*: Developments, Current Status and Future Prospects of Education in South-East Europe. Ljubljana 2005. Available at http://www.see-educoop.net/education_in/pdf/egp-report-final-oth-enl.pdf.

2. Technical and Organisational Information on the Project

2.1. Research Trips and Interviews

In order to collect empirical data and direct information for the elaboration of the project results, the members of the project team organised several field trips in different countries of the SEE region. In the following overview these trips will be listed in chronological order. Minutes of the field trips are available on request.

2.1.1. Macedonia and Kosovo (17 to 22 April 2006)

Prof. MANTL and Prof. MARKO visited Skopje, Tetovo and Prishtina. They visited the state and private universities as well as the Academy of Sciences of Kosovo and Macedonia, participated in different meetings with members of the universities and held several discussions. On 20 April 2006 Prof. MANTL and Prof. MARKO gave speeches at the University of Prishtina dealing with the importance of higher education and research and sharing their experiences. They also met the president of the Academy of Sciences and even the President of Kosovo in order to discuss issues concerning the development of higher education and sciences in the region. Zoran ILIEVSKI and Arben HAJRULLAHU, who were also junior researchers in the UnivSOE project, provided local support. The following experts were met:

SS. Cyril and Methodius University, Skopje, Macedonia:

- **Prof.Dr. Lubica ŠUTURKOVA, PhD** (Vice-Rector)
- **Marija CENEVSKA, M.A.** (Head of the Office for International Cooperation)
- **Prof.Dr. Gjorge IVANOV** (Vice-Dean of the Faculty of Law Iustinianus Primus)

New York College (Private University), Skopje, Macedonia:

- **Prof.Dr. Michael HATZIPROKOPIOU** (Dean)

Foundation Open Society Institute, Skopje, Macedonia:

- **Suzana PECAKOVSKA** (Programme Coordinator Higher Education and scholarships, Foundation Open Society Institute Macedonia)

South East European University (SEEU) Tetovo, Macedonia:

- **Prof.Dr. Blerim REKA** (Vice-Rector for Research, South East European University Tetovo, SEEU)

State University of Tetovo, Macedonia:

- **Rector Prof.Dr. Nexhbedin BEADINI** (State University of Tetovo)²¹²
- **Arburin ISEINI** (Head of International Relations Office, State University of Tetovo)
- **Vice-Rector Prof.Dr. Ismail AHMEDI** (State University of Tetovo)

Macedonian Academy of Sciences and Arts, Skopje, Macedonia:

- **Prof.Dr. Momir H. POLENAKOVIĆ, MD, PhD** (Vice-President of the Macedonian Academy of Sciences and Arts (MANU), Skopje)
- **Blaže RISTOVSKI** (Editor in Chief of the Macedonian Encyclopaedia)
- **Prof.Dr.Dipl.phil. Jordan POP-JORDANOV** (Director of the Research Centre for Energy, Informatics and Materials of the Macedonian Academy of Sciences and Arts (ICEIM-MANU), Skopje)
- **Prof.Dr.Dipl.phil.slav. Milan DJURČINOV** (Macedonian Academy of Sciences and Arts, Skopje)

Prishtina, Kosovo:

- **President Dr. Fatma SEJDIU** (President of Kosovo)

Academy of Sciences, Prishtina, Kosovo:

- **Prof.Dr. Rexhep ISMAJLI** (President of the Academy of Sciences, Kosovo)

University of Prishtina, Kosovo:

- **Prof.Dr. Jahi HOXHA** (President of the Board of the University of Prishtina)
- **Prof.Ass.Dr. Ibrahim GASHI** (Member of the Board of the University of Prishtina)
- **Wardha QIREZI** (Head of the Office for International Relations, University of Prishtina)
- **Valon MURATI** (Director Human Rights Centre of the University of Prishtina)

²¹² In October 2006 Rector BEADINI as well as 50 employees of the University were dismissed by the Minister of Higher Education because of irregularities (2000 faked diplomas, financial crimes etc.). This measure was supported by intellectuals and members of the University and finally approved by the Senate. The new rector is Prof.Dr. Sadi BEXHETI. See http://www.kas.de/db_files/dokumente/laenderberichte/7_dokument_dok_pdf_9468_1.pdf (8.3.2008). February 14-15, 2008 – On the occasion of the 31st anniversary of the University “Džemal Bijedić” in Mostar, the Rector of the State University of Tetova Prof. Dr. Sadi Bexheti signed two agreements of cooperation. The agreements were established with the University “Džemal Bijedić”, represented by the Rector Prof. Dr. Fuad Čatović, and the University of Tuzla, represented by Prof. Dr. Dzemo Tufekčić. This step leads the State University of Tetova towards accomplishing a major mission goal, which is the internationalization of the University. http://www.unite.edu.mk/Anglisht/INDEX%20ENG/publikimi_15_02_2008_sarajeve.html

A crucial issue of the field trip to Macedonia and Kosovo was the problem of the autonomy of Universities and Academies of Sciences. Concerning the Universities, the implementation of the Bologna Process as well as the access to the Universities and the need for serious permanent quality assurance – at state and private universities – remain the principal issues of concern. The Academies of Sciences understand themselves also as a “shelter” of the humanities and the guarantee for the pursuit of research dedicated to national culture. The fact that the majority of their members are older than 55-65 years raises the issue of the necessary promotion of younger researchers – a task which still has to be developed. In general, the internationalisation of the Universities as well as the research institutions presents one of the most important next steps of development apart from the necessity to improve the fulfilment of basic tasks in teaching and research.

2.1.2. Ukraine (11 October 2006)

Prof. MANTL received the *Doctor honoris causa* from the National Ivan Franko-University of L’viv (Ukraine) on 11 October 2006. On this occasion he also met the following persons and discussed issues of the development of higher education in Ukraine in general and the opportunities for the National Ivan Franko-University L’viv and its orientation to Western Europe and cooperation possibilities with Western Universities in particular:

- **Rector Prof.Dr. Ivan VAKARCHUK** (now: Minister of Science in the government of Yulia TYMOSHENKO)
- **Dean Prof.Dr. Markian MALSKY** (Dean of the Faculty of International Relations of the National Ivan Franko-University L’viv)

2.1.3. Romania (24 to 29 October 2006)

Dr. KOPETZ participated in a field trip to Romania (Cluj-Napoca and Sibiu) together with Ms. Eva LAHNSTEINER, scientific collaborator at the Competence Centre for South East Europe at the University of Graz and junior researcher focusing on Romania in the UnivSOE project. Interviews were organised at the **Babeş-Bolyai University of Cluj-Napoca** with the following persons:

- **Vice-Rector Prof.Dr. Levente SALAT-ZAKARIAS** (responsible for undergraduate and MA studies, curricula, transferable credits, education reform, publication of the programmes of study, accreditation, department for teacher training, university

diplomas, coordinator of the Hungarian line of study) on the subject of the reform of higher education law in the light of the Bologna Process;

- **Vice-Rector Prof.Dr. Paul Şerban AGACHI** (responsible for scientific research, research institutes and centres, laboratories, publishing houses, publications, libraries, exportation of scientific products, contacts with the graduates, management, University image, coordinator of the Romanian line of study) on the strengths and weaknesses of the research management of the University;
- **Mrs. Joana FLOREA** (Centre for International Cooperation) on the subject of the numerous international relations, cooperation and ERASMUS-contracts of the Babeş-Bolyai University, and especially with universities in German-speaking countries;
- **Dr. Stelian BRAD** (Technical University of Cluj-Napoca, responsible for technology transfer, Manager of the spin-off company Artsoft) on the importance of technology transfer of universities and the lack of legal provisions as well as the necessary experience with EU-funded research projects and research experience abroad;
- **Mrs. Ioana TICO** (PhD candidate at the Technical University of Cluj-Napoca) on the challenges for young researchers and the necessity to work at the same time in order to earn enough money to be able to finance their studies.
- Another interview took place at the **Medical University of Cluj-Napoca** with a member of the Rectorate as well as a collaborator in the Office for International Relations.

Transportation from Cluj to Sibiu was organised by bus. At Sibiu an interview was organised with

- **Prof. Dr. Claudiu KIFOR** (Lucian Blaga University of Sibiu, director of the scientific research department) on the necessity of promoting research activities within the university, the participation in European research projects and the limited state funds for research.

On the following day a conference on the topic “Europäische Integration: Wie kann Rumänien von der österreichischen Erfahrung lernen?” took place at the Romanian-German (Private) University of Sibiu, organised by **Prof. Dr. Monica VLAD**. On this occasion Dr. KOPETZ made a presentation concerning “The European Higher Education Area and Romania”, which led to a vivid discussion afterwards and confronted the speaker with the

deeply rooted academic thinking of the “older” generation, which was expressed by a member of the Rectorate of the University of Iași.

The general impression of this interesting field trip was that Romania faces a lot of challenges concerning the transformation of its higher education system caused by the end of communism and the Bologna Process and its research landscape is being challenged by the European research system. The situation in Transylvania differs apparently from the rest of the country since the issue of access to higher education for the Hungarian and German-speaking minority in this region is a very crucial one. The difficult role of the private universities has also become apparent.

2.1.4. Slovenia (19 April 2007)

Dr. KOPETZ participated in a one-day research trip to Ljubljana together with Mag. Isabella POIER, general secretary of the UnivSOE-Project. They visited the University of Ljubljana and the Academy of Sciences and Arts. Interviews were also organised with representatives of an independent research institute as well as of the ASO office Ljubljana. The following persons were met:

- **Prof. Dr. Janez KRANJC** (Faculty of Law, University of Ljubljana)
Prof. KRANJC was critical regarding the economic bias of the ongoing Bologna Process and emphasised the necessity of the inseparable link between research and teaching as well as the value of theoretically trained students also for the practical life.
- **Prof. Dr. Alenka ŠELIH** (Vice-President of the Slovenian Academy of Sciences and Arts and Professor at the Faculty of Law, University of Ljubljana)
Prof. ŠELIH explained the role of the Academy of Sciences within the Slovenian research landscape, its tasks and organisation and told of the difficult cooperation between the different Academies of Sciences in Former Yugoslavia before and after the end of communism.
- **Prof. Dr. Mitja ŽAGAR** (Former Director of the Institute for Ethnic Studies)
Prof. ŽAGAR talked about the role of research institutes in Slovenia, their international and European research cooperation and the reforms of the government concerning the funding of independent research institutes.
- **Prof. Dr. Branko STANOVNIK** (Head of the International Relations Department of the Slovenian Academy of Science and Arts - SASA) and

- **Prof. Dr. Matija GOGALA** (Secretary General of the SASA)

Prof. STANOVNIK and Prof. GOGALA explained the function of the Slovenian Academy of Sciences as the most distinguished assembly of scholars in Slovenia, its special function of protecting Slovenian culture and language and the necessity of basic research in general. The SASA holds different research institutes in indirect ownership.

- **Dr. Miroslav POLZER** (Austrian Science Liaison Office - ASO, Ljubljana)

Dr. POLZER gave an interesting overview on the research landscape in Slovenia as well as in the whole region of South East Europe and highlighted the numerous Austrian initiatives and activities during the last few years.

The general impression of the short research trip to the lively city of Ljubljana was that Slovenia had managed to keep European and international contacts in higher education and research even during the years of communism, which facilitated the quick restart of inter-academic links after its independence not only with the other countries of Former Yugoslavia and Eastern Europe but also the Western part of Europe as well as the US.

2.1.5. Croatia (26 to 27 April 2007)

Dr. KOPETZ participated in a two-day research trip to Croatia (Zagreb) together with Ms. Antonija PETRIČUŠIĆ, research assistant of Prof. MARKO and junior researcher in the UnivSOE project, national expert for Croatia. They met a member of the Faculty of Law of the University of Zagreb, the director of an independent NGO working in the area of internationalisation of higher education, a PhD-candidate and a member of the Croatian Academy of Sciences and Arts and even participated in the ceremony of the Anniversary Meeting of the Academy. Especially the Croatian Academy of Sciences presented itself as the most important Academy of Sciences among the Academies of the former Yugoslavia.

- **Mag. Tihana JOZIĆ**, PhD candidate at Karl-Franzens-University of Graz, temporary researcher at the Faculty of Law, University of Zagreb, in the context of a MOEL scholarship of the ÖFG (Austrian Research Association), Croatian and Bosnian citizen, on the existing political difficulties in Bosnia and Herzegovina, the influence of the Croatian government on Croats in Bosnia and the growing research possibilities in Zagreb.

- **Ninoslav ŠČUKANEC** (Director of the Institute for the Development of Education, Zagreb): The Institute for the Development of Education started as a student driven NGO in the field of supporting students who want to study abroad, founded by the current director. Up until 2007 the Institute provided therefore mainly services for individuals and counselling services for institutions and individuals on issues of higher education and foreign study possibilities. In the meantime the strategy of the Institute is directed more towards the improvement of higher education policy in Croatia since there is a lack of policy advice in this field. See <http://www.iro.hr/>.
- **Prof. Dr. Jakša BARBIĆ** (Member of the Croatian Academy of Sciences and Arts, President of The Scientific Council for Government Administration, Judicature and the Rule of Law at the Croatian Academy of Sciences, at the same time Professor of Commercial Law at the University of Zagreb): Prof. BARBIĆ explained the important role of the Academy within the Croatian research landscape and the research scenery of the Former Yugoslavia. He especially pointed out that the Academy plays an active role in supporting the Croatian government in its reform process towards European Union membership by organising and delivering scientific advice in different matters, also in public administration reform.

The general impression of the research trip to Zagreb was that Croatia has successfully placed the issue of research and higher education on the political agenda. From the perspective of EU membership negotiations, talking about the knowledge society has become en vogue. Nevertheless, there are still shortcomings in the implementation of the Bologna process and capacity building within universities needs further support. Especially the existing system of disintegrated universities with (some) strong faculties poses problems.

2.1.6. Bosnia and Herzegovina (28 April to 1 May 2007)

Dr. KOPETZ and Mag. POIER participated in an official excursion of the “Land” of Styria to Bosnia and Herzegovina (“Freundschaftsfahrt des Landes Steiermark nach Bosnien und Herzegowina”). During the 4-day trip they visited Bihać, Banja Luka, Travnik, Sarajevo, Mostar and Livno. In Bihać they managed to visit the buildings of the newly founded University and discussed with Dr. Jörg HOFREITER, the Styrian honorary consul and lecturer at the university, the regional importance of this small university. In Sarajevo they met the Austrian ambassador in Sarajevo, Dr. Werner ALMHOFER, who informed them about the ongoing difficult situation at the universities in Bosnia and the quite "immobile" Academy of

Sciences. In Mostar, the Mayor stressed the importance of the universities. Nevertheless the impression of a divided city remained. The general impression was that Bosnia and Herzegovina still needs special support in order to recover economically, politically and also academically.

2.1.7. Greece (28 May to 3 June 2007)

Together with the Greek junior researcher in the UnivSOE project, Mrs. Margarita KASTANARA, Dr. KOPETZ, Mag. POIER and Ass.Prof.Dr. Klaus POIER participated in a field trip to Greece. Starting in Athens, they met several people from the principal Greek institutions of higher education and science (Ministry, research institutes, University of Athens, Greek Academy of Sciences) and went on to Larissa and Thessaloniki in order to get a holistic impression of the situation after the harsh university demonstrations which had taken place in winter 2006/2007 after the announcement of the modification of the Greek constitution in order to permit private universities. Several interviews were organised with the following persons:

- **Prof. Dr. Dimitrios KYRIAKIDIS** (Director and Chairman of the Administrative Board, National Hellenic Research Foundation) on the role of fundamental research in independent research institutes;
- **Mr. Athanasios KYRIAZIS** (Secretary for Higher Education at the Ministry of National Education and Religious Affairs) on the ongoing changes in line with the Bologna Process;
- **Prof. Dr. Nicolaos MATSANIOTIS** (Secretary General of the Academy of Athens) on the role and organization of the Academy of Athens;
- **Prof. Dr. Ioannis KARAKOSTAS** (Vice Rector of Student Affairs, Culture and International Relations of the National and Kapodistrian University of Athens) on the leading role of the University of Athens and international programmes;
- **Ambassador Dkfm. Dr. Herbert KRÖLL** (Austrian Ambassador in Athens) on the difficult relationship between Greece and Macedonia as well as the Greek society in general;
- **Prof. Dr. Iohannes KOKKORAS** (President of the T.E.I. in Larissa) on the special role of the Technological Education Institute of Larissa, established in 1984, providing “*the theoretical and practical training needed to support the practice of professions relating to the application of scientific, technological, artistic or other type of knowledge or skill*” according to the founding law 1404/1983;

- **Mrs. Helen KOTSAKI** (Head of the International Relations Department of the Aristotle University of Thessaloniki) on the international study activities of the university;
- **Prof. Dr. Perikles LATINOPOULOS** (Vice-Chairman of the Research Committee and Professor at the Department of Civil Engineering, Aristotle University of Thessaloniki) on the research activities and research strategy of the Aristotle University;
- **Prof. Athanasia TSATSAKOU** (Vice-Rector for Academic Affairs and Professor of French Literature) on the role of the Aristotle University within the Greek higher education landscape and the self-perception of state universities towards private universities;
- **Mr. Nenad SEBEK** (Executive Director of the Centre for Democracy and Reconciliation in Southeast Europe (CDRSEE));
- **Mrs. Corinna NOACK-AETOPULOS** (Programmes Director of the CDRSEE) on the activities of the CDRSEE in reconciliation issues in SEE, especially on the now famous “Southeast European Joint History Project”, the difficult challenge of lustration as well as on the necessity of a stable SEE region for Greek wealth and commercial development.

As a conclusion of the research trip to Greece it can be stated that the Greek system of higher education is currently confronted with a deep change triggered by European developments within the framework of the Bologna Process. The introduction of private higher education, which is a reality in the major part of Europe, is seen as a danger for Greek state higher education but nevertheless understood by the responsible actors as a necessary step in opening and modernising the Greek system. Greek research seems to be strongly linked with institutes abroad.

2.1.8. Oxford/England (16 to 27 July 2007)

Dr. KOPETZ was a Visiting Fellow at the Institute of European and Comparative Law of the University of Oxford carrying out research for the UnivSOE project, especially concerning the European Higher Education and Research Area. She also established contact with SEESOX, the centre for SEE studies in Oxford, especially with Dr. Dimitar BECHEV.

2.1.9. Ukraine (16 to 22 September 2007)

Several times before Prof. MANTL has held a one-week guest seminar on European integration at the Ivan Franko National University of L’viv, Ukraine. This time, he took the opportunity to discuss issues of the development of higher education in Ukraine with several experts. He was supported by Prof.Dr. Oksana HOLOVKO and Mag. Anna FEDORCHENKO, who are both

collaborators of the UnivSOE project. He also went to Kyiv supported by Mag. Wolodymyr HRYZINA.

L'viv (16 to 20 September 2007):

- **Rector Prof.Dr. Ivan VAKARCHUK** (now Minister of Science in the government of Yulia TYMOSHENKO)
- **Vice-Rector Prof.Dr. Maria ZUBRYTSKA** (National Ivan Franko University of L'viv)
- **Prof.Dr. Wolodymyr KAMIANETS** (National Ivan Franko University of L'viv)
- **Science Attaché MMag. Andreas WENNINGER** (Österreichisch-Ukrainisches Kooperationsbüro L'viv)

Kyiv (21 to 22 September 2007):

- **Prof.Dr. Valerj KOPIYKA** (Chair of International Relations and Foreign Policy, National Taras Shevchenko University of Kyiv, Ukraine)
- **Doc.Dr. Maria IWANYTSKA** (German Studies, National Taras Shevchenko University of Kyiv, Ukraine)

The pro-western orientation of the Ukraine and its universities is one of the big challenges of the country building a buffer between the EU and Russia. Knowledge of western languages as e.g. English or German is a necessary condition for academic exchange. Issues of the implementation of the Bologna Process are currently of high interest. There are still problems with corruption, especially the entrance exams at universities represent a risk. The cultivation of the humanities has become a difficult task since the market-orientation of the studies has increased. Yet, there are many talented young people in Ukraine. Therefore it is important to give them chances at home after experiences abroad.

2.1.10. Bosnia and Herzegovina (14 to 18 November 2007)

Prof. MARKO organised a research trip to Sarajevo, in which Prof. MARKO, Prof. MANTL, Prof. POIER, Mag. POIER, Ms. Katharina KONSCHegg and Dr. KOPETZ participated. They visited the University of Sarajevo, the Constitutional Court of Bosnia and Herzegovina and the Office of the High Representative as well as the Bosnjacki Institute in Sarajevo. The main purpose, however, was the organisation of a workshop on “Religion and Higher Education in South East Europe”, which took place on 17 November 2007 in the Bosnjacki Institute in Sarajevo. The majority of the junior researchers participated in this workshop, which was introduced by a speech by Prof. Dino ABazovic from the University of Sarajevo highlighting the eminent role of religion and religious discourse in forming the national identities in the

SEE region. The discussion added a comparative perspective to the topic since the participants themselves presented the situation in their respective countries. At the end, general conclusions of the UnivSOE project as well as dissemination and follow-up activities were discussed.

2.2. Workshops and Final Conference

2.2.1. Research Workshop on 24 to 25 November 2006 in Graz

The purpose of the first research workshop taking place at the University of Graz from 24 to 25 November 2006 was to discuss the status quo of the situation concerning higher education and research in the different countries, to identify strengths and weaknesses and to point out further needs of research. The workshop was prepared by specific country reports which had been elaborated along the lines of a questionnaire with the support of the junior researchers of the UnivSOE project. Finally, the research workshop provided an opportunity to meet the involved senior experts from the different countries from the SEE region in Graz, to exchange examples of best practice and to launch a network of motivated and interested young researchers in the social sciences from SEE. Participants in the workshop were mainly the junior and senior researchers of the UnivSOE project, including some interested guests. Afterwards the workshop conclusions were formulated: they have been integrated into the general conclusions of this final report. The programme of the workshop can be found below.

2.2.2. Junior Round Table on 28 June 2007 in Graz

The main purpose of the Junior Round Table which took place on 28 June 2007 in Graz was to present updated information on the developments in the higher education and research sector in the specific countries of the UnivSOE project. Therefore, the junior researchers met in Graz and talked about current issues from a legal and political point of view. The programme can be found below.

2.2.3. Final Conference on 29 to 30 June 2007 in Graz

The Final Conference aimed at discussing and disseminating the preliminary results of the project within the broader context of the European Higher Education and Research Area in order to develop perspectives for the future. Therefore, junior and senior researchers of the UnivSOE project participated, as well as stakeholders and experts, scholars and practitioners from Austria and the SEE region. Representatives of the national ministries and politics were also invited; in the end approximately 40 to 50 persons participated in the successful two-day

conference, for which European Commissioner Janez POTOČNIK had written a welcome address. The programme of the conference as well as the list of participants can be found below.

2.2.4. Workshop on 17 November 2007 in Sarajevo

The last workshop of the UnivSOE project was dedicated to the special topic of “Religion and Higher Education” and took place on 17 November 2007. Sarajevo was chosen as the best location to experience the co-existence of the most characteristic religions in SEE. Prof. Dino ABAZOVIC from the University of Sarajevo delivered a speech on the role of religion in SEE. During the discussion the junior researchers presented the situation of religion and higher education in their home countries. At the end a comparative perspective was possible and highlighted the growing importance of religion and religious education after the end of communism as well as its separating but also peacemaking role for the future. At the end, the general conclusions of the UnivSOE project were discussed and evaluated among the researchers from the participating countries. Moreover, dissemination and follow-up activities were discussed. The list of participants and the programme can be found below.

2.2.5. Programmes



Research Project UnivSOE: Institutions of Tertiary Education in Central and South East Europe

Developments, Structures and Perspectives of these Institutions for their Integration into the European Higher Education and Research Area
o.Univ.Prof.Dr.Dr.h.c. Wolfgang MANTL - Univ.Prof.Dr. Joseph MARKO - Dr. Hedwig KOPETZ
Institute of Austrian, European and Comparative Public Law, Political and Administrative Science
Universitätsstrasse 15/C3, 8010 Graz. Tel.: ++43/316-380-3365. Fax: ++43/316-380-9452. hedwig.kopetz@uni-graz.at
<http://www.uni-graz.at/univsoe/>

Graz, 22 November 2006

Research Workshop

23 - 25 November 2006, University of Graz, Austria

Institutions of Research and Tertiary Education in Central and South East Europe – Developments, Structures and Perspectives for their Integration into the European Higher Education and Research Area

Programme

Thursday, 23 November 2006

Arrival of participants

Friday, 24 November 2006

9.00h Opening Session: Strengths and weaknesses of institutions of tertiary education and research institutions in South East Europe

Welcome and Introduction

o. Univ. Prof. Dr. Willibald POSCH, Dean of the Faculty of Law
o.Univ.Prof.Dr. Wolfgang MANTL, Univ.Prof.Dr. Joseph MARKO

The case of Slovenia

Input: *Prof. Janez KRANJC, Ljubljana*
Discussant: *Mag. Marianne PASTERK, Graz*

The case of Croatia

Input: *Prof. Josip KREGAR, Zagreb*
Discussant: *Dipl.Jur. Antonija PETRICUSIC, Graz*

Coffee break

The case of Bosnia and Herzegovina

Input: *Prof. Jasna BAKSIC MUFTIC, Sarajevo*
Discussant: *Mag. Slobodanka MILIKIC, Graz*

The case of Serbia

Discussant: *Marko KMEZIĆ, Belgrade*

Lunch Break

14.00h Afternoon Session

The case of Montenegro

Input: *Prof. Sonja TOMOVIC, Podgorica*

Discussant: *Doc. Radovan STOJANOVIC, Podgorica*

The case of Kosovo

Input: *Prof. Gazmend LUBOTENI, Prishtine*

Discussant: *Dr. Arben HAJRULLAHU, Graz - Prishtine*

The case of Macedonia

Input: *Prof. Gjorge IVANOV, Skopje*

Discussant: *Zoran ILIEVSKI, LLM, Skopje*

Coffee break

The case of Albania

Input: *Prof. Refik KADIA, Shkoder*

Discussant: *Valdet BISHANAKU, Graz-Tirana*

19.00h Styrian Dinner in the City

Saturday, 25 November 2006

10.30h Final Session: Strengths and weaknesses of institutions of tertiary education and research institutions in Central and Eastern Europe

The case of Bulgaria

Input: *Prof. Anna KRASTEVA, Sofia*

Discussant: *Bozhana STOEVA, Sofia-Madrid*

The case of Romania

Input: *Prof. Bogdan AURESCU, Bucarest*

Discussant: *Eva LAHNSTEINER, Graz, and Sergiu CONSTANTIN, Bozen-Bolzano*

Coffee Break

The case of Ukraine

Input: *Prof. Oksana HOLOVKO, L'viv*

presented by: *Anna FEDORCHENKO, Graz - L'viv*

General Discussion

Concluding Remarks

o.Univ.Prof.Dr. Wolfgang MANTL, Graz

13.30h Departure for a trip into the southern part of Styria (typical lunch in the vineyards)

20.00h Arrival in Graz

Sunday, 26 November 2006

Departure



Research Project UnivSOE: Institutions of Tertiary Education in Central and South East Europe

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www.uni-graz.at/univsoe/

Junior Round Table

28th June 2007, University of Graz, Austria

RESOWI, Universitätsstraße 15/D3, A-8010 Graz

Room SR 15.34 (D3)

Institutions of Research and Tertiary Education in Central and South East Europe –

New Developments and European Perspectives

Programme

Thursday, 28th June 2007

12.30h Lunch (Meeting point at the Institute of Public Law, Department Prof. MANTL, RESOWI, C3)

14.00h Junior Round Table

Welcome and Introduction: o.Univ.Prof.Dr.Dr.h.c. Wolfgang MANTL, Graz

New developments in Slovenia

Ana ZIVANOVIĆ, Mag. Marianne PASTERK, Graz

New developments in Croatia

Antonija PETRIČUŠIĆ, MA, Graz-Zagreb

New developments in Bosnia and Herzegovina

Slobodanka MILIKIĆ, Graz-Banja Luka

New developments in Serbia

Marko KMEZIĆ, LL.M., Belgrade

New developments in Montenegro

Dr. Branka BOŠNJAK, Podgorica

14.40-15.30h Discussion

15.30-15.45h *Coffee Break*

15.45h New developments in Kosovo

Dr. Hedwig KOPETZ (on behalf of Dr. Arben HAJRULLAHU)

New developments in Macedonia

Zoran ILIEVSKI, LL.M., Skopje

New developments in Greece

Margarita KASTANARA, Dipl.Psych., Graz-Thessaloniki

Mag. Anastasios MORAITIS, Graz-Athens

New developments in Bulgaria
Bozhana STOEVA, Sofia-Madrid

New developments in Romania
Prof.Dr. Monica VLAD, Sibiu
Sergiu CONSTANTIN, Bolzano

New developments in Ukraine
Prof.Dr. Oksana HOLOVKO-HAVRYSHEVA, L'viv
Mag. Anna FEDORCHENKO, L'viv-Graz

16.30h **General Discussion** covering the following issues:

- New legal and political developments concerning higher education and research
- Autonomy of Universities, Academic Freedom
- Implementation of the Bologna Process
- Life Long Learning
- Private Universities
- Quality Assurance and Evaluation
- Private Think Tanks
- Academies of Sciences
- Universities of Applied Sciences (Professional Training)

Ca. 18.15h End of the Junior Round Table

20.00h Welcome Dinner for the Participants of the Junior Round Table and of the UnivSOE Final Conference in the city centre of Graz
(Restaurant "Altsteirische Schmankerlstube", Sackstraße 10)

Welcome address at the final conference

"Institutions of Research and Tertiary Education in Central and South East Europe – Developments, Structures and Perspectives for their Integration into the European Higher Education and Research Area"

Graz, 29-30 June 2007

Janez Potočnik, Commissioner for Science and Research

Dear Ministers,
Distinguished Professors,
Researchers, students,

During this conference you will discuss the final outcome of the UnivSOE research project aiming at integrating the South East European Countries into the European Research and Higher Education Area.

Let me share with you how much I am interested in this topic and would very much have liked to be among you to listen and contribute to the findings of this very useful research project.

Cooperation with the Western Balkan Countries is a high priority for the EU, particularly in the area of Research and Higher Education. A year ago, in Vienna, at the launching event of the Steering Platform for Research for the Western Balkan Countries, together with the Austrian Presidency, I announced that I wanted the doors of the European Research Area widely open for the Western Balkan Countries. I am convinced that cooperation in these areas will ultimately facilitate the integration of the Western Balkan Countries in the European Union and I am personally committed to this process.

Cooperating on research with the scientific community from the EU is in the first place increasing the possibilities of exchanging knowledge and ideas. Both the EU and the Western Balkan countries will benefit from that because in conducting research together more critical mass will be created; the results of the research will be more competitive and lead to new market access opportunities. Given the traditionally good scientific base existing in the Western Balkan Countries, also the EU will benefit from bringing research institutions and scientists from the Balkans into their consortia.

This is why I have made the association to the Seventh Framework programme for research and technological development (FP7) attractive to all Western Balkan Countries. And with success: on 13 June 2007 the Memoranda of Understanding associating respectively Croatia, the former Yugoslav Republic of Macedonia and Serbia were signed and Montenegro will follow soon. The same possibility exists for Albania and Bosnia & Herzegovina and I hope they will also soon request to become associated to the Seventh research framework programme. The Memorandum of Association with Turkey was signed on 1 June 2007.

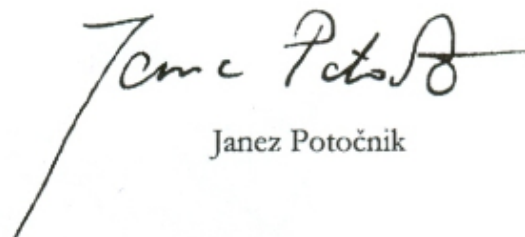
By being associated to the Seventh Framework the Western Balkan Countries become more familiar with the EU decision-making and research policy. This is another political advantage of my drive to open the doors of the European Research Area.

But, research cooperation is more than funding under the Framework Programmes. It is about measures and actions which reinforce your research capacity and human resources so as to make research possible and to stimulate scientists to contribute to the quality of life and society.

At EU level, research has become a core policy. I encourage all Western Balkan Countries to start designing an integrated research policy which will allow them to develop at national level their research capacity building. On this the efforts have to come in the first place from the Western Balkan Countries: they need to establish a strategy on how much to spent on research at national level, on taking measures which encourage the private sector to invest in research or to encourage young people to develop a scientific career. In other words, what is valid for the EU of 27 member States is also valid for wider Europe.

This is why I appreciate very much the efforts by Austria to support this research project by looking closer into the research capacity of leading institutes and universities and to guide the Western Balkan Countries into the European Research Area. The fact that this Conference takes place in Graz is no coincidence: it is the city where the idea of bringing research closer to education and vice-versa with a focus on the South Eastern European Countries all started. This is another demonstration of Austria's strong commitment to research for the Western Balkan countries which is much appreciated.

I wish you a successful event.

A handwritten signature in black ink, reading "Janez Potočnik". The signature is written in a cursive style with a long, sweeping underline that extends to the left and then curves back under the name.

Janez Potočnik



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<http://www.uni-graz.at/univsoe/>

Final Conference

June 29-30 2007, University of Graz, Austria

Universitätsplatz 3, A-8010 Graz, Room SZ 01.18 (Main Building, 1st Floor)

Institutions of Research and Tertiary Education in Central and South East Europe – Developments, Structures and Perspectives for their Integration into the European Higher Education and Research Area

Programme

Friday, June 29th 2007

9.30h Opening Session:

Universities and Research in Europe from a historical and cultural perspective

Chair: o.Univ.Prof.Dr.Dr.h.c. Wolfgang MANTL, Graz, Director UnivSOE Project

Welcome and Introduction

Univ.Prof.Dr. Alfred GUTSCHELHOFER, Rector of the University of Graz

o. Univ. Prof. Dr. Willibald POSCH, Dean of the Faculty of Law

o.Univ.Prof.Dr.Dr.h.c. Wolfgang MANTL, Director UnivSOE Project

Univ.Prof.Dr. Joseph MARKO, Senior Researcher UnivSOE Project

- 1. Univ.Prof.Dr. Janez KRANJC, University of Ljubljana
Universities in Europe: common heritage, common future?*
- 2. o.Univ.Prof.Dr. Dr.h.c. Helmut KONRAD, University of Graz
Private universities in Europe – risks and challenges*

11.00h Coffee Break

- 3. o.Univ.Prof.Dr. Walter BERKA, University of Salzburg
Autonomy of universities in the European perspective: threats and obligations*
- 4. Discussants: Prof.Dr. Josip KREGAR, University of Zagreb
Zoran ILIEVSKI, LL.M., Ss. Cyril and Methodius University of Skopje*

13.00h-14.00h Reception held by the Mayor of the City of Graz, Mag. Siegfried NAGL (RESOWI, D3)

14.00h Afternoon Session:

Towards the European Research and Higher Education Area:

General concepts and perspectives for Central and South East Europe

Chair: Dr. Hedwig KOPETZ, Graz, Junior Researcher UnivSOE Project

5. *MinR Mag. Barbara WEITGRUBER, MA, Austrian Federal Ministry of Science and Research, Vienna*
The European Higher Education and Research Area: a specific Austrian responsibility for the Western Balkan Countries?

6. Discussants: *Dr. Branka BOŠNJAK, University of Montenegro, Podgorica*
Prof.Dr. Mitja ŽAGAR, Institute for Ethnic Studies, Ljubljana
Prof.DI Manfred HORVAT, Vienna University of Technology

15.30h Coffee Break

7. *SC Mag. Friedrich FAULHAMMER, Austrian Federal Ministry of Science and Research, Vienna*
The impact of the Bologna Process on European Universities after the Ministerial Summit of London May 2007: Realising the European Higher Education Area by 2010? Barriers and chances for Europe and the Western Balkan Countries
8. *Prof.Dr. Oksana HOLOVKO-HAVRYSHEVA, Ivan Franko National University of L'viv*
Research and Teaching?! – Obstacles and Chances for Younger Researchers at Universities, an Eastern European perspective
9. Discussants: *Prof.Dr. Monica VLAD, Private University of Sibiu*
Mag. Heribert WULZ, Secretary General of the Austrian Rectors' Conference, Vienna

19.00h Reception held by the Governor of Styria, Mag. Franz VOVES (Palais Attems, Sackstraße 17)

Saturday, June 30th 2007

9.00h Concluding Session: Research and Higher Education in South East Europe: Special traditions, political challenges and European perspectives

Chair: Univ.Prof.Dr. Joseph MARKO, Graz

10. *Prof.Dr. Dražen VIKIĆ-TOPIĆ, Deputy Minister, State Secretary for Science and Technology, Croatian Ministry of Science, Education and Sports, Zagreb*
Making research and higher education a priority on the political agenda: difficulties and necessity
11. *Mag. Marijana GRANDITS, Stability Pact for South Eastern Europe, Brussels*
Research and higher education in South East Europe: special traditions, political challenges and European perspectives

10.15h Coffee Break

12. *Prof.Dr. Fuada STANKOVIC, University of Novi Sad*
Research and higher education as avant-garde of regional cooperation, reconciliation and European integration in South East Europe
13. *Prof.Dr. Anna KRASTEVA, New Bulgarian University, Sofia*
Universities as civil society actors: communist legacy and civil society responsibility – threats and tasks
14. Discussant: *Univ.Prof.Dr. Hubert ISAK, University of Graz*
15. *Univ.Prof.Dr. Joseph MARKO, University of Graz*
Preliminary results of the UnivSOE project: a resumé
16. *o.Univ.Prof.Dr.Dr.h.c. Wolfgang MANTL, University of Graz*
Concluding remarks

13.30h Reception held by the Rector of the University of Graz,
Univ.Prof.Dr. Alfred GUTSCHELHOFER and end of the conference



Research Project UnivSOE: Institutions of Tertiary Education in Central and South East Europe

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<http://www.uni-graz.at/univsoe/>

Final Conference

29/30 June 2007, University of Graz

List of participants

1	BENEDEK, Wolfgang, Univ.Prof.Dr.	University of Graz, Austria
2	BERKA Walter, o.Univ.Prof. Dr.	University of Salzburg, Austria
3	BOSNJAK Branka, Dr.	University of Montenegro, Podgorica, Montenegro
4	CONSTANTIN Sergiu	EURAC-Research, Bolzano, Italy
5	DALL Eike, Mag.	Information Office of the Steering Platform on Research for the Western Balkan Countries (see-science.eu), Vienna, Austria
6	FAULHAMMER Friedrich, SC, Mag.	Austrian Federal Ministry of Science and Research, Vienna, Austria
7	FEDORCHENKO Anna, Mag.	University of Graz, Austria
8	GRANDITS Marijana, Mag.	Stability Pact for South Eastern Europe, Brussels, Belgium
9	GUTSCHELHOFER Alfred, Rector Univ.Prof. Dr.	University of Graz, Austria
10	HAHN Johannes, Federal Minister of Science and Research, Dr.	Austrian Federal Ministry of Science and Research, Vienna, Austria
11	HERMANN Nikolaus, Dr.	Honorary Consul of the Republic of Croatia, Graz, Austria
12	HOLOVKO-HAVRYSHEVA Oksana, Prof. Dr.	University of L'viv, Ukraine
13	HORVAT Manfred, Prof. DI	Vienna University of Technology, Austria
14	ILIEVSKI Zoran, LLM	Ss. Cyril and Methodius University of Skopje, Macedonia
15	ISAK Hubert, Univ.Prof. Dr.	University of Graz, Austria
16	KASTANARA Margarita, Dipl.Psych.	University of Graz/University of Thessaloniki, Greece
17	KASTELLIZ Dietlinde, Mag., M.A.	University of Graz, Office of International Relations, Austria
18	KMEZIC Marko, LLM	Belgrade Centre for Human Rights, Serbia

19	KONRAD Helmut, o.Univ.Prof. Dr.	University of Graz, Austria
20	KOPETZ Hedwig, Ass. Dr.	University of Graz, Austria
21	KOVACEVIC Kanita, Mag.	Austrian Federal Ministry for Education, the Arts and Culture, Vienna, Austria
22	KRANJC Janez, Prof. Dr.	University of Ljubljana, Slovenia
23	KRASTEVA Anna, Prof. Dr.	New Bulgarian University, Sofia, Bulgaria
24	KREGAR Josip, Prof. Dr.	University of Zagreb, Croatia
25	MANTL Wolfgang, o.Univ.Prof. Dr. Dr.h.c.	University of Graz, Austria
26	MARKO Edith, Dr.	University of Graz, Competence Centre SEE, Austria
27	MARKO Joseph, Univ.Prof. Dr.	University of Graz, Competence Centre SEE, Austria
28	MILIKIĆ Slobodanka, Mag.	University of Graz, Competence Centre SEE, Austria
29	MORAITIS Tassos, Mag.	University of Graz, Austria
30	PASTERK Marianne, Mag.	University of Graz, Competence Centre SEE, Austria
31	PETERS Marc Stefan, Dr.	Europa Institut Budapest/Andrássy-University Budapest, Hungary
32	PETRICUSIĆ Antonija, Dipl.Jur.	University of Graz, Competence Centre SEE, Austria
33	PICHL Elmar, Mag.	Austrian Federal Ministry of Science and Research, Austria
34	POIER Isabella, Mag.	University of Graz, Austria
35	POIER Klaus, Ass.Prof. Dr.	University of Graz, Austria
36	POSCH Willibald, o.Univ.Prof. Dr.	University of Graz, Dean, Austria
37	RESSLER Regina, MMag.	University of Graz, Austria
38	STANKOVIC Fuada, Prof. Dr.	University of Novi Sad, Serbia
39	STOEVA Bozhana, Dr.	Center for Economic Development, Sofia, Bulgaria
40	STOKLASKA Anneliese, MR, Dr.	Austrian Federal Ministry of Science and Research, Vienna, Austria
41	VIKIC-TOPIC Drazen, Prof. Dr., Deputy Minister	State Secretary for Science and Technology, Croatian Ministry of Science, Education and Sports, Zagreb, Croatia
42	VLAD Monika, Prof. Dr.	Private University Sibiu, Romania
43	WEITGRUBER Barbara, MR, Mag.	Austrian Federal Ministry of Science and Research, Vienna, Austria
44	WULZ Heribert, Mag. Secretary General	Austrian Rectors' Conference, Vienna, Austria
45	ŽAGAR Mitja, Prof. Dr.	Institute for Ethnic Studies, Ljubljana, Slovenia
46	ZIVANOVIC Ana	University of Graz, Competence Centre SEE, Austria



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Workshop

November 16th 2007, Sarajevo, Bosnia and Herzegovina

Bošnjački institut - Fondacija Adila Zulfikarpašića Sarajevo

Mula Mustafe Bašeskije 21, 71000 Sarajevo, Bosna i Hercegovina

Religion and Higher Education in South East Europe

Dissemination of the Project Results

Programme

Friday, November 16th 2007

9.00h Opening Session:

Religion and Higher Education in South East Europe

Chair: em o.Univ.Prof.Dr.Dr.h.c. Wolfgang MANTL, Graz, Director UnivSOE Project

Welcome and Introduction

em.o.Univ.Prof.Dr.Dr.h.c. Wolfgang MANTL, Director UnivSOE Project

Univ.Prof.Dr. Joseph MARKO, Senior Researcher UnivSOE Project

1. *Keynote Speaker: Dr. Dino ABAZOVIĆ, Human Rights Centre Sarajevo*
2. *Round Table: Presentations of the participants*
3. *General Discussion*

11.00h Coffee Break

13.00h Lunch Break

14.00h Coffee Break

14.30h Afternoon Session:

Towards the Integration of SEE and CEE into the European Research and Higher Education Area:

Conclusions of the UnivSOE Project and Dissemination

Chair: Univ.Prof.Dr. Joseph MARKO, Senior Researcher UnivSOE Project

4. *Univ.Prof.Dr. Joseph MARKO/Dr. Hedwig KOPETZ
Conclusions of the UnivSOE Project, Dissemination and Follow-up*
5. *General Discussion*
6. *em o.Univ.Prof.Dr.Dr.h.c. Wolfgang MANTL
Concluding Remarks*

2.3. Project Meetings

In order to agree on scientific and organisational issues of project management, a team headed by o.Univ.Prof.Dr.Dr.h.c. Wolfgang MANTL convened for regular meetings. In these meetings research questions were defined and operationalised as well as administrative issues discussed and supervised. The team also evaluated the workshops and coordinated the contributions of the junior researchers. The members of the team were the head of the UnivSOE project, Prof. MANTL, senior researcher Univ.Prof.Dr. Joseph MARKO and junior researcher Ass.Dr. Hedwig KOPETZ. Mag. Marianne PASTERK-REISINGER, who contributed as a junior researcher for Slovenia but also managed the financial part (SAP) and the homepage of the project, and Mag. Isabella POIER, who participated from January 2006 onwards in the function of general secretary of the project responsible for administrative support. From May 2007 onwards Ass.Prof.Dr. Klaus POIER participated in the meetings offering general support. From time to time the younger researchers Mag. Anna FEDORCHENKO (University of L'viv/Lemberg and Graz and junior researcher for Ukraine) und Bakk. Stefan LIENHART (University of Graz) participated in the meetings, as well as Ms. Katharina KONSCHIEGG and Ms. Katrin RUSS in the final phase (second half 2007).

In total, 32 meetings took place in the building of the Faculty of Law of the University of Graz (Resowi). Minutes of the meetings are available on request: 16.8.2005, 6.9.2005, 20.9.2005, 4.10.2005, 24.10.2005, 7.11.2005, 23.11.2005, 19.12.2005, 16.1.2006, 21.2.2006, 7.3.2006, 20.3.2006, 3.4.2006, 14.6.2006, 25.7.2006, 21.8.2006, 25.9.2006, 28.9.2006, 16.10.2006, 14.11.2006, 20.11.2006, 29.1.2007, 12.3.2007, 28.3.2007, 16.4.2007, 26.6.2007, 4.7.2007, 10.7.2007, 7.8.2007, 26.9.2007, 14.11.2007 (Sarajevo), 16.1.2008 (Vienna).

Additionally, two workshops took place in a special location, the "Volksbildungsheim St. Martin bei Graz" in order to develop the medium- and long-term strategy of the project (27.2.2006, 14.00-18.00 h and 24.4.2006, 16.00-18.30 h). During the first workshop the external expert Dr. Christian HARTMANN, Joanneum Research, was invited to present research results on the research output of SEE countries.

2.4. Public Relations and Dissemination

2.4.1. Presentations and Participation at Conferences

A speech by o.Univ.Prof.Dr.Dr.h.c. Wolfgang MANTL in the context of the Austrian EU-presidency during the first half of the year 2006 was explicitly part of the agreement (§ 2 Werkvertrag). Prof. MANTL delivered his speech “Bericht über die Universität und ihre Rolle in den Transformationsprozessen in Südosteuropa” at the conference of the EU general directors on 16 May 2006 in Graz. The guest lecture of Prof. MANTL at the University of L’viv in October 2007 was also used to exchange opinions and collect information on the situation in Ukraine.

Prof. MARKO contributed with a presentation at the conference “Strengthening Higher Education and Research in South East Europe: Priorities for Regional and European Cooperation”, organised in the framework of the Austrian EU presidency by the European University Association in cooperation with the University of Vienna on 2/3 March 2006 in Vienna. Dr. KOPETZ also participated at this conference in Vienna. Prof. MARKO, Dr. KOPETZ and Ms. PETRICUSIC participated in the Western Balkan Science Day on 13 November 2006 in Vienna.

Dr. KOPETZ gave input at the panel “Regional Co-operation from a Civil Society Perspective” at the conference “Civil Society in South Eastern Europe”, which was organised by the Institute for the Danube and Central Europe (IDM) on 30/31 March 2006 in Vienna. Apart from that she presented the UnivSOE-project in the context of a TEMPUS-project study stay of members of the University of Prishtina on 22 June 2006 at the University of Graz. On 27 October 2006 Dr. KOPETZ gave a presentation on the issue of Romania and the European Higher Education Area at the conference “Europäische Integration: Was kann Rumänien von der österreichischen Erfahrung lernen?” organised by Prof.Dr. Monica VLAD at the Romanian-German University of Sibiu (Romania). On 12 May 2007 Dr. KOPETZ delivered a lecture on the topic of “Democratisation of South Eastern Europe: The Role of Higher Education and Research” at the 3rd Vienna Workshop on International Constitutional Law. On 10 May 2007 Dr. KOPETZ participated in the Science Impact Conference of the Austrian Science Fund in Vienna. From 16 to 27 July 2007 Dr. KOPETZ was as a Visiting Fellow at the Institute of European and Comparative Law at the University of Oxford; she carried out research for the UnivSOE project and made contact with SEESOX, the centre for SEE studies

in Oxford (Dr. Dimitar BECHEV). She also presented the UnivSOE project at the Dubrovnik Conference on Higher Education on 30/31 October 2007 in Dubrovnik.

Mag. POIER participated on 20/21 April 2006 at the “3. Österreichisches Osteuropa-Forum“, which was in the context of the Austrian EU-presidency focusing on „Südosteuropa: Traditionen als Macht“ in Vienna.

The members of the project team participated in several other events with a thematic link to SEE (e.g. discussions of the South East European Academy Graz) also promoting thereby networking activities. In addition to that, meetings with representatives of the SEE ERA Net project and the Information Office of the Steering Platform on Research for the Western Balkan Countries (see-science.eu/wbc-inco.net) (Mag. Peter MAYR and Mag. Elke DALL) as well as the preparatory meetings for the project bringing together Prof. MANTL accompanied by Dr. KOPETZ and Prof. MARKO with SC Anton DOBART and SC Friedrich FAULHAMMER shall be mentioned, too.

2.4.2. Public Relations, Homepage

Several articles in newspapers and different media, also on the internet, presented the UnivSOE project and its research focus:

- Press release from 16 March 2006 on the first page of the Homepage of the University of Graz (“Aktuelles”) dedicated to the presentation of the UnivSOE project (Mag. Dagmar EKLAUDE, Public Relations Office of the University of Graz).
- Press release from 11 May 2006 on the first page of the homepage of the University of Graz (“Aktuelles”) presenting the project, the speech of Prof. MANTL at the conference of the EU general directors and the conference (Mag. Dagmar EKLAUDE, Public Relations Office of the University of Graz).
- Interview with Prof. MANTL and Prof. MARKO on the issue of the UnivSOE project in the students’ newspapers “law@graz” (May 2006) and “mUNItion” (June 2006).
- Article on Prof. MARKO and his research profile focusing on SEE in the newspaper “Kleine Zeitung” from 2 June 2006.
- Article on the UnivSOE project and the Final Conference in Graz: Hedwig KOPETZ, UnivSOE-Project: SEE towards European Research and Higher Education Area, in: see-science.eu eJournal (spring 2007), 14 (<http://see-science.eu/ejournal/list>).

- Article on the UnivSOE project and the workshop on “Religion and Higher Education” in Sarajevo: Hedwig KOPETZ, Religion and Higher Education, in: see-science.eu eJournal (fall/winter 2007), 15 (<http://see-science.eu/ejournal/list>).
- Article on the results of the UnivSOE project in the research magazine of the University of Graz “UniZeit” (winter 2007): Annemarie HAPPE, Auf gemeinsamen Wegen, in: UniZeit 4/2007, 6f.

In order to provide information about the project, a homepage was created and updated by Mag. Marianne PASTERK-REISINGER in German and English: <http://www.uni-graz.at/univsoe>.

2.4.3. Publications

In the meantime several publications dealing with the UnivSOE project and its research have been published. Cf. e.g.:

Wolfgang MANTL: The Role of Universities and Science in the Process of European Integration – using Austria as an Example. In: Renate PIRSTNER-EBNER/Gerhard SCHNEDL/Silvia ULRICH (Hg.): Funktionen des Rechts in der pluralistischen Wissensgesellschaft. FS für Christian Brünner zum 65. Geburtstag. Wien-Köln-Graz 2007 (Studien zu Politik und Verwaltung Bd. 95), 135-143.

Wolfgang MANTL (Hg.): Phänomenologie des europäischen Wissenschaftssystems (in preparation).

Joseph MARKO: Zur Notwendigkeit der europäischen Integration Südosteuropas. In: Herwig HÖSELE/Reinhold LOPATKA/Wolfgang MANTL/Hildegunde PIZA/Manfred PRISCHING/Bernd SCHILCHER/Andreas SCHNIDER (Hg.): Steirisches Jahrbuch für Politik 2005. Graz 2006, 79-91.

Joseph MARKO/Hedwig KOPETZ (ed.): Integration of South East Europe into the European Higher Education and Research Area. Results of the UnivSOE Project 2005-2008 (in preparation).

Hedwig KOPETZ: Südosteuropa auf dem Weg in den Europäischen Forschungsraum. Ein neues Forschungsprojekt an der Universität Graz untersucht die wissenschaftliche Integration der mittel- und südosteuropäischen Länder. In: Herwig HÖSELE/Reinhold LOPATKA/Wolfgang MANTL/Hildegunde PIZA/Manfred PRISCHING/Bernd SCHILCHER/Andreas SCHNIDER (Hg.): Steirisches Jahrbuch für Politik 2005. Graz 2006, 93-98.

Hedwig KOPETZ: Democratisation of South East Europe: The Role of Higher Education and Research. In: Harald EBERHARD/Konrad LACHMAYER/Gregor RIBAROV/Gerhard THALLINGER

(eds.): Perspectives and Limits of Democracy. Proceedings of the 3rd Vienna Workshop on International Constitutional Law (forthcoming).

Hedwig KOPETZ: Welche Zukunft für Bologna? Zur Konvergenz des Europäischen Forschungs- und Hochschulraums. In: Jürgen BUSCH/Hedwig KOPETZ (eds.): Higher Education Integration in Europe (in preparation).

3. Country Reports

Research Project UnivSOE

"Institutions of Tertiary Education in Central and South East Europe: Developments, Structures and Perspectives of these Institutions for their Integration into the European Higher Education and Research Area"

Country Report: Albania

Michaela Salamun

Zaim Hallunaj

1. RESEARCH AREA SEE – ALBANIA	196
1.1. Institutions for Research and Teaching on the Tertiary Educational Level ...	196
1.2. Coordination/Co-operation of Institutions	199
1.3. Involvement in Regional and International, in particular European, Research and Teaching Programmes	199
1.4. Administrative Structures	200
1.4.1. <i>Line Ministry</i>	202
1.4.2. <i>Special, Independent Advisory Bodies</i>	202
1.4.3. <i>Specialized Institutions for the Financial Management and Fostering of Research</i>	203
1.4.4. <i>Development of the Research Quota over the last five Years</i>	203
1.4.5. <i>Conference of Rectors</i>	203
1.5. Constitutional Framework	203
1.5.1. <i>Competences for Research and Universities</i>	203
1.5.2. <i>Constitutionally Guaranteed Freedom of Science and Further Specification by Laws and By-laws or Regulations</i>	203
2. UNIVERSITIES	204
2.1. Legal Basis	204
2.1.1. <i>Establishment and Recent Legal Reforms</i>	204
2.1.2. <i>Adequateness of the Legal Framework</i>	205
2.2. Model of Organisation	206
2.3. Functions	206
2.3.1. <i>Autonomy: Vis-à-vis the State, the Economy, other Societal Forces</i>	206
2.3.1.1. <i>Appointment/Election of University Bodies</i>	207
2.3.1.2. <i>Financing of Units</i>	208
2.3.2. <i>Research</i>	209
2.3.2.1. <i>Investigator-driven Basic Research</i>	209
2.3.2.2. <i>Use of Basic Financial Means</i>	209
2.3.2.3. <i>Training of Scientific Academic Staff and Post-docs</i>	211
2.3.3. <i>Teaching</i>	211
2.3.3.1. <i>The Underlying Philosophy of “Education”</i>	211
2.3.3.2. <i>Curricular Models for Undergraduate, Postgraduate Studies and PhD Programs</i>	211
2.3.3.3. <i>Implementation of the Bologna Process</i>	213
2.3.3.4. <i>Courses for Life-long Learning, Vocational Training or for Complementary Practical Job Experience</i>	213

2.3.3.5. <i>Staff Composition</i>	214
2.3.4. <i>Effectiveness</i>	215
2.3.4.1. <i>Specialisation and Creation of Centres of Excellence</i>	215
2.3.4.2. <i>Assessment of Institutions, Students and Lecturers</i>	215
2.3.5. <i>Financing and Efficiency</i>	218
2.3.5.1. <i>Financing of Universities</i>	218
2.3.5.2. <i>Control of Budgets</i>	218
2.3.6. <i>International Co-operation</i>	218
2.3.6.1. <i>Regulation of Access to the National University System</i>	218
2.3.6.2. <i>Ratio of Domestic and Foreign Students and Countries</i>	219
2.3.6.3. <i>Export of Students – Researchers</i>	219
2.3.6.4. <i>Integration into International, in particular European Networks</i>	219
2.3.6.5. <i>Bi- and Multilateral Research Co-operation Agreements</i>	219
2.3.6.6. <i>Visiting Scholars</i>	220
2.3.7. <i>Transdisciplinarity</i>	220
2.3.8. <i>Role Model for a Scientist</i>	220
2.3.9. <i>Role of Universities in Inter-ethnic Co-operation</i>	221
2.4. Trends in the Education and Research Sector	221
3. NOT UNIVERSITY RELATED RESEARCH INSTITUTIONS	222
3.1. Academies of Sciences and Art	222
3.1.1. <i>Foundation</i>	222
3.1.2. <i>Legal Basis</i>	222
3.1.3. <i>Model of Organisation</i>	222
3.1.4. <i>Institutional Structure</i>	222
3.1.5. <i>Functions</i>	223
3.1.6. <i>Financing</i>	224
3.1.7. <i>Underlying “Philosophy” of the Academy</i>	224
3.1.8. <i>Relationship to Universities and Not University related Research Institution</i>	224
3.2. Other Not University related Research Institutions	224
3.3. Integration into the European Research Area	224
4. NOT UNIVERSITY RELATED EDUCATION SECTOR	225
4.1. Educational Institutions in the Tertiary Sector, Except Universities	225
4.2. Other Institutions	225
4.3. Integration into the European University Network	225
4.4. ERI SEE	225

1. RESEARCH AREA SEE – ALBANIA

1.1. Institutions for Research and Teaching on the Tertiary Educational Level

In Albania institutions for research and teaching on the tertiary level are listed by Law No. 7893, dated 22.12.1994 on science and technological development, as amended by Law No. 8401, dated 9.9.1998 (in the following: LSTD). It defines the scientific institutions of the state as follows:

1. universities, schools of higher education²¹³ and research centres,
2. institutes and scientific centres of the Academy of Sciences,
3. institutes and scientific centres of the ministries, the Ministry of Education and Science²¹⁴ and central institutions, and
4. national centres of research (Art 12 LSTD).

In addition, the new Law No. 9741, dated 21.5.2007 for higher education in the Republic of Albania (in the following: LHE) defines the institutions of higher education as the universities, academies, professional colleges, high schools and interuniversity centres (Art 4 Para 4 LHE). **Public universities** exist in Tirana (Technical University, Agricultural University and University of Tirana), Shkodra, Vlora (Technical University), Elbasan, Gjirokastra and Korça (Agricultural University)²¹⁵. Additional public universities have been created for the academic year 2006/07 in Durrës²¹⁶, Fier²¹⁷ and Berat²¹⁸. As regards research, a report written by the Expert Group on the Reform of the System of Scientific Research of January 2006 observes that at the universities only a few individuals actually conduct research.²¹⁹ Furthermore, there are the Military University “Skenderbej”, the Police Academy²²⁰, the Academy of Physical Culture and Sports “Vojo Kushi”²²¹ and the Academy of Arts. Thus the new LHE provides that **academies** offer professional higher education and creative activities, including scientific research, in specific areas of the arts, sports, public order and other professional fields (Art 6 Para 1 LHE). The new LHE also provides for **interuniversity centres** to develop and promote scientific research programs and projects and to assist in the advanced education after the first cycle of university studies; they have a structure similar to a faculty and are created by decision of the Council of Ministers at the proposal of the Ministry of Education and Science (in the following: MoES) (Art 6 Para 3

²¹³ The non-university school of higher education, the High School of Nursery, which offered non-university diplomas provided also by certain branches of some universities with a duration of 2-5 years was made a faculty of the University of Tirana by Decision No. 612, dated 21.9.2004. Legal acts and developments in this paper were considered until 24.8.2006; the report was updated in July 2007.

²¹⁴ Before the amendment by Law No. 8401, dated 9.9.1998 “Committee of Science and Technology” instead of the MoES.

²¹⁵ See for the universities also Section 2.1 below.

²¹⁶ Decision No. 801, dated 20.12.2005; the University will have a Faculty of Teaching, a Faculty of Economics and Administration and a Non-university High School.

²¹⁷ Decision No. 546, dated 3.8.2005; the University will have a Faculty of Teaching and a Faculty of Applied Sciences.

²¹⁸ Decision No. 547, dated 3.8.2005; the University will have a Faculty of Teaching and a Faculty of Applied Sciences.

²¹⁹ Cf. *Reforma e sistemit të kërkimit shkencor, Raport i Grupit të Ekspertëve*, Janar 2006, 17. The group consisted of nine members, eight of which were professors at universities and one at the Academy of Sciences.

²²⁰ See Law No. 9120, dated 28.7.2003, on some changes and amendments to Law No. 8461 and Law No. 9387, dated 4.5.2005, on some additions and changes in Law No. 8461, as changed; Decision No. 281, dated 2.6.2000, on the organisation and functioning of the Police Academy; and Decision No. 524, dated 1.8.2003, on the opening of the post-university school “Arben Zylyftari” at the Police Academy.

²²¹ Decision No. 266, dated 25.5.2000.

LHE). In addition, there are the **private universities** “Ufo dental”²²², “Universiteti “Kristal””²²³, “Zoja e Këshillit të Mirë”²²⁴, “Marubi”²²⁵, “University ‘Marin Barleti’”²²⁶, “New York University-Tirana”²²⁷, “Luarasi”²²⁸, “Justinian I”²²⁹, “Sevastiparashqevi Qiriazhi”²³⁰ and the “European University of Tirana”²³¹.

The **Academy of Sciences** is organized in the section of social sciences with seven²³² units (Institute of Economy, Institute of Language and Literature, Institute of History, Archeological Institute, Centre of Albanian Encyclopaedia, Institute of Folk Culture and the Centre of the Study of Arts) and the section of natural and technical sciences with seven units (Institute of Applied Informatics and Applied Mathematics,²³³ Institute of Nuclear Physics, Institute of Biological Research, Seismological Institute, Hydrometeorological Institute, Centre of Hydraulic Research, Centre of Geographical Studies) (for ongoing and planned reforms see also further below and in general on the Academy see Section 3.1 below). As regards research, mainly the Academy publishes monographies of scientific quality. It has been criticized that its institutes conduct mostly applied research and provide services and that the number of presentations and posters at international conferences is low.²³⁴

Furthermore, there are 24²³⁵ research institutions attached to **ministries**, which, however, according to the report of the Expert Group on the Reform of the System of Scientific Research provide mainly services and conduct little research.²³⁶

²²² Decision No. 197, dated 10.4.2004; the University offers a 4-year degree in Stomatology (School of Dental Medicine).

²²³ Decision No. 761, dated 6.12.2005; the University encompasses the Faculties of Business Administration (3-year diplomas in Finance and Business Management), Law (3-year diploma) and Pharmacy and Stomatology (Pharmacy 3-year diploma, Stomatology 5-year diploma).

²²⁴ Decision No. 567, dated 27.8.2004; the university encompasses the Faculties of Medicine, Economic and Political Science and a Faculty of Applied Sciences. It grants 3-year university diplomas in Company Administration and Management, Political Science and International Relations, Computer Engineering, Nursing and Physiotherapy, specialist diplomas in Medicine (6 years); Odontology and Dental Prosthesis (5 years); Pharmacy and Industrial Pharmacy (5 years); and Architecture (5 years). It issues specialization diplomas in Health Administration (2 years postgraduate); European Studies (2 years postgraduate); Computer Science Engineering (2 years postgraduate); Nursing (1-2 years postgraduate); and Physiotherapy (1-2 years postgraduate) as well as a specialization diploma in Medicine (3-5 years after specialist university diploma).

²²⁵ Decision No. 652, dated 30.9.2004; the University grants the title “High Specialist in Film and Media” as director, stage designer, cameraman and montage (3-year programme).

²²⁶ Decision No. 571, dated 12.8.2005; the University encompasses Faculties of Foreign Languages (3-year programmes in English, German and French) and Applied Mathematics (3-year programmes in Mathematics – Administration and Mathematics-Finance).

²²⁷ Decision No. 397, dated 15.8.2002; the University grants the grade Bachelor in Business Administration (Accounting, Finance, Marketing, Management, and Economics), Computer Sciences and English Language and Literature.

²²⁸ Decision No. 611, dated 11.9.2003; the University has a Law Faculty (4-year course, which is concluded with the title “Jurist”).

²²⁹ Decision No. 156, dated 15.3.2006; the University has a Faculty of Law with a 4-year course.

²³⁰ Decision No. 274, dated 10.5.2006; it has a Faculty of Economics with courses in Business Management, Finance Director and Accounting Director (4-year programmes).

²³¹ Decision No. 636, dated 20.9.2006; it has a Faculty of Social Sciences and a Law Faculty and offers 3-year courses for Bachelor’s degrees.

²³² Cf. *Reforma e sistemit të kërkimit shkencor ...*, 9. There are two pages of the Academy: one lists 14, while the other one lists only 13 institutes. Cf. <http://www.akad.edu.al/> and <http://www.academyofsciences.net/institutes/> (24.8.2006); the web page of the MoES lists only 12. Cf. http://www.mash.gov.al/kerkimi_shkencor/institute_qendra.html (24.8.2006).

²³³ Now dissolved by Decision No. 146, dated 28.3.2007.

²³⁴ Cf. *Reforma e sistemit të kërkimit shkencor ...*, 17.

²³⁵ Cf. *Reforma e sistemit të kërkimit shkencor ...*, 10. The web page of the MoES lists 33 institutes and the numbers on the page with the individual institutes do not correspond with the numbers cited on the web page about the list of the ministries. Cf. http://www.mash.gov.al/kerkimi_shkencor/institute_qendra.html (24.8.2006).

²³⁶ Cf. *ibid.*, 10, 17.

Ministry of Agriculture, Food and Consumer Protection	Institute of Cultivated Plants, Fushë Krujë Institute of Food Research, Tiranë Institute of Veterinary Research, Tiranë Institute of Zootechnical Research, Tiranë Institute for the Protection of Plants, Durrës Institute of Mais and Rice, Shkodër Institute of Horticulture, Vlorë Institute of Vegetables and Potatoes, Tiranë Institute of the Study of Land, Laprakë
Ministry of Environment, Forests and Administration of Waterways	Institute of Research in Forestry and Pastures, Tiranë Institute of Fish Research, Durrës Institute of Environment, Tiranë
Ministry of Economy, Trade and Energetics	Albanian Geological Service, Tiranë Institute of the Technology of Mining and Processing of Minerals, Tiranë National Scientific Center of Hydrocarburants, Fier Institute of Studies and Planning in Light Industry, Tiranë Institute of Mechanics and Wood, Tiranë Institute of Metallurgy, Elbasan
Ministry of Public Works, Transport and Telecommunications	Institute of Transport, Tiranë Institute of Construction, Tiranë Institute of Urbanistics, Tiranë
Ministry of Tourism, Culture, Youth and Sports	Centre of Scientific Sports Research, Tiranë Institute of Cultural Monuments, Tiranë
Ministry of Health	Institute of Public Health, Tiranë

According to the Master Plan for Higher Education and Science – MPHES (2006 – 2015) presented in March 2006²³⁷ the institutes of the Academy of Sciences and the ministries are to be integrated into a new system of science, in which the function of the Academy is to be reduced to a honorific one. The Expert Group on the Reform of the System of Scientific Research suggested inter alia the fusion of many of the institutes into the following centres: 1. Interuniversity Centre of Albanological Studies, 2. University Research Centre of Water, Energy and Environment, and 3. University Research Centre of Geosciences, as well as the creation of new Faculties of the Technology of Information and Communication and of Biotechnology and Food Sciences.²³⁸ As regards private research institutions, there are certain NGOs, such as the Albanian Centre for International Studies, which publish reports, journals or through which individuals publish essays.

Education for **applied sciences** is to be offered in the new Universities of Fier and Berat, which include Faculties of Applied Sciences, and has been conducted at the private universities “Zoja e Këshillit të Mirë” (Faculty of Applied Sciences), “Marubi” (Film) and “Marin Barleti” (Faculty of Applied Mathematics) (see also Section 4.1). The Magistrate School is a public budgetary institution for the (post-graduate) professional education of judges and prosecutors which enjoys administrative, academic and financial autonomy (Arts 1, 2 of Law No. 8136, dated 13.7.1996, as amended by Law No. 9414, dated 20.5.2005). According to the new LHE the **high schools** offer higher education in the first and also in the second study cycle and may offer applied scientific research and services in the respective fields; they must consist of at least of two faculties (Art 6 Para 2 LHE). The **professional**

²³⁷ Cf. Myqerem Tafaj: *Master Plan for Higher Education and Science – MPHES (2006 – 2015)*, March 2006, http://www.coe.int/t/dg4/highereducation/Source/tafaj_March06.ppt (23.8.2006).

²³⁸ Cf. *Reforma e sistemit të kërkimit shkencor ...*, 22 et seq.

colleges offer education and training activities in different fields in non-university professional education for the preparation of specialists with practical orientation (Art 7 Para 1 LHE). Institutions of higher education are entitled to offer also non-university education programmes of a professional nature with more than 120 credits and a duration of at least two years (Art 26 Para 4 LHE).

Teacher training is conducted in Faculties (University of Shkodër, University of Korçë, University of Gjirokastër, University of Elbasan, the new Universities of Durrës, Fier and Berat) or Departments (University of Vlorë) (see also Section 4.1).²³⁹

1.2. Coordination/Co-operation of Institutions

An explicit provision for co-operation is included in the new Law No. 9655, dated 11.12.2006, on the Academy of Sciences of Albania (in the following: LASA), according to which the Academy co-operates with national and foreign research and teaching institutions which have the necessary capacities for research and the conduct of studies in different scientific fields (Art 4a LASA). However, there is no funding allocated to this co-operation or networking task.²⁴⁰ In addition, the Rectors' Conference coordinates and develops higher education and scientific research (Art 68 Para 2 LHE). Furthermore, to conduct activities of education and research with a common interest, the university is entitled to co-operate with other institutions: universities and cultural and economic public and private scientific research institutions. For such cooperation interuniversity centres may be created (Art 5 Para 5 LHE).

The institutions of higher education are coordinated in certain respects also by the MoES, for example through its powers to issue instructions, such as regarding rules on the form and content of the diploma and the supplement, which must be adhered to by the Academic Senates when determining these issues (Art 31 Para 4 LHE).

1.3. Involvement in Regional and International, in particular European, Research and Teaching Programmes

As regards **regional programmes**, there has been involvement e.g. with the Inter-Balkan Forum IST, the Balkan Physicists Union, the South European Academic Network, Ohrid Lake studies and some Balkan Institutes.²⁴¹ Also, there are bilateral agreements with Italy, Greece, Macedonia, Bulgaria, Slovenia and Bosnia and Herzegovina (see Section 2.3.5.5 below).

International research programmes, including European ones, are Eureka, NATO Scientific Program, the Fifth and Sixth Framework Program, Life, UNESCO, INCO-Copernicus and a programme with the Swiss Science Foundation. There are many different research co-operations of the universities, faculties, departments, the Academy of Sciences etc., including with Japan, Israel and India, and also with Graz,²⁴² it is impossible to list all of

²³⁹ Cf. http://www.aal.edu.al/html/body_diplomat.html (23.8.2006).

²⁴⁰ A management board and a technical board were appointed in 2003 by joint decision of the MoES and the Academy of Sciences with the mandate to create the Academic Network of Albania (ANA), which would be in charge of the national research and education network. However, the boards have not been very active up to 2005. Cf. TERENA: *GÉANT2 Report on the Country Needs Assessment concerning research and education networking in Albania*, 8 September 2005, 5 *et seq.*

²⁴¹ Cf. MoES, Directorate of Scientific Research: *Research and Development Activities in Albania*, 26.10.2004, 18.

²⁴² See <http://www.mash.gov.al/> (23.8.2006). There has been support for the transformation of the education system from the EU, the Council of Europe, UNESCO, UNICEF, the World Bank, AEDP-Soros Open Society Foundation, KulturKontakt Austria, Dutch Helsinki Committee, ANA, MIRA foundations (Norway), Toronto Institute of Global Education and individual by the Deutsche Akademischer Austauschdienst (DAAD), the British Council, the Ron Brown and Fulbright. Several Italian universities, often with support from the Italian government, and also French, Dutch, and American universities have been working for a long period on projects, such as joint seminars, at Albanian universities. Cf. Glori Husi: Country Profile – Albania, in: Rafael Biermann

them here. As regards teaching programmes, since 1992 different faculties or departments of different universities have been involved in 76 Tempus (Phare) programmes (out of 183 applications) financed by Phare and Cards. Twelve of these projects are ongoing.²⁴³

Project	University
Curriculum Development	Architecture, Technical University Tirana
Administration and Management	University of Shkodër
Curriculum Development	Biology, University of Tirana
Agricultural Studies	Agricultural University Tirana
Curriculum of Hotel Management and Tourism	University of Korça
Curriculum in Mechanical Engineering	Mechanical Engineering, Technical University Tirana
School of Ultrasounds	Medicine, University of Tirana
Master in Agriculture	Agricultural University Tirana
Agricultural Capacities in the Balkans	Agricultural University Tirana
Institutional Development	Agricultural University Tirana
Politics of Transport	Mechanical Engineering, Technical University Tirana
ISO standards	Mechanical Engineering, Technical University Tirana

1.4. Administrative Structures

The LSTD provides that the scientific and technological policy is prepared by the **MoES**²⁴⁴ in co-operation with the Academy of Sciences, ministries and other central institutions, with the participation of the scientific institutions and schools of higher education, and is submitted to the **Council of Scientific Policy and Technological Development**²⁴⁵, which transfers it together with its opinion to the Council of Ministers (Art 8 LSTD). The Council of Scientific Policy and Technological Development consists of functionaries of ministries and central institutions as well as five distinguished scientists chosen by the head of the Council, i.e. the Prime Minister, with a maximum of 15 members (Art 27 Para 2 and 3 LSTD). The main duties of the Council of Scientific Policy and Technological Development are to

- define and direct the scientific and technological policies suitable for the socio-economic development of the country,
- approve directions and priorities of the scientific and technological policies and national programmes of research and development,
- give opinions about draft laws and decisions about scientific and technological activity, which it submits for approval to the Assembly and the Council of Ministers,

(ed.): *Europe at Schools in South Eastern Europe – Country Profiles*, Centre for European Integration Studies Rheinische Friedrich Wilhelms-Universität Bonn, no date, 20.

²⁴³ Cf. <http://www.mash.gov.al/> (23.8.2006).

²⁴⁴ Before the amendment by Law No. 8401, dated 9.9.1998, “Committee of Science and Technology” instead of the MoES.

²⁴⁵ Decision No. 424, dated 6.8.1993, for the creation of the Council of Scientific Policy and Technological Development and the reorganisation of the Committee of Science and Technology, as amended by Decision No. 158, dated 7.4.1995. The Committee was dissolved in 1998; Decision No. 308, dated 24.5.2006, abrogates Decision No. 244, dated 20.3.1998, of the Council of Ministers for the Council of Scientific Policy and Technological Development. However, Decision No. 244, dated 20.3.1998, as published in *Fletorja Zyrtare* on <http://www.legjislacionishqiptar.gov.al/>, deals with the creation of the corporation “Agency for Economic Development”.

- assess periodically the achievements of scientific and technological policies,
- determine the duties of state organs related to the development and use of scientific potential and
- create temporary or permanent commissions and working groups for specific problems (Art 27 Para 1 LSTD).²⁴⁶

The (interministerial) **Committee of Science and Technology**, the government organ responsible for science and technology, was founded in 1980 and dissolved in 1998²⁴⁷ and its responsibilities transferred to the MoES, which represents the most important administrative structure. Therefore, since 1998 the MoES²⁴⁸ has the duty to

- prepare the scientific and technological policies and related national research and development programmes, which it submits to the Council,
- prepare and submit to the competent organs for approval proposals on the development and improvement of the managing system of science and technology in institutional, financial and legislative aspects,
- study and determine measures, in co-operation with ministries and other central institutions, for the encouragement of development and technology transfer,
- in co-operation with the ministries and the Academy of Sciences, prepare and propose to the Council of Ministers the draft budget of the state for scientific and technological activity. It disposes and distributes funds for activity within its competence, funds for projects based on competition, funds for activity based on agreements of scientific-technical co-operation with the state and international organizations within its competence and has a fund reserved for important and unforeseen activities and projects;
- study, propose and take measures for the enlargement of the participation of the country in international co-operation in science and technology,
- encourage the preparation and qualification of scientists for the development of scientific and technological activity and economy and culture, especially young scientists,
- analyse and evaluate the results of scientific and technological activity and its role in the development of the country and prepare a report to this respect and
- issue regulations and orders for scientific and technological activity, which are binding on state organs and bodies (Art 28 LSTD).²⁴⁹

²⁴⁶ See also Decision No. 424, dated 6.8.1993 as amended.

²⁴⁷ Cf. *Reforma e sistemit të kërkimit shkencor...*, 12; MoES, Directorate of Scientific Research: *Research and Development Activities in Albania*, 26.10.2004, 2.

²⁴⁸ Before the amendment by Law No. 8401, dated 9.9.1998, “Committee of Science and Technology” instead of the MoES.

²⁴⁹ Other activities mentioned in Decision No. 424, dated 6.8.1993 as amended, were the following:

- to further and support the development of the privatisation in the activity of research and development, for problems with interest for the state, by investing and further investments of the private sector,
- to draft agreements of technical and scientific co-operation with states, governments and international organizations and submit them for examination or approval to the Council of Ministers. In the implementation of these agreements to draft and approve programmes of technical and scientific co-operation and projects to this respect and to follow their application,
- to represent the Council of Ministers in international organizations of technical and scientific character and to keep direct contact with analogue organs of other countries,
- to further and support the activation and creation of societies and scientific foundations,
- through the Office of Patents to register and protect patents trademarks and industrial design in the Republic of Albania; to further inventions of information services for patents, trademarks and industrial design.

The **Council of Higher Education and Science** is an advisory organ of the MoES and the Council of Ministers as regards policies of the development in higher education and science (Art 65 Para 1 LHE).

1.4.1. *Line Ministry*

The MoES is competent for research and universities. It is responsible for the realisation of the political programme of the Government in the field of higher education and scientific research (Art 63 Para 1 LHE). The MoES exercises its activity through the Department of Higher Education and Diploma Recognition and through the Agency of Accreditation. As regards research, there is the Directorate for Scientific Research; the Pedagogical Institute deals with teacher training²⁵⁰. The report of the Expert Group on the Reform of the System of Scientific Research notes that, at the national level, a clear structure for the administration of scientific research is lacking, as the Committee of Science and Technology was dissolved, the Research Foundation provided in the LSTD²⁵¹ was never established and the MoES lacks sufficient structures.²⁵² Reform plans envisage the establishment of an Albanian Foundation of Science.²⁵³ Law No. 9576, dated 3.7.2006, provides for a Council of Higher Education and Science, while the Research Foundation foreseen in draft amendments to the old LHE (as published in Shekulli 9.6.2006) has not been provided for.

1.4.2. *Special, Independent Advisory Bodies*

The new Law No. 9576, dated 3.7.2006, provides for a **Council of Higher Education and Science** (in the following: the Council) as an advisory organ to the MoES and the Council of Ministers to draft and realize the policies of the development of education and science (Art 65 Para 1 LHE). The Council is to consist of 19 members: The Minister of Education and Science as its head, the Head of the Academy of Sciences, the Head of the Rectors' Conference, a representative determined by the Minister of Finance, 15 experts from different fields of science who are chosen in public competition, as well as experts of higher education, science, technology and from the private sector (Art 66 Paras 1 and 5).²⁵⁴ The Council has the following duties:

- to draft strategies and national programmes for higher education and scientific research, the directions of the respective policies and to prepare legal acts
- to suggest the main areas and programmes of scientific research and technological development,
- the draft budget provided for higher education and science and the methodology of its distribution,

²⁵⁰ Cf. Glori Husi: Country Profile – Albania, in: Rafael Biermann (ed.): *Europe at Schools ...*, 13.

²⁵¹ Art 48 of the law provides for scientific foundations: To further and support the scientific and technological activity the National Foundation of Science and Technology is created with its own funds given to it by the Council of Ministers and complemented through funds of other private or public national or foreign organs. The establishment and functioning of the Foundation and of other foundations that can be created is done according to the rules of the Civil Code.

²⁵² Cf. *Reforma e sistemit të kërkimit shkencor ...*, 12.

²⁵³ Cf. Tafaj: *Master Plan for Higher Education and Science...*

²⁵⁴ These members have to meet certain criteria based on professional merit and are selected in public competition by a commission consisting of a representative of Parliament, the Council of Ministers, the MoES and the Rectors' Conference; the commission presents a list of candidates to the Council of Ministers, which appoints the members for a period of seven years without the right of re-election (however, in the first Council five members are elected for three and five for five years (Art 66 Paras 2 and 6 LHE).

- criteria for the evaluation and accreditation of institutions of higher education or study programmes,
- criteria to award scientific grades and titles, jointly with the Commission of the Evaluation of Academic Titles
- the development of special policies requested by the MoES and ways of financing them,
- any other problem requested by the MoES, etc. (Art 65 Para 2 LHE).

1.4.3. Specialized Institutions for the Financial Management and Fostering of Research

The government allocates funds for research in the respective budget law. The National Foundation for Science and Technology provided for in the LSTD has not been established; however, reform plans concern the establishment of an Albanian Science Foundation.²⁵⁵

1.4.4. Development of the Research Quota over the last five Years

It is estimated that GERD represents about 0.1% of the GDP, but there are no precise figures as neither the National Institute of Statistics (INSTAT) nor the MoES has collected statistical information about the financing of the Science and Technology system.²⁵⁶ A qualitative evaluation is conducted by the universities and research institutions at the end of each year.²⁵⁷

1.4.5. Conference of Rectors

The Conference of Rectors is an autonomous collegial body of the managing authorities of public and private institutions of higher education. The Conference of Rectors gives opinions on problems regarding the development of higher education institutions as well as on issues determined by law. It functions on the basis of its Statute adopted by two thirds of its members (Art 68 Paras 1, 3 and 5 LHE).

1.5. Constitutional Framework

1.5.1. Competences for Research and Universities

Albania is a unitary state; therefore, the central state is responsible for research and universities and the Constitution²⁵⁸ does not include rules on the distribution of competency, except relating to local self-government.

1.5.2. Constitutionally Guaranteed Freedom of Science and Further Specification by Laws and By-laws or Regulations

According to Art 58 Para 2 of the Constitution the freedom of artistic creation and scientific research, their application, and the benefits from their achievements are guaranteed for all. Art 3 Paras 1 and 3 LHE provide that the institutions of higher education have autonomy and academic freedom, which is expressed in the freedom of teaching, the freedom of scientific

²⁵⁵ Cf. Tafaj: *Master Plan for Higher Education and Science...; Reforma e sistemit të kërkimit shkencor...*, 12.

²⁵⁶ Cf. Georgi Angelov, Kostadinka Simeonov and Ivo Slaus: *UNESCO Science Report on South-East Europe 2005*, 126.

²⁵⁷ For information thanks to Mr. E. Agolli from the Directorate of Scientific Research in the MoES.

²⁵⁸ Constitution of the Republic of Albania adopted by referendum on 22.11.1998, in *Fletorja Zyrtare* No. 28 of 7.12.1998, 1073 *et seq*, English translation at <http://www.keshilliministrave.al/english/kushtetuta/kushtetuta%20e%20Shqiperise%201.htm> (10.10.2006).

research and the freedom of establishment, in accordance with the LHE. The autonomy of higher education institutions is expressed in

- their self-government, to organise their internal structures and activities through statutes and regulations drafted in accordance with the LHE and other legal acts in force,
- the right to draft and develop independently study programmes and research projects,
- the right to determine criteria for the admission of students into the study programmes,
- the right to collect funds and to gain material means, according to the rules in force, and the right to realise independent agreements with the Government or other organisms regarding training, qualifications or research projects; the right to realise agreements with institutions, business associations or other national or international public or private organisations; the right to administer public funds and other income, to dispose of it according to the manner provided by law (Art 3 Para 2 LHE).²⁵⁹

Similarly, the LSTD provides that the freedom of science and technological development is guaranteed by law. It encompasses the solving of scientific problems, basic methodological principles, the evaluation of research results and the dispersion of these results. State support aims to establish a just balance between the freedom of scientific research and the necessity of profiting as much as possible from the financing granted (Art 5 Para 1 LSTD). However, this freedom in theory can be further limited as follows: The scientific staff of the research institutions of the state are free in their choice of research and development methods if the respected approved documents, on the basis of which they work (programmes, projects, duties, contracts etc.), do not provide otherwise (Art 41 LSTD).

2. UNIVERSITIES

2.1. Legal Basis

Law No. 9741, dated 21.5.2007, for higher education in the Republic of Albania represents the legal basis for universities. The establishment and functioning of private universities is now also governed by this law (see Art 43 Para 1 and Art 84 LHE).²⁶⁰

2.1.1. Establishment and Recent Legal Reforms

After the Second World War the Higher Pedagogical Institute of Tirana was opened in 1946 as the first institution of higher education; its purpose was to train teachers for the seven-year schools. Subsequently, during the years 1951-54, several tertiary level institutes with four- or five-year courses were opened. They included the Polytechnic Institute, the Pedagogical

²⁵⁹ According to Art 3 Para 6 LHE the state guarantees the inviolability of the institutions of higher education and their territory. The organs of public order can intervene in the academic premises only on the request or with the permission of the head of the high school. Only in the cases of the commission of a crime or natural disaster, can the organs of public order intervene without the permission of the head of the school of higher education. The violation of the institutions of higher education is punished according to the law.

²⁶⁰ Previously, private universities were established based on Council of Ministers' Decision No. 156, dated 22.3.2001, on non-public schools in the Republic of Albania and Decision No. 303, dated 1.7.1999, on the creation of a system of accreditation in higher education as amended by Decision No. 611, dated 4.12.2002. It was criticised that accreditation regulations applied specifically to non-public higher education institutions, which implied a non-balanced treatment of public and non-public providers of higher education. Cf. Adrian Miroiu: *The Development of Private Higher Education in Albania. Suggestions and recommendations for policy measures*, Presented to the Open Society Foundation-Albania, June 2005, 4. See also Decision No. 248, dated 28.5.1999, for criteria and procedures of granting a license for the functioning of non-public education institutions and additional non-public education institutions, where religious subjects are taught and where the teaching takes place also in foreign languages.

Institute for the training of teachers for the principal branches of the secondary schools, the Agricultural Institute, the Institute of Economics, the Medical Institute and the Law School. These institutes, except the Higher Institute of Agriculture, which remained separate, were unified in 1957 to form the State University of Tirana. In the same year, the Shkodra Higher Pedagogical Institute was established. The Higher Institute of Physical Culture opened in 1958, like the Higher School for Actors, the Conservatorium and the Institute of Figurative Arts. In 1966, these institutions were merged to form the Higher Institute of Arts. Later, the following additional higher institutes were opened: the Higher Agricultural Institute in Korçë, the Higher Pedagogical Institute in Elbasan, and the Higher Pedagogical Institute in Gjirokastrë.²⁶¹

In 1992 the University of Tirana, which comprised ten faculties, was split up and the engineering faculties joined the Polytechnic University of Tirana (four faculties), leaving the University of Tirana with seven faculties, covering the human, economic, natural and medical sciences. In 1992 the Agricultural Institute was transformed into the Agricultural University of Tirana (four faculties) and four universities were created in other cities as well as one university in 1994 in Vlorë:

1. University L. Gurakuqi, Shkodër (six faculties), based on the Pedagogical Institute of the city;
2. University A. Xhuvani, Elbasan (five faculties), based on the Higher Pedagogical Institute of the city;
3. University E. Cabej, Gjirokastrë (three faculties), based on the Pedagogical Institute of the city;
4. Polytechnic University F.S. Noli, Korçë (three faculties), based on the Higher Polytechnic Institute of the city;
5. University I. Qemali, Vlorë (three faculties).²⁶²

Recent legal reforms include the implementation of the Bologna process. To this respect, the Law on higher education was amended in July 2003 and 2006 to pave the way for the implementation of the restructuring of higher education on the basis of study cycles (see also Section 2.3.3. below). Moreover, the new Law No. 9576, dated 3.7.2006, on higher education tries to tackle some of the other reform issues, such as the granting of financial autonomy to universities, including in terms of institutional governance and accountability, improvement of the quality of university studies and bringing scientific research and university teaching closer together²⁶³. However, provisions in the new law have been harshly criticised by the scientific community, most prominently by the Conference of Rectors.

2.1.2. *Adequateness of the Legal Framework*

The report of the Expert Group on the Reform of the System of Scientific Research criticised that the LHE does not sufficiently account for the problem of scientific research: The pedagogical staff is not required to conduct research, the law has not been fully implemented, as necessary sublegal acts regarding research have not been adopted, it uses only general terms for research and development and does not specify that the schools of higher education

²⁶¹ Cf. Vladimir Misja, Arqile Teta, Adriatik Kallulli: *Higher Education in Albania*, UNESCO Monographs on Higher Education (ed. W. Vollmann), CEPES, Bucharest 1986, 14.

²⁶² Cf. Marenglen Spiro: *Reforming the study programs and curricula at the University of Tirana from the perspective of the provisions of the Bologna Declaration. A case study (January 2003)*, UNESCO-CEPES/European University Association (EUA), Seminar on the External Dimension of the Bologna Process – Southeastern European Higher Education and the European Higher Education Area in a Global World, 6 - 8 March 2003, Bucharest, 3 *et seq.*

²⁶³ Cf. <http://www.skvc.lt/old/Alb/Enicalb.htm> (24.8.2006).

may engage in advice and technological transfer; the departments are not obliged to conduct research, but mainly teaching, and the law does not create a real space to promote scientific research based on groups.²⁶⁴

Furthermore, the Expert Group on the Reform of the System of Scientific Research believes that the LSTD is marked by serious shortcomings: It does not account for links with teaching at universities or clearly address competencies for decision-making in many areas. In addition, it lacks sufficient details for the functioning of the Council of Science and Technology, such as criteria for the determination of its composition or rules of procedure. Also, the law leaves only a narrow space for research by private and foreign subjects or public-private-partnerships by superficially mentioning support from the state for private activity, but failing to create any space for its realization, and by not enabling the opening of national programmes to foreign actors.²⁶⁵

2.2. Model of Organisation

The democratic model prevails, however, with varying degrees of influence by the state, which limits effective participation (see Section 2.3.1 below). Recent reform plans include a shift towards the corporate government model by introducing - in addition to the Rector and the Academic Senate - a Governing Board consisting of members of the MoES, interest groups and the community of higher education institutions selected by the National Council for Higher Education and Science, which is responsible for the management, governance and long-term development strategy of the university and selects the Rector as well as the Dean. This has been criticized by the academic community for decreasing autonomy and taking away election rights from university staff. Although the Governing Board was foreseen in draft amendments to the old LHE²⁶⁶, it was not provided for in the new LHE.

2.3. Functions

2.3.1. *Autonomy: Vis-à-vis the State, the Economy, other Societal Forces*

Autonomy exists according to the law with respect to the state. Art 3 Para 1 LHE provides that institutions of higher education are autonomous. This autonomy implies e.g. that the institutions have self-government, the right to organise their internal structures and activities through statutes and regulations drafted in accordance with the LHE and other legal acts in force (Art 3 Para 2 LHE). Each institution adopts its own statute²⁶⁷ in accordance with the LHE and sublegal acts adopted for its implementation (Art 8 Para 5 LHE). The MoES controls its legality and may send it back to the institution for amendment (Art 39 Para 2 LHE). In addition, the MoES is entitled to repeal any act issued by the authorities or managing organs of institutions of higher education if it contradicts the law (Art 64 Para 2 LHE). The MoES may suspend the Rector in flagrant cases and when he seriously violates the law and sublegal acts (Art 64 Para 3 LHE).

Another limitation of the autonomy of the universities is related to financing: The MoES conducts the auditing of public institutions of higher education (Art 81 LHE). As the universities are financed almost exclusively from the state budget, in practice there is a high

²⁶⁴ Cf. *Reforma e sistemit të kërkimit shkencor ...*, 13 *et seq.* Although the statements of the group refer to the legal framework before the adoption of the new LHE on 3.7.2007, some considerations apply also to the new law.

²⁶⁵ Cf. *ibid*, 12 *et seq.*

²⁶⁶ Published in *Shekulli* 9.6.2006.

²⁶⁷ The Statute is adopted by the Academic Senate by a two thirds majority (Art 14 Para 2d LHE).

degree of dependence on the state coupled with little autonomy in financial issues.²⁶⁸ Furthermore, there is reportedly strong political control over the governing bodies of education and research institutions: The election procedure in elections for the managing authorities, such as the Rector or the Dean, still displays a tendency to be controlled by politics.²⁶⁹ As in general there has been a tendency to “exchange” employees of the public administration, including in the MoES (and not only in the highest political posts), after elections leading to a change in government, another limitation of the autonomy can result from the power of the party in government, depending on the political affiliation of the respective Rector and/or Dean.

2.3.1.1. Appointment/Election of University Bodies²⁷⁰

Universities have managing authorities and organs (e.g. Rector, Academic Senate) and professional bodies (Science-teaching Councils²⁷¹). The Rector²⁷² is elected by secret vote by the entire academic staff, non-academic staff and the students (Art 21 Para 3a LHE). The members of the Academic Senate, i.e. from the academic staff, non-academic staff and students, are elected by the respective groups of the institution (Art 21 Para 2a LHE).²⁷³

The managing bodies at the faculty are the Dean²⁷⁴ and the Faculty Council. They are elected in a procedure analogous to that of the elections of the Rector and the Academic Senate at the university level (see Art 21 LHE). The Head of Department is elected by the academic staff and the Department Council by the groups of the academic and non-academic staff (Art 21 Paras 2c and 3c).²⁷⁵

The managing authorities and organs of the public institutions of higher education are elected every four years. The managing authorities must have at least the title of Associate Professor and cannot be re-elected to the same function more than twice consecutively; in the second election they must receive 60% of the valid votes (Arts 20 Para 2 and 23 Para 1 LHE).

²⁶⁸ Regarding the situation before the adoption of the new LHE in 2007, it was noted that the legislation did not clearly handle the problem of financial autonomy and financial management: On the one hand, it did not create obstacles, but on the other hand it was very evasive, because it did not determine the boundaries within which the financial autonomy can be operational. Cf. Arben Malaj, Fatmir Mema, Sybi Hida: *Albania, Financial Management in the Education System: Higher Education*, Bamberg Working Paper Series on Government and Growth, Working Paper No. 54, December 2005, 8 *et seq.*

²⁶⁹ Cf. Tafaj: *Considerations about Massive Brain Drain from Albania and Strategies Attracting High-Qualified Scientists*, no date, 3.

²⁷⁰ See for this section also MoES: *Education in the Republic of Albania*, no date, 17 *et seq.*

²⁷¹ The Science-teaching/art-teaching Council is competent for the most important matters concerning the faculty activities: making the curriculum for overall studies (basic and doctoral) by departments, groups or streams, with the consent of the university; creating the scientific-research programmes; defining the faculty draft Statute; defining the measures for enhancing gifted students, etc. Cf. MoES: *Education in the Republic of Albania*, no date, 17.

²⁷² The Rector is the head of the Academic Senate and the Dean is the head of the Faculty Council (Arts 14 Para 1, 18 Para 1 LHE). The President of the Republic appoints the elected Rector, the Rector appoints the elected Dean and the Dean appoints the elected Head of Department (Art 21 Para 8 LHE).

²⁷³ The Academic Senate is a collegial decision-making organ, which determined the policies of development of the institution, programmes, coordinates, directs and controls the activities of teaching and scientific research and evaluates their effectiveness (Art 14 Para 1 LHE).

²⁷⁴ Besides the Dean there is usually a Vice-Dean for instruction, scientific-research work and finance. Cf. Ministry of Education: *Country report Albania*, Appendices, no date, 141.

²⁷⁵ The Academic Senates, Faculty Councils and Department Councils and the Councils of the centres comprise 15% students, 5% non-academic staff and the rest academic staff (Art 21 Para 2d LHE). In the elections for the managing authorities (i.e. the Rector, Dean, and Head of Department) the votes of the students and non-academic staff are calculated with a percentage, namely 20% of the total votes for the students and 5% of the total votes for the non-academic staff (Art 21 Para 4 LHE).

2.3.1.2. Financing of Units

Universities are financed mainly from the state budget and university fees (see for the latter Section 2.3.5 below). Art 73 LHE provides that the public institutions of higher education are financed *inter alia* from the budget. The financing from the budget consists in unconditional transfers and transfers with competition for investments (Art 76 Para 1 LHE). The distribution of the unconditional transfers is based on a formula that guarantees equality, justice and transparency, as determined by the MoES in consultation with the Council of Higher Education and Science and adopted in the annual law on the State Budget (Art 77 Para 1 LHE). After approval of the budget by the Assembly, the MoES allocates it to the universities; the amount is based on the macroeconomic situation and the requests of the universities, based on certain criteria, such as those mentioned below for the distribution of funds within the universities. However, frequently the requests of the universities do not match the funds allocated.²⁷⁶ Since the amount allocated to universities/faculties depends on the number of enrolled students for undergraduate studies and on the number of employees (input-budget system), it has been argued that the system of financing is not related to efficiency, which could be seen in the number of graduated students, the number of credits and other quality measurement criteria. Although the allocation of funds is done according to quantitative data, the new procedures in budget planning create incentives to use in part quality measurements in the amount of budget funds. However, it has been noted that unless there is no qualitative evaluation of universities, it is impossible to plan the budget based on such measurement.²⁷⁷

Besides the state budget, institutions of higher education are financed from income created by the institutions and other sources with a purpose (Art 73 Para 1 LHE). The fees for public institutions of higher education are adopted by decision of the Council of Ministers²⁷⁸. In the use of financial sources the institution's own income has priority (Art 72 Para 5 LHE).

The Academic Senate approves the division of the financial resources (Art 14 Para 2c LHE). The Rectorate drafts the criteria for the distribution of the financial, material and human resources (Art 15 Para 1c LHE). The Council of Administration is a collegial decision-making organ that oversees and controls activities connected to the administrative, financial and economic management as well as the property management of the institution (Art 16 Para 1 LHE). It consists of members of the academic staff with a scientific degree directly elected by the academic staff in each main unit of the institution, members chosen by the MoES who are representatives of the fields of science, economy, culture and central and local public authorities (less than half of all the members) and one member chosen by the students' council of the institution (Art 16 Para 4 LHE).²⁷⁹ The Council of Administration *inter alia* approves the criteria for the division of the financial resources (Art 16 Para 2 LHE).

In practice, the distribution of funds within the university²⁸⁰ is based on the following criteria: (i) the number of enrolled students for undergraduate studies of each faculty; (ii) the number of full-time and part-time professors; (iii) the surface of the faculty buildings (iv) specific expenses of the teaching process and (v) the amount of revenue generated by the faculty. However, as the number of students of each faculty and the number of full-time

²⁷⁶ Cf. Malaj *et al.* *Albania, ...*, 7.

²⁷⁷ Cf. *ibid.*, 8 *et seq.*

²⁷⁸ Decision No. 198, dated 5.4.2006.

²⁷⁹ Members cannot be members of the Academic Senate, vice-rectors, deans and vice-deans (Art 16 Para 6 LHE). More details are provided in the statute of the institution (Art 16 Para 7 LHE). According to the new LHE there is also a Council of Ethics (Art 17 LHE) and a Council of Professors to organise the doctoral and post-doctoral qualification (Art 19 LHE).

²⁸⁰ To institutes, research centres and sectors, teaching laboratories and ateliers, clinics, services, studios, libraries, sports centres, museums, experimental yards, which function according to the respective internal regulations.

professors/staff for universities is decided by the Government, universities do not have much freedom to manage their budget resources.²⁸¹

The LSTD lists the sources from which the financial means of scientific institutions can be derived:

- the state budget,
- international technical-scientific co-operation,
- the conduct of scientific and technological activity (studies, projects, services etc.) for third persons, companies and juridical and physical persons of the state and private, local and foreign,²⁸²
- the activity of the units of production and experimental labs of the institutions,
- different foundations and donors, and
- patents from inventions and other activity in support of scientific activity and technological development (Art 30 Para 1 LSTD).

Furthermore, through the system of taxes and credits the state favours the development of scientific and technological activity in certain subjects, as determined by law (Art 32 LSTD). In practice, according to the report of the Expert Group on the Reform of the System of Scientific Research, financial means for research by foreign donations are very low and almost zero from the private sector.²⁸³ Also, there is almost no co-operation on the part of the universities with the private sector.²⁸⁴

2.3.2. *Research*

2.3.2.1. *Investigator-driven Basic Research*

The LSTD provides for both basic and applied research (Art 2). This is also evident in the following provisions: Art 6 of this law determines that the main goal of scientific and technological activity are the gains, the increase and transmission of scientific and technological knowledge in all fields, especially for the natural wealth of the country and the spiritual, historical and cultural wealth of the people, as well as their rational exploitation and use for the harmonious and democratic preparation of the society, the economy and culture (Para 1). At the same time, the scientific and technological activity is guided inter alia by scientific truth (Para 3), the results of which are put at the disposal of society (Para 4). In practice, the provision of services conducted mainly by the many institutes functioning in the ministries seems to outweigh basic and applied research, with mainly the Academy of Sciences conducting applied research in addition to the provision of services. However, no patent has resulted from the relations of its institutes.²⁸⁵

2.3.2.2. *Use of Basic Financial Means*

Basically, the Council of Ministers and the MoES decide on how financial means are used. The latter defines the Science and Technology policy, plays a coordination role and is responsible for administrating national Science and Technology programmes funded through the Public Investment Programme. In this role, it supports Science and Technology

²⁸¹ Cf. Malaj *et al: Albania, ...*, 8.

²⁸² This is repeated in Art 24 LSTD.

²⁸³ Cf. *Reforma e sistemit të kërkimit shkencor...*, 15.

²⁸⁴ Cf. Malaj *et al: Albania, ...*, 5.

²⁸⁵ Cf. *Reforma e sistemit të kërkimit shkencor ...*, 17.

programmes in other ministries, drafts national Science and Technology policy documents and prepares the total budget for Research and Development programmes.²⁸⁶

Research and Development activities are financed by the state budget either as institutional financing or as programme financing according to the national Research and Development programmes (Art 2 LSTD). Institutional financing is given directly to the central organizations to support the Research and Development activities of their dependent institutions. Financing for programmes is conducted through state budget funds designated for the national programmes and given directly to the organizations that manage them, and through funds given to the MoES to finance different projects in a competitive way following public standard procedures. The national Research and Development programmes aim to finance 'bottom-up' initiatives for Research and Development from the state budget.²⁸⁷

Since 1999 some streamlining has been conducted through the introduction of six (instead of 12) National Programmes on Priority Areas with a three-year duration and an interdisciplinary orientation as well as private sector participation. From 2002-2005 these programmes covered the following areas:

1. Albanology - Academy of Sciences,
2. Natural Resources - Academy of Sciences,
3. Systems of Information Technology - MoES,
4. Biotechnology and Biodiversity - MoES,
5. Agriculture and Food - Ministry of Agriculture and Food and
6. Health - Ministry of Health

Within these areas funds are distributed by means of a Council of Ministers' Decision (cf. Decision No. 610, dated 11.9.2003, on the financing of the national programmes of research and development for the year 2003). However, according to the report of the Expert Group on the Reform of the System of Scientific Research, programme financing takes less than 10% (100 million Lekë²⁸⁸) of the funds for extra-university institutions and less than 2.5% of the total funds, including the universities. In addition, only 632 out of 2240 employees of the extra-university institutions claim to have a curriculum fit for academic research.²⁸⁹ The total budget in 2004 for extra-university institutions was 1.65 billion Lekë, while the University of Tirana had a budget of 1 billion Lekë for about 21 000 students.²⁹⁰ In 2004 the MoES allocated for the first time separate funds for scientific research to the schools of higher education based on Order No. 7, dated 16.3.2004, for the procedures of application, approval and financing from the fund of scientific research projects.²⁹¹ The funds, however, amounted to only 30 million Lekë.²⁹²

Besides the national programmes, there are research and development activities e.g. in the social sciences mainly at universities, the Academy of Sciences, NGOs, etc., in energy issues at two agencies, in environmental issues at the National Environment Agency, different institutes and NGOs, materials, mainly for civil works at universities and several institutes,

²⁸⁶ Cf. Angelov *et al*: *UNESCO Science Report on South-East Europe 2005*, 124.

²⁸⁷ Some of the drawbacks of projects run within the national Research and Development programmes are that funds are always allocated at the end of a fiscal year, making project management difficult; the national Research and Development programmes also offer few possibilities to pay in-house human resources. Cf. Angelov *et al*: *UNESCO Science Report on South-East Europe 2005*, 124.

²⁸⁸ 1 € is about 123 Lekë.

²⁸⁹ Cf. *Reforma e sistemit të kërkimit shkencor ...*, 16. Government plans foresee to dismiss 1400 administrative employees without academic degrees. Cf. *Gazeta Shqiptare* of 2.4.2006.

²⁹⁰ Cf. *Rilindja Demokratike* of 13.2.2006.

²⁹¹ Cf. Ministria e Arsimit dhe Shkencës: *Raporti Vjetor Statistikor i Arsimit 2003 – 2004*, 45.

²⁹² Cf. *Rilindja Demokratike* of 13.2.2006.

health at one institute and several hospitals and geosciences at several institutes and the Faculty of Geology.²⁹³

2.3.2.3. *Training of Scientific Academic Staff and Post-docs*

Scientific academic staff and post-docs are trained at the universities (however, Master and doctoral studies until recently existed only at universities in Tirana; see also Section 2.3.3.2) and in foreign institutions through grants, such as those awarded by SOROS and Tempus. For example, the Statute of Tirana University provides that the scientific and teaching staff have a right to post-university scientific qualification according to the Council of Ministers' Decision No. 786, dated 17.12.1998, for the scientific post-university qualification and classification of pedagogical and research staff, as amended by Decision No. 897, dated 29.12.2004, and the Order of the MoES for post-university scientific qualification No. 18, dated 10.8.1999 (Art 28 of the Statute).

2.3.3. *Teaching*

2.3.3.1. *The Underlying Philosophy of "Education"*

Teaching mainly aims to prepare students for the labour market, but also functions according to the classical model. Thus Art 2 LHE provides that the mission of the civil higher education is inter alia to create, transmit, develop and protect knowledge on the part of the teacher, scientific research and services, to develop and promote the arts, physical education and sports, to form highly qualified specialists and to prepare young scientists as well as to contribute to the advancement of the standards of democracy and of the civilisation of society and in the preparation of the young for such a society. The university realises higher education, the development of knowledge, science and professions and transmits knowledge in these areas as well as the scientific and professional disciplines (Art 5 Para 1 LHE). The university assures an education based on research, continuing education, qualification, specialisation and prepares specialists and young scientists (Art 5 Para 2 LHE). It realises applied scientific research and creative activities, offers services according to its mission and supports and realises the qualification of the academic staff. It ensures an appropriate relationship between education, scientific research and the offering of services (Art 5 Para 3 LHE). Over the last few years many 3-year courses have been established in private schools of higher education/universities, most of which concentrate on professional education (see Section 1.1 above).

2.3.3.2. *Curricular Models for Undergraduate, Postgraduate Studies and PhD Programs*

The model for undergraduate and postgraduate studies has been and is still in the process of being restructured according to the Bologna process. The model applied so far was based on a two-tier system consisting of a diploma (4-5 years)²⁹⁴ and postgraduate training (3-4 and more years of doctoral studies).²⁹⁵ More recently, Master studies have been established, but operate

²⁹³ Cf. MoES, Directorate of Scientific Research: *Research and Development Activities in Albania*, 26.10.2004, 9 *et seq.*

²⁹⁴ But also 6 and 3 years (4 years with most disciplines, 4-5 in engineering, 6 years in medicine, 3 years for teaching in primary and secondary school). Cf. MoES: *Structure of Higher Education in Albania*, no date, no pagination. See also Table 2 in Annex of Sue E. Berryman: *Albania's Education Sector: Problems and Promise*, Human Development Sector Unit, Europe and Central Asia Region, World Bank, May, 2000, 75.

²⁹⁵ In the two-tier system the following diplomas can/could be awarded: Non-university diploma (2-3.5 years), Open Distance Learning diploma (3 years), University diploma (4-6 years), Post-university qualification (up to 1 year), Open Distance Learning qualification (up to 1 year), Diploma of post-university specialization (up to 1

only at the universities in Tirana; the same applies to doctoral studies offered only by seven institutions in 2005²⁹⁶. In addition, the number of years varies (specialized studies 1-2 years, doctoral studies 2-5 years).

The system is increasingly adjusted to the Bologna Process: the Agricultural University and the Polytechnical University (since 2001/02) in Tirana as well as nursing and journalism studies at the University of Tirana, economic sciences (since 2004/05),²⁹⁷ foreign languages and psychology at the University of Shkodër, foreign languages at Elbasan and Vlorë University have a 3-year first cycle of study. Also, some new branches opened recently have officially marked the beginning of the new scheme. Several areas of study, however, such as mathematics, architecture, construction and veterinary science have been excluded.²⁹⁸ Study cycles of the Bologna process were only recently adopted by law: An amendment to Art 35 of the former LHE (Law No. 9576, dated 3.7.2006) provides for two study cycles, the first of which has a duration of at least 3 years with at least 60 ECTS credits per year and concludes with the “Bachelor” degree, while the second one has a duration of 1-2 years with 60 ECTS credits per year and concludes with a “Master” degree.

Postgraduate courses could be established by the MoES on the basis of Decision No. 19, dated 6.1.1997, for the functioning of qualification and specialization courses at the schools of higher education; short term courses were to encompass not less than 40 lectures and long-term courses not less than 120 lectures. The courses were to be subject to study fees established by the MoES according to the Council of Ministers’ Decision No. 478, dated 7.11.1992, and at the conclusion of the course a certificate was to be awarded by the faculty. Council of Ministers’ Decision No. 786, dated 17.12.1998, on the post-university scientific qualification and classification of the pedagogical and research staff, as amended, provides for the possibility to establish courses for awarding a diploma for specialized post-university studies (Master) and a Doctorate²⁹⁹. However, only Decision No. 588, dated 2.11.2000, provides for the opening of post-university schools at the University of Tirana, Polytechnic University, Agricultural University and the Academy of Physical Education and Sports for the academic years 2000-2001 and 2001-2002, the expenses for which are covered by study fees and other income generated according to legal and sublegal acts in force.³⁰⁰

The new LHE provides for three study cycles: the first study cycle with 180 credits and a duration of three years (First Level Degree), the second study cycle with 120 credits and a duration of two years (Second Level Degree), the integrated second study cycle with 300 credits and a duration of five years (Integrated Second Level Degree), Master studies with 60 credits and a duration of one year (Master of First Level), the third study cycle with 60 credits

year), Post-university specialised studies (1-2 years, Diplomë e Studimeve të Thelluara pasuniversitare or Kandidat i Shkencave) and Doctor Diploma (PhD; 2–5 years, Doktor i Shkencave). Cf. MoES: *Structure of Higher Education in Albania*, no date, no pagination.

²⁹⁶ Cf. *Higher Education in the Republic of Albania*, NTO in Albania, September 2005, 5. Council of Ministers’

²⁹⁷ Cf. Europäische Kommission: *Im Blickpunkt: Strukturen des Hochschulbereichs in Europa 2004/05. Nationale Entwicklungen im Rahmen des Bologna-Prozesses*, 2.

²⁹⁸ Cf. *Towards the European Higher Education Area. Bologna Process. National Reports 2004 – 2005. Albania*, 28.1.2005, 5, 13.

²⁹⁹ Decision No. 786, dated 17.12.1998 as amended, regulates doctoral studies for scientific qualifications. Institutions with the right to set up doctoral studies and to award the doctor’s degree are determined by the Commission of Scientific Qualification (Para 1.3). A proposal to set up doctoral studies, which a university department or research institution submits to the Commission, should be accompanied by documents indicating e.g. the available academic staff, the financial sources and equipment, and a description of the programme of doctoral studies (Para 2.4). The Directorate of Scientific Research in the MoES, in collaboration with the universities and research institutions concerned, makes up the plan which annually specifies the field of doctoral studies and the number of places available in each. The Commission, which functions at a national level, is responsible to the Council of Ministers and also determines also the institutions capable of offering the second level programmes (Master). Cf. <http://www.skvc.lt/old/Alb/Enicalb.htm> (24.8.2006).

³⁰⁰ In addition, there is Decision No. 524, dated 1.8.2003, for the opening of the postuniversity school “Arben Zylyftari” at the Police Academy.

and a duration of 3 years (Doktor) and specialised studies for specific professions, such as medicine or law, with 120-240 credits and a duration of 2-4 years (Specialist ... or Magjister ...), Master of Second Level with 60 credits and a duration of one year (Master of Second Level) (Art 26 Para 1 LHE).

2.3.3.3. *Implementation of the Bologna Process*

Albania signed the Bologna Declaration in 2003; Order No. 114, dated 6.5.2003, of the MoES on the “Establishment of a Working Group for the reform of higher education” and Order No. 23, dated 6.2.2004, on the “Implementation of the activity plan for the period 2004-2005. Approximation of the Albanian higher education system to the European one according to the requirements of the Bologna declaration” were adopted to implement the Bologna process. During 2003–2005 study cycles, academic standards in higher education, teaching load, financial autonomy and university admissions procedures were adopted. The universities are revising their curricula to adapt fields to the new structure; several faculties have already concluded this process in certain studies (see Section 2.3.3.2 above)³⁰¹. The implementation of ECTS began in 1999; the diploma supplement was issued upon request in 2004/05.³⁰² Amendments to the old LHE (Law No. 9576, dated 3.7.2006) provided for ECTS. Also, elections to the students’ governing body have taken place, novel concepts on the teaching load of pedagogues and the benchmarks for the institutional evaluation and standards on quality assurance in higher education have been created.³⁰³ However, frequently measures are incomplete and require further implementation measures.

2.3.3.4. *Courses for Life-long Learning, Vocational Training or for Complementary Practical Job Experience*

With regard to life-long learning several measures have been taken: admission quotas have been awarded for second choice courses of study, i.e. courses carried out without any competition against a tuition fee due to the institution, which varies according to the branch or the faculty chosen. In addition, the part-time system has been operating in courses of study of teaching, economics, law, social sciences and informatics since the academic year 2003/04. Distance learning³⁰⁴ has been applied in the branches of mechanical engineering, electricity and electronics and extended to post-university courses in the area of economics and libraries.³⁰⁵ The new LHE provides for study programmes of continuing education (Art 30 LHE).

Finally, vocational training exists e.g. at the Polytechnical (Electronics) and Agricultural University as well as in medicine, nursing and psychology (social worker) and for pre-school teacher training at the Universities of Elbasan, Gjirokastër, Korçë, Shkodër, Vlorë³⁰⁶.

³⁰¹ In 2003 the Central Group in the MoES for the implementation of the reform resulting from the Declaration of Bologna prepared amendments to relevant legal acts and compiled regulations of the MoES. Cf. *Towards the European Higher Education Area...*, 13.

³⁰² Cf. *Higher Education in the Republic of Albania*, NTO in Albania, September 2005, 5; Vaso Qano: *The Higher Education Area in Albania*, Albanian Tempus Office, MoES, Aachen, 29- 30 September 2005, 5.

³⁰³ Cf. *Towards the European Higher Education Area...*, 1.

³⁰⁴ The System of Distance Education in Albania is composed of the National Centre on Distance Education and the Departments on Distance Education at the University of Tirana, University of Shkodër and the Polytechnic University of Tirana. The system was set up in 1998 and started its activity with non-university education. Cf. MoES: *Structure of Higher Education in Albania*, no date, 1. The new LHE provides expressly for distance education (Art 24 Para 1c).

³⁰⁵ Cf. *ibid*, 9.

³⁰⁶ Cf. ETF: *VET reform policy peer review Albania. Report by the international peer review team*, February 2003, 19.

Continuing education courses have been offered for Diploma holders with a good academic background and at least two years of work experience in their field.³⁰⁷

2.3.3.5. Staff Composition

In the academic year 2003/04 within the teaching staff there were 10% with the title “professor”, 12% with the title “associate professor” and 10% with the title “doctor”.³⁰⁸ For 2004 the number of academic staff on full time basis at the universities was 1525 persons: 194 Prof. (12%), 265 Ass. Prof. (17%), 331 Dr. (22%), 289 Lecturers (19%) and 446 Ass/lecturers (29%).³⁰⁹ Female pedagogues are about 51% (in the same document 43%).³¹⁰

The data for the year 2005/06³¹¹ were given by the MoES as follows:

		All	Female
I	Full time teaching staff	2017	914
1	Professor	312	43
2	Assistant Professor	342	106
3	Pedagog with the grade "Doktor"	259	91
4	Pedagog without the grade "Doktor"	387	197
5	Assistant Pedagog	706	471
6	Supervisor of Scientific Research	3	1
7	Master of Scientific Research	8	5
8	Assistant of Scientific Research		
II	Part-time staff	2955	1458
1	Professor	212	33
2	Assistant professor	153	42
3	Pedagog with the grade "Doktor"	187	64
4	Pedagog without the grade "Doktor"	1494	756
5	Assistant Pedagog	909	563
III	Academic Support Staff	546	378

³⁰⁷ The courses are not academic programmes and have been offered for employment purposes. Upon completion a certificate is issued, which may indicate a grade for the course. Cf. <http://www.ceed.co.uk/ceed/un/al/albanco.htm> (24.8.2006).

³⁰⁸ Cf. Ministria e Arsimit dhe Shkencës: *Raporti Vjetor Statistikor i Arsimit 2003 – 2004*, 41.

³⁰⁹ Cf. Qano: *The Higher Education Area in Albania ...*, 3.

³¹⁰ Cf. Ministria e Arsimit dhe Shkencës: *Drejtoria e teknologjisë, informacionit dhe statistikës. Statistika për arsimin e lartë, viti akademik 2004 – 2005. Informacion statistikor viti shkollor 2004-05*, Tirana, 1 March 2004.

³¹¹ For the following tables thanks to Ms. Sh. Lamçe from the Statistics Department of the MoES.

The age structure of the full-time staff for the year 2004/05 was as follows:

	All	Female
- 25	61	45
25-29	348	223
30-34	304	186
35-39	267	128
40-44	223	97
45-49	276	97
50-54	228	85
55-59	177	40
60-64	119	9
65 -	14	1
Total	2017	911

The age structure of the part-time staff for the year 2004/05 was as follows:

	All	Female
- 25	144	121
25-29	472	256
30-34	388	164
35-39	360	132
40-44	422	117
45-49	363	78
50-54	378	91
55-59	238	42
60-64	111	9
65 -	79	3
Total	2955	1013

To the knowledge of the authors there are no statistics on origin.

2.3.4. Effectiveness

2.3.4.1. Specialisation and Creation of Centres of Excellence

Although not all subjects are taught at all universities (e.g. more subjects are taught at the universities in Tirana, and there is a Faculty of Naval studies at the University of Vlorë), so far no special centres of excellence have been created (besides the specialized institutes within the ministries). However, the national programmes (see Section 2.3.2.2) can be seen as a means for further streamlining and specialization. Similarly, Tempus projects and postgraduate programmes offered only by certain universities can support the forming of specializations. The plans to fuse the institutes of the ministries and the Academy of Sciences (see Section 1.1) have the potential to result in the creation of centres of excellence.

2.3.4.2. Assessment of Institutions, Students and Lecturers

The **assessment of the quality** of the institutions of higher education is conducted internally (see Art 59 LHE), externally by the Agency of Accreditation (or other agencies of accreditation that form part of the European Network for the Ensuring of the Quality in Higher Education), near to which the Council of Accreditation also functions (Art 60 Para 2 LHE) (see Decision No. 303, dated 1.7.1999, on the creation of a system of accreditation in

higher education as amended by Decision No. 611, dated 4.12.2002). The Agency of Accreditation for Higher Education is a public institution accountable to the MoES and was established in 1999 under a Tempus JEP. It drafts and sets the criteria and procedures of Evaluation of Quality of higher education, which, after consulting the Higher Education Institutions, are submitted to the Accreditation Council³¹² for final approval. In the case of the non-public higher education institutions, if the report produced by the Agency is negative, the MoES adopts decisions to the effect of not recognizing the existing course of study or submits proposals to the Council of Ministers in order for it to no longer recognize the institution or course.³¹³

Quality assurance/evaluation consists in the evaluation of programmes and of institutions. The Agency has prepared procedures and standards for quality evaluation in higher education, in collaboration with domestic and foreign experts (Aspects and Indicators for Evaluation of Quality at Higher Education as well as two handbooks for self-evaluation and for external evaluation). Internal evaluation (self-evaluation) is conducted by the institutions of higher education themselves,³¹⁴ while external evaluation is conducted by a team of experts (peer review) who must not have conflicts of interests with the institution under evaluation.³¹⁵

However, the legal framework (Decision No. 303, dated 1.7.1999, on the creation of a system of accreditation in higher education as amended; see Section 2.1) has been implemented so slowly that few evaluations have been conducted: During 2001-2003 evaluation was carried out in five programmes at four universities, during 2004 the evaluation and accreditation of all nursing programmes at six universities was conducted as well as in civil engineering at the Polytechnic University and the evaluation and accreditation process of diplomas in the teaching domain was initiated.³¹⁶

³¹² The Chairman of the Council of Accreditation is appointed by the Prime Minister and its members by the MoES. The Council is composed of nine high-profile professionals in the field of higher education, science and economy who hold scientific titles. One member of the Council should be a representative of the MoES. The Agency and the Council of Accreditation have been financed by the government and the assessments from the agency budget and in some cases from international projects, such as Tempus, the Civil Society Foundation, etc. Cf. http://www.aaal.edu.al/html/statusi_i_aaal.html (24.8.2006).

³¹³ Cf. *Higher Education in the Republic of Albania*, NTO in Albania, September 2005, 4.

³¹⁴ For example, the University of Tirana has elaborated a policy document on its own quality evaluation and the faculties have adopted an order about the procedures of evaluation. The document lays down a democratic method in which each department, faculty or unit drafts the evaluation documentation applied by it (principles, standards, procedures taking account of the characteristics of the department, etc.), which is approved by the majority of department members, the Head of Department and the Dean. The evaluation encompasses institutional activity, such as teaching, research and services. The method strikes a balance between methods based on quantity and quality, internal, self- and external evaluation, etc. Students participate in the evaluation by filling in forms, questionnaires, participating in interviews and focus groups and the staff of the evaluation. See <http://www.unitir.edu.al> (24.8.2006).

³¹⁵ Evaluation covers different aspects of the institution and/or programme:

- Mission statement
- Management
- Policy and decision making procedures and responsibilities
- Quality of staff
- Programme organisation
- Curriculum design
- Student selection, recruitment and assessment
- Student workload
- Development and organisation of the teaching process
- Teaching methods
- Quality of educational activity
- Research policy and quality
- Quality assurance mechanisms
- Mission realised and achieved goals
- Stakeholders, including students

The ideas of students have been considered through interviews administered by the external evaluation team. Evaluation of the performance of educational activities in higher education is the competence of the Senates and Science-teaching/Art-teaching Councils in individual higher education establishments. Cf. <http://www.aaal.edu.al/html/vleresime.html> (24.8.2006).

³¹⁶ See *ibid* and *Towards the European Higher Education Area...*, 4.

The **selection of students** functions on the basis of a quota system (see e.g. Decision No. 198, dated 5.4.2006, for the admission to the universities and schools of higher education for the academic year 2006/7, in the full time system and for the determination of the fees). In contrast to previous years, the academic year 2006/07³¹⁷ was the first year without entrance exams, except for the Academy of Arts, Architecture, the Academy of Physical Culture and Sports and the branch of Physical Culture at Shkodër University; instead, admissions were based on the average grade of four years of high school (20%) and the grades achieved in the A-levels (80%). In the year 2006/07 the admission quota was 8440 students.

Lecturers and researchers are selected according to their CV, academic experience, recommendations, publications and competitive tests. Decision No. 786, dated 17.12.1998, for the scientific post-university qualification and classification of pedagogical and research staff as amended, provides for the titles of lector (pedagogue), assistant, associate professor and professor. A lector must have a doctorate, teaching experience, several article publications and have supervised a university or post-university degree (Para 4.2.3); an assistant is a specialist giving seminars, exercises and lab work who is preparing to become a lector and is involved in post-university education and the doctorate (Para 4.2.4). To become associate professor, besides the doctorate and at least 10 years of teaching experience at schools of higher education, e.g. the publication of a study book or monograph, at least five article publications, including in foreign journals, participation in symposia etc. is required (Para 4.2.2). The teaching and research activity is evaluated publicly in the department, but decided by secret vote; the Scientific Council of the institution, the respective section of the Academy of Sciences decides by secret vote, and finally the Commission for Scientific Qualification (Para 4.5). Similar requirements and the same procedures apply to qualify as professor.

As regards **output evaluation**, the LSTD provides that the activity of the scientific institutions is subject to periodical evaluations by the MoES or the Academy of Sciences³¹⁸ (Art 44 LSTD), however, without specifying the kind of evaluation. According to the Expert Group on the Reform of the System of Scientific Research, there is no accountability for scientific research; only the Academy of Sciences has a more or less developed system of verification of the use of means and realized output.³¹⁹ Nevertheless, the indicators of the evaluation of the Agency of Accreditation include those on out-put evaluation.³²⁰ The Evaluation Report on the Law Faculty of the University of Tirana of May 2001, for example, refers to the number of academic staff and graduated students.³²¹

³¹⁷ Cf. for the last year Decision No. 560, dated 12.8.2005, for the approval of quotas of acceptance in the universities and schools of higher education for the academic year 2005/6, in the full-time system and for the determination of the fees for this academic year based on entrance exams. Expertise with respect to item writing and test implementation as well as publication of results was provided by the Centre of National Education Assessment and Examination, which started to operate in 1994 as part of the Pedagogical Research Institute. It was institutionalised as an independent agency, however, dependent on the MoES. Cf. Shpresa Petrela: Large-Scale Assessment and Education Policy in Albania, Centre of National Education Assessment and Examination, in: *Monitoring and Evaluation of Education in Albania*, 6-7 December 2001, 15.

³¹⁸ Before the amendment by Law No. 8401, dated 9.9.1998, also the Committee of Science and Technology.

³¹⁹ Cf. *Reforma e sistemit të kërkimit shkencor...*, 16.

³²⁰ Cf. *Indikatore për vlerësimin institucional, Propozime për disa standarde për sigurimin e cilësisë në arsimin e lartë, Material i përgatitur për Agjencinë e Akreditimit të Arsimit të Lartë*, Tiranë, 25 Maj 2004, no pagination, at <http://www.aaal.edu.al> (11.10.2006).

³²¹ Cf. Republika e Shqipërisë, Agjencia e Akreditimit të Arsimit të Lartë: *Mbi Cilësinë në Fakultetin e Drejtësisë të Universitetit të Tiranës, Vlerësues: Grupi i Ekspertëve të Jashtëm*, Tiranë, Maj 2001, 7 et seq, at *ibid*.

2.3.5. *Financing and Efficiency*

2.3.5.1. *Financing of Universities*³²²

The fees are set for each year: Decision No. 198, dated 5.4.2006, “for the admission to the universities and schools of higher education for the academic year 2006/7, in the full time system and for the determination of the fees” provides fees that differ according to university and faculty for students of the first year: Thus e.g. at the University of Tirana the fee at the Faculty of Law is 30 000 Lekë (about 234 €), at the University of Shkodra 16 000 Lekë (about 130 €) and at the University of Vlora 20 000 Lekë (about 162 €); the highest fee (at public universities) is required for the study of film and TV directing at the Academy of Arts, which is 80 000 Lekë (about 650 €). In 2005 about 22% of the budget allocated to higher education was from tuition fees.³²³

2.3.5.2. *Control of Budgets*

According to Art 16 LSTD the research institutions of the state³²⁴ are subject to supervision, especially for budgetary and economic issues (use of budgetary means, staff positions, administration of property, accounting and finances, investments).³²⁵ The institutions are obliged to secure an effective use of the budgetary funds and the possibility of applying the results of their activity (Art 30 Para 2 LSTD). The means put at their disposal from non-state or international organs are used only in the fulfilment of determined duties of the institutions (Art 30 Para 3 LSTD), which report also for the use of income from non-budgetary sources (Art 31 Para 3 LSTD). In the MoES the Directorate of Monitoring monitors the budget and expenditures.³²⁶ The control is conducted according to cost efficiency, operating efficiency, expediency depending on the special case.³²⁷

2.3.6. *International Co-operation*

2.3.6.1. *Regulation of Access to the National University System*

There is a quota for foreign students established by the MoES according to the requests submitted by the universities and schools of higher education as part of the overall number of students. Based on Decision No. 198, dated 5.4.2006, for the admission to the universities and schools of higher education for the academic year 2006/07, in the full time system and for the determination of the fees in the year 2006/07 this quota was 40 students. In addition, a separate quota within the overall number exists for Albanians who live outside Albania (Kosovo, Macedonia, Montenegro, Presevo, Bujanovac and Medvedje); this quota was 309 students in the year 2005/06.

³²² See on financing in general Section 2.3.1.2 above.

³²³ Cf. Malaj *et al: Albania, ...*, 5.

³²⁴ Art 12 of the law defines these as the universities, schools of higher education and research institutes inside them; institutes and scientific centres of the Academy of Sciences; institutes and research centres of the ministries, the MoES and central institutions; and national research centres (before the amendment by Law No. 8401, dated 9.9.1998, “Committee of Science and Technology” instead of the MoES).

³²⁵ In issues related directly to scientific research and technological development, the supervision is restricted to juridical aspects (respect for legal and sublegal acts and respective agreements and contracts) (Art 16 LSTD).

³²⁶ Cf. Malaj, *et al: Albania ...*, 8.

³²⁷ Information thanks to Mr. E. Agolli from the Directorate of Scientific Research in the MoES.

2.3.6.2. *Ratio of Domestic and Foreign Students and Countries*

In the academic year 2005/06 in the full time system 52 283 students were enrolled; 668 of them were from foreign countries. Of the 173 first year students, 58 were from Kosovo, 27 from Macedonia, 63 from Montenegro, 10 from Preshevo, 3 from Turkey and 12 from other countries.³²⁸

2.3.6.3. *Export of Students – Researchers*

Outgoing students and researchers go through programmes such as ERASMUS, CEEPUS (Law No. 9473, dated 9.2.2006, on adherence to CEEPUS II), bilateral agreements, Tempus, university co-operations, etc. or individually. Precise statistics on the numbers of outgoing students seem to be absent; in the year 2001 about 3 000 students left Albania to study abroad.³²⁹ Similarly, there appear to be no precise statistics on the number of outgoing researchers. From 1991-2005 more than 50% of lecturers and research staff of the universities and research institutions emigrated during the peak of the brain drain in the periods 1991-1993 and 1998/99.³³⁰

2.3.6.4. *Integration into International, in particular European Networks*

There is integration into programmes such as Eureka, the Fifth (now Sixth) Framework Programme, Life, UNESCO, and INCO-Copernicus. In addition, a Memorandum of Understanding between the Ministries of Education and Higher Education of the Countries of Southeast Europe in the framework of the Task Force for Education and Youth of the Stability Pact was signed on 5.12.2003. The Academy of Sciences is involved in NATO, IAEA and INTERREG-2 programmes. For example, the University of Tirana is member of the following university networks: European University Association, Conference of European Rectors (CRE) (2000), UNiversities from the CAPitals of Europe UNICA (1998), Community of Mediterranean Universities CUM (1996), Association of Partly or Wholly French-speaking Universities (AUPELF) (1998), Network of the Intermediterranean and Central Europe (AIMOS) (1995), Black Sea Universities Network (BSUN) (1999), Universities of the Capitals of the Mediterranean Countries (MEDECA) (1998), Open network of the European Studies in South-East Europe (2000), Network of International Co-operation of the Universities (ICON) (1999), University Association “Universities of Mediterranean” (UNIMED) (2000) and the Network of the South-Eastern European Universities SEEU (1998).³³¹

2.3.6.5. *Bi- and Multilateral Research Co-operation Agreements*

Bilateral research co-operation agreements exist with the following countries:

- Italy – signed in Tirana on 18 December 1997,
- Greece – signed in Tirana on 4 October 1984,
- Macedonia - adopted by Decision No. 327, dated 17.5.2001,

³²⁸ Statistics from the MoES (see footnote 101).

³²⁹ Cf. Tafaj, *Considerations about Massive Brain Drain ...*, 2.

³³⁰ Late in 2005, the main host countries for the Albanian lecturers and researchers were the US (26.3%), Canada (18.4%), Italy (13.7%), Greece (12.9%), France (9.7%), Germany (6.3%), England (2.9%) and Austria (2.6%). Cf. Ilir Gedeshi: *From Brain Drain to Brain Gain: Mobilising Albania's Skilled Diaspora*, Center for Economic and Social Studies (CESS), no date, 2, 4, 7.

³³¹ Cf. <http://www.unitir.edu.al/> (24.8.2006).

- Bosnia and Herzegovina – adopted by Decision No. 435, dated 26.6.2003,
- Ukraine – signed in Kiev on 27 May 2003 ,
- Egypt – draft-agreement adopted by Decision No. 57, dated 11.2.1993,
- Slovenia – adopted by Decision No. 260, dated 28.4.2005,
- Poland – adopted by Decision No. 243, dated 27.5.1993,
- Austria – Memorandum of Understanding between the Ministries of Education, signed in Tirana on 30 April 2003³³² and an Agreement ratified by Law No. 9522, dated 25.4.2006,
- Bulgaria – Law No. 9756, dated 18.6.2007, on the ratification of the “Programme for cooperation in the field of education, science and culture through the Council of Ministers of the Republic of Albania and the Government of the Republic of Bulgaria for the period of 2007-2009”

As regards agreements at university and/or faculty level, for instance, the University of Tirana has signed bilateral co-operation agreements with about 40 European universities.³³³ A multilateral treaty exists regarding the exchange of students (Law No. 9473, dated 9.2.2006 on adherence to CEEPUS II).

2.3.6.6. *Visiting Scholars*

Visiting scholars are usually supported by grants from foreign funds. For example, Shkodër University has hosted Fulbright scholars from the US, scholars from Austria, Italy, France and Montenegro.

2.3.7. *Transdisciplinarity*

The new LHE provides for the organisation of interdisciplinary programmes (Art 28 LHE). There are interdisciplinary postgraduate teaching programmes, such as a Master of Public Administration offered by the Economics Department at Tirana University, including also courses in law, established in cooperation with the University of Nebraska.³³⁴ In addition, there is a postgraduate inter-university Master of Arts in European Studies programme, which brings together the Universities of Tirana, Shkodra and Elbasan and was established with the support of the Universities of Granada, Leuven and Thessaloniki.³³⁵

2.3.8. *Role Model for a Scientist*

Both models, the individual genius in search of truth or an entrepreneur and manager organising research activities, exist; however, considering that neither research funds nor employment at universities usually can offer an income sufficient to cover basic needs, many scientists work either outside their professions in private economy or hold additional functions in public national and international institutions.

³³² Cf. <http://www.mash.gov.al/> (24.8.2006).

³³³ Cf. <http://www.unitir.edu.al/> (24.8.2006).

³³⁴ See http://www.soros.al/soros/english/Annual_Reports/2001/masteri.htm; see also http://web.uni-bamberg.de/sowi/economics/download/Master_Degree_EES_neu.pdf.

³³⁵ The four core courses provide an integral picture of the historical developments, political system, economics and the law of the EU. The elective courses deal with more specific issues, such as human rights, international law and organizations, the role of media in the European context, as well as issues closely related to the position of Albania vis-à-vis the European integration process, e.g. “Albanian identity and position in the Balkans and Europe”. Cf. Glori Husi: Country Profile – Albania, in: Rafael Biermann (ed.): *Europe at Schools in South Eastern Europe – Country Profiles*, Center for European Integration Studies Rheinische Friedrich Wilhelms-Universität Bonn, no date, 19.

2.3.9. Role of Universities in Inter-ethnic Co-operation

Although estimates on how many members of ethnic minorities the population comprises differ between 1.5% (according to a study conducted by INSTAT in 2003³³⁶) and 7.5% (according to a study conducted by the World Bank in 2002, the data set of which, however, is not representative³³⁷) and even more by minority representatives,³³⁸ in contrast to other Western Balkan countries, in Albania there have been no major problems regarding inter-ethnic co-operation. Therefore, there are no specific conflict management activities. However, the University of Gjirokastra offers four-year degree courses for teachers in Greek language and since 1995 Greek language has been taught at the Faculty of Foreign Languages of Tirana University.³³⁹ The Greek state pays the teachers who teach in Greek in the schools of the minority region an additional monthly salary of about 150 €³⁴⁰ as well as additional pensions of about 50 € to retired members of the Greek minority, which is regarded by many Albanians as undue influence on the part of the Greek government.

Except in the relationship with the Roma minority, there is a low degree of perceived ethnic or social distance. Decision No. 633, dated 18.9.2003, adopted the Strategy for improving the living conditions of the Roma minority, which inter alia provides that the MoES will establish quotas for places at the universities for Roma students to study programmes such as public administration, social sciences, law, economics, engineering, etc., so that the new Roma generation become part of the civil service at all levels of the public administration. However, this measure seems not to have been implemented yet.

2.4. Trends in the Education and Research Sector

There is certainly a trend towards greater international involvement as EU programmes provide the necessary funds for university development and will in the future also for research. Plans for university reforms include introducing a Governing Board, which inter alia will select the Rector and the Dean and would thus depart from the participative model, a Foundation for the Financing of Scientific Research³⁴¹, as well as restructuring the curricula for further implementation of the Bologna process. The reform agenda includes the modernization of the course structure and curriculum, strengthening university governance structures, improvement of legislation and funding formula, stronger linkages between research and teaching, an enhanced quality assurance and accreditation mechanism, and enhanced linkages with the labour market.³⁴²

Because universities since the transition have provided mainly teaching and hardly conducted research, strengths can be seen in the amount of teaching provided, though the quality depends on the individual lecturer, and weaknesses can be found in research output. A major problem is the lack of adequate working and research infrastructure, such as lab

³³⁶ Cf. INSTAT: *Minorities in Albania*, Thirteenth Meeting of the OSCE Economic Forum “Demographic Trends, Migration and Integrating Persons belonging to National Minorities: Ensuring Security and Sustainable Development in the OSCE area”, Prague, 23 - 27 May 2005, distributed at the request of Albania, EF.DEL/42/05 24 May 2005, no pagination.

³³⁷ Cf. Hermine De Soto, Peter Gordon, Ilir Gedeshi, Zamira Sinoimeri: *Poverty in Albania. A Qualitative Assessment*, Washington DC: World Bank 2002, 90.

³³⁸ See for more details Michaela Salamun: *Access to education, training and employment of minorities in the Western Balkans. Country report Albania*, Eurac/ETF, unpublished report, January 2006, 1 *et seq.*

³³⁹ Cf. Human Rights Committee: *Consideration of Reports Submitted by States Parties under Article 40 of the Covenant. Initial report. Albania**, 2 February 2004, Point 1372.

³⁴⁰ Cf. Albanian Helsinki Committee: *Report on the Completion of the Project: “On the Status of the Minorities in the Republic of Albania”*, September 2000, 3 *et seq.*

³⁴¹ Provided for in draft amendments to the LHE as published in *Shekulli* 9.6.2006.

³⁴² Cf. World Bank: *Albania - Education Excellence and Equity Program Project*, Project information document of 23.2.2006.

equipment, computers, office space for each member of the academic staff, internet access, especially, but not exclusively, at universities outside Tirana. Expectations from EU member states thus relate to funding, co-operation and provision of equipment.

3. NOT UNIVERSITY RELATED RESEARCH INSTITUTIONS

3.1. Academies of Sciences and Art

3.1.1. *Foundation*

The Academy of Sciences of Albania was founded in 1972 by Decree No. 4993, dated 10.10.1972, and unified then existing 25 scientific research institutions. On 25 January 1973 its Assembly gathered for the first time. The Academy includes 12 scientific institutions, centres and organisms in its system (see Section 1.1 above).³⁴³

3.1.2. *Legal Basis*

The legal basis for the Academy is Law No. 9655, dated 11.12.2006, on the Academy of Sciences of Albania³⁴⁴ and a new Statute that seems to have been adopted by the Assembly by the end of 2006.³⁴⁵

3.1.3. *Model of Organisation*

The model of organisation of the Academy of Sciences, a scientific institution, is that of a public law institution with forms of self-government or autonomy; it acts according to the laws and its Statute (Arts 1 - 3 LASA).

3.1.4. *Institutional Structure*

The Academy of Sciences consists of not more than 30 regular members with the title “Akademik”, not more than 15 associated members with the title “Akademik i asociuar” and members of honour of other countries (Art 5 LASA). The regular and associated members of the Academy form the **Assembly**, the highest directing organ of the Academy. The managing organs are the **Executive Council**, which is composed of the head, the vice-head, the scientific secretary and the section heads and elected by secret vote by the Assembly, and the **Managing Board** consisting of the head, the vice-head and the scientific secretary (Art 10 LASA). The **Head** of the Academy is elected by secret vote by the Assembly members and must be “Akademik”; he is appointed by the President of the Republic (Art 11 LASA).

Art 13 LASA provides that the Academy of Sciences consists of sections. There is the section of social and albanological sciences and the section of natural and technical sciences (see for the institutes Section 1.1). According to Art 6 LASA the regular members of the Academy are chosen from renowned scientists with the title “professor” with Albanian citizenship, who with authentic and generalizing works of a high scientific level have solved in theory and practice problems of a special importance in the field of science, economy, arts and culture

³⁴³ See for institutions before 1972, such as the New Academy of 1750 in Voskopoja and the Institute of Sciences of 1948, though with different functions, at <http://www.akad.edu.al/permbajtja/hyrje.htm> (24.8.2006).

³⁴⁴ Replaced Law No. 9182, dated 5.2.2004.

³⁴⁵ Replaced Statute adopted by Decree No. 2242, dated 22.10.1998 of the President of the Republic for approval of the Statute of the Academy of Sciences of Albania. The new Statute has not been accessible to the authors. Cf. http://www.akad.edu.al/permbajtja/reforma_akademi.htm (24.8.2006).

and have provided assistance in the university and post-university formation of young scientists. In special cases the regular members can choose also personalities with renowned merits in other areas. Associated members are chosen from among renowned scientists with the title “professor” with Albanian citizenship, who with scientific works have provided important assistance in the development of science and the university and post-university formation of young scientists. Honorary members are chosen from among personalities from other countries who have given a significant contribution in the development of the country. Persons holding high administrative or political functions cannot be candidates for regular or associated members during the exercise of these functions.

3.1.5. *Functions*

The Academy also conducts scientific research work in institutes, centres and other organs that form a part of its system, in support of the annual and multi-annual scientific programmes in the areas of albanological, social, natural and technical sciences. More concretely, besides cooperation with other institutions, the Academy proposes new fields of research and studies in accordance with the needs of development of the country, offers the state institutions advice and expertise necessary for solving important issues in the development of the country, publishes periodicals and other works of a high scientific quality, organises national and international scientific conferences and organizes competitions and the award of scientific prizes (Art 4 LASA). However, the reform plans foresee that the function of the Academy be changed to a purely honorific one.³⁴⁶

The Academy inter alia offers the state institutions advice and expertise necessary for the solving of important issues in the development of the country and organizes competitions and the award of scientific prizes (Art 4 LASA).

The Academy accepts foreign members from the distinguished scholars of other countries as honorary members (Art 5 LASA). The Academy has relations with many foreign counterparts, universities etc. and participates in INTERREG 2 programmes; it is not possible to list all of them here.³⁴⁷

There are information days in different institutions; the Academy conducts seminars, conferences and workshops related to problems of stable development.³⁴⁸ A considerable proportion of academic researchers work part-time as teachers at universities. Besides Research and Development, some institutes host a total of 80 students for hands-on and speciality training.³⁴⁹

The Academy is an autonomous independent institution with a budget from the government and its own law.³⁵⁰ In a statement about the Reform of Scientific Research and the Academy of Sciences, the Assembly states that during transition the Academy has affirmed its scientific independence and avoided political interference and that the institutes of the Academy today have more autonomy than the faculties of the universities.³⁵¹ On the other hand there are allegations of corruption in the handling of projects, of political influence and of personal enmities in the appointment of professors.³⁵²

³⁴⁶ Cf. Tafaj: *Master Plan for Higher Education and Science ...*

³⁴⁷ See <http://www.academyofsciences.net/institutes/> (24.8.2006).

³⁴⁸ Cf. email and telephone interview by Prof. S. Bushati.

³⁴⁹ Cf. Angelov *et al*: *UNESCO Science Report on South-East Europe 2005*, 125.

³⁵⁰ Cf. email and telephone interview by Prof. S. Bushati.

³⁵¹ Cf. at <http://www.akad.edu.al/> (24.8.2006).

³⁵² Cf. *Gazeta Tema* online of 6.7.2006.

3.1.6. *Financing*

The Academy is a budgetary institution and is financed by the state budget, technical-scientific services conducted for legal or natural persons outside its system, as well as by applications, projects, donations, subventions and sponsors used in accordance with the law and sublegal acts in force (Art 14 Para 1 LASA). As regards co-operation with industry, the Academy offers its products to the government and also to public and private subjects.³⁵³

3.1.7. *Underlying “Philosophy” of the Academy*

The existence of the Academy is necessary and should be strengthened on its own with some other unique institutions. Its members are Albanian and honorary members of foreign (non-Albanian) origin. They have resisted the times and have been restructured in line with the priorities of the time. Its goals are the national priorities in accordance with the orientation of the Balkans, both regional and European. Reforms concern the efficiency of its work, the requirements of the market and the economy and a stable development towards the goals of integration in Europe and the rest of the world.³⁵⁴

3.1.8. *Relationship to Universities and Not University related Research Institutions*

Art 4a LASA provides that the Academy co-operates with national and foreign research and teaching institutions, which have the necessary capacities for research and the conduct of studies in different scientific fields.

3.2. **Other Not University related Research Institutions**

There are associations (NGOs) that conduct research, such as the Albanian Political Science Association (ALPSA)³⁵⁵ and the Albanian Institute for International Studies³⁵⁶.

3.3. **Integration into the European Research Area**

The MoES organised information days on the Fifth Framework Program in 2000 and 2001, on the Sixth Framework Program in 2002 and on the Seventh Framework Program in 2006 with representatives of the European Commission. SEE-ERA.NET has helped in adding bilateral programmes (with Macedonia and Slovenia) and has had and will have its own impact on the enlargement of the integration.³⁵⁷

³⁵³ Cf. email and telephone interview by Prof. S. Bushati.

³⁵⁴ Cf. *ibid.*

³⁵⁵ Cf. <http://www.alpsa.org/> (20.9.2006).

³⁵⁶ Cf. <http://www.aiis-albania.org/news.html> (20.9.2006).

³⁵⁷ For information thanks to Mr. E. Agolli from the Directorate of Scientific Research in the MoES.

4. NOT UNIVERSITY RELATED EDUCATION SECTOR

4.1. Educational Institutions in the Tertiary Sector, Except Universities

Post-secondary qualifications with a professional format (polytechnics schools oriented towards the labour market) have been largely absent in public higher education.³⁵⁸ The new University of Durrës started functioning from the academic year 2006/07 will include a higher non-university school awarding non-university diplomas (such diplomas have existed mainly for distance learning at the Faculty of Construction Engineering of the Technical University Tirana³⁵⁹). Faculties for applied sciences will exist at the new universities in Fier (Decision No. 546, dated 3.8.2005; with a five-year course in naval engineering and a three-year course in tourism management) and Berat (Decision No. 547, dated 3.8.2005; three-year courses in public administration, tourism management and nursing). Private institutions offering courses in applied sciences have been established with the universities "Zoja e Këshillit të Mirë", "Marin Barleti" and "Marubi" (see Section 1.1 above).

Finally, teacher training is conducted in Faculties for teacher training (University of Shkodër, University of Korçë, University of Gjirokastrë, University of Elbasan, the new Universities of Durrës, Fier and Berat) or Departments for teacher training (University of Vlorë).³⁶⁰ So far the training has been structured as follows: Teacher training in three years (for pre-school education at the pedagogical middle school and for the lower cycle of the nine-year school at a higher education institution), in four years (plus education courses and practice training for the upper cycle of the nine-year school and for middle school at a higher education institution) and in five years (specialist in the field of education established only recently).³⁶¹

4.2. Other Institutions

There is the School of Magistrates, an independent budgetary institution, which offers professional education courses for lawyers who want to become a judge or prosecutor.

4.3. Integration into the European University Network

There are a number of co-operation programmes that contribute to the creation of a European dimension in higher education, such as programmes by TEMPUS, the Stability Pact, CARDS, Phare, and many other bilateral agreements between universities.

4.4. ERI SEE

Albania is involved in ERI SEE and a delegation from the MoES participated in the Graz Conference in January 2005.

³⁵⁸ Vocational education courses exist in embryonic form within higher education in branches, such as medicine, engineering, administration, hotel management; they do not stand for specific institutions, and are often not even identified with higher education courses. Cf. <http://www.skvc.lt/old/Alb/Enicalb.htm> (24.8.2006).

³⁵⁹ Cf. <http://www.aaal.edu.al/html/diplomat.html> (24.8.2006).

³⁶⁰ Cf. *ibid*.

³⁶¹ Cf. <http://www.skvc.lt/old/Alb/Enicalb.htm> (24.8.2006).

Research Project UnivSOE

"Institutions of Tertiary Education in Central and South East Europe: Developments, Structures and Perspectives of these Institutions for their Integration into the European Higher Education and Research Area"

Country Report: Bosnia and Herzegovina

Slobodanka Milikić

1. INSTITUTIONS	227
1.1. Public Universities	227
1.1.1. <i>University of Sarajevo (FBiH)</i>	227
1.1.2. <i>University of Banja Luka (RS)</i>	228
1.1.3. <i>University of East Sarajevo (RS)</i>	228
1.1.4. <i>University of Tuzla (FBiH)</i>	229
1.1.5. <i>University of Zenica (FBiH)</i>	229
1.1.6. <i>University of Mostar "Džemal Bijedić" (FBiH)</i>	230
1.1.7. <i>Sveučilište u Mostaru (FBiH)</i>	230
1.1.8. <i>University of Bihać (FBiH)</i>	231
1.2. Private Universities	231
1.3. Research and Development in Bosnia and Herzegovina	232
1.4. Vocational Education (VET)	233
1.5. Life Long Learning	234
1.6. Co-ordination of the Research and Education Institutions	234
1.7. Involvement in Regional and International Research and Teaching Programmes	236
1.8. Administrative Structures	236
1.9. Development of the Research Quota	237
2. THE CONSTITUTIONAL FRAMEWORK	237
3. THE UNIVERSITIES	239
3.1. Legal Basis and Establishment	239
3.2. Funding of Universities	239
3.3. Research	240
3.4. Teaching	241
3.4.1. <i>Curricular Models for Undergraduate and Postgraduate Studies</i>	241
3.4.2. <i>The Implementation of the Bologna Process</i>	242
3.4.3. <i>Life-long Learning and Courses for Vocational Training</i>	242
3.4.4. <i>ICT Education in Universities</i>	242
3.4.5. <i>Teaching Staff</i>	242
3.5. Effectiveness	242
3.6. Financing	243
3.7. International Co-operation	244
3.8. Trans-disciplinarity	245
3.9. Public-private-partnership Models for Research and Teaching	245
3.10. The Role-model for a Scientist	245
3.11. Inter-ethnic Co-operation	245
3.12. Trends in the Education Sector	246
4. NOT UNIVERSITY RELATED RESEARCH INSTITUTIONS	246
5. THE NOT UNIVERSITY RELATED EDUCATION SECTOR	246
6. EUROPEAN HIGHER EDUCATION AREA	247

1. INSTITUTIONS

1.1. Public Universities

1.1.1. University of Sarajevo (FBiH)³⁶²

The University of Sarajevo³⁶³ is comprised of 26 faculties, academies and colleges, further subdivided into 6 academic groups, and an additional number of other members and associated members.

Members of the University³⁶⁴: Academy of Fine Arts; Drama Academy; Faculty of Architecture; Faculty of Economics; Faculty of Electrical Engineering; Faculty of Criminal Sciences; Faculty of Political Sciences; Faculty of Physical Education; Faculty of Transportation and Communications; Faculty of Pharmacy; Faculty of Philosophy; Faculty of Civil Engineering; Faculty of Mechanical Engineering; Medical Faculty; Music Academy; Teachers Training College; Faculty of Agriculture; Faculty of Law; Faculty of Natural Sciences and Mathematics; Faculty of Dental Medicine; Faculty of Forestry; Faculty of Veterinary Medicine; Medical Healthcare College.

Other members of the University³⁶⁵: University Clinical Centre; National and University Library.

Associated members³⁶⁶: Faculty of Islamic Science; Institute for History; Institute for Crime Research against Humanity and International Law; Institute for Genetic Engineering and Biotechnology; Oriental institute; Student's Health Care Centre; Student Centre.

The following institutions act to satisfy students' needs³⁶⁷: Students Union of the University of Sarajevo; Student FM radio; University Academic and Cultural Centre in Sarajevo (AKCUS); University Sports Association Bosnia; University Tele-Informatics Centre (UTIC); Interlink Walk-In Centre (ILC); Human Rights Centre (HRC); Centre for Interdisciplinary Postgraduate Studies.

The **following higher education institutions³⁶⁸** are not part of the University of Sarajevo, but it is necessary to mention them in the framework of higher education in Sarajevo: "Vrhbosna" Divinity College and Franciscan Theological College.

The funds do not exist within the university budget to support their research and development.

Student Union: Student Union of the University in Sarajevo³⁶⁹.

Faculty-university relationship: The University has a statute with new rules determining relations between the central administration and the faculties. The statute defines the functions of the faculties, transfer of some responsibilities to the central university bodies etc.

Quality assurance system: The University passed several documents aiming to reform the university structure and assure quality. At present the faculties have their own internal quality assurance systems consisting of evaluating lecturers by students and by commissions appointed by deans³⁷⁰.

³⁶² As the oldest university the University of Sarajevo contributed directly and indirectly to the establishment of new Universities in Banja Luka, Mostar and Tuzla. There are 8 Universities in BiH: University of Sarajevo with 23, University of Tuzla with 13, University of Banja Luka with 13, University "Džemal Bijedić" Mostar with 8, Sveučilište Mostar with 9, University of East Sarajevo with 16, University of Bihać with 5, and University of Zenica with 6 faculties.

³⁶³ See at <<http://www.unsa.ba/eng/ouni.php>>.

³⁶⁴ See at <<http://www.unsa.ba/eng/clanice.php>>.

³⁶⁵ See at <http://www.unsa.ba/eng/ostale_clanice.php>.

³⁶⁶ See at <<http://www.unsa.ba/eng/instituti.php>>.

³⁶⁷ Ibid.

³⁶⁸ Ibid.

³⁶⁹ See at <<http://www.usus.ba>>.

³⁷⁰ European University Association, Institutional evaluation of seven Universities of Bosnia and Herzegovina, 23 September 2004.

Bologna process: The ECTS, diploma supplement and new curricula shall be implemented along with legislative steps towards university reform.

1.1.2. *University of Banja Luka (RS)*³⁷¹

Nowadays the University of Banja Luka consists of thirteen faculties with 49 departments.

Faculties: Academy of Arts; Faculty of Architecture and Civil Engineering; Faculty of Economics; Faculty of Electrical Engineering; Faculty of Mechanical Engineering; Faculty of Medicine; Faculty of Agriculture; Faculty of Law; Faculty of Natural Sciences and Mathematics; Faculty of Technology; Faculty of Philosophy; Faculty of Forestry; Faculty of Physical Education and Sport.

Institutes and Research Centres: Institute of Agriculture; Institute of International Law and International Relations; Centre for Interdisciplinary Studies and Scientific Research; Centre for Geo-strategic Research; Centre for Human Rights; University Computer Centre; Centre for Social Activities for Students (CEDUBAL); Student Centre; University Library of Republika Srpska³⁷².

The University receives modest funding for its research activities from the RS Ministry of Science and Technology. It has kept research activity in the social sciences and humanities, as well as in food technology.

Student Union: Organizations of Students of the University of Banjaluka³⁷³.

Quality assurance system: Banja Luka University has its own quality assurance system related to the assessment of didactic and scientific staff activities. Additionally each faculty has developed a system based on the evaluation of lecturers by scientific commissions and student opinion. The competence of academic staff is measured on the basis of number of publications, promotion through master and PhD theses, etc³⁷⁴.

Bologna process: The Bologna process is under continuous development at the university. The university has prepared a credit transfer system ready for implementation. The majority of faculties have prepared new curricula and a two stage system of study in which two models exist: 3+2 and 4+1.

1.1.3. *University of East Sarajevo (RS)*³⁷⁵

Faculties: Academy of Fine Arts (Trebinje); Theological College (Bogoslovija Foča); Faculty of Economics (Pale and Brčko); Faculty of Electrical Engineering (Lukavica); Faculty of Philosophy (Pale); Faculty of Physical Education and Sport (Pale); Faculty for Production and Management (Trebinje); Faculty of Mechanical Engineering (Lukavica); Music Academy (Lukavica); Faculty of Medicine (Foča); Faculty for Teacher's Training (Bijeljina); Faculty of Agriculture (Lukavica); Faculty of Law (Pale); Faculty of Dental Medicine (Foča); Faculty of Technology (Zvornik).

There is no specific funding for research activities in the university's budget. Some equipment mainly devoted to student laboratories can be used for research activities.

Student Union: Association of Students of the University of East Sarajevo³⁷⁶.

Faculty-university relationship: The relationship between the university and faculty is regulated by the University Statute from 1993. The University and faculties are legal bodies with their own administrations, book-keeping, etc.

³⁷¹ See at <<http://www.urc.bl.ac.yu/indexeng.html>>.

³⁷² University of Banja Luka, *University of Banja Luka 1975*, Banja Luka, 2000.

³⁷³ See at <<http://www.sobl.rs.sr>>.

³⁷⁴ Op.cit.9.

³⁷⁵ See at <<http://www.unssa.rs.ba/>>.

³⁷⁶ See at <<http://www.unssa.rs.ba>>.

Quality assurance system: The University does not have any external quality assurance system. An important element of the quality evaluation is questionnaires distributed among students who assess lectures and lecturers³⁷⁷.

Bologna process: ECTS has not been implemented at the university but some faculties have already started with the system. Preparations for diploma supplements are in progress but its introduction is restricted by a lack of appropriate legislation. The University has a three stage system of teaching at the moment (4+1+3) which has been realized at all faculties.

1.1.4. University of Tuzla (FBiH)³⁷⁸

The University of Tuzla has 13 **faculties** as its parts (Special-education teachers college, Faculty of Economy, Electrical Engineering, Philosophical College, Faculty of Sport, Mechanical Engineering, Faculty of Medicine, Faculty of Mining-Geological-Civil Engineering, Faculty of Technology, Faculty of Law, Faculty of Science, Faculty of Pharmacy) and the Academy of Drama. There are two Centres: Distance Education Development (life-long learning), Business Start Up Center. The establishment of Foreign Languages Center and a Quality Control Center is expected soon.

Student Union: Student Union of the University in Tuzla³⁷⁹.

Faculty-university relationship: The University of Tuzla has optimal organization considering the level of factors having impact on its organization. This means that the University utilizes one giro-account, the appointment of staff is done at the University level, students are studying at the University. The Faculties are responsible for the teaching process and research. They are also responsible for managing the funds they gain through research. The general rules of teaching, research and management are uniform and the same for all faculties.

Quality assurance system: The University has started preparations for an external quality evaluation system. The internal quality assurance system is uniform for the whole university. The system was accepted by University Senate and it is obligatory at all faculties. All lecturers are obliged to deliver reports related to their didactic work including the lecture contents, number of students participating, activities carried out, etc. Academic teachers are appointed according to the procedures uniform at each faculty. The number of scientific papers and books published, projects carried out, participation in international conferences, supervised scientific works are taken into consideration when evaluating the competence of academic staff³⁸⁰.

Bologna process: The system of credits will be fully introduced at all faculties. The university will apply a two stage (4+1) study system. The third stage, the PhD study, lasts 3 years.

1.1.5. University of Zenica (FBiH)³⁸¹

Faculties: Faculty of Metallurgy and Materials Science; Faculty of Mechanical Engineering; Faculty of Education; Faculty of Economics; Faculty of Law; Faculty of Health, Islamic Pedagogical College.

Associated Members: Metallurgical Institute “Kemal Kapetanović”.

Research Centres: Centre for Social and Inter-religion Researches; Centre for Global Understanding of Law; Centre for Social and Inter-religion Researches.

³⁷⁷ Op.cit.9.

³⁷⁸ See at <<http://www.untz.ba/>>.

³⁷⁹ See at <<http://www.usut.untz.ba/>>.

³⁸⁰ Op.cit.9.

³⁸¹ See at <<http://www.unze.ba/>>.

University of Zenica was founded pursuant to the decision of Zenica-Doboj Canton Assembly.

Student Union: Student Union of the University in Zenica³⁸²

1.1.6. *University of Mostar “Džemal Bijedić” (FBiH)*³⁸³

Faculties: The Agro-Mediterranean Faculty; The Faculty of civil engineering; The Teaching Faculty; The Faculty of Law; The Faculty of Humanities; The Faculty of Business Management; The Faculty of Information Technologies (FIT); The Faculty of Mechanical Engineering; The Institute of Mechanical Engineering; The Institute for Designing and Examining of the materials and constructions, within the Faculty of Civil Engineering – ZPIMK.

The Agro-Mediterranean Faculty is creating a basis for serious research activities in agriculture, horticulture and the food industry in cooperation with partners from the region and abroad.

Student Union: Student Union of the University “Džemal Bijedić”³⁸⁴.

Faculty-university relationship: The University adopted the Action Plan of the new rector, within which working groups have been formed who have already started making new documentation of the integrated University, such as: the University Statute, new job systematization, Rule book on labour relations, documents related to financial management. However, in practice, this planned process cannot be implemented so smoothly. Deans and the existing management organization of the faculties prevent faster implementation.

Quality assurance system: An organized QA system doesn't exist at the University level, and this can be said to be the general situation in the country. An organized labour market doesn't practically exist, so there is no link between the University and its surroundings. Additionally, feedback on graduate students from their employers, which would be very significant in terms of improving teaching, doesn't exist³⁸⁵.

Bologna process: The university has prepared proposals for implementing new curricula in accordance with the German model and two stage system of study (3+2 model) but it is not allowed to start with it yet.

1.1.7. *Sveučilište u Mostaru (FBiH)*³⁸⁶

Faculties: The Agro-Mediterranean Faculty; Faculty of Economics; Faculty of Philosophy and Humanities; Faculty of Natural Sciences and Mathematics; Faculty of Civil Engineering; Faculty of Medicine; Law Faculty; Academy of Arts; Medical Healthcare College.

The University has created 6 research institutes (agronomy, economics, law, Croatian language and literature, civil engineering, mechanical engineering). A PhD programme exists in law and economics.

The two Mostar Universities are funded by the Herzegovina-Neretva canton with additional financial support from three other cantons, but there is no specific contribution towards research activities.

Student Union: Student Union of the University in Mostar³⁸⁷.

Faculty-university relationship: The University has elaborated a draft of the new statute, which will integrate the university bodies and transfer some responsibilities from faculties to

³⁸² See at <<http://www.unze.ba/us>>.

³⁸³ See at <<http://www.unmo.ba/>>.

³⁸⁴ See at <<http://www.unmo.ba/html/ba/institucije/institucije.html#unija>>.

³⁸⁵ Op.cit.9.

³⁸⁶ See at <<http://www.sve-mo.ba/>>.

³⁸⁷ See at <<http://www.studentskizbor.ba>>.

the central administration. The management of most of the faculties are afraid of integration and reform of the university as they will lose part of their impact upon the faculties and finances.

Quality assurance system: All faculties appointed one person dealing with the quality assurance issues. The university takes patterns from reference institutions from abroad in quality assurance. The chosen institutions are respective faculties from Croatia, Austria, and Slovenia and from other European countries. The changes transferred from abroad refer to academic criteria for the appointment of new professors. One of the most important elements of the system implemented recently at the faculty of medicine are the questionnaires filled by the students at the end of each semester. Depending on the assessment dean of the faculty talks with professors and advise them on how to improve the level of teaching. The university wants to introduce that system of evaluation at all faculties³⁸⁸.

Bologna process: The University has appointed a commission for the implementation of the Bologna declaration both at the University and faculty levels. In this regard faculties defined the ECTS for each form of teaching. The diploma supplement is already ready for implementation. The University of Mostar has been very active within international relations. The university is a member of the EUA (European University Association), of the Danube Rectors' Conference (DRC) and it used to take part in the activities of the Croatian Rectors' Conference as well³⁸⁹.

1.1.8. University of Bihać (FBiH)³⁹⁰

Faculties: The Bio-Technical Faculty; Technical Faculty; Pedagogical Faculty; Economic Faculty; Law Faculty; Medical Health Care College; Islamic Pedagogic College.

Research Centres: Human Rights Conflict Prevention Centre

Student Union: Student Union of the University of Bihać³⁹¹.

Faculty-university relationship: The relationship between the faculties and central University bodies is determined by the Law on University of Bihać and by the University Regulations according to which the faculties, members to the University, have status as a legal body; their responsibilities are determined by this status.

Quality assurance system: A quality assurance system has not been developed at the university. Some faculties use questionnaires which are reviewed but they are not obligatory. Central quality assessment procedures do not exist at the university³⁹².

Bologna process: Most of the faculties are ready for introducing credits. The university has elaborated a diploma supplement but its introduction depends on passing the higher education legislation. The number of students going abroad is not considerable (few students, rare visits). The University makes efforts to stimulate them to learn foreign languages and participate in projects. The issue of financing visits abroad has not been resolved. There are no foreign students at the University.

1.2. Private Universities³⁹³

There are 22 private higher education institutions³⁹⁴. The law on higher education (passed in July 2007) treats private and public higher education institutions equally³⁹⁵. While Bosnia has

³⁸⁸ Op.cit.9.

³⁸⁹ Ibidem.

³⁹⁰ See at <<http://www.unbi.ba/>>.

³⁹¹ See at <<http://www.unbi.ba/>>.

³⁹² Op.cit.9.

³⁹³ The licenses for opening and operations of universities and faculties are issued by the competent ministries of education in the cantons in the FBiH as well as in the RS.

a handful of private universities, almost all higher education students attend the country's eight public institutions, according to official statistics.

In the Federation BiH: e.g. The American University in Bosnia and Herzegovina³⁹⁶ all graduates of this university shall receive a diploma from the State University of New York.

In Republika Srpska: there are several founded private universities on the territory of Republika Srpska, such as Slobomir P University³⁹⁷, founded by Mira and Slobodan Pavlović, known as the foremost Serbian benefactors.

According to the Government of the FBiH, nine private Colleges in the Middle Bosnia Canton do not meet the requirements for its establishment and its operation. The same appears to be a problem in the Herzegovina-Neretva Canton³⁹⁸. In the Posavina Canton, Zenica – Doboј Canton, Livno Canton and West-Herzegovina Canton, no private colleges are established.

The RS Ministry of Education and Culture announced in November 2007 its intention to carry out the inspection of all the work licenses issued to universities, faculties and colleges in RS, which was to be accomplished until the end of February 2008. The High Education Law of the RS contains all the conditions and procedures which are necessary for setting up university, faculty or college³⁹⁹.

1.3. Research and Development in Bosnia and Herzegovina

Scientific research has been carried out in academic laboratories in local sites of the universities, as well as in autonomous institutes for applied research e.g. in Zenica and Mostar for metallurgy and Tuzla for mining. The company Energoinvest, which produces machines in particular for the energy sector, has been heavily involved in research, with PhDs, MScs and many engineers and technicians working in its laboratories⁴⁰⁰. A great number of elites in universities and industrial laboratories emigrated to foreign countries. Only a limited number of laboratories have been able to maintain research activities of an international standard⁴⁰¹.

The eight universities have maintained research activities in social sciences (economics, sociology) and humanities (history, political science); as well as in engineering and physical science⁴⁰².

³⁹⁴ E.g. The American University in Bosnia and Herzegovina, University in Sarajevo (IUS), Sarajevo School of Science and Technology and College of Faculty of Public Administration Sarajevo; the similar exist in Banja Luka.

³⁹⁵ Under the new law, university education is organized according to the system of transferable points and has three levels: The undergraduate courses typically last for three to four years and bring 180 to 240 ECTS points. Upon the completion of the undergraduate courses, students are awarded the title of Bachelor of Arts or Science. Postgraduate courses, which last for two years, carry 120 ECTS points and award the degree of Master of Art or Science. PhD courses can be taken after completing a postgraduate university course – they typically last for three years, and the academic title of Doctor of Science or Doctor of Arts is awarded upon completion. The university can also offer postgraduate specialist courses which last for one to two years, by which one can acquire the title of a specialist in a certain specialist field such as medicine.

³⁹⁶ See at < <http://www.aubih.ba>>.

³⁹⁷ See at < <http://www.spu.ba/eng/index.php>>.

³⁹⁸ The establishment of the Management College in Mostar in September 2007, even though it has not been approved by the Ministry of Education of Herzegovina-Neretva Canton.

³⁹⁹ Have at least 50% of all the professors there with permanent full-time employment, have the premises required by the Law, provide one toilet facility per 50 students, have a classroom with at least 20 computers, to have one Internet facility for 300 students, have the library with at least 3 000 different volumes dealing with subjects from different fields of science.

⁴⁰⁰ Food and pharmaceutical industries were also able to develop their own research and development activities.

⁴⁰¹ The Institute of Agriculture in Banja Luka, the Institute of Genetic Engineering and Biotechnology in Sarajevo, and of the two Agro-Mediterranean Institutes in Mostar.

⁴⁰² UNESCO Office in Venice, Guidelines for a Science and Research Policy in Bosnia and Herzegovina No 2, 2006, 31.

Access to important research infrastructures such as libraries, both in RS and FBiH,⁴⁰³ which contain rare books and manuscripts is difficult. Access to the internet is very difficult due to bad telecommunication connections⁴⁰⁴. The academic network is not functioning.

Industrial Research has vanished. Two exceptions are the Aluminij Company in Mostar, and the Bosnalijek pharmaceutical company in Sarajevo. Most academic laboratories are in the bad condition⁴⁰⁵.

The Law on Science, the first draft was circulated at the beginning of 2005 and its drafting is under the responsibility of the BiH Ministry of Civil Affairs. Only the Sarajevo Canton and RS have passed legislation on the organization of scientific research⁴⁰⁶.

There is a total absence of valid statistics in BiH. Official statistics for the FBiH⁴⁰⁷ show that there were 2 125 teachers and advisers in the six universities in the Federation, among them 1 044 professors and 903 doctors) and 58 000 students.

The Science and Education or Science and Technology Ministries on the entity and cantonal levels have established research funds for supporting projects. Public funding of research activities (excluding salaries of university staff) amounts to approximately 8 million KM (4 million euros)⁴⁰⁸. The Ministry of Civil Affairs of Bosnia and Herzegovina has no funds to support research and development activities.

The funding devoted to research and development in BiH is very low, 1.5% of the GDP before the war versus around 0.05% presently⁴⁰⁹.

Cooperation between universities, research laboratories and occasionally between local firms and research institutes exists somewhat. Particularly the Chambers of Commerce are pleading for the development of cooperation between the academic community and its industrial partners.

1.4. Vocational Education (VET)

Experts from EC-TAER have indicated that 70 % of students going to secondary schools attend vocational schools. “Graduates are trained narrow, often occupationally specific specialization for which there is questionable labour market demand. The secondary system in BiH is, thus, out of alignment with the emerging market economy’s need for broad-based skills, labour flexibility and continuous learning⁴¹⁰.”

⁴⁰³ National Library of BiH, National and University Library of the Srpska Republic.

⁴⁰⁴ Figures for 2000: According to figures from the Academy of Sciences and Arts of BiH, the number of internet hosts is rather small in BiH (950 per million people with 30 PCs per 1000 people).

⁴⁰⁵ According to the Observatoire des Sciences et des Techniques (OST) in Paris the science indicators for BiH reveal that the evolution of scientific output during the period 1993-2001 has been positive, the absolute number of scientific papers published in international journal nevertheless remains weak (a total of 30 papers in 2001). It also appears that BiH has its strength in medicine (accounting for 40% of the papers published in international journals), engineering sciences (20%) and physics (18%).

⁴⁰⁶ Research and Development Strategy document. The Sarajevo canton established a research fund (1.5 million KM) to support research projects on the basis of an evaluation of experts under the responsibility of the Academy of Sciences and Arts of BiH. The Sarajevo Canton’s Ministry of Education and Science created a new department of informatics which gives access to an ensemble of 46 scientific journals through Science Direct. The RS Ministry of Science and Technology’ budget amounted in 2005, 3 million KM, with 80% dedicated to research and development activities.

⁴⁰⁷ Statistical data on economic and other trends, January 2005. The FBiH Ministry has established a fund (1.9 million KM) to support research projects; a call for tenders has been launched and the evaluation of proposals are under the responsibility of the Academy of Sciences and Arts of BiH.

⁴⁰⁸ UNESCO Office in Venice, Guidelines for a Science and Research Policy in Bosnia and Herzegovina No 2, 2006, 33.

⁴⁰⁹ Ibid, 51.

⁴¹⁰ World Bank Human Development Sector Unit, Europe and Central Asia Region, Project Appraisal Document on a Proposed Credit to BiH for an Educational Development Project, 19 April 2000, Report No: 20170 BiH, 5.

1.5. Life Long Learning

The International Conference entitled “Life-Long Learning and Adult Education-key factors for the economic and social recovery in South East Europe” was held in Sarajevo in September 2006⁴¹¹. The Declaration on Life-Long Learning was signed at the same conference held in Skopje in 2003. BiH authorities agreed to implement a Twinning Light Project for BiH with the overall objective to prepare BiH institutions for the EU Action Programme in the Field of LLL (2007-2013) and Youth in Action (2007-2013). The most recent initiative was the 7th Life Long Learning Festival that took place in 2006 in Sarajevo⁴¹². It is not that the life long learning never existed at the BiH universities. It has existed over the past 40 years and it was called permanent education⁴¹³. In March 2006 the “Strategic directions for development of adult education in Bosnia and Herzegovina” document was developed⁴¹⁴. This type of educational provision has not been systematically developed in BiH. If educational inclusion is to be achieved and the potential of learning fully realized, life-long learning needs to become an integral, and funded, part of the education system. Just 3.3% of young people aged 15-25 years who are neither pupils nor full-time students are included in some education or training programme and only 1.6% of people aged between 26-65 years. Persons above 65 years are not included in any form of education⁴¹⁵.

1.6. Co-ordination of the Research and Education Institutions

The Republic of Bosnia and Herzegovina (BiH) has a complex political structure on three levels: state, entity and canton. On the state level there is no single ministry dealing with education. The authority over education is given to the two entities: the Federation of Bosnia and Herzegovina (FBiH) and Republika Srpska (RS).

In RS a single ministry of education (and culture) manages the educational sector, including higher education. There are two universities: University of Banja Luka and East Sarajevo (decision-making power centered in Banja Luka.)⁴¹⁶

In the FBiH, the Federal Ministry of Education (science, culture and sport) has transferred the authority of education to the ten cantons, so that each canton has its own ministry of education, which is also in charge of Higher Education. Out of 10 only 5 cantons have universities and these are: Sarajevo, Tuzla, Bihać, Zenica and two Universities of Mostar (University “Džemal Bijedić” Mostar - East and Sveučilište Mostar -West). Most of the eight BiH universities (exception is Tuzla) are loose associations of autonomous faculties and other institutions (numbering 90 in all). The faculties are funded directly, rather than through the university.⁴¹⁷

These two entities have been organised in a different way according to the level of decentralisation (the Federation of Bosnia and Herzegovina, which is completely decentralised, and further subdivided into ten cantons, whereas the Republic of Srpska is somewhat more centralised and it is subdivided into 6 regions). In addition, after the process

⁴¹¹ Organized by the Ministry of Civil Affairs, Institute for International Cooperation of the German Union of Higher Public Schools (IIZ/DVV), regional office in Sofia and the Office in Sarajevo, and the OSCE Mission in BiH.

⁴¹² The event was organized by the NGO Amica EDUCA Tuzla.

⁴¹³ In the form of seminars, courses, political sessions, attestations. They only had appropriate certificates.

⁴¹⁴ Domestic and international experts supported by the OSCE Mission in BiH and the German Union of Higher Public Schools (IIZ DVV) developed the document. See in the BiH National Report 2005-2007, 18-19.

⁴¹⁵ Functional Review of the Education Sector in Bosnia and Herzegovina at <<http://www.europa.ba/files/docs/publications/en/FunctRew/education/eng0FinalReport.pdf>>.

⁴¹⁶ See at <<http://www.vladars.net/lt/min/mp.html>>.

⁴¹⁷ See at <http://www.fbihvlada.gov.ba/hrvatski/ministarstva/obrazovanje_nauka.php>.

of arbitration, the area of Brčko has been given a special status as a separate District of Brčko which belongs exclusively to Bosnia and Herzegovina as a State and not to its entities.

Higher education in the Federation of Bosnia and Herzegovina (FBiH) has been positioned at the cantonal level, whereas in Republic of Srpska (RS) it is placed at the entity level. At the level of FBiH there is the Ministry of Education and Science, but its responsibilities are not that big in comparison to the universities themselves, since their founder in its legal capacity happens to be the cantonal government, i.e. the Cantonal Assembly. In practice, this means that every canton has or is legally allowed to have its own Law on Higher Education. Furthermore, it means that Bosnia and Herzegovina can have a total of 14 laws on higher education (1 at the State level, 3 at the levels of entities and the District of Brčko, and the remaining 10 at the level of cantons within FBiH). This creates a specific kind of chaos in this area and more problems in recognition of school leaving certificates and diplomas.

In addition, no legislation or procedural mechanisms ensure the homogeneity of academic standards or allow the comparative assessment of the performance of academic institutions. Such a situation means that higher education in BiH faces unresolved issues of governance at the levels both of coordination and the management of institutions. According to the current laws and regulations, higher education institutions are financed by the ministries of the entity (in Republika Srpska) or the cantons (in the Federation BiH). All higher education activities are subject to entity (in RS)/cantonal (in FBiH) laws on higher education.

The role of the state-level Ministry of Civil Affairs is to coordinate these activities between the two entities as well as to submit reports to the Bologna Follow Up Group on developments related to the Bologna Process in BiH⁴¹⁸. Bosnia and Herzegovina signed Bologna in 2003. In early 2005, the Rector's Conference of BiH was formed. Further, there is the Higher Education Working Group or so called Bologna Committee for BiH. The BiH Team of Bologna Promoters has also been formed⁴¹⁹.

The University is run by a Rector and his closest aides and associates. There are three Vice/Pro-Rectors and a Secretary General. The University has a professional service, which does administrative type of work. The highest academic body of the University is the Senate (University Council). It is comprised of representatives from all the higher education institutions within the University (they are appointed from the ranks of Associate and Full Professors only), together with a representative of students, whose name is proposed by the Student Union of the University of Sarajevo. The Senate is supposed to secure the solving of all the issues related to a teaching process, academic and scientific work, and to provide for the quality of teaching and research process.

There are six groups of higher education institutions and scientific members (Teaching-Scientific Board) at the University. These groups happen to be organised according to areas of academic disciplines: Social Sciences, Medical Sciences, Humanities, Technical Sciences, Natural Sciences, Mathematics and Biotechnical Sciences, and the Arts. The groups set up their own "small" academic councils, which have the tasks similar to those of the University Senate itself. The primary reason for such an organisation is to provide for a more efficient working of the Senate. It also presupposes a "deeper" discussion on academic and teaching process issues in similar or related disciplines. The Rector and the University Council (Senate) govern the University. The Academic (Teaching-Scientific Board) Council is the highest executive body. There is a Vice-Rector in charge of scientific and research affairs, and a Vice-Rector in charge of educational affairs and a student Vice-Rector.

⁴¹⁸ The members of HEWG, and the representatives of the Ministry of Civil Affairs in BiH and the Council of Europe are the representatives of the Conference of Education Ministers in BiH, as well as BiH representatives in the Bologna Follow Up Group, BiH representatives in the Committee for Higher Education and Research at the Council of Europe.

⁴¹⁹ The members are the representatives of public universities and student organizations.

Faculties are run by Dean and his closest aides, Pro-Deans (the actual number of Pro-Deans has been defined by the Faculties' internal regulations), and the Secretary to the Faculty. Each Faculty has a small number of people who carry out administrative work at the Faculty. The highest academic body of the Faculty is All-Faculty Council (i.e. Academic and Scientific Council/Teaching Scientific Board). It is comprised of the professors, associates and student representatives. Their respective number is defined by the Faculty internal regulations. Faculties have been organised in a way that allows them to fulfil two principal functions – educational and academic and scientific research. They are structured as a classic matrix organisation. Institutes, departments, chairs, laboratories, who bring together persons from similar or related research areas in order to make their academic and scientific work more efficient, and the people more motivated, constitute a basis for setting up studies at undergraduate, specialist or postgraduate levels, respectively i.e. U DžB: a. University: University Council; Rector; Teaching-Scientific Board b. Faculty: Managing Board (Statute; Curricula; Finance); Supervisory Board (Analyses business reports); Dean and Teaching-Scientific Board.)

University administration is seen as a service with the specific task of facilitating the teaching, learning and research work undertaken by the students and staff, within the framework of overall strategies and policies established by the university leadership and within the legal framework established by the government. (i.e. U SA: The Sarajevo Canton appoints a Board of Directors/Trustees of seven to nine members which govern the University. The same structure applies for each individual higher educational institution within the University. The Sarajevo Canton also appoints a Supervising Board of Directors which controls the University financial transactions. It consist of three members.)

1.7. Involvement in Regional and International Research and Teaching Programmes

Relations between university management and faculties are a weak point of the whole organization. As the faculties are legally not integrated into one entity the relations are rather loose and limited to an advisory role of the central university bodies. Faculties with stronger financial position are not interested in integration. This concerns particularly faculties of technology and law. During the latest period however, more and more faculty staff members and even managers of particular faculties understand that without integration the university will not have a chance to be included in European Higher Education Area i.e. the Tempus cooperation⁴²⁰.

1.8. Administrative Structures

In the RS, the Ministry of Education and Culture is responsible for monitoring, planning and executing policy. In the FBiH this role belongs to the cantonal ministries of education and the Federal Ministry of Education and Science at the entity level. The Federal Ministry of Education and Science acts mainly as a coordinating body for education policy among the cantonal institutions.

The text of the state Law on Higher Education, Part III – Institutions in the Area of Higher Education, provides that:

- “- The Ministry of Civil Affairs of BiH should be responsible for implementation of the Law on Higher Education and for coordination and development of the higher education in BiH, upon consultations with other competent ministries;
- An agreement should be reached among the universities to establish the Rectors' Conference of BiH. The Rectors' Conference establishes and represents the common interests of the

⁴²⁰ There are also other internationally funded projects as WUS, SUS, and NIP FP6.

universities in BiH, and establishes cooperation with the institutions in the area of education in BiH;

- The Center for Information and Document Recognition (CIP) should be established as an autonomous administrative organization in charge of information and recognition affairs in the area of higher education, under the Convention on Diploma Recognition in Higher Education (the Lisbon Convention);
- The Agency for Development of Higher Education and Quality Assurance should be established as an autonomous administrative organization in charge of setting the criteria for formation, merging and closing of higher education institutions, accreditation and licensing of higher education institutions, the format and general contents of diplomas and diploma supplement, and the quality system⁴²¹.

1.9. Development of the Research Quota

Activities are also underway for the beginning of functioning of the Scientific and Technological Park (STP), which could commercialize the scientific and expert results of the Metallurgy Institute in Zenica. In RS the Public-Private Sector Partnership project is being prepared⁴²². The scientific research to its modest extent exists mainly at universities. Scientific research has been encouraged through the project “National Contact Point for Framework Projects in BiH-NCP FP BiH”⁴²³. It promotes BiH researchers and research organizations in the FP7. The EU FP and Project “South-East Europe Research and Education Network SEEREN2”, project no. FP6 – 026748, is a project the goal of which is focused on development of scientific infrastructure⁴²⁴. The project will consolidate the network into the single European Research Area (ERA). There is also a goal to revitalize the national academic and research network BIHARNET on the DF optical infrastructure.

The Conference entitled “Science, Research and Competitiveness for the Future“ was held in Tuzla in July 2002. The representatives of all BiH universities, BiH Academy of Science and the competent ministries adopted the Declaration on the Position of Science in BiH which asked for the passing of the Framework Law on Scientific Research Activity at the BiH level, called for allocation of 2% of the GDP for science, for establishment of Young Researcher project, for intensification of the scientific research projects at universities, and research and development projects within businesses⁴²⁵. According to the BiH National Report, some 75-80% of doctoral candidates continue their research careers. The majority of them are found at the universities.

2. THE CONSTITUTIONAL FRAMEWORK

BiH has signed many international treaties which include the right to education. These include the International Covenant on Economic, Social and Cultural Rights, the Convention on the Rights of the Child, and the European Convention for the Protection of Human Rights and

⁴²¹ Bosnia and Herzegovina, National Report on Higher Education 2005-2007 at <<http://www.see-science.eu>>.

⁴²² BiH National Report Bologna 2005-2007.

⁴²³ The project is implemented by the SUS BiH and has been supported by the Government of the Republic of Austria (ADA), Open Society Fund of BiH, and the Ministry of Civil Affairs of BiH.

⁴²⁴ Implementation of the GEANT network for South East Europe means access to leading technologies and services available to the overall research and educational community and all scientific sectors, without discrimination between the users and stakeholders, aimed at the future reduction of the so called digital divide.

⁴²⁵ The Government of the Sarajevo Canton has also initiated a project for the development and establishment of an on-line registry of researchers and scientific research institutions, that grew to become a project at the FBiH level. In the RS, activities have also been undertaken to develop and establish a database on scientific workers and scientific institutions.

Fundamental Freedoms. Finally, the State of BiH has undertaken specific obligations in the field of higher education, including through participation in the Bologna Process and through ratification of the Lisbon Recognition Convention. These shall take priority over all other laws. All persons within the territory of Bosnia and Herzegovina shall enjoy human rights and fundamental freedoms, including the right to education.

The new higher education Framework Law, drafted with the support of the Council of Europe, should have been passed by the State Assembly on 29 July 2004, but the BiH House of Peoples turned down the Framework Law⁴²⁶. At its session held on early June 2006, by a majority of votes, the Council of Ministers of BiH supported the Draft Law on Higher Education in BiH and forwarded it to the Parliamentary Assembly of BiH for further procedure. The members of the Constitutional Law Committee of the House of Representatives of the Parliamentary Assembly of BiH could not agree that the state of Bosnia and Herzegovina should have competency in the area of accreditation and licensing of higher education institutions, and sent a negative opinion on the Draft Law to the House of Representatives of the Parliamentary Assembly of BiH, which practically also meant that the Law was again rejected.

The BiH Parliament's House of Representatives on June 13th endorsed a state-level higher-education law, one of the key reform bills outlined in the country's European Partnership commitments. The BiH House of Peoples adopted the Law on Higher Education on 30 July 2007. The law entered into force in August 2007⁴²⁷.

Given the political inhibition for the state to establish a system of higher education recognized in Europe on the one hand, and the goals set forth that need to be met by 2010 on the other hand, the universities in BiH have found themselves in the situation that they can no longer wait for adoption of the Law at the state level, and they took some activities on their own initiative on the path of reforms pursuant to the Bologna Principles. Such a move by the universities had its reflection on the legislations of the entities and cantons, in terms of changing the existing or the adoption of new laws on higher education, which according to the Constitution of BiH is in their competency after all.

On 19 July 2006, the National Assembly of the Republika Srpska adopted the new Law on Higher Education in RS⁴²⁸. Separate regulations govern the Police Academy of the Federal Ministry of Interior, the Higher Schools of the Interior of the RS, and the Police Academy of the State Border Service.

On the other hand, eight of the ten cantons in the Federation of Bosnia and Herzegovina have adopted their respective laws on higher education. The laws have been adopted i.e. in the Tuzla Canton, Sarajevo Canton, Zenica-Doboj Canton, Bosnian Podrinje Canton, Una-Sana Canton, West Herzegovina Canton, Posavina Canton.

The Brčko District, as a separate organizational unit in BiH, has its own laws covering each of the four levels of education. The state Law on Higher Education provides for institutional

⁴²⁶ Unfortunately, at the House of Peoples, the representatives of Croat caucus put forth an argument of a breach of vital national interests and the Law was sent to the Constitutional Court of Bosnia and Herzegovina, which was competent to determine the future procedure of adoption of the Framework Law on Higher Education. In its decision, the Constitutional Court ruled that the issue of education is a matter of vital national interest of all the three peoples and that future procedure of adoption requires a majority of votes in each caucus in the House of Peoples of the Parliamentary Assembly. After that, the Law failed to win the necessary majority at the House of Peoples (representatives of the Croat caucus voted against). It is important to note that the question of vital national interests was raised in relation to the use of language of the constituent peoples, approval of university statutes, a requirement to be decided by consensus, etc. There were no issues raised in relation to the Bologna Process.

⁴²⁷ Dall, Elke, BiH Higher Education Law, 5 December 2007 at <<http://www.see-science.eu/news/2568.html>>.

⁴²⁸ The law envisages the formation of a Rector's Conference of RS, Center for Information and Recognition, and Council for Quality Assurance and Development of Higher Education.

autonomy that the universities in BiH have never had so far⁴²⁹. The University bodies envisaged are the steering board, the senate and the rector.

Article 156 of the Law on Higher Education of the RS envisages the integration of the higher education institutions in the RS (the University of Banja Luka, and the University of East Sarajevo) by no later than by 1 October 2007.

Article 10 of the Law on Higher Education in BiH states that the higher education institutions in BiH are the universities and higher schools.

3. THE UNIVERSITIES⁴³⁰

3.1. Legal Basis and Establishment

The **U SA** was established in 1949. It exists as a loose association of a large number of higher education institutions and with rather specific legal stipulations for each of its members. **U BA** was established in **1975**. **U ES** was re-established in **1992** as the legal successor of the University of Sarajevo (1949). The **U DŽB** was established in 1977 (Rebirth 1993). The **U Z** was founded in **2000**. **U B and S M** in 1990's.

Higher Education in BiH is highly limited by the legal situation. The University of Tuzla is the only exception to this in that it benefits from more modern and progressive cantonal legislation providing greater respect for the autonomy of the university and allowing for integrated institutions.

3.2. Funding of Universities

The education sector is regularly funded from the budgets of various authority levels – the State, the Entities, the Cantons, Brčko District and municipalities. There are no significant funds assigned to support the educational sector at the State level.

Federation BiH: Each Canton has established a Ministry of Education (MoE) that is responsible for the budget proposal and allocation of financial resources, which is a subject of an agreement with Cantonal Ministry of Finance. According to the Law, financing of the sector is even further decentralized to the level of municipalities.

Republika Srpska: The education sector in RS is under the authority of a single Ministry of Education with a clear organizational structure and centralistic attitude towards handling the matters in the sector.

Brčko District (BD): Higher educational institutions on the territory of BD are the responsibility of the MoE RS. Financial flows are highly centralized and they are under the supervision of the Department for Budget and Finance. The Department for Budget and Finance must approve budget proposals and the allocation of financial resources in education with additional the consent of the BD Mayor.

The education sector in BiH is mainly financed from public sources - out of the budget of authorities and in minor proportion from private sources – out of budgets.

The existing model of higher education financing is not transparent. The MoE covers the full expenditure of salaries and allowances, or the larger part of it and a part of the material expenditures.

⁴²⁹ According to article 19 of the Law on Higher Education the legal entity status and the institutional autonomy understand that each licensed higher education institution has full legal entity status. Any funds received shall belong to the higher education institution. These principles are also contained in the Law on Higher Education of RS and of the West Herzegovina canton.

⁴³⁰ See Section 1 for the more detailed overlook.

The private sources are: full-time students' fees, part-time students' fees, fees for students of parallel studies – studies entailing the same right as regular studies, but where the students finance their own education themselves, fees paid by foreign students, post-graduate study fees, exam fees, revenue from scientific and research work.

According to the Ministry of Civil Affairs between 4 and 5% of the GDP is spent on the overall education in BiH.

Neither Entity allocates sufficient funds for education. The funds are spent primarily on salaries and compensations of people employed in the education sector and very little is channelled into current operating costs and maintenance; what is spent under these headings often goes to pay for the cost of public utilities. The shortage of funds has led to the deterioration of school buildings. Capital investments are funded mainly from donations and grants. The sustainability of the present funding system is jeopardized by the rapidly falling budget revenues of the Entities and declining international aid. Problems with educational financing are compounded by the fact that until recently the entity budgets, as well as most cantonal budgets, did not allocate funding for science.

There is also financing from the so-called Funds for the Higher Education.

3.3. Research

Since the war in Bosnia and Herzegovina (1992 – 95), during which most of the research infrastructure was destroyed (or became obsolete), scientific research activities have been significantly reduced and universities have become the main places where research is still conducted. Namely, during the war or right after it, the research and development centres of large companies either stopped operating or were transformed into service centres. Recently, in the past one or two years, there has been a gradual revival of the economy and consequently a return of researchers from the domain of commerce and industry onto the research scene. However, their percentage share in the total activities in science in Bosnia and Herzegovina is still significantly lesser than that of the university research sector. Alongside teaching and learning, scientific research is the second main branch of activity which can be expected at a university. Research activity at different universities will differ greatly, depending on the profile and strengths of the institution, the social and economic environment, the range of partners, etc. Of course, the lack of funds for research is a major cause of this low level of activity, but cannot explain the current situation entirely. Another cause is probably the preference for teaching activity, since the staff is paid according to the number of teaching hours they undertake, hence the very widespread holding of multiple teaching posts by many individuals. There is also the lack of a clear and widely known research strategy. Research is not given sufficient priority at Faculty and Department levels, and individual scientists are not encouraged to contribute to these institutional goals. These choices should therefore also be of relevance and use to external partners, and thus have the possibility of obtaining some form of support.

(i.e. U SA: It is necessary to point out that the University has not received from the State any considerable funds for scientific and research activities in the course of at least last ten years. There have been some efforts and new developments to support the research activities by the Sarajevo Canton government, but it is just a drop in the bucket. It should be emphasised that the research equipment is outdated, or was totally destroyed in the course of war events and post-war situations, which further diminishes possibilities for research).

There are no effective university-wide research strategies. Only the University of Tuzla seems so far to have been able to create a university-wide research fund for encouraging individual researchers.

The above-mentioned (1.1.) various Institutes for Research seem to be independent of universities, and as such can not have scientific, personnel and funding coherence.

BiH can also apply for considerable research funds, such as FP6, etc. However, it is obvious that a considerable number of professors and associates are not in a position to use the offered possibilities due to the low competence of English, a poor use of information technology and a lack of project management skills.

3.4. Teaching

Traditional discipline-based and discipline-oriented processes still largely exist. Interdisciplinary cooperation in teaching and learning is very weak. This de facto situation is compounded by a traditional pedagogical approach based on the learning and memorisation of facts. While disciplines and facts are obviously important, this approach will not lead to the necessary competences that are now so necessary for modern academic life or to the skills-oriented outcomes which are so desirable for modern economies. However, the desire, intention of introducing a different learning environment for students, including elective courses, project and field work, and the development of academic competencies of long-term value in the labour market are new approaches which are central to the implementation of the Bologna Process. Some faculties overemphasise the historical approach and the accumulation of stored “archival” knowledge. Some lectures are delivered in the very traditional manner *ex cathedra*, which belittles other interactive methods in the teaching process, where research and joint activities should have a more dominant place. Students are not frequently included into projects and research activities. Evaluation criteria, which could measure the accomplishments, are vague and not standardised. There are no mechanisms for external evaluation. The financial and other means for the introduction of new teaching and other technologies into the teaching process are either meagre or completely lacking. Teaching activity across the BiH is in a critical position.

3.4.1. Curricular Models for Undergraduate and Postgraduate Studies

At the University of Sarajevo courses of instruction and a scientific and academic research process have been organised on the following levels:

1. Undergraduate studies, after whose completion students are awarded a Bachelor's degree diploma (BA or B.Sc.), which have been only partly financed by the State. Undergraduate studies last, at the faculties of social sciences and humanities, four /4/ years, at the faculties of technical sciences and academies five /5/ years, and at the Faculty of Medicine six /6/ years.
2. Postgraduate studies, organised either by the University or by faculties themselves, last four /4/ semesters. In the course of the fourth semester students prepare their MA theses and upon their defence they are awarded the academic degree and MA diploma. The students themselves cover the majority of the study fees and costs for this level of education.
3. Doctorates, which imply original research work and a public defence of a doctoral dissertation. Doctoral studies have not been envisaged. Based on the successfully defended doctoral dissertation, the candidates acquire the academic degree of Ph.D. Doctoral candidates cover themselves the overall costs of their research work and the writing of a dissertation.
4. Specialist studies, which usually last two to three (2-3) semesters and are considered to be narrow, expertise-oriented and do not lead to an academic degree. Specialist studies should correspond to the needs of certain experts in diverse areas and disciplines in relevant work areas and communities. These candidates also cover the costs of their specialist studies.

This USA model also applies to other universities.

3.4.2. The Implementation of the Bologna Process

BiH formally joined the Bologna Process in 2003. Considerable progress in the implementation of Bologna provisions can be noticed at the universities. The process is under continuous development and much has been changed since last year. All universities have developed ECTS system, some of them have the system working, and others are ready for its implementation. Of course there are faculties which should speed up the process and hopefully it will be all ready with new legislation. The universities are working on diploma supplement. Some have already patterns ready for implementation but they cannot introduce them until new legislation is accepted. The system of studies is based on existing university legislation, mostly consisting of two or three stages 4+1+3. Some universities have prepared proposals for the implementation of a 3+2 study model.

3.4.3. Life-long Learning and Courses for Vocational Training⁴³¹

The past BiH experience has not known the notion of LLL. Education used to be finalized by ending the undergraduate or possibly postgraduate studies. Now LLL is one of Bologna tools which should be implemented.

3.4.4. ICT Education in Universities

At electrical engineering faculties there are Computer Science departments. Also at Economics and Faculties of Science, departments of Mathematics there are ICT oriented studies. At the Economics faculty there is centre for e-learning. Generally every student has ICT as separate course for one or two semesters where basic knowledge about ICT, the architecture of the computer, hardware and software are studied.

3.4.5. Teaching Staff

A large proportion of staff is already approaching the official retirement age and young staff have not been recruited to replace them. The age of professors and associates is far from being satisfactory. Another problem is an insufficient number of teachers, particularly from a middle generation, as well as the insufficient number of teaching assistants in comparison to the overall number of students. The main reason for such a situation is the impossibility of both the University and Faculties to decide autonomously about the recruitment of new staff. The other reason lies in a lack of motivation among the young persons to work at University due to low salaries and the impossibility of conducting academic and scientific research there, which happens to be one of prerequisites for climbing the academic ranks into higher positions. The majority of the universities do not have enough teachers and they depend on the teachers from other universities and countries, namely Serbia and Montenegro and Croatia. There are no unified curriculum and teaching methods for the country. Most universities use either Croatian or Serbian models.

3.5. Effectiveness

More specifically, these include questions regarding the suitability of the methods of testing: the tradition of oral examinations, without written records being kept of questions asked or students' replies, leaves little scope for transparency and is certainly open to abuse. Moreover, it appears that students were often assessed both in writing and then orally, with the link

⁴³¹ See Section 1.5.

between these two types of assessment unclear and varying from case to case. Furthermore, reports written by students on projects and practical work were not taken into account in the assessment procedures. The students had been examined on issues which were not covered in the programme, or which were of no relevance to the main points of the programme.

There are entrance exams for all universities (the contents of the exams depend on the faculties). In contrast to many other countries in the region, BiH does not base university admissions upon centralized entrance examinations. Decisions about university admissions are made based on two criteria:

1. students' secondary school record
2. and the results of university-specific written entrance examination.

Entrance examinations usually test knowledge in academic subjects important for the chosen study program. The tests are designed by university faculty members based on textbooks used in secondary schools. Students can also get additional points for winning one of the first three places in Olympiads (mathematics, physics, democracy, etc.), and for being awarded the title of best student of their class.

The number of university places is limited; in general, students with the most points get admitted. There are usually two admission dates, in July and September. The more prestigious departments and universities admit the planned number of students in the first round and do not invite applications for the second round of admission.

The pedagogic and academic sense of some teachers is questionable. They are selected by the Senate (it forms a commission which then decide jointly who will be awarded with the applied position) after the public tender is published in local media. The actual procedure is explained thoroughly in each university's statute or faculty internal regulation.

There is a very low number of Master students at each University and an even lower number of PhD students. Given the size of many of the BiH universities, these figures are very low to ensure continuity in academic staff numbers for the years to come. It seems that the post-graduate degrees at the BiH universities are more expensive than the highly regarded European and US universities.

3.6. Financing

Subsequently, the financing of the universities is not a country-wide issue. The central university leadership usually has little legal authority or power over resources. Each faculty manages its own finances, which prohibits university-based planning and management, and weakens the external relations of the institution.

The education sector is regularly funded from the budgets of various authority levels – the State, the Entities, the Cantons, Brčko District and municipalities. There are no significant funds assigned to support the educational sector at the State level.

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The private sources are: full-time students' fees, part-time students' fees, fees for students of parallel studies – studies entailing the same right as regular studies, but where the students finance their own education themselves, fees paid by the foreign students, post-graduate studies fees, exam fees, revenues from scientific and research work.

Sarajevo Canton finances the University of Sarajevo. The Canton provides an average of 60% of budget funds, whereas the so-called independent income constitutes about 40% of the financing of the University activities, or those of the Faculties, for that matter.

Regarding the University of Džemal Bijedić, the Government funds 40%. 60% are non-governmental funds provided by the University and faculties. Non-governmental funds include: student entrance fees and other fees that students pay for their education; means made by the University and faculties through various grants, donations from the Federal Ministry of Education, some cantons and companies (about 5% of total budget); profit from the services that the University offers on the market (about 3% of total budget). But these are not significant and stable incomes.

3.7. International Co-operation

Since Bosnia and Herzegovina has not yet implemented the main elements of the Bologna Process, i.e. it has not harmonised its study programmes with those of other European universities (these activities are underway), has not implemented the ECTS, has not completed the formation of CIRQA (which is the ENIC/NARIC for Bosnia and Herzegovina, necessary for the activities of diploma recognition), the mobility of students in both directions is not adequately organised and is generally negligible. In addition to the discord between the Bosnian-Herzegovina higher education system and the Bologna guidelines and the discord of mobility procedures, another obstacle to more intensive student mobility is the absolute absence of any financial support from the state for effecting mobility. And of course, the third large problem in this sense is visa regulations, i.e. complicated and extensive procedures for acquiring visas. The mobility of students is therefore mostly one-way and irreversible – it leads to what is called "brain-drain". Namely, significant numbers of Bosnian-Herzegovina students leave to study abroad, in other European countries (especially Austria) and a significant percentage of them do not return to Bosnia and Herzegovina. There is no system of teacher mobility - very limited mobility does exist, but mainly as a result of individual efforts on the part of teachers to secure grants through international projects. Our teachers visit foreign universities, but mainly as guest researchers -- very rarely as guest lecturers. In most European countries, they cannot survive from their domestic paychecks, nor are they able to "transfer their health insurance to foreign countries". The visa regulations of most European countries for our country are another significant obstacle also in the case of teacher mobility. The participation of BiH in the TEMPUS programme has also initiated teacher mobility. Most of the teacher mobility was related to training in content, structure and methodology of teaching in certain areas. In addition to this, several TEMPUS projects resulted in joint degree programmes, which lead to exchanges of teachers to and from BiH. These joint degrees have been developed at the level of master's studies and are recognised by BiH and EU participating institutions. Joint degrees are completed by a single diploma on behalf of all of the participating institutions. The recent history of Bosnia-Herzegovina is certainly also a constraint under which the universities have been operating. Previous networks at all levels

had broken down, and the university had become rather isolated in terms of international academic exchange and exposure.

3.8. Trans-disciplinarity

The Sarajevo University currently offers three inter-disciplinary postgraduate studies. The courses of instruction are carried out in English: “Democracy and Human Rights”, with the University of Bologna (Italy) as a partner institution; “European Studies”, with the University of Bologna (Italy) as a partner institution; “State Management and Humanitarian Organisations”, with the University “La Sapienza” from Rome (Italy) as a partner institution.

3.9. Public-private-partnership Models for Research and Teaching

Given that universities do not exist in isolation, but are firmly anchored in a regional environment which itself is going through an economic and social transition process, it is also important to assess the needs of society and of the students in developing these new teaching and learning structures. Little work appears to have been done in this respect, neither at the central university nor at the decentralised faculty level. It would certainly be useful to have more structured possibilities for dialogue with stakeholders and students regarding their needs and concerns. There is overall insufficient communication with local authorities, economy, and labour market; there is no feedback on graduated students. Regarding relations between the university and industry this issue is not developed in a sufficient degree. The participation of industry representatives in university steering bodies is generally not accepted. The industry cannot influence the development of curricula and study programmes according to the market needs. Some faculties develop cooperations with the industry. This concerns predominantly faculties of technology. They offer consulting services and organize technology transfer centres.

3.10. The Role-model for a Scientist

It is not easy to find a role model for a scientist in the current system, in which legal authority is placed in the individual university faculties, rather than in the university itself, and in which professors enjoy virtual autonomy. This perpetuates a system that lacks accountability and efficiency; it must be reformed.

3.11. Inter-ethnic Co-operation

Most, if not all universities are more ethnically homogenous than before, and this can mainly be blamed on a general population displacement and to a tradition of attending a local university. There is also a trend to increase political control over the universities through Steering Boards of Canton in FBiH and a Higher Education Council in the RS. This obviously contradicts the Bologna Process. Point 25 (the social dimension) of the BiH National Report 2005-2007 states: Article 7, of the text of the Law on Higher Education in BiH, as well as in the relevant laws at the entity and cantonal levels, states: “Access to higher education in BiH shall not be restricted, directly or indirectly, on any actual or assumed basis, such as sex, race, sexual orientation, physical or other disability, marital status, skin color, language, religious affiliation, political or other opinion, national, ethnic or social origin, affiliation with an ethnic community, property, birth, age, or some other status.” The Decision of the Council of Ministers of BiH formed the Board for the Romas, who constitute the largest ethnic minority in BiH, and which has been working since mid-2002 with the Council of Ministers of BiH. The Group on Educational Needs of the Roma and Other Ethnic Minorities has developed an

Action Plan on Educational Needs of the Roma and Other Ethnic Minorities, and this plan was adopted by the entity and cantonal ministries of education in mid-February 2004. The educational authorities of BiH have, among other things, committed to develop a flexible implementation plan to be applicable on the whole territory of BiH for the inclusion of all children coming from ethnic minorities (in particular the Romas) into the educational system.

3.12. Trends in the Education Sector

The universities are subjected to very local political forces and demands which absolutely do not correspond to the universities' own needs and strategies and the long-term interests of students. These false co-ordination steps in the long run may damage both the university and the local/regional community. The problems with tertiary education started in the 1980's when allocations for education were cut back. This trend continued and even worsened during the war. The conditions for teaching classes are still far behind western European standards. Other problems include dated curricula, a large number of universities that do not have a sufficient number of qualified faculty members or the appropriate resources; further, universities are lacking a developed in-country network and are not connected to other universities abroad.

4. NOT UNIVERSITY RELATED RESEARCH INSTITUTIONS

There are Academies of Sciences and Art, ANUBiH in FBiH and ACSA RS under the RS Ministry of Research and Technology. They are mostly financed through entity governments. Other non-university related research institutions are the RS Chamber of Commerce; FBiH Chamber of Commerce; BiH Chamber of Commerce.

5. THE NOT UNIVERSITY RELATED EDUCATION SECTOR

Teacher education: primary teachers (kindergarten through fourth grade) were traditionally trained in two-year post-secondary Pedagogical Academies. The government has recently published a decree stipulating that Secondary Teacher Training Schools should also train primary-school teachers (grades 1 to 4). Teachers for upper grades in elementary schools will be trained in expanded four-year programmes at the Educational Academies. The Pedagogical Academies have been replaced by a four-year teacher training college in Bijeljina. Subject teachers for grades 5-8 hold university degrees with additional training provided by the Faculty of Philosophy in Banja Luka or Belgrade. Secondary teachers are trained at Secondary-teacher Academies. The number of teachers available in Bosnia and Herzegovina has dropped dramatically since the war began. A World Bank study indicates that about 8 000 teachers lack formal qualifications, while 4 000 teachers are abroad and could potentially resume their duties. Secondary school teachers hold university degrees with additional pedagogical training provided by the Faculty of Philosophy in Banja Luka or Belgrade.

Non-traditional studies: distance higher education-Radio Zid Sarajevo has embarked on a youth radio programme with UNICEF aid. It wishes to expand its work in distance education programmes. The SOROŠ Foundation, the Free University of Amsterdam and World University Service are setting up Internet equipment in order to improve the exchange of programmes and academic staff between Bosnian and foreign universities. Other forms of non-formal higher education-Workers'/People's Universities (Radnički/Narodni Univerziteti) offer a great variety of courses lasting from two weeks to two years leading to a particular vocational qualification.

6. EUROPEAN HIGHER EDUCATION AREA

The Ministry of Civil Affairs of Bosnia and Herzegovina, as the State Ministry responsible for higher education, has been actively involved in the promotion of the European Higher Education Area in Bosnia and Herzegovina. Immediately after Bosnia and Herzegovina joined the Bologna process in September 2003, a handbook was prepared by SUS BiH (World University Centre in BiH) and SRCe (Students IT Centre). It includes a short introduction and history of the Bologna Process, all the major documents and declarations relevant for the EHEA, and a message from SUS BiH and each of the Rectors regarding the process and the future of BiH within it.

Research Project UnivSOE

"Institutions of Tertiary Education in Central and South East Europe: Developments, Structures and Perspectives of these Institutions for their Integration into the European Higher Education and Research Area"

Country Report: Bulgaria

Bozhana Stoeva

1. RESEARCH AND TEACHING INSTITUTIONS	249
1.1. Introduction	249
1.2. Participation in Regional and International Research and Teaching Programs	249
1.3. Administrative Structures	250
1.4. Institutions for the Financial Management and Fostering of Research.....	250
1.5. The Development of the Research Quota	252
2. THE CONSTITUTIONAL AND LEGAL FRAMEWORK.....	253
3. THE UNIVERSITIES	254
3.1. Legal Basis	254
3.2. Model of Organization	254
3.3. Functions of Universities	255
3.4. Autonomy	255
3.5. University Bodies.....	257
3.6. Research	261
3.7. Teaching	261
<i>3.7.1. Curricular Models for Undergraduate and Postgraduate Studies</i>	<i>261</i>
<i>3.7.2. Implementation of the Bologna Process</i>	<i>262</i>
<i>3.7.3. Courses for Life Long Learning and Vocational Training</i>	<i>263</i>
3.8. Composition of Faculty Staff.....	263
3.9. Quality Assessment and Quality Assurance	263
3.10. Financing and Efficiency	264
3.11. International Cooperation	268
<i>3.11.1. Foreign Students</i>	<i>268</i>
<i>3.11.2. Integration into International Networks and Cooperation Agreements</i>	<i>269</i>
3.12. Transdisciplinarity	270
3.13. Role-model for a Scientist	270
3.14. Inter-ethnic Co-operation	270
3.15. Trends and Reforms	270
3.16. Expectations from EU-Member States	271
4. NOT UNIVERSITY RELATED RESEARCH INSTITUTIONS	271
4.1. Bulgarian Academy of Sciences	271
<i>4.1.1. Structure</i>	<i>271</i>
<i>4.1.2. Self-Perception of the Academy</i>	<i>273</i>
4.2. Other Not University related Research Institutions	275
4.3. Integration into the European Research Area	275
5. THE NOT UNIVERSITY RELATED EDUCATION SECTOR	275
6. INTEGRATION INTO THE EUROPEAN UNIVERSITY NETWORK.....	275

1. RESEARCH AND TEACHING INSTITUTIONS

1.1. Introduction

There are several main institutions for teaching and research on a tertiary educational level in Bulgaria:

- Universities, which offer three-level degree programs: bachelor, master and PhD, and different research activities within their departments, programs and priorities.
- Bulgarian Academy of Science, which offers PhD degree programs and realizes different research activities within national and international projects.
- Specialized tertiary high schools that offer some or all degree programs and realize research in the specified area of their work.
- International universities and international high schools.

The Bulgarian institutions that coordinate all universities and teaching institutions on a tertiary level are the Ministry of Education and Science and the National Evaluation and Accreditation Agency to the Ministry of Councils.

1.2. Participation in Regional and International Research and Teaching Programs

All Bulgarian institutions for teaching and research on a tertiary level are actively involved in regional and international programs. The European programs are among their main priorities and almost all of them work on different projects within all European programs, among them the Fifth and the Sixth Framework Programmes, ERASMUS, Socrates, Leonardo, EURECA, CORDIS, etc. The NATO projects must be mentioned too.

There are two methods of participation. These institutions participate in various projects in partnership with other European institutions, universities, research organizations or international partners. The other way is by competition. The Ministry of Education and Science announce an open competition for a concrete project for research and development, according to the national and European priorities and within the resources of the National Fund for Scientific Research.

A National Centre for Academic acknowledgement and mobility has been created as part of the EU integration Department of the Ministry of Education and Science. Its main goals are:

- To facilitate all practical activities related to the acknowledgement of diplomas and educational qualifications.
- To participate in international networks for exchange of information on the problems of education systems and its development.
- To assist academic recognition and academic exchange within international programs.
- To provide information to the Bulgarian educational institutions, to specialize in the field of education and citizens about foreign education systems, international agreements on education, academic acknowledgement and academic mobility.
- To facilitate the participation of national educational institutions in international programs.

The Centre for Academic acknowledgement and mobility facilitates academic mobility through the development of common criteria and procedures for the recognition of

educational qualifications, and through information regarding different education systems. In this context, the Centre:

- Carries out at national level the fulfilment of the responsibilities of Bulgaria within different framework agreements.
- Conducts the practical implementation of the academic acknowledgement of the international network decisions ENIC/NARIC.
- Participates in activities related to the modernization of the legislative framework for the recognition of educational documents and its implementation according to the reforms in the Bulgarian educational system and EU law.
- Facilitates the recognition of diplomas and qualification certificates.
- Offers current information on the Bulgarian education system to partners from the European information networks in the field of education.
- Participates in publications, comparative surveys and books of the Council of Europe, the European Union and other organizations with materials related to different aspects of the Bulgarian education system.
- Assists Bulgarian tertiary schools and universities in their participation and involvement in international educational programs through information on foreign education systems.

1.3. Administrative Structures

The competence and responsibility for education in Bulgaria are allocated to the Ministry of Education and Science.

The Scientific Research Promotion Act, adopted in 2003, envisages the creation of a National Scientific Research Fund for the Ministry of Education and Science. Its main priority is to enhance national research, facilitating the work of the Minister of Education and Science. Article 10 determines the structures of this body. The Council includes the Minister of Education and Science and nineteen (19) other members, among them must be one representative of the Ministry of Economy, and one of the Ministry of Finance, seven representatives of the universities and specialized tertiary schools nominated by the Council of Rectors, four representatives of the Steering Committee of the Bulgarian Academy of Science, two representatives of the Ministry of Agriculture and Forests, a representative of the Executive Council of the Fund for National Scientific Research and two delegated representatives of the organizations of employers, appointed by an agreement between their presidents, and one representative of the non-governmental organizations of scientists, appointed by their presidents. The Minister of Education and Science is the President of the Council, and the administration of the Ministry of Education and Science services the National Council for Scientific Research.

1.4. Institutions for the Financial Management and Fostering of Research

The Scientific Research Fund is a specialized institution for financial management and the fostering of research and innovation in Bulgaria. The Scientific Research Promotion Act stipulates its creation, structure, responsibilities, functions and activities. It is established as a legal entity with a registered office in Sofia.

The Scientific Research Fund aims at enhancing and encouraging scientific research in Bulgaria, in compliance with National Plan for Economic Development, the national pre-accession and accession programs and medium-term strategies, and the ratified framework

programs with EU priorities. The Fund is a secondary administrator of budget credits reporting to the Minister of Education and Science. The administration of the Ministry of Education and Science services the activities of the Scientific Research Fund. The management bodies of the Scientific Research Fund are its Executive Board, the Chairman of the Executive Board and the Manager. They are elected and conduct their activities in compliance with the Regulations of the Scientific Research Fund, approved by the Minister of Education and Science, in coordination with the Minister of Finance. Standing and temporary scientific expert commissions assess and rank scientific research projects applying for competitions. The Chairman of the Executive Board is elected from among its members for a period of two years without the right to two successive terms of office.

The Fund “Scientific Research Fund” maintains a Register for scientific activities in the Republic of Bulgaria which contains information and data about:

- Scientific organizations.
- Scientists in Bulgaria.
- Information on the scientific projects, their coordinators and leaders, scientific achievements and publications related to those projects.
- The recipients of resources from the central budget.
- Performers of the scientific research.
- Programs and projects in the field of scientific research financed by the state.

The Fund’s revenues are accrued from:

- Subsidies from the state budget;
- It’s own revenues from the Fund's activities - from intellectual property rights to scientific products, and protected patents;
- Donations and aid from national and international financial institutions and organizations and resources under international agreements;
- Donations by individuals and legal entities;
- Revenues from interest on resources of the Fund.

The resources of the Scientific Research Fund are used for:

- Implementation of the National Strategy for Scientific Research;
- Targeted financing of national scientific programs;
- Fundamental research;
- Participation in international programs and projects related to scientific research;
- Preparation and implementation of demonstration projects;
- Scientific publications;
- Awards for scientific achievements;
- Organizing and holding forums related to the scientific exchange and integration of the research processes;
- Payment of a part of the interest rate for granted bank credits for projects of higher educational institutions and scientific organizations included in the National Strategy for Scientific Research, developing scientific products and/or building of a scientific infrastructure;
- Professional development of scientists and researchers;
- Support of the Fund's activities.

The resources for the financial encouragement of scientific research are provided by subsidies from the state budget and by other sources, such as specialized funds, public procurement, national scientific programs and projects of individual administrative bodies, in compliance with the goals and priorities set by the National Strategy for Scientific Research.

Another fund for fostering research in Bulgaria is the National Innovation Fund to the Ministry of Economy and Energy. Its revenues are accrued from the state budget and the financial management envisages co-financing from the private sector with the purpose of stimulating business participation.

1.5. The Development of the Research Quota

The figures of the Ministry of Education and Science show that the total public expenditures for tertiary education in Bulgaria were around 0.8% of the GDP in 2006. The state subsidies amounted to 0.58% of the GDP in 2006. In 2006 the average maintenance of one student at the state universities was around 1 150 Euros (2 307 BG levs). The main goal of the government is to designate 4.2% of GDP for the period 2006-2009, as the Strategy for the Higher Education Development shows.

According to Eurostat, the gross domestic expenditures on research and development in Bulgaria are 0.48% of GDP in 2006. It is much lower than the average EU 27 for 2006, which is 1.84% of GDP. At the same time, the Eurostat data show that the Bulgarian government finances 65.8% of the expenditures on research and development. For comparison, the EU 27 average is 34.6% of GDP. The private sector (industry) finances only 28.2%, while the EU 27 average is 54.9% of GDP. The funds from abroad are 5.5%, compared to the EU 27 average which is 8.5% of GDP.

The annual expenditures on public and private tertiary educational institutions compared to the GDP per capita, according to Eurostat, amount to 49.4%, whereas the EU 27 average is 35.5, and the EU 13 (Euro area) – 35.0%.

According to the latest Eurostat data, the number of tertiary graduates in science and technology per 1000 persons (aged 20-29) is 8.6, while in the EU 27 the figure is 12.9.

Lisbon goals call for EU member states to increase their expenditure on R&D to 3% of GDP by 2010. Bulgaria has the same objectives and it is put down in the Strategy for Higher Education Development. The Eurostat data show that governmental expenditures for higher education and research in Bulgaria are comparable to the European levels. In many aspects Bulgaria is above the EU 27 average. “While the public sector funding of R&D, relative to GDP, stands at about one half of the Lisbon target, industry’s share is only one twentieth of what it is in some of the most dynamic knowledge-based economies”, the World Bank concludes in its Report (July 2007)⁴³². This leads to the conclusion that the main problem of the system is in the volume of financing, but in the centralized system. Money is concentrated in the government and competition between universities, especially those of the state, is practically impossible.

⁴³² “Bulgaria: Accelerating Bulgaria’s Convergence: the Challenge of Raising Productivity”, Volume I, Overview, World Bank, July 2007, available at http://siteresources.worldbank.org/INTBULGARIA/Resources/ABCreport_volume_1.pdf (accessed 10 February 2008).

2. THE CONSTITUTIONAL AND LEGAL FRAMEWORK

The competences for research and universities in Bulgaria are allocated to the Ministry of Education. All universities, the Bulgarian Academy of Science and the specialized scientific organizations and institutions are encouraged and promoted to develop and implement more research activities and projects in their areas of work.

Two main Acts regulate and guarantee the freedom of science in Bulgaria: the Higher Education Act, and the Scientific Promotion Act.

Scientific research is a national priority and is of strategic importance for the development of the country. Integration into the European research space and into the framework programs of the European Union is a priority in the field of international cooperation. Under the provisions of and by the procedure stipulated by the Scientific Promotion Act, and in compliance with the National Strategy for Scientific Research, scientific research of proven importance is encouraged; this includes scientific research related to:

- Solving important issues of the country in the sphere of economics, public processes and human resources;
- The national identity, Bulgarian history and culture;
- The development of engineering sciences and innovations;
- The creation of new scientific knowledge.

Scientific research activities comprise fundamental and applied research, as well as the dissemination of the scientific results. It is based on the principles of ethics, transparency, publicity, accessibility and applicability.

The encouragement of scientific research activities means providing financial incentives for scientific research, the creation of conditions for using potential scientific resources and their development in compliance with the country's priority trends of development, the creation of conditions for the protection and for the marketing of scientific products, and assistance for their dissemination in all spheres of public life. Financial stimulation is to be carried out in a way guaranteeing the effectiveness and transparency of the use of public resources.

The Council of Ministers may assist Bulgarian research teams when participating in international research organizations and programs.

Research at non-university institutes of higher education, in compliance with the Higher Education Act, aims for the advancement of science or applied research products as well as for the advancement of education. The organization and governance of universities and all higher schools' research activities are regulated by the higher school's Rules of Operation. They encourage research work and projects in high priority spheres and shall be entitled to plan and conduct joint research projects with other higher schools, scientific organizations and institutions, depending on their interests and the interests of research.

Research work at higher schools and universities is conducted also by specially appointed persons, as well as by students, doctoral candidates and trainees engaged in specialized studies. The terms and conditions of employment, operations and dismissal of persons specifically appointed to carry out research is regulated by the universities and higher school's Rules of Operation, the provisions of the Academic Degrees and Titles Act, and the Labor Code.

Research at higher schools and universities in Bulgaria is financed through subsidies from the state budget. The general terms of spending the funds are laid down in the universities and higher schools' Rules of Operation. They 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.

3. THE UNIVERSITIES

3.1. Legal Basis

Two main Laws stipulate and determine the legal basis of universities and higher schools in Bulgaria: the **Higher Education Act** and the **Academic Degrees and Academic Ranks Act**.

The **Higher Education Act** was promulgated in the State Gazette (SG) No. 112/27.12.1995, and after that amended by SG No. 28/2.04.1996; 56/15.07.1997, corrected by SG No. 57/18.07.1997, amended by SG No. 58/22.07.1997; amended and supplemented by SG No. 60/2.07.1999, corrected by SG No. 66/23.07.1999; amended by SG No. 111/21.12.1999, effective 1.01.2000; amended and supplemented by 113/28.12.1999; 54/4.07.2000; by amended SG No. 22/9.03.2001; 40/19.04.2002, amended and supplemented by SG No. 53/28.05.2002, 48/4.06.2004; amended by SG No. 70/10.08.2004, effective 1.01.2005, amended and supplemented by SG No. 77/27.09.2005, effective 27.09.2005.

The **Academic Degrees and Academic Ranks Act** was promulgated in the State Gazette No. 6/9.05.1972, amended and supplemented by SG No. 43/6.06.1975, amended by SG No. 12/11.02.1977, amended by SG No. 61/4.08.1981, amended by SG No. 94/5.12.1986, amended by SG No. 10/2.02.1990, amended by SG No. 59/21.07.1992, amended by SG No. 112/27.12.1995, amended by SG No. 28/2.04.1996, amended by SG No. 54/4.07.2000, effective 4.07.2000

The legal framework for universities and higher schools in Bulgaria stipulates the rules of higher education, all scientific and research activities, gives them some internal autonomy, but it is not ideal. The Ministry of Education and Culture in partnership with all involved parties envisages reforms and amendments in order to improve the legal framework for universities and higher schools and give them the opportunity to function better, develop and carry out more effectively their educational and scientific research activities. The academic degrees and the academic ranks are the most serious problems concerning the legal framework for universities and higher schools in Bulgaria.

A progressive policy framework for quality assurance by the National Evaluation and Accreditation Agency (NEAA) is in place. What is needed now is implementation to ensure the credibility, rigor and independence of the evaluation, and the collection, publication and dissemination of comparative information on the quality of outputs and outcomes. This will replace control with regulation, enable competition, enhance transparency and accountability, and improve educational experiences and outcomes.

3.2. Model of Organization

The main purpose is to introduce in Bulgarian universities and higher schools a democratic model with the participation of students and all academic staff in all decision-making

processes. It is not functioning as a whole yet. Universities and higher schools ensure the quality of tertiary education and research through an internal system for assessment and assurance of the quality of academic instruction and faculty, including also student-opinion polls, and peer reviews.

3.3. Functions of Universities

Bulgarian universities and high schools perform mainly educational and fewer research functions.

3.4. Autonomy

The State provides favorable conditions for the unrestricted development of higher learning 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;
- Providing, under certain conditions, loans and social benefits for undergraduate and graduate students, doctoral candidates (doctoral candidates), and trainees engaged in specialized and professional studies;
- Providing property to public higher schools and granting tax and other concessions to all higher school in the performance of their activities;
- Organizing 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 Bulgaria and abroad;

The State exercises its functions in the management of higher education through the National Assembly and the Council of Ministers. The state authority vested with the implementation of national policies in the area of higher learning is the Minister of Education and Science. The National Agency for Assessment and Accreditation under the Council of Ministers is the specialized state authority vested with the authority to assess, accredit and control the quality of the universities and higher schools' activities. It is a legal entity supported by the budget and has its principal office in Sofia.

There are two types of universities and higher schools in Bulgaria: private and public. **Public universities and higher schools** are established and function on the basis of the state property at their disposal and an annual state subsidy. They may acquire title to real estate or receive proceeds thereof for the performance of their activities.

The most contemporary history of the **private universities** in Bulgaria started after the fall of communist regime in 1989. We can say that its establishment and development is closely related to the changes in the Bulgarian society during the years of democratic reforms.

The first private universities in Bulgaria appeared in 1991, after the enactment of the law on academic autonomy. The National Assembly recognized five private universities between 1991 and 1995. Actually, only four of them are still functioning: the American University in Bulgaria, the New Bulgarian University, the Varna Free University and the Burgas Free

University. The fifth private university, which does not exist anymore, is the Slavic University in Sofia. It functioned for four years, after which, due to administrative irregularities, the Parliament made the decision to close it in 1999. According to the National Statistics Institute, in 2006/2007 the number of the private tertiary education institutions amounted to 16, whereas the public institutions numbered 37. At the same time, the data of the National Statistics Institute (2006/2007) show that the number of students in the private universities and colleges is around 50 000 and that there are around 200 000 students in the state universities.

During the years of transition and democracy instauration, the private universities in Bulgaria had to overcome many difficulties and challenges. The example of the Slavic University presents a negative experience with private universities. Since the very beginning private universities have appeared as a complementary element to the state university. Except the American University in Bulgaria, which has a different status and different traditions than a foreign university, the private universities used to attract students who were not admitted at a state university.

Although private universities appeared as tertiary education institutions additional and complementary to the state universities, which were considered prestigious, they managed to introduce different new elements into the educational system and contributed to its development and improvement. In the early 1990s private universities introduced and applied for the first time the bachelor's-master's-doctoral degree structure. This structure was introduced officially into the Bulgarian education system after 1995, as part of the harmonization with the European higher education structure. Private universities were one of the first tertiary education institutions to start applying the credit evaluation system of the students. The introduction of standard admission exams could be considered as another achievement of private universities. Distance learning and education is one more detail which have given the private education sector a reputation for being more flexible and adaptable to the current needs of the students and the market. Private universities were the first to introduce new courses and new disciplines, some of which do not exist yet in the state universities.

Mobility and flexibility characterize almost all of the private universities in Bulgaria. Nowadays, they give more liberty to the students and better access to information sources. As good examples, we could mention the American University and the New Bulgarian University in Sofia, which are also the universities that allow liberal arts education.

The private universities' flexibility is possible due to their full autonomy and financial independence from the state. They managed the above-mentioned achievements because of their adaptability to the market demand and to the changing needs of the society. Overcoming a variety of difficulties, nowadays, private universities attract many well qualified professors who used to work at the state universities, offering them more opportunities for applying innovative approaches and programs. The financial incentive for the professors at the private universities is much larger than at a state institution.

In spite of their achievements, private universities have faced and still are facing some serious problems. Since they appeared in the beginning of the 1990s, private universities have had to work in a changing legal situation. Different regulations have been adopting after the private tertiary institutions started to operate. In 1995, the Higher Education Law recognized the private universities as legal institutions with their own structure, operation system and

programs. Also in 1995, the Higher Education Law introduced a requirement for the establishment of a private tertiary education institution in Bulgaria.

State accreditation is a problem that all private universities must face. The existing private universities in Bulgaria already have their accreditation, but they still have to obtain accreditation for their education programs.

Tuition fees could be considered another challenge for private universities. The increasing fees are an obstacle for many students to study in a private university or a private college. The financing of many of the institutions is based on the tuition fees. Some private universities, such as the New Bulgarian University and the American University, have foreign donors as well.

It is still difficult for private universities to maintain their own staff of professors. Most of the professors works at state universities. They don't have permanent contracts and they are not completely committed to the private education institution.

Despite some promises and appeals, the government is not committed to facilitating the work of private universities. The government is working now on the improvement of supporting private tertiary institutions and providing them with financial assistance. Unfortunately, there have been no significant results in this field.

The private universities have developed significantly since 1991. Nowadays, they enjoy much more credibility and offer a variety of opportunities for the students. The lack of confidence is diminishing, but some of them still have to face the challenge of being a second choice after the state universities. In spite of some negative perceptions, private universities have managed to hold the students' interests and continue to strengthen their position in the tertiary education system in Bulgaria.

Universities are not independent vis-à-vis the state, the economy or other social forces.

3.5. University Bodies

Higher schools and universities in Bulgaria enjoy academic autonomy. It is such autonomy where the intellectual freedom of the academic community and the creative nature of academic instruction, research and artistic creation find expression as supreme values. The academic community comprises all faculty, students and doctoral candidates, and specializing trainees. Academic autonomy includes academic freedom, academic self-government and the inviolability of the territory of the higher schools and universities.

Higher schools and universities perform their overall activities in adherence to the principle of academic autonomy and in compliance with the laws of this country. Academic freedom finds expression in the freedom of teaching, freedom of research, freedom of acts of creativity, and freedom of learning.

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 Academic Degrees and Titles 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 universities and other organizations while performing their activities;
- The right to conclude contracts with the other organizations;
- The right to construct, hold or use facilities requisite for educational and research activities, or for the provision of welfare services to students, faculty staff, doctoral candidates and employees;
- The right to maintain international cooperation, conclude contracts and agreements, and maintain membership of international organizations.

The authority vested with the right to assert the common interests of higher schools and universities before the state and government authorities are the Board of Higher School/University Rectors. The Board of Rectors is represented by a Chairperson elected from among its members and:

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

The governing bodies of the higher schools and universities in Bulgaria are the General Assembly, the Academic Board and the Rector. The governing bodies of higher schools and universities are elected for four-year terms. The powers of higher schools and universities' governing bodies are not be discontinued due to the results of by-elections. The tenure of office of any members elected at such by-elections must terminate with the expiration of the respective governing body's mandate. The term of office of a university/higher school's Rector terminates with the expiration of the mandate of the General Assembly that elected him/her. The Rector continues to perform his/her function until a new Rector is elected but for not more than two months.

A university/higher school's General Assembly must:

- 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 power;
- 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 power;
- 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 Chairperson of the General Assembly shall conclude a contract with the elected Rector under the Labor Code.

Universities and higher schools in Bulgaria have primary and auxiliary units and affiliates. Primary units are all faculties (schools), departments, institutes and colleges. Auxiliary units are all sections, centers, libraries, laboratories, experimental stations, printing and publishing facilities, production units and other self-contained units. The constitution and the functions of auxiliary units' governing bodies are laid down in the universities' and higher schools' Rules of Operations (Rulebooks). Affiliates are territorially detached structures of the higher school or the university. The powers of any primary unit's governing bodies can not be terminated though the conduct of by-elections. The tenure of office of any additionally elected members is terminated with the expiration of the respective governing body's mandate.

A faculty (school) is an university/higher school's primary unit, uniting and involving the interaction of several chairs to provide training of students in a single or in a group of professional areas in the same sphere of higher education, and which employs no less than forty (40) full-time faculty members of whom habilitated holders of academic rank give at least 70 percent of the lecture courses in each specialty.

The faculty's governing bodies are the General Assembly, the Faculty Board and the Dean. All must be elected for a term of four years. Their tenure must not be discontinued when by-elections are conducted.

The faculty's General Assembly is made up of all full-time faculty members, administrative staff delegates, and delegates of all students and doctoral candidates enrolled in the faculty (school). Faculty members account for a minimum of seventy percent (70%), while students' and doctoral candidates' delegates account for a minimum of fifteen percent (15%) of all listed General Assembly members.

The Faculty (School) Board determines the composition of the Faculty General Assembly. It shall:

- Elect by secret ballot from among its habilitated members a Chairperson and a Deputy Chairperson for the term of its power;
- Elect by secret ballot a habilitated person to serve as the faculty's Dean;
- Determine the number of persons to serve on the Faculty (School) Board and elect the Board members by secret ballot;
- Discuss and adopt the Dean's Annual Report on instructional and creative activities as well as on the state of the faculty (school);
- Be represented by its Chairperson.

The faculty's General Assembly is convened at least once a year by its Chairperson pursuant to a resolution of the Faculty Board, at the Dean's request or at the request of a quarter of all listed General Assembly members.

The Faculty Board is composed of at least 25 members and comprises representatives of the full-time faculty members, students and doctoral candidates. No less than three fourths of all Faculty Board members must be habilitated persons having academic rank. The Faculty Board:

- Elects by secret ballot a Deputy Dean on a motion of the Dean;
- Puts forth proposals to the Academic Board as to:
 - Projects to establish, transform or close chairs and auxiliary units operating under the faculty (school);
 - Drafting curricula and qualification descriptions by degrees and specialties;
 - Announcement of competitions pursuant to Art 50 hereof;
- Elects and promotes in position (pay grade) the non-habilitated faculty members;
- Makes proposals to the higher school's Rector for dismissals (i.e. cessation of employment).
- Makes proposals to the faculty's General Assembly and/or to the higher schools' governing bodies regarding issues relative to the operations and the state of the faculty (school);
- Adopts the curricula in the various majors (specialties) offered by the faculty (school) and the individual programs of study of students, doctoral candidates and trainees engaged in specialized studies;
- Annually approves and oversees the teaching workload of faculty members;
- Recommends scientific works, textbooks, monographs, and other creative achievements for printing in the higher school's publishing facilities and sees to it that they are issued to the press in a timely manner;
- Discusses and approves the results of the assessment of faculty members and, submits them to the Rector to render a decision;
- Discusses, makes recommendations and takes decisions regarding the operations of all faculty units;
- Sees to the state of the faculty's library and information-service facilities and takes measures to ensure their improvement;
- Makes decisions regarding the faculty's financial matters;
- Adopts the Annual Report on the instructional, research, artistic and creative activities carried out within the faculty (school);
- Takes various other decisions relating to the faculty's operations.

The Dean:

- Is vested with the faculty's management and has also the authority to represent it;
- Is by right a member of the Faculty Board and its Chairperson;
- Puts forth to the Faculty (School) Board the candidacies of habilitated faculty members for Deputy Deans;
- Performs functions arising out of the law and the higher school's Rules of Operations (Rulebook).

A **department** is a university/higher school's primary unit tasked with the provision of training in one or more subjects that do not constitute a specialty. A department must employ a minimum of fourteen (14) full-time faculty members. A department's structure, as well as

its governing bodies' constitutions and functions, shall lay down in the respective university/higher school's Rules of Operations (Rulebook).

An **institute** is a higher school's primary unit bringing together faculty staff assigned to conduct long-term scientific research. Its structure, as well as its governing bodies' constitutions and functions are prescribed by the university/higher school's Academic Board.

A **college** is a university/higher school's primary unit employing faculty members, holding at least one 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's governing bodies are its General Assembly, the College Board and its Director. All shall be elected for a term of four (4) years.

- How are universities' institutions (faculties, departments, institutes, etc) financed?

Public universities/higher schools' institutions are financed by the state. Private universities/higher schools, international universities, colleges, etc. use their own funds and resources.

3.6. Research

There are especially targeted research and research activities in compliance with National Scientific Research Promotion Program on the basis of open competition. All universities and higher schools in Bulgaria possess their own funds to finance scientific research. The Ministry of Education and Culture envisages funds within its priorities and the National Scientific Research Promotion Program to foster scientific research by involving universities, higher schools and Bulgarian Academy of Science. These funds are reattributed on the basis of open competition and calls for proposals.

Most of the projects in Bulgarian higher schools and universities are related to targeted research.

Scientific academic staff and post-docs are trained by university experts and by participation and specialization in international and European programs.

Regarding the basic financial means for all activities or the development of specific areas of research or centers of excellence, the Ministry of Education decides at a national level for public universities and higher schools, and each university and higher school in Bulgaria then decides on the basis of international, European and national priorities.

There are no exact statistical and detailed data on applied research for the development of specific products.

3.7. Teaching

The underlying philosophy is to provide a "general" education in the tradition of classic humanities and specific training in preparation for the labor market.

3.7.1. Curricular Models for Undergraduate and Postgraduate Studies

The circular model in Bulgaria consists in three levels: bachelor, master and PhD.

- **First degree:** with a minimum term of study of 4 years by the training plan, the graduated students acquire a Bachelor's degree. The studying ensures basic

widespread knowledge and a degree of qualification whose goal is to give provide opportunities to work and direct access to the European labor market. About 2/3 of the graduated bachelors continue in master's programs.

- **Second degree:** with a minimum term of study of 5 years or at least 1 year after a Bachelor's degree, the graduated students acquire a Master's degree. The studying ensures profound fundamental knowledge, combined with the narrower orientation of a training program with a defined or inter-discipline specialty, as well as possibilities to cater to the labor market's concrete needs.
- **Third degree:** with a minimum term of study of 3 years after acquiring a Master's degree, the graduated students acquires PhD. The study is done in scientific specialties. There is one more legislated degree of education in the Bulgarian higher education – the Specialist degree. It is the shortest degree of acquisition vocational higher education (ISCED 5B) (3 years) and legislated practical orientation of studying. It can be acquired in the colleges, which are structural units in the higher schools or are independent higher schools.

The Ph.D. is not always the final goal of the studies. Usually, students stop by finishing their master's degree.

Not all subjects are represented at all universities.

Each university, state or private, pre-sets quotas for students each year. The students' selection is based on admission exams. Universities have the autonomy to set the quotas and they depend on their capacity to admit students. Tertiary education institutions admit and teach students without exceeding their capacity in accordance with their accreditation. They also have the autonomy to define the tuition fees, but the state universities cannot exceed a maximum, previously established by the government.

3.7.2. *Implementation of the Bologna Process*

Bulgaria was one of the first countries to accept the requirements of the Bologna declaration. A National Group of Counselors was created within the project "National Group of Counselors within the Bologna process in Bulgaria 2005-2006", developed and implemented by the Human Resources Development Center⁴³³ and the Socrates/Erasmus National Agency and with the financial support of the European Commission. By accepting the Higher Education Law (Higher Education Act) in 1995 and its modifications and supplements in 1999, a new model of higher education was set to be developed. In 2002, modifications of the Higher Education Law introduced the term "regulated profession". On this basis, State Requirements for training specialties from the List of Regulated Professions have been introduced, harmonizing the training programs and conditions with the European standards and practices for the specialties and professional qualifications related to special regime of recognition. In the same year, some legislative changes were accepted with the goal of ensuring higher education's flexibility and ability to adapt to the labor market's needs. They have replaced the Register of the Specialties in the Higher Education by a Classifier on the Domains of Higher Education and the Professional Directions. Some domains and directions of education which have been adopted in general in the educational and scientific practice of

⁴³³ The HRDC organises studies and research on actual problems in the field of education and training in Bulgaria, on employment, unemployment and mobility, vocational guidance and counselling, career development, transnational educational co-operation, which are used by the Ministry of Education and Science, the Ministry of Labour and Social Policy, the National Employment Service, the National Institute of Education, non-government and academic organisations, different professional communities (www.hrdc.bg)

the world have been indicated in the classifier in order to implement the Bologna declaration's recommendation that the specialties be "clear and comparable". Through this, an opportunity has been given to the higher schools – to offer training programs and professional qualifications and to prepare students in specialties according their possibilities, in dynamic accordance with the labor market's needs and European standards.

3.7.3. Courses for Life Long Learning and Vocational Training

There are such courses and they depend on the priorities and the orientation of the university/higher school programs. Long life learning is one of the main priorities of the Bulgarian tertiary system, but there are too many details still to be taken care of.

3.8. Composition of Faculty Staff

The faculty staff is created and selected on the basis of an application and competition. Open competitions are announced and all interested persons can apply and participate in order to obtain the vacant position.

All academic, scientific and non-scientific staff enjoy good relations in general and they collaborate with each other, but incentives still are missing. Young people are missing due to the lack of incentive and an interesting professional future and market orientation. Regarding the age structure, the average age is over 40 years.

Concerning the public universities/higher schools, the place of origin is Bulgaria, and the national affiliation – Bulgarian. Private universities, higher schools and colleges are more apt to hire international staff, but Bulgarians are still predominant.

3.9. Quality Assessment and Quality Assurance

All students in Bulgarian universities and higher schools are selected on the basis of entrance exams related to a concrete field of their studies and specialization. All academic and research positions at public universities and higher schools in Bulgaria are occupied on the grounds of competitions and elections held under the terms and conditions laid down in the Academic Degrees and Titles Act and the higher schools' Rules of Operation (Rulebooks). The private universities/higher schools apply the same principles in compliance with their internal rules and priorities.

The decision to announce a competition for occupying an opened positions must be made by the Academic Board on a motion of the university/higher school's primary units and/or affiliates. All competitions for habilitated teaching staff shall be announced in the official State Gazette a minimum of three months prior to the deadline for filing the documents required for participation in the competition. The decisions to announce competitions for occupying positions at university hospitals are taken by the Academic Board of the respective higher medical school in consultation with the Manager or Executive Director of the hospital. If a university/higher school's Faculty Board so decides, scientists and instructors from Bulgaria and from abroad may be co-opted to teaching and research activities for a certain period of time as visiting instructors. No competition shall be held for these appointments.

The relationship between a visiting instructor and a university/higher school shall be stipulated in a contract valid for a period of up to one year, which must be subject to extension. Universities/higher schools may also hire faculty on the basis of services contracts under terms and conditions laid down in the universities/higher school's Rulebook.

A university/higher school must appoint specialists and experts to assist research or artistic and creative activities. The terms and conditions of selecting and appointing such persons as well as the specific titles of their positions shall be determined in accordance with the provisions of the Academic Degrees and Titles Act and the higher school's Rules of Operation. All positions are occupied under contracts of employment for an indefinite term. Employment relations between the university or the higher school and the winner of the competition come into effect as of the date of the approval of his or her election. The Rector signs the contract of employment within one month following the approval of the election.

Quality management systems allow for the assessment of lecturers, researchers, professors and teaching staff in universities and higher schools in Bulgaria. Students complete different questionnaires and give their evaluation to each lecturer, professor, and assistant. Another internal model for quality assessment is a peer review. Lectures and researchers are selected on the basis of competition, or based on their degrees and merits. Universities and higher schools announce an open competition for available positions. All interested persons can apply. They present their documents, publications, etc. After examining their CVs, those who would fit best are invited to an interview and/or exam. The person with the best results is recruited.

3.10. Financing and Efficiency

Public universities and public higher schools are financed by the state budget. Each public university/higher school draws up, implements, finalizes and reports its independent budget. Within the consolidated budget the Academic Board approves annually the budgets of the university/higher school's primary units and affiliates. The rules of drawing up the budgets of the primary units and affiliates is laid down in the higher school's Rules of Operations. The budget revenue of university/higher schools consists of:

- State budget subsidies;
- Financial assistance from municipalities;
- Donations, bequests, inheritance, sponsorship;
- Its own revenue from: research, consultancy, creative, therapeutic and sports activities as well as industrial property rights, copyright and other related rights;
- Proceeds from application and tuition fees, as well as proceedings from tuition;
- Fees for postgraduate degrees;
- Administrative services for non-students;
- Other activities related to the process of learning.

The state budget subsidy provides funds for:

- Maintenance cost of tuition;
- The scientific or artistic and creative activities characteristic of the higher school;
- Publication of textbooks and scientific works;
- Welfare costs of students;
- Capital investment.

The Council of Ministers adopts the rules for determining the remuneration of persons working at public universities and higher schools in Bulgaria.

Students, doctoral candidates and trainees engaged in specialized studies are required to pay tuition. The Council of Ministers sets the yearly tuition to be paid for instruction at public higher schools and universities. Students pay such tuition in equal instalments at the beginning of each semester. The following categories are exempt from paying any fees for studying at public higher schools and universities:

- Orphans;
- Disabled persons with long-term disabilities and a reduced ability to work by 70 percent or more;
- Orphans of disabled war veterans;
- Persons raised at orphanages until they are of age;
- Cadets in military academies;
- Doctoral candidates in the final two years of their doctoral studies.

Foreign students, doctoral candidates and trainees engaged in specialized studies are required to pay fees that in public higher schools and universities shall not be any less than the differentiated norms of tuition maintenance costs. Fees must not be paid by students, doctoral candidates and trainees admitted under inter-governmental agreements where this issue has been settled on the reciprocal basis.

Private universities, private colleges and other private higher schools rely on their own funds and financial resources, collected by tuition fees, projects, donations, etc.

Public universities and higher schools' budgets are controlled by the state and their General Assembly and governing bodies. The income and expense sides of the budget are drawn up in congruity with the income and expense items on the state budget. Within the time limits for the submission of the annual financial statement, the higher school publishes a report on the execution of budget revenues and expenditures in accordance with the classification of central government budget revenues and expenditures. Any excess of profit over expenditures as of the end of the year shall be transferred as a reserve into the higher school's budget for the ensuing fiscal year.

Governing bodies and internal mechanisms control private universities' budgets in compliance with their internal rules.

The efficiency of the universities and higher schools is evaluated in compliance with the Higher Education Act by the Ministry of Education and Science, the National Agency for Assessment and Accreditation, and by internal mechanisms and cost efficiency systems applied in universities and higher schools in Bulgaria.

Accreditation is the recognition by the National Agency for Assessment and Accreditation of the right of universities and higher schools to give higher education by educational and qualification degrees in certain spheres, professional areas and specialties related to regulated professions through the assessment of the quality of their activities. The objective of assessment and accreditation is to stimulate universities and higher schools to develop their potential and to upgrade and maintain the quality of the education they offer. Accreditation results shall be taken into consideration in formulating the state policy in respect to the higher school or the university.

The National Agency for Assessment and Accreditation evaluates all projects aiming to open and/or transform a university or a higher school, a faculty, an affiliate or a college, as well as

proposals to open professional areas and specialties related to regulated professions. The right of higher schools and universities to conduct studies for the doctor's educational and academic degree by academic specialties is also a subject of accreditation.

There is institutional and programmatic accreditation. The higher school or the university, upon receipt of institutional accreditation, may request program accreditation. Evaluation of projects for opening of faculties, affiliates, professional areas and specialties related to regulated professions may be requested solely by a higher school that has successfully undergone institutional accreditation.

Institutional accreditation shall:

- Be based on the assessment of the way in which the higher school pursues its mission and objectives;
- Result from the assessment of the efficiency of the higher school in the supervision, assurance and upgrading of the quality of instruction in the spheres of higher education and professional areas it offers.

The assessment in the institutional accreditation is aimed at checking the efficiency of:

- The internal system for assessing and assuring the quality of education;
- The procedures for approving, monitoring and renewing curricula and programs;
- The procedures for undertaking action in connection with and arising out of the results of the program accreditation and other external independent audits;
- The overall management and control of the processes of grading at the higher school;
- The management of the system of gaining and transferring credit points;
- The management of the cooperation with other higher schools and organizations;
- The maintenance, management and development of the facilities of the higher school;
- Research and creative activities of the faculty and the participation of students and doctoral candidates in them.

Program accreditation is based on an assessment of the quality of the instruction offered in a specific professional area at a primary unit and/or affiliate of the higher school, of a specialty related to regulated professions, or an academic specialty. Within the framework of the professional area, the assessment aims at checking the quality of instruction of students in all forms of studies in the educational and qualification degrees and in the doctoral educational and academic degree.

Subject to program accreditation are:

- The structure, organization and content of curricula and programs;
- The profile and qualifications of the faculty;
- The available facilities for the purposes of education;
- Teaching and grading methods;
- The quality control of education;
- Research and creative activities of the faculty and the participation of students and doctoral candidates in them.

Assessment under accreditation procedures is carried out on a four-grade evaluation scale comprising the following grades: Very Good, Good, Satisfactory, Unsatisfactory (Failed). Accreditation shall have six-year validity when the grade received is "Very Good" or "Good", and a validity of three years in case of a "Satisfactory" grade. Accreditation shall be denied in the event of an "Unsatisfactory" grade. Projects for opening a higher school, a university, as well as faculties, affiliates, colleges, professional areas and specialties related to regulated professions shall be given a positive or a negative assessment.

The Rules of Operations of the National Agency for Assessment and Accreditation, in conformity with the statutory requirements for the relevant procedure, specify all facts and circumstances in respect whereof an applicant is required to submit any appropriate documents and requisite information. All costs of accreditation or project assessment procedures shall be paid by the applicant at rates approved by the Minister of Finance.

The National Agency for Assessment and Accreditation:

- Develops criteria for assessment and accreditation in accordance with the Higher Education Act and state requirements;
- Develops the procedures of assessment and accreditation and all relevant documentation;
- Assesses the projects for opening and transforming higher schools, primary units, affiliates, professional areas, specialties related to regulated professions, and academic specialties;
- Develops criteria and procedures for post-accreditation monitoring of higher schools, primary units, affiliates, professional areas and specialties related to regulated professions;
- Assesses the overall activities and the quality of instruction offered by higher schools and organizations, and uses said assessment to either grant or deny accreditation;
- Sets up and maintains an information system comprising data about all accredited higher schools, their primary units, affiliates, professional areas, specialties related to regulated professions, or academic specialties;
- Publishes annually, not later than the month of May of each calendar year, in the official State Gazette a list of all accredited higher schools, their primary units, affiliates, professional areas, specialties related to regulated professions, or academic specialties, as well as the accredited academic specialties at higher schools and organizations, along with the accreditation grades assigned.

In Bulgaria, there is limited information on future employment and earnings prospects to inform course offerings and student demand. In the absence of this, the government controls student numbers by subjects in each institution. Funding mechanisms still provide limited incentives to universities to be attractive to students, and are not yet used to support public policy objectives. Although industry can play an important role in ensuring that universities produce graduates that are more valuable to the economy; in Bulgaria (as in many countries) it has been difficult to establish needed linkages. Finally, the ultimate authority of the university is a body that is comprised largely of the staff of the university. This governance structure does not serve the broader public interest and is not conducive to innovation and change. Although universities have a lot of autonomy, they are not adequately accountable for quality.

With good market information funding can be made more competitive. Funding mechanisms could also play a greater role in enhancing quality and relevance and rewarding public policy objectives such as the study of priority subjects, or employability. To increase the relevance of courses and curricula, the government should require reviews of courses and curricula with local industry. Contracts with universities could link additional funding to the introduction of changes. Contracts with universities could also tie future funding to the adoption of acceptable governance arrangements. What is needed is a governing council with a majority of external stakeholders and a competitive selection of university leaders.

3.11. International Cooperation

3.11.1. Foreign Students

Admission of students and doctoral candidates in Bulgarian universities and higher schools is conducted by way of entrance examination within the admission quotas and in strict adherence to the state standard requirements, and the requirements set forth in the higher schools' Rulebooks, providing these are not contradictory to the state requirements. Higher schools and universities may hold a general entrance examination or recognize the results of the entrance examination given at another higher school.

Applicants who have successfully partaken in the admission competition to a higher school or a university shall be admitted under more relaxed terms and conditions as established in the university and the higher school's Rulebook in any of the following cases:

- Applicants who scored equally;
- Disabled persons with long-term disabilities and reduction of the ability to work by 70 percent or more;
- Disabled war veterans;
- Orphans;
- Mothers of three or more children;
- Twins where both have concurrently applied to the same higher school and for the same professional area and one of them has been admitted.

If the Academic Board so decides, higher schools and universities may admit applicants without any entrance examination provided that the applicant has successfully passed the state matriculation exams under the Educational Level, Educational Minimum and Curriculum Act within the framework of the set numbers. Applicants who are winners of national or international competitions completing their secondary education in the year of the competition and medal winners at the Olympic, world or European championships shall be admitted without any entrance examination and beyond the annual number of students, where the entrance examination for the specialty they apply for corresponds to the subject-matter of the competition or championship. Universities and higher schools shall announce the admission terms and conditions before 31 March of each year.

Most of the students at universities and higher schools in Bulgaria are Bulgaria. Only a small number of them are foreign students, mainly from Greece, Macedonia, Romania and some other neighboring countries.

Bulgaria hosts also scholars from all countries around the world, but mainly from Europe, within different exchange programs.

On the other side there is an export of students and researchers. It is quite difficult to define the exact number of outgoing, because some of them don't officially leave their universities.

3.11.2. Integration into International Networks and Cooperation Agreements

The European Integration and Bilateral Cooperation Department to the Ministry of Education and Science coordinates Bulgaria's participation in European programs and its representation in the European network EURYDIS in the field of education.

Bulgarian universities and higher schools are involved and participate in European networks related to the Framework Programmes, Leonardo, Erasmus, Socrates, Comenius, Grutvig, Minerva, Lingua, NATO projects, World Bank project, and others. There are also specialized institutions and organizations to facilitate and promote integration into European networks, and among them are: the Human Resource Development Centre, the National Agency Leonardo da Vinci, the National Agency Socrates, the National Resource Centre for Vocational Guidance, the Bulgarian National Observatory.

The **Human Resource Development Centre** organizes studies and research on actual problems in the field of education and training in Bulgaria, on employment, unemployment and mobility, vocational guidance and counselling, career development, transnational educational co-operation, which are used by the Ministry of Education and Science, the Ministry of Labour and Social Policy, the National Employment Service, the National Institute of Education, non-government and academic organisations, and different professional communities. It co-ordinates, consults and organizes the Bulgarian partnership in the European programmes "Leonardo da Vinci" and "Socrates", as well as in the Stability Pact concerning projects, related to human resource development. The Human Resource Development Centre is Bulgaria's executive office of the European Training Foundation in Turin.

The **National Recourse Centre for Vocational Guidance (NRCVG)** is part of the Human Resource Development Centre in Bulgaria. The 50 NRCVGs, which exist in all EU and EEA Member States and many Central and Eastern European Countries, form a [network](#) for exchanging information about work, study and training opportunities throughout Europe. Its purpose is to provide guidance at European and national level.

The **Bulgarian National Observatory** started its activities in March 1997 and has been run by the Human Resources Development Centre since mid 1999. It plays a significant role in the process of vocational education and training reform by providing up-to-date information on VET and the labour market and on EU developments in the field.

Bulgaria has been a full-fledged participating country in the second phase of the **Leonardo da Vinci Programme** since 1 January 2000, according to the Association Decision No 3/02.08.2000 (2000/587/EC).

There are bilateral and multilateral research cooperation agreements. They are regulated in compliance with the cooperation agreements between Bulgaria and the other countries. Bulgaria has such agreements with most the European countries. All universities and higher schools in Bulgaria are free to establish close relations and they actively cooperate with research centers, universities, institutions and similar organizations all over the world in order to develop and implement different projects in their field of work.

Bulgarian universities and higher schools actively participate in international and European projects. In 1 out of 5 cases they have a lead function, manage and coordinate projects.

3.12. Transdisciplinarity

The research and teaching activities are specified and allocated to the faculties and departments according to the particular needs and scientific disciplines.

Bulgarian universities and higher schools maintain and offer interdisciplinary teaching programs at three levels (bachelor, master and Ph.D.) and research projects within a variety of scientific fields (law, economics, social sciences, medicine, natural sciences, engineering, technologies, etc.).

Regarding cooperation between industries and universities, universities and industries in Bulgaria make some effort to cooperate, but this cooperation is still too insignificant. The implementation of public-private-partnership models for research and teaching is insignificant in Bulgaria. They are to be developed and implemented. There are no chairs and institutes financed by private foundations in Bulgaria. The economic actors do not participate in the financing of Bulgarian universities and higher schools. There are not many spin-off enterprises, just an insignificant number.

3.13. Role-model for a Scientist

Scientists are managers, researchers and coordinators. They are the individual geniuses in search of truth as well as entrepreneurs and managers organizing research activities.

3.14. Inter-ethnic Co-operation

Universities play mainly an intermediate role and provide professional support in ethnic issues. There are no conflict management activities. There is not a high level of multi-ethnicity. However, there are all kinds of research activities that cover seminars, conference, research, professional exchange, etc.

3.15. Trends and Reforms

The main trends related to universities and higher schools in Bulgaria are market orientation and internationalization, with a strong and predominated accent on international involvement. During the entire period since 1989 educational reforms have been an imminent element for strong political debates and an important field of reform. These reforms also concern higher education in Bulgaria. Several amendments have been done during those years, and the plans for other reforms continue. Right now the most serious problem and a hot topic for debates and discussions is the validation of academic degrees and academic rank.

Bulgarian higher education institutions enjoy a high degree of autonomy and compare fairly well in this respect to the New Member States and many EU countries. However, Bulgarian universities lack the framework to exercise the autonomy that they have. Increased autonomy has not been accompanied by mechanisms for ensuring governance that is likely to be good for the university in the long run or for society as a whole. In particular, the ultimate authority of the university is a body that is comprised largely of the staff of the university. This suggests that universities would be run largely for the benefit of existing staff, and is also a recipe for inertia and conservatism. In addition, the appointment of the Rector by the academic electorate means that the leader owes his or her loyalty entirely to the academic electorate, and his or her selection is not sufficiently based on management and leadership skills. While this governance structure is similar to many of the New Member States, the

trend in the EU-15 is clearly towards a redefinition of functions and composition of university Boards or Councils, with a greater management responsibility role for a mix of academic and outside stakeholders, and competitive appointment of university leaders.

3.16. Expectations from EU-Member States

Bulgaria has excellent relations and good collaborations with all EU member states, but Bulgarian universities and higher schools lack a more intensive exchange of EU professionals, researchers, and lecturers, more effective close relations for the exchange of information and support of students and academic staff.

EU member states could provide assistance and exchange of best practices in order to overcome insufficient information and linkage with the industry. There is limited available information on future employment and earnings prospects of various higher education programs to inform demand, limited involvement of industry in the identification of courses and curricula and pedagogic practices of high value. There are also limited mechanisms to incorporate work experience into academic courses.

4. NOT UNIVERSITY RELATED RESEARCH INSTITUTIONS

There are Academies of Sciences and Arts (in terms of state-related institutions). Apart of them, there are many think tanks and NGOs, which cover different areas of research.

4.1. Bulgarian Academy of Sciences

4.1.1. Structure

The Bulgarian Academy of Science is the successor to the Bulgarian Learned Society, which was founded at the end of September 1869 in Braila, Romania. After Bulgaria's salvation from the Ottoman Empire, the General Assembly overwhelmingly decided on 25-28 October 1878 to move the seat of the Society from Braila to Sofia, the capital of Bulgaria. On 6 March 1911 the Bulgarian Learned Society was transformed into the Bulgarian Academy of Sciences.

In compliance with the provisions of the law of Bulgarian Academy of Sciences passed in 1991, on its own initiative the Bulgarian Academy of Sciences carried out a very difficult but necessary reform during the last decade of the 20th century. The most important objectives of this reform were to increase the efficiency of the Academy's activities, to preserve its highly qualified scientific potential and to enhance the social authority of the institution.

The Bulgarian Academy of Sciences is a state institution and private law association. The institutional structure is regulated by law. There are no restrictions to some scientific disciplines. The members are recruited by elections, merits, by academic degrees and academic ranks. The Academy is an association of scientists, i.e. an assembly of elected members thereby honoring their scientific achievements. It also runs research institutions with hired scientific staff. In order to support young researchers it awards prizes and scholarships. The Academy is involved in legal and political counseling with regard to research policies. The Bulgarian Academy of Sciences has foreign members from different countries and it is open and does accept foreign members.

The Bulgarian Academy of Sciences actively participates in EU (the Fifth and the Sixth Framework Programmes) and NATO projects. The successful participation of the Bulgarian Academy of Sciences' scientists as highly valued partners in the European Framework Programmes and NATO scientific programs has ranked Bulgaria in terms of international scientific cooperation among the first in the group of countries, candidates for accession in the European Union and membership in NATO. The Bulgarian society's unquestionable acceptance of the European and Atlantic values has found its reflection in the recognition of Bulgarian science as a state priority for the benefit of the economy and society.

The Academy received high international recognition for the quality of research conducted by its scientists, which involves:

- Obtaining of new knowledge in scientific areas, traditionally strong for the academy;
- Development of applied scientific research for the needs of the national economy and social progress;
- Establishment of the interdisciplinary approach in research activities;
- Preparation of highly qualified researchers and scientific experts;
- Intensive international scientific cooperation and ever-closer alignment of Bulgarian science with the guidelines of the Euro-Atlantic policy of scientific development.

The Bulgarian Academy of Sciences has bilateral agreements with the following foreign scientific organizations:

EUROPE

Universita degli Studi di Roma "La Sapienza"

The Academy of Sciences of Albania

The Austrian Academy of Sciences

Fonds National de la Recherche Scientifique/ CRGI of the French Community of Belgium

Nationaal Fonds voor Wetenschappelijk Onderzoek, Belgium

Croatian Academy of Sciences and Arts

Academy of Sciences of the Czech Republic

Deutsche Forschungsgemeinschaft

Rosendorf Zentrum, Deutschland

Estonian Academy of Sciences

The Academy of Finland

Centre National de la Recherche Scientifique, France

Université d' Artois, France

Université Louis Pasteur, France

Georgian Academy of Sciences

Hungarian Academy of Sciences

CNR (The Italian National Research Council)

Latvian Academy of Sciences

Macedonian Academy of Sciences and Arts

Academy of Sciences of the Moldavian Republic

Netherlands Organization for Applied Scientific Research(TNO)

Polish Academy of Sciences

Romanian Academy

Russian Academy of Sciences

Serbian Academy of Sciences and Arts
Slovak Academy of Sciences
Slovenian Academy of Sciences and Arts
Consejo Superior de Investigaciones Científicas, Spain
Royal Swedish Academy of Sciences
Royal Swedish Academy of Letters, History and Antiquities
TUBITAK (The Scientific and Technical Research Council of Turkey)
Turkish Academy of Sciences
The British Academy, UK
The Royal Society, UK
The National Academy of Sciences of Ukraine

OUTSIDE EUROPE

The Chinese Academy of Social Sciences
The Chinese Academy of Sciences
The Academy of Sciences of Egypt
The Israel Academy of Sciences and Humanities
Ben Gurion University of the Negev
The Mongolian Academy of Sciences
The National Science Council of Taiwan
The National Science Foundation of the U.S.A.
The National Academy of Sciences of the United States of America
NCEEER (National Council for Research in the Humanities and Social Sciences)

The Bulgarian Academy of Science offer a variety of public lectures and teaching modules in different scientific areas, such as mathematical sciences, social sciences, humanities, physical sciences, chemical sciences, biological sciences, engineering sciences, and earth sciences. The Bulgarian Academy of Sciences is not entirely autonomy. The Academy has the autonomy to decide on internal issues, programs, research and scientific priorities, education and research priorities, but it depends on the State and the economic actors due to its legal basis and methods of financing.

The Bulgarian Academy of Sciences is financed by the State and revenues from European and international projects, tuitions fees, and courses fees. There are co-operations with corporations within the priorities and the objectives of projects' development and implementation. There are intents and efforts for close cooperation between universities and other research institutions, but no significant results have yet been achieved.

4.1.2. Self-Perception of the Academy

The Bulgarian Learned Society, transformed in the Bulgarian Academy of Sciences, was created in a crucial moment for Bulgaria. In 1869 Bulgaria was still a part of the Ottoman Empire and it didn't exist as an independent country. During 500 years of Turkish slavery, the Bulgarian culture, ethnicity and traditions might be conserved. And here could be found the biggest achievement of the Bulgarian Academy of Sciences. A successor of the Bulgarian Learned Society, which was founded in Romania, its mission has been always to conserve and disseminate Bulgarian culture, promote sciences and education, the national traditions and interests, corresponding to the needs of the society and defending democratic values through research and education. Since its foundation, the Bulgarian Academy of Sciences is open to all ethnicity, although Bulgarians predominate.

The mission of the Bulgarian Academy of Sciences is to contribute to the development of world science in accordance with the human values, national traditions and interests and to assist the accumulation of the spiritual values of the nation and its welfare. This mission's roots are underlying the first statutes of the Bulgarian Learned Society and are embedded in the current law and statutes of the Bulgarian Academy of Sciences.

In conformity with this mission the main strategic objective of the Bulgarian Academy of Sciences is to ensure and maintain the highest possible level of science, interdisciplinary, international competitiveness and high national self-confidence in agreement with the needs of the socio-economic and spiritual development of the Bulgarian society and with the European and world trends of the organization of scientific research.

The recent changes of the society and state's attitude towards science and scientific research in Bulgaria in the beginning of the 21st century and the long and difficult transition to democracy determine the necessity of a new and clear formulation of the strategic objectives and priorities of the Bulgarian Academy of Sciences. In this way defining specific goals and concrete tasks for a set period has substantiated the overall mission. The definition of such objectives and priorities precedes the outlining of the concrete approaches for their attainment.

The main objectives of the Academy have been achieved to a great extent despite the economic hardships of the transition to democracy and market economy, the scarce state funding science and the Bulgarian Academy of Sciences in particular have received during the last several years, as well as the lack of real opportunities for financial support by the national industry or the private economic sector. The institutional and human resources policy of BAS has undergone significant changes. A successful reorientation of the scientific potential along the most modern lines of the European and global development has been carried out, which aims at the formation of a society, economy and civilization based upon knowledge.

In order to achieve the long-term and future goals the Bulgarian Academy of Sciences has concentrated its efforts:

- To optimize its administrative and personnel structure;
- To maintain the high level of scientific research and expertise;
- To maintain the national intellectual potential and to provide the highest possible scientific qualification to young scientists;
- To support the process of achieving economic stability and development as well as the realization of the social transformation of the country;
- To develop cooperation with Bulgarian universities, scientific organizations, governmental and non-governmental institutions;
- To ensure adequate funding of research;
- To introduce and apply a project based principle in the organization and planning of scientific research;
- To support the participation of Bulgarian scientists in the expanding process of international scientific cooperation.

As for reform plans, in order to achieve the long-term objectives, priorities and the strategic mission of the Bulgarian Academy of Science it is necessary to:

- Improve the funding of science in Bulgaria both in terms of GDP and national budget share and the efficiency of funding;
- To support the development of the Bulgarian society;

- To strengthen the national identity, historical, cultural and spiritual values originated by Bulgarian people on its land;
- To integrate intensively into the European programs and structures;
- To increase the attractiveness of the scientific career;
- To develop opportunities for scientific communication;
- To improve and modernize the obsolete material basis and equipment;
- To maintain the high level of qualification of Bulgarian scientists;
- To decrease the brain-drain without affecting the mobility of scientists.

4.2. Other Not University related Research Institutions

Think tanks and non-governmental organizations, research institutions, and policy foundations are functioning as a bridge between the state and the economy in Bulgaria. Speaking in general terms, there are no private research companies in Bulgaria. Only some big companies have created and maintain research departments in their fields, such as Alen Mak, Aroma.

4.3. Integration into the European Research Area

There is sufficient information for participation in EU programs. Initiatives like SEE ERA Net helped a lot in this regard. However, there is a lack of knowledge and experience necessary to prepare good project proposals and a capacity to create networking systems.

5. THE NOT UNIVERSITY RELATED EDUCATION SECTOR

In Bulgaria there are no institutions of higher education for applied sciences yet. There are specialized centres for human development resources, teaching, and programs to the Bulgarian Academy of Sciences.

6. INTEGRATION INTO THE EUROPEAN UNIVERSITY NETWORK

There would be participation interest in activities such as ERI SEE (Education Reform Initiative of South Eastern Europe), but a lack of information impedes the active involvement of Bulgarian universities, educational, research and scientific institutions and organizations. What is missing is efficient exchange of experience and information, effective networking systems and enough professional capacity for establishing contacts.

Research Project UnivSOE

"Institutions of Tertiary Education in Central and South East Europe: Developments, Structures and Perspectives of these Institutions for their Integration into the European Higher Education and Research Area"

Country Report: Croatia

Antonija Petričušić

Abbreviations	278
1. INTRODUCTION	279
1.1. Institutions for Research and Teaching on the Tertiary Educational Level	280
1.2. Co-ordination and Co-operation	280
2. EXISTING ADMINISTRATIVE STRUCTURES.....	282
2.1. Allocation of Competences	282
2.2. Special Advisory Bodies	282
2.3. Institutions for the Financial Management and Fostering of Research	284
3. THE CONSTITUTIONAL FRAMEWORK	285
4. THE UNIVERSITIES	286
4.1. Establishment and Recent Reforms	286
4.2. The Adequacy of the Legal Framework	288
4.3. Organisational Model	288
5. TYPES OF HIGHER EDUCATION INSTITUTIONS.....	289
5.1. Functions of Universities	290
<i>5.1.1. Autonomy.....</i>	<i>290</i>
<i>5.1.2. University Bodies</i>	<i>290</i>
6. RESEARCH.....	292
6.1. Election of Researchers	292
6.2. Research Projects	293
6.3. Investigator Driven Basic Research	295
6.4. Targeted Basic Research.....	296
6.5. Research as a Bridge between the State and the Economy	296
6.6. Private Research Companies	298
6.7. Funding of Specific Areas of Research.....	299
6.8. Applied Research for the Development of Specific Products.....	299
7. TEACHING	300
7.1. Undergraduate Education	300
7.2. Post-graduate Education	301
7.3. Acquiring a Doctorate of Science	301
7.4. Curricular Models for Undergraduate and Postgraduate Studies.....	303
7.5. Implementation of the Bologna Process	304

7.6. Life-Long Learning Courses	305
7.7. Staff Composition of Faculties	306
7.8. Elections and Appointments of University Teachers	306
7.9. Specialisation and Creation of Centres of Excellence	309
7.10. Quality Assessment	309
8. ACCESS TO HIGHER EDUCATION	309
8.1. Funding of Tertiary Education Institutions	310
8.2. Foreign Students.....	311
9. FINANCING AND EFFICIENCY	312
10. SCIENCE AWARDS AND SCHOLARSHIPS	315
11. INTERNATIONAL COOPERATION	316
12. TRANSDISCIPLINARITY	318
12.1. Public-Private-Partnership Models for Research and Teaching	319
12.2. Role of Universities in Inter-ethnic Co-operation	319
13. NOT UNIVERSITY RELATED RESEARCH INSTITUTIONS.....	320
13.1. Academies of Sciences and Art	320
13.2. Institutional Structure	320
13.3. The Specialization of Academies	321
13.4. Recruitment of Members	322
13.5. Functions of Academies	322
13.6. Association of Scientists	323
13.7. Research Institutions	323
13.8. Prizes and Scholarships	324
13.9. Participation of the Academy in Political Discussions	324
13.10. International Collaboration	324
13.11. Financing of the Academy	324
13.12. Other Not University related Research Institutions	324
14. NOT UNIVERSITY RELATED EDUCATION SECTOR	325
15. INTEGRATION INTO THE EUROPEAN RESEARCH AREA	326
15.1. Information for Participation in EU Programs.....	327
15.2. SEE ERA Net	327
15.3. Integration into the European University Network.....	328
16. CONCLUSIONS	328
17. BIBLIOGRAPHY	329

Abbreviations

BICRO	Business and Innovation Center of Croatia
CARDS	Community Assistance for Reconstruction, Development and Stabilisation
CARNET	Croatian academic communications network
CSIPO	Croatian State Intellectual Property Office
COST	Cooperation in Science and Technology
EHEA	European Higher Education Area
ERI SEE	Education Reform Initiative of South Eastern Europe
ENIC	European Network of National Information Centres on Academic Mobility and Recognition
ERA	European Research Area
EU	European Union
EUREKA	European Research Coordination Agency
FP 6	Sixth Framework Programme for Research, Technology Development and Demonstration
GDP	Gross Domestic Product
HAZU	Croatian Academy of Sciences and Arts
HE	High Education
IT	Information Technology
IPR	intellectual property rights
MSES	Ministry of Science, Education and Sports
NARIC	National Academic Recognition Information Centre
NCHE	National Council of Higher Education
NCS	National Science Council
NFS	National Foundation for Science, Higher Education and Technological Development
OECD	Organisation for Economic Co-operation and Development
POHZ	Croatian Scientists Portal
RAZUM	RAzvoj na Znanju UteMeljenih poduzeća Development of Knowledge-Based Companies
R&D	Research and Development
RTD	Research and Technology Development
S&T	Science and Technology
SEE ERA	Southeast European Era-Net
SME	small and medium enterprises
TEMPUS	Trans-European mobility scheme for university studies
TEST	Technology-Related Research and Development Projects
WIPO	World Intellectual Property Organization

1. INTRODUCTION

The science and technology (S&T)⁴³⁴ system of the former Socialist Federal Republic of Yugoslavia, of which the Republic of Croatia was part until 1990, was highly decentralised and based on the principles of self-management. At the time of dissolution of the federation in 1991, the Croatian research and development (R&D) were well integrated in the world R&D system and about 30% of the country's potential was implied in international research projects. The central governmental organisation in charge of science and higher education policy has been the Ministry of Science since the country gained its independence in 1991. This Ministry was in some periods also in charge of technology, culture and as of late education and sports.

In spite of the 1991 - 1995 war in Croatia, the scientific and teaching activities in all of the universities and scientific institutes were maintained, even though some of the scientific institutions were in cities seriously damaged by the aggression (i.e. Osijek, Dubrovnik and Zadar).

Contrary to the official statement on successful sustaining scientific activities in 1990s, there are positions that argue that “the governing party in power between 1990 and 2000 openly marginalized science and treated it as a form of prestigious consumption”.⁴³⁵ S&T capacities have indeed generally declined in the transition period, due to reduced investments and slow and inadequate restructuring of the sector, which consequently caused heavy brain-drain⁴³⁶ and worsened material conditions for research.⁴³⁷ At the same time, the institutional framework was frequently changed, sometimes without reason, reflecting the momentary or short-term interests of groups of people charged with decision-making in science. Critical authors consider the main transitional problems to be: the lack of concepts and visions, absence of specialized public policies, economic and social restructuring and problems of functional regional and EU integration.⁴³⁸

⁴³⁴ Some authors warn that in the post-socialist countries, the relationships between two basic orientations of research activity, namely the Science and Technology (S&T) versus Research and Development (R&D), remain varied and not precisely defined. The present distinction, according to them, creates difficulties in defining precisely the field of the analysis of state of affairs of the scientific field. According to them, S&T refers to the state-supported activities that preserve traditional scholarly and theoretical interests and orientations. R&D stands for the dominance of applied knowledge production and reflects private and company interests, as well as the domination of private investment in research. This division will be used in the present paper. See Nada Švob-Đokić (ed.). “Research and Development Policies in the Southeast European Countries in Transition: Republic of Croatia”, Studies and Research Series, 2002, IMO, Zagreb.

⁴³⁵ As a negative example the author points to the construction of an impressive building of the Institute for the Study of the Brain, despite the fact that such research had no respectable body of researchers or tradition in Croatia; or the luxurious interior design of the organizations cultivating the so-called “national science and scholarship”. Compare for example Nada Švob-Đokić. “*Some questions of principle*”, in “Research and Development Policies in the Southeast European Countries in Transition: Republic of Croatia”, Studies and Research Series, 2002, IMO, Zagreb.

⁴³⁶ Some data report as many as 45 000 specialists educated in Croatia working in foreign countries currently. Many scientists of Croatian origin are eminent members of numerous academic communities all over the world. In order to find the exact data on the number of Croatian scientists abroad, the National and University Library under the auspices of the Ministry of Science, Education and Sports has initiated a project on Croatian scientists whose data are to be collected in the focal point for the information about individuals and their activities. See the web site of the Croatian Scientist Portal (Portal hrvatskih znanstvenika, POHZ), at <http://pohz.nsk.hr/>.

⁴³⁷ Nada Švob-Đokić. Science and Technology in the Republic of Croatia in Kobal, Edvard ; Radošević, Slavo (Eds.). “Modernization of Science Policy and Management Approaches in Central and South East Europe”, Amsterdam/Berlin/Oxford/Tokyo/Washington, DC : IOS Press, 2005.

⁴³⁸ Nada Švob-Đokić. The Transitional Changes in the Scientific Systems of Southeast European Countries in Franičević, Vojo; Kimura, Hiroshi (Eds.). “Globalization, Democratization and Development”, Zagreb: Masmedia, 2003.

Revision of the legislation on science and technology started with the adoption of the new law on science and higher education in 1993 which was subsequently amended in 1996 and 2001. Until 2001 the national science policy was based on the National Scientific Research Program adopted in 1996. The Croatian National Scientific Research Programme for the period 1996 - 1998, later extended for three more years, dealt mainly with the institutional structure, elements of state control of science and the definition of the objectives and priorities in S&T. Very ambitiously, the Programme aimed to “form the foundations of the scientific policy and to constitute the implementation program for the advancement of the system of S&T”⁴³⁹ but was never systematically implemented. Since July 2003 development of S&T has been based on the concepts from the Strategy of Development of the Republic of Croatia in the 21st Century, adopted by the Government and the Parliament.⁴⁴⁰ Already in 2001 Croatia signed the Bologna Declaration, an international law that aims at creating greater compatibility and comparability of the European systems of higher education. This initiated a reform process which was followed by the establishment of a new legal framework between 2003 and 2005. Finally, the new legislative framework was put in place in 2003 when the Law on Scientific Research Activity and the Law on Scientific Activity and Higher Education were adopted.⁴⁴¹ In this period also the Law on Recognition of Foreign Educational Qualifications was passed.⁴⁴² The new legislation foresaw the establishment of higher education authorities, and subsequently the National Council for Higher Education, the National Council for Science and the National ENIC/NARIC office (European Network of National Information Centres on Academic Mobility and Recognition / National Academic Recognition Information Centre)⁴⁴³ were established in 2004, while in 2005 the Agency for Science and Higher Education was put into place.

1.1. Institutions for Research and Teaching on the Tertiary Educational Level

The Croatian higher education system comprises six universities: the University of Zagreb, the University of Rijeka, the University of Osijek, the University of Split, the University of Zadar and the University of Dubrovnik. There are altogether 85 faculties, art academies and schools of professional higher education; six polytechnics (two in Zagreb, one in Karlovac, Rijeka, Dubrovnik and Požega); six independent schools of professional higher education and eleven private accredited schools of professional higher education in the country. It is expected that the seventh university will soon be established in city of Pula, an administrative centre of the Istran County. The Government has accepted a draft Law on the establishment of the University of Pula (Prijedlog Zakona o osnivanju Sveučilišta u Puli) that is to be voted on by the Parliament in the following weeks.⁴⁴⁴

1.2. Co-ordination and Co-operation

The 1994 Higher Education Law introduced two separate systems in higher education: one scientific, i.e. university, and the other professional, i.e. polytechnic. Universities are established by a law, public polytechnics and professional schools of higher education are established by decree of the Croatian Government, while private universities and polytechnics are established by a resolution of the founder. Universities, polytechnics and professional

⁴³⁹ Ministry of Science and technology, National science and Research Programme 1996-1998.

⁴⁴⁰ Strategy of Development of the Republic of Croatia in the 21st Century, Official Gazette 108/2002.

⁴⁴¹ Law on Scientific Research Activity and the Law on Scientific Activity and Higher Education, Official Gazette 123/2003.

⁴⁴² Law on Recognition of Foreign Educational Qualifications, Official Gazette 148/2003.

⁴⁴³ More on those two offices see the web page of the Ministry of Science, Education and Sports, at <http://public.mzos.hr/default.asp?ru=787&gl=&sid=&jezik=1>.

⁴⁴⁴ Jutarnji list, “Pulsko sveučilište napokon stvarnost”, April 28, 2006.

schools of higher education are established as institutions. Universities are entitled to establish faculties, art academies, departments, and other component parts.

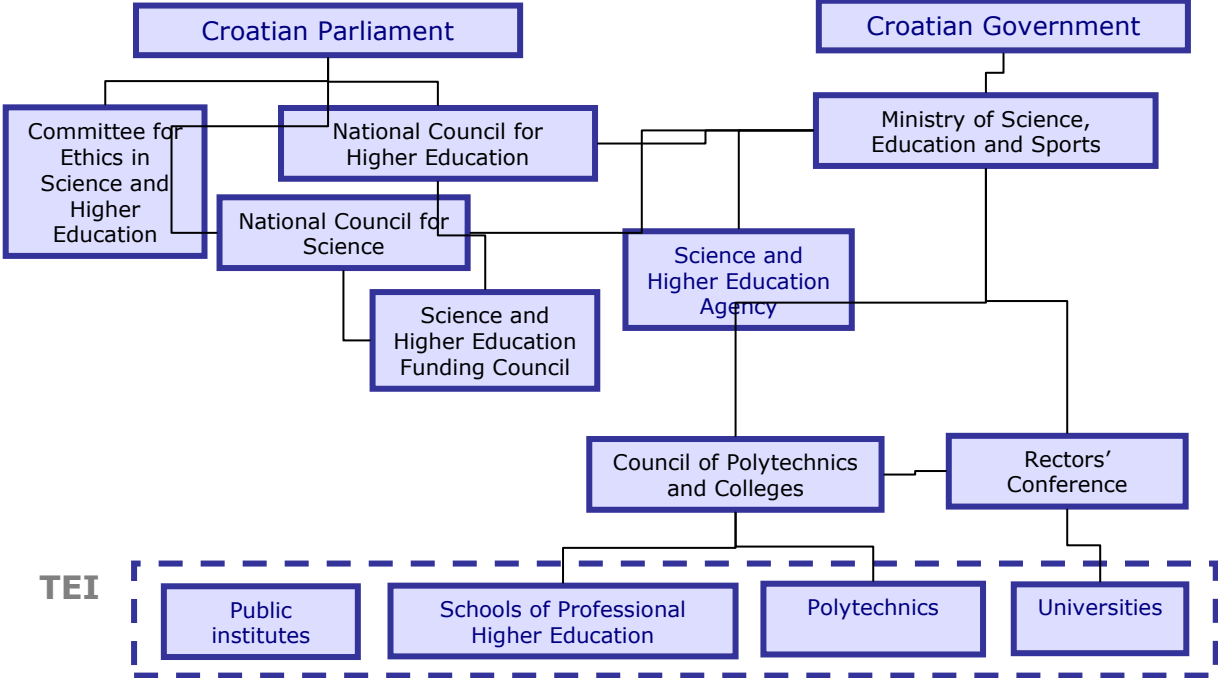


Table: Steering of the Tertiary Education System 2005
 Source: Ministry of Science, Education and Sport

2. EXISTING ADMINISTRATIVE STRUCTURES

In Croatia, science and research is under the authority of the Ministry of Science, Education and Sport (MSES). The role of the Ministry in the scientific and academic field is far stronger than in other Western European countries, which opens up space for political influence on academic and scientific freedom. A striking feature commonly noticed by external evaluators of the Croatian scientific system was “the strong tendency towards centralised management, particularly, as far as the science and education sector is concerned, an excessively powerful role for the Ministry in the planning and implementation of decisions.”⁴⁴⁵ Namely, officials in the Ministry take the responsibility not only for broad matters of policy and scientific priorities, but also the allocation of resources at a detailed level and even in individual academic appointments.⁴⁴⁶ The existing centralised system has historical background in previous socialist political system and the autocratic system which initially replaced it in 1990s.

For the sake of operational efficiency the science and higher education system is managed by two national bodies, one responsible for science and the other responsible for higher education: the National Council for Higher Education is responsible for the development and quality of the overall system of higher education, while the National Science Council submits to the Government recommendations on the allocation of budgetary funds. Both are obliged to meet at least once a year in order to make decisions, i.e. put forward recommendations of strategic importance.

2.1. Allocation of Competences

In the area of science, the Ministry of Science, Education and Sports (MSES) carries out administrative and other tasks related to the development of scientific research activity and scientific-technical information and communication, foundation and development of scientific research and other legal entities, development of science and application of scientific achievements, harmonization in financing programs of permanent research activity and projects as well as in financing scientific projects of special interest, planning, harmonization and implementation of development of information technology (IT) activity and its integration into an overall information system in the country, monitoring, documenting and implementing scientific, technical and technology cooperation with foreign countries and international organizations according to international agreements, sending experts from Croatia abroad and integration of foreign experts in activities in the country, etc.

The Ministry prepares draft laws and ordinances in the area of science, research, technology, education and sports which are consequently submitted to the Parliament by the Government. MSES manage budgetary funds for these areas as well.

2.2. Special Advisory Bodies

As previously stated, the National Science Council and the National Council of Higher Education are advisory bodies which formulate and monitor the programmes of functioning of R&D and higher education organisations (universities and institutes). The National Science Council appoints councils for specific areas of science (natural, technical, biomedical, bio-technical, social science and the humanities).

⁴⁴⁵ Academia Europea. “Science and Higher Education in Croatia: Report on a visit by the Academia Europaea”, at http://www.unizg.hr/fileadmin/rektorat/dokumenti/iskorak2001/sience_higher_education_croatia.pdf

⁴⁴⁶ *Ibid.*

The National Science Council (NCS) is a strategic body responsible for the development and quality of the overall scientific activity. Its major function is to monitor quality and evaluate scientific organizations, determine scientific fields, areas and discipline, as well as interdisciplinary fields of science and arts, setting detailed requirements for attaining the authority to conduct a procedure for appointment into science ranks, evaluation of scientific projects, collaborative scientific programs etc. The National Science Council appoints councils for specific areas of science (natural, technical, biomedical, bio-technical, social science and the humanities). Together with the National Council for Higher Education; the Council submits proposals on the allocation of financial resources foreseen in the budget for scientific activity and higher education.

The National Council of Higher Education (NCHE) is appointed by the Croatian Parliament (Sabor) as an expert advisory body for the higher education system in Croatia financed through the Ministry of Science, Education and Sport by a specific budget line determined by the Parliament. Members sitting in the National Council represent all branches of higher education and all regions of Croatia.⁴⁴⁷ They are appointed for a four year term upon proposals from the Rectors Conference of the University senates. The National Council was elected for the first time in 1993 as an advisory body to the Ministry of Science and Technology and to the Croatian universities and other institutions for higher education studies. The National Council has a decisive say in evaluating the work of universities. The National Council formulates its opinions on whether the universities and post-secondary schools meet the qualitative and organizational norms and standards, and this “seemingly consultative nature of the National Council for Higher Learning is in fact decisive when the Council proposes to the Ministry to approve or not the continued functioning of a given institution of higher learning.”⁴⁴⁸

The Agency for Science and Higher Education is a specialized institution established in 2004 by the decree of the Government in order to perform expert activities in the evaluation of scientific research and higher education and carry out activities connected with the recognition of diplomas and qualifications. It aims at ensuring the qualitative and successful functioning of the higher education system. The Agency evaluates universities, faculties and polytechnics and is meant to support the activities of the Councils and the Minister. The Agency may also conduct an evaluation at the request of a higher education institution or a public scientific institute itself. Finally, the Agency shall report to the Councils on the actions performed and their results, and the Councils shall make appropriate decisions on the basis of the Agency reports. The Agency had an important role in the creation of the National Network for Quality Assurance of Higher Education and its integration into the European Quality Assurance Network.

An advisory body for the area of technology is the Technology Council. The technology policy is formulated in the Croatian Programme for Innovative Technological Development. The Council closely monitors the execution of projects and requires quarterly reports from project directors. In addition, the Croatian Parliament appoints the Committee on Education, Science and Culture responsible for proposing legislation under the authority of the Ministry of Science, Education and Sports.

⁴⁴⁷Aleksa Bjeliš. “Quality Assurance System in Croatia – National Council for Higher Education”, at <http://www.unizg.hr/tempusprojects/bjelis-tempus-NCHE-0504.ppt>

⁴⁴⁸ Gvozden Flego. “Some legislative and institutional issues”, in Nada Švob-Đokić (ed.). “Research and Development Policies in the Southeast European Countries in Transition: Republic of Croatia”, Studies and Research Series, 2002, IMO, Zagreb.

2.3. Institutions for the Financial Management and Fostering of Research

The National Foundation for Science (NFS) promotes science, higher education and technological development in the country, in order to enhance development and employment opportunities. The NFS gives support to scientific, higher education and technological programmes and projects, and also promotes mobility in the field of higher education. Support can be given to scientific programmes of special interest, in basic, applied and development research. The NFS especially supports higher education programmes which result in innovation and patents, gives grants to talented students and especially to young and prominent scientists and experts from industry, scientific and higher education institutions in Croatia. Through strategic investment in people and ideas essential to outstanding research and helping projects which can foster development of Croatia, the NFS helps the transformation of Croatian society into a society of knowledge, and enhances the development of a globally recognized research and knowledge-based economy.

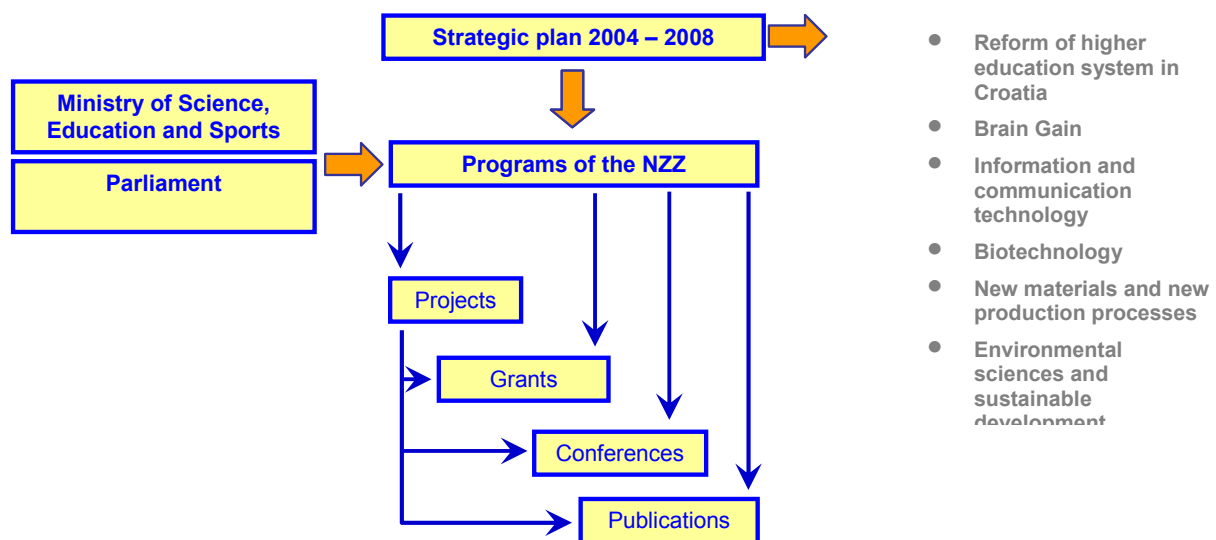


Table: Strategic focus of the National Foundation for Science, Higher Education and Technological Development (NZZ is the acronym in Croatian language)

3. THE CONSTITUTIONAL FRAMEWORK

It is constitutionally prescribed that the State protects, inter alia, educational conditions that promote the right to a decent life of its citizens (Article 62). Primary education is compulsory and free in Croatia. Secondary and higher education are equally accessible to everyone according to their abilities (Article 65). The establishment of private schools and educational institutions is prescribed by the Constitution (Article 66).⁴⁴⁹

The autonomy of universities is guaranteed by the Constitution and the Universities have a right to independently decide on their organization and work in conformity with a special law (Article 67). In reality, universities are (still) voluntary associations of faculties, and retain the right to make their own decisions on key issues regarding their activity and their finances. Therefore, the autonomy of the university guaranteed by the Croatian Constitution turns into the 'autonomy of faculties', which results in fragmented studying and research programmes, and makes it impossible to establish the university as an integral organization of any kind.

In addition, the Constitution guarantees freedom of scientific, cultural and artistic creativity, obliging the State to stimulate and assist the development of science, culture and the arts. Furthermore, the State shall protect scientific, cultural and artistic goods as national spiritual values. Finally, the protection of moral and material rights deriving from scientific, cultural, artistic, intellectual and other creative activities are constitutionally guaranteed (Article 68).

Universities should respect the constitutional principle of non-discrimination (on grounds of race, gender, language, religion, political or other opinion, national or social origin, property, birth, education, social status, invalidity, sexual orientation and age, or otherwise).⁴⁵⁰

Being aware that knowledge is an irreplaceable factor for social and human growth, the current Government has emphasized the importance of creating synergy between science and economic development in its Programme for the period 2003-2007.⁴⁵¹ The Program foresaw the establishment of the National Innovation System aimed at providing further incentives for introducing new technologies into the Croatian economy. The Program also foresaw the establishment of the National Foundation for Science, Higher Education and Technology Development.

Since July 2003 Croatian science policy has been based on the concepts from the Strategy of Development of the Republic of Croatia in the 21 Century-Science⁴⁵² adopted by the Government and the Parliament as well as on the Law on Scientific Activity and Higher Education adopted by the Croatian Parliament on 17 July, 2003.⁴⁵³

⁴⁴⁹ Constitution of the Republic of Croatia, Official Gazette 41/2001.

⁴⁵⁰ Statute of the University of Zagreb, <http://www.unizg.hr/fileadmin/rektorat/dokumenti/statut/statuteng.pdf>

⁴⁵¹ The Programme of Government für the period 2003-2007.

⁴⁵² Official Gazette 108/2002.

⁴⁵³ Official Gazette 123/03.

4. THE UNIVERSITIES

The Law on Scientific Activity and Higher Education came into force in August 2003 and established a mixed system which supports the specialist education offered in polytechnics, independent schools of professional higher education and universities on one hand, and academic education which is conducted solely in universities on the other hand. The Law treats private and public higher education institutions equally.

4.1. Establishment and Recent Reforms

The first university institution in Croatia was founded by the Dominicans in Zadar in 1396 as the studium generale for theology. It existed until 1806, when it was shut down during the French occupation. Even though the university education has existed since medieval times, academic education was not widely spread throughout the country till mid-XX ct.

The University of Zagreb⁴⁵⁴ was founded by King Leopold I by his decree of September 23, 1669 on recognition of the university rights and privileges to the Zagreb Academy, led by the Jesuits, and approved by the Croatian Parliament (Sabor) on November 3, 1671.⁴⁵⁵ The University in the modern sense, including science and engineering, was founded in Zagreb in 1874, thanks to the efforts of the Croatian bishop Josip Juraj Strossmayer. It had three faculties: Law, Theology and Philosophy, from which soon many new faculties developed. The University of Zagreb is very large (with more than 60 000 students and staff in excess of 10000 employees) and it is spread over the whole city. This university is a conglomerate of over 30 faculties and academies of arts. The opportunism of maintaining of traditional idea of a “universal” university, comprised of the hard sciences and the humanities, has been questioned in the last decade and there were numerous proposals put forward to split the University up into smaller units.⁴⁵⁶ The University of Zagreb is comprised of 29 faculties and three academies.

The Josip Juraj Strossmayer University of Osijek⁴⁵⁷ was established in 1975 by the decision of the Parliament of the Socialist Republic of Croatia.⁴⁵⁸ The recent history of higher education in the area began in 1959 when the Zagreb Faculty of Economics founded the Centre for part-time studies in Osijek as a branch of the faculty. Nevertheless, the history of higher education in the Slavonia region, of which Osijek is a capital, began in 1707, when the first institution of higher education was founded in Osijek. It was the Higher Theological School, which was opened in the 1707/1708 academic year as Studium Philosophicum Essekini, and included a three-year course of studies in philosophy. This university has nine faculties, one polytechnic school (the Teacher Training College) and one department (the Department of Mathematics). The University offers courses of study in the following fields: natural sciences, technical sciences, biomedicine and medicine, biotechnical sciences, social sciences and the humanities. There are three more affiliated institutions of the University of Osijek that contribute to and support higher education: the City and University Library in Osijek, the Student Centre in Osijek and the Student Centre in Slavonski Brod.

⁴⁵⁴ See more info at <http://www.unizg.hr/>.

⁴⁵⁵ Preamble of the Statute of the University of Zagreb.

⁴⁵⁶ The ongoing election of the Rector has re-opened the debate on the partition of the University, where some advocate division into four universities: technical, biotechnical, biomedical and humanistic. Certain candidates advocate the separation of several faculties (Law, Economy and eventually Agronomy) within a single university. *Večernji list*, 14.04.2006., pp. 2.

⁴⁵⁷ See more info at <http://www.unios.hr/>.

⁴⁵⁸ University of Osijek. Povijest visokog školstva, at <http://www.unios.hr/povijest/povijest.html>.

The University of Rijeka was founded in 1973, but its historic roots date back to the 17th century when the first school for higher education was established by the Jesuits in 1627. It enjoyed equal status with academies in the largest cities of the Austrian Empire. The Faculty of Philosophy, established in 1726, operated for two years. The Theological Faculty was founded in 1728. From 1773 to 1780, Rijeka was the seat of the Royal Academy. Presently the University is comprised of ten faculties, three teacher's schools of professional higher education, two university libraries and the student centre.⁴⁵⁹

The University of Split was established in 1974 by the decision of the Parliament of the Socialist Republic of Croatia. Currently, the city of Split has 18 higher education institutions (the University of Split with 10 faculties, one academy of arts, two teacher's schools of professional higher education and one university department, Split Polytechnic with 7 departments, as well as the Maritime School of Professional Higher Education in Split and the School of Professional Higher Education in Tourism in Šibenik). The University of Split has over 800 teachers, 400 of which hold a Ph.D. and 100 a Master's degree and over 15,000 students.⁴⁶⁰

The University of Zadar was (re)established in 2003. In the year 1996, on the occasion of the celebration of the 600th anniversary of the first university in Croatia, the idea of instituting, or rather reviving the University of Zadar came into being. The Parliament passed the Law of Instituting the University of Zadar in July 2002 and the registration of the University finally took place in January 2003. The University of Zadar consists of 21 departments: Archaeology, English Language and Literature, Philosophy, French Language and Literature, Geography, Informatics and Communication Sciences, Classical Philology, Croatian and Slavic Studies, German Language and Literature, Pedagogy, History, Psychology, Sociology, Italian Language and Literature, Department of Teachers and Pre-school educators, Ethnology and Socio-cultural Anthropology, Librarianship, Maritime Affairs and Traffic, Economics and Agriculture and Mediterranean Aquaculture.

The Government also supported the establishment of the University in Dubrovnik and the establishing Law was passed by the Parliament in October 2003. The founding entities of the University are the Polytechnic of Dubrovnik, which was founded in 1995, and the Faculty of Tourism and Foreign Trade, who had initiated the preparation of a feasibility study for the foundation of the University in Dubrovnik. The foundations of university education in Dubrovnik have a very long tradition which goes back to the 17th century. In the academic year 2004/2005 the University of Dubrovnik had twelve university and six professional courses in the following fields: science of navigation, marine engineering, marine electrical engineering and communication technologies, business and applied information technology, aquaculture and mariculture, economy and business studies, tourism and mass communication. At the moment, the number of students is 2600, while the number of people engaged in lecturing, professional and scientific activities at the University adds another 160.

Each of the universities in Croatia is composed of many independent faculties (fakultet), i.e. scientific-educational constituent units, artistic, educational constituent units, scientific constituent units, as well as of other constituent units which serve to ensure the unity and common standards of the University.

⁴⁵⁹ University of Rijeka. University Brochure, at http://www.uniri.hr/Engl_BrosuraPlava.pdf

⁴⁶⁰ The University of Split official web site at <http://www.unist.hr/>

4.2. The Adequacy of the Legal Framework

The Law on Higher Education of 1993 was designed to make universities more efficient and autonomous, and it also provided for the separation of the university sector from vocational education through the creation of colleges and polytechnics. However, the Ministry resisted the changes mandated by the Law and micromanaged every faculty separately, weakening the concept of institutional autonomy of University. Legislative changes introduced in 1996 further weakened the ability of the universities to manage themselves. To promote integration into the European higher education system, the academic community enhanced its contacts with international advisory bodies which recommended that university autonomy and management be strengthened. For example, a study done in 2000 detected that “almost complete autonomy of the faculties has resulted in independent professorships for service functions such as Mathematics, Physics, Information Technology, Economics, Social Sciences etc.”⁴⁶¹ Therefore the study suggested that the “unified process of teaching and research, as a principle claimed by the University is severely infringed in these cases.”⁴⁶² Those proposals were taken into account in the latest change of the legislation which took place in 2003, and which started to be implemented in academic year 2005/06.

4.3. Organisational Model

There are no private universities in the country. However, there are private higher education institutions, mostly located in Zagreb. The part of the present report on non-university related research institutions contains a list of all private higher educational institutions.

⁴⁶¹ Academia Europea. “Science and Higher Education in Croatia: Report on a visit by the Academia Europaea”, at http://www.unizg.hr/fileadmin/rektorat/dokumenti/iskorak2001/science_higher_education_croatia.pdf

⁴⁶² Ibid.

5. TYPES OF HIGHER EDUCATION INSTITUTIONS

<i>Types of Institutions</i>	<i>Number</i>
Universities (Universities include faculties, schools of higher education, academies of art, university departments and independent courses of study attached to the university. Total: 80 units.)	6
Public Institutes	26
Research Centres in the Industry Sector (state and private)	11
Academies (Croatian Academy of Arts and Sciences, Academy of Medical Sciences, Academy of Technical Sciences)	3
Schools of Professional Higher Education (6 independent and 12 private Schools of Professional Higher Education)	18
Polytechnics (7 public and 1 private accredited polytechnic)	8
Other scientific research legal entities (parts of business, cultural, health and state institutions)	50
Military research centres	1
Technology Centres	5
Total	122

Table: The national science and technology base

Source: Ministry of Science, Education and Sports of the Republic of Croatia, October 2003

Article 22 of the Law on Scientific Research and Higher Education enumerates as scientific organizations: universities, public research institutes, research institutes, other legal persons performing scientific activity, and institutions of special importance for the Republic of Croatia (such as Miroslav Krleža Lexicographic Institute, Croatian Academy of Sciences and Arts). Higher education is conducted at universities and in professional studies at polytechnics and at public schools of professional higher education.

Universities (sveučilište) are institutions of higher education authorised to organise and implement courses of study and scientific research, as well as to develop high-quality artistic and technological work. Universities establish and conduct university and interdisciplinary studies in at least two areas of scientific or artistic activity in a number of fields, as an autonomous and integrated process, indirectly or through its faculties, art academies and departments. Universities comprise faculties, art academies, departments and institutes and other units according to the law. In addition, professional courses can also be taught at universities. There are six public universities in the country.

- A faculty is an institution of higher education, a component part of a university, where university studies are organized and conducted, and where scientific and professional work in one or more scientific or professional areas is developed. Professional studies can also be conducted there.

- An art academy is an institution of higher education, a component part of a university, where artistic study is organized and conducted, and where top artistic endeavors and scientific activity in the field of art are nourished. Professional studies can also be conducted there.

Polytechnic (veleučilište) is a school of professional higher education which conducts at least three different studies in a minimum or three different fields and can not have schools of professional higher education as a component part.

Schools of professional higher education can be a component part of a university or can be situated outside the university.

Public institutes are established for the purpose of implementating public service programs in scientific research. They conduct all types of activities, from continuous research activities to contractual scientific research (projects).

The Universities tend to be organized in accordance with the “democratic model”, i.e. in which participation of all academic staff and students in all decision-making processes is foreseen. Apart from the representation of the faculties in the highest decision making bodies (Senates) of the universities, the new law anticipates that the student representatives of the first and the second cycle should participate in the Senate with at least 10% of the total number of the Senate members, and the students of the third cycle with at least 5%. Students are, at least at the proclamatory level, considered to be important participants in higher education and invaluable partners in the process of assessment and promotion of the quality of higher education teaching.

5.1. Functions of Universities

5.1.1. Autonomy

The legal system observes and regulates the freedom of scientific research and the autonomy of the university. The financial aspect of this autonomy is carried out through financing the programmes in the form of a lump sum budget of the university.

5.1.2. University Bodies

The University management is made of the Senate, Rector, University Council and the Rector’s Collegium as well as field councils. These executive bodies may establish expert or advisory bodies for assistance in performing their tasks. The Rector is the head and the leader of the University, with rights and obligations of the director of a public institution. He/she represents the University, participates in the operation of the Rectors’ Conference, presides over the Senate, and in addition s/he is in charge of the management of the University.

- The Senate

The Senate is the expert council of the University and consists of the Rector, employees with a scientific educational or artistic educational title, students of undergraduate and graduate studies, students of postgraduate studies, and members elected from other employees.

Senate members serve a four-year term madate. Student representatives are elected every two years. The Senate members are elected directly by employees with scientific-educational and

artistic-educational titles through the expert councils of the constituent units in such a manner as to ensure proportional representation of the constituent units in the Senate. Each scientific-educational and artistic-educational constituent unit shall have at least one representative in the Senate.

The Senate determines the strategic developmental policies of the University, determines educational, scientific, artistic and professional policies of the University, enacts the Statute and other University rules and regulations within its authority, by a two thirds majority of all its members, adopts the budget of the University, upon a proposal of the Rector's Collegium, decides on the establishment, change of the status or cessation of scientific or artistic educational constituent units, at the proposal of the Enlarged Rector's Collegium, by a two thirds majority of all its members, decides on the establishment of organizational units of the University, approves doctoral proposals which cover multiple scientific fields, awards honorary doctorates and titles of "professor emeritus" and "deserving scientist", approves appointments to the title of full professor and to the position of scientific counselor, appoints the Electoral Commission in the procedure of electing the Rector, participates in the electoral body for election or relief from duty of the Rector, decides on initiating the procedure to relieve the Rector from duty, elects vice-rectors and relieves them from duty at the proposal of the Rector, etc.

The Senate approves appointments or elections of heads of other University constituent units, the foundation charter, or the statute of the unit. It in addition appoints representatives of the University to the University Council. The Senate plays an important role in ascertaining study capacities and the policy of admission, determines admission quotas, defines standards of study and oversees their implementation through its Committee and Office for Quality Management, decides on study programs, initiates multidisciplinary scientific projects and study programs which encompass multiple scientific or artistic fields, monitors international cooperation of the University and makes proper decisions thereupon, adopts plans of employment in scientific and artistic educational, scientific and associate positions and makes plans for personnel organization, upon proposals of the field councils, etc. The University Senate may put a suspensive veto on the decisions of Faculty Councils when they are contrary to the interests of the university.

- The Rector

The Rector is the second entity running the university. The Rector is elected by the University Senate from among the nominees proposed by the Electoral Commission. Previously, the University Governing Council would submit a list of nominees for the position of the Rector.⁴⁶³ This meant that the Rector was indirectly chosen by parliamentary body governing the university (i.e. University Governing Council), thereby the election of the Rector were non-autonomous.

The Electoral Commission is composed of a chairperson and six members, appointed by the Senate from among its members, controls the procedure of candidacy. The election procedure is instituted by the Electoral Commission issuing a public invitation for candidates, at least eight months before the expiration of the mandate of the incumbent Rector. The proposal shall contain the curriculum vitae and work program of the candidate and shall be put on the Web-site of the University at least two weeks before the joint session of the Senate and the field councils, upon which the candidates shall present and defend their programs. The

⁴⁶³ "The Governing Council shall submit to the University Senate the list of nominees for the election of the Rector." (ZU, Article 105, Para. 2)

Electoral Commission shall examine the submitted proposals in order to establish whether the candidates fulfill the requirements prescribed by the Law and the Statute. Candidates who fulfill the requirements from the previous section shall present and defend their programs at the joint session of the Senate and the Field Council.

The Rector is elected by a secret ballot, at a joint session of the members of the Senate and the members of all the field councils. Each member of the electoral body has one vote. The Rector is elected by a majority vote of all the members of the electoral body. If no candidate obtains such a majority in the first election, a second election is held in which the two candidates who have obtained the largest number of votes in the first election have the right to stand for election.

The term of office of the Rector shall begin, as a rule, on October 1 of the year of election and expire on September 30 of the year of cessation of the mandate. If the Rector's mandate happens to terminate before the expiration of the term for which he or she has been elected, the Senate shall select the acting Rector from among its members who shall perform the duty until the election of a new Rector. In such a case, the Senate shall determine by a special decision the terms of the procedure of selection as well as the date of assuming the mandate by the newly elected Rector.

The Rector is elected for a four-year term and in some cases, depending on the University Statute, may be re-elected once. The Rector shall be elected from the ranks of the University educators with the scientific or artistic title of full professor. The Rector is responsible to the Senate and regularly submits an annual report on the operation and business of the University.

6. RESEARCH

6.1. Election of Researchers

The Law on Scientific Activity and Higher Education defines the researchers and research assistants, the way of achieving such positions and the registration process they have to undertake in order to become fully fledged members of the academic community. Namely, the researcher should be elected by the institution (faculty, public institute, academy etc.) and subsequently registered by the Ministry of Science, Education and Sports. Without this registration and confirmation from the Ministry, the researcher has no right to benefit from Governmental funding, meaning he will not be getting any salary. Once confirmed by the Minister, a researcher's position is valid for a certain period, in which he is obliged to acquire a certain academic degree. In order to have his working contract prolog s/he has to apply for promotion into a higher rank academic title.

The Minister of MSES is authorized, upon request of the research project head, and with prior consent of the relevant scientific institution, to approve the employment of a junior researcher on a scientific project financed by the Ministry.⁴⁶⁴ All vacant positions in academic institutions have to be advertised in the Official Gazette, daily papers and on the web site of the institution. In spite of a lack of scientific employees in research institutions, it usually takes several months, up to a year, to get a confirmation from the Minister that a position for a junior researcher is assured. Public institutes or universities are unable to employ junior researcher without the Minister's consent, therefore the long procedure contributes to the

⁴⁶⁴ Article 43, paragraph 8 of the Law on Scientific Research and Higher Education.

inefficiency of the Croatian science. For example, recently advertised decision of the Minister to allow employment of junior researcher on several research projects in Croatia took more than a year after heads of those projects applied for new positions.

Obligations of a young researcher include: attaining a degree of Master of Science within four years, and PhD within the following four years. A young researcher with a PhD may have his/her employment contract extended for a maximum of 11 years following the concluding of the first contract.

The following persons are entered in the Register of researchers maintained by the MSES:

- research associates, senior research associates and research advisors,
- assistant professors, associate professors and full professors. In addition to the above, the following persons are entered in the register:
- external associates – assistant professors and senior assistant professors,
- persons with a doctoral degree.

6.2. Research Projects

The overall research activities can be divided into the following areas:

- Individual and team-based research of the faculty members;
- National research projects, financed by the government;
- Commercial research projects;
- International projects;
- Scientific conferences organized by the Faculty;
- International cooperation;
- Publishing.

The computer application for the overview and application of research projects was developed by the MSES. Named “zProjekti”, it contains basic data for project implemented from 1990 on. Web accessible Croatian scientific bibliography research papers from 1991 until the present are inserted by each academic member.

	1996	1997	1998	1999	2000
Natural Sciences	290	300	343	351	400
Technical Sciences	240	300	354	355	408
Medical Sciences	142	191	233	240	268
Bio-technical Sciences	63	86	99	93	134
Social Sciences	88	97	138	138	208
Humanities	92	128	161	162	193
Total	915	1102	1328	1339	1607
Public Institutes	228	277	358	358	432
Higher Education Institutions	616	724	857	861	1037
Other Institutions	71	101	113	120	138
Total	915	1102	1328	1339	1607

Table: Annual Overview of Young Researchers in the period 1996-2000 Distributed per Scientific Areas and Types of Scientific Institutions

Source: Questionnaire for the European Commission

The Ministry of Science, Education and Sport provides financial assistance for the following:

- Publishing of scientific books and university textbooks
- Publishing of magazines (both scientific and magazines for popularization of science)
- Organization of scientific conferences
- Organization of professional conferences
- Work of scientific and professional associations.

In addition, the Ministry buys off scientific books and university textbooks for scientific and university libraries. Researchers, associates and professors, as well as junior researchers employed in public institutes and universities are entitled to reimbursement of costs of the design and submission of a doctoral degree in the amount of HRK 4,500, and the design and submission of a master's degree in the amount of HRK 3,000.⁴⁶⁵

	2001.	2002.	2003.
Ukupno <i>Total</i>	1 780 379	2 006 307	2 209 274
Vlastita sredstva <i>Own resources</i>	843 209	946 480	1 026 281
Državna i lokalna uprava <i>Government and local administration</i>	794 929	860 561	964 846
Privatna i javna poduzeća <i>Private and public enterprises</i>	115 145	138 788	143 475
Ostali domaći izvori <i>Other domestic resources</i>	8 096	29 119	26 170
Inozemni naručitelji <i>Foreign resources</i>	18 920	31 359	48 502

Table: Resources for R&D
Source: Statistical Annual 2005.

	2001.		2002.		2003.	
	<i>ukupno</i> <i>Total</i>	<i>žene</i> <i>Women</i>	<i>ukupno</i> <i>Total</i>	<i>žene</i> <i>Women</i>	<i>ukupno</i> <i>Total</i>	<i>žene</i> <i>Women</i>
Ukupno sektori <i>All sectors – total</i>	7 495	3 192	8 686	3 770	8 669	3 936
Poslovni sektor <i>Business enterprise sector</i>	973	365	1 205	417	858	368
Državni sektor <i>Government sector</i>	1 970	1 014	2 108	1 119	2 416	1 261
Visoko obrazovanje <i>Higher education sector</i>	4 552	1 813	5 373	2 234	5 395	2 307

Table: Researchers with full-time employment
Source: Statistical Annual 2005.

⁴⁶⁵ Article 10 of the Collective agreement for science and higher education, Official Gazette no. 101/02.

	2001.	2002.	2003.
Ukupno sektori <i>All sectors – total</i>	7 180	8 645	9 7
Poslovni sektor <i>Business enterprise sector</i>	533	525	4
Državni sektor <i>Government sector</i>	2 098	1 963	2 9
Visoko obrazovanje <i>Higher education sector</i>	4 549	6 157	6 3

Table: Published research works by sectors and fields of science
Source: Statistical Annual 2005.

6.3. Investigator Driven Basic Research

The official explanation by the MSES claims that “the majority of financed projects reflect interest by researchers and institutes for specific topics (curiosity-driven research).” Nevertheless, from my own year-long engagement with a scientific/research public institute in Croatia, I dare to claim that the vast majority of directors of research institutions as well as heads of departments who are eligible to put forward projects to the MSES are exclusively concerned with winning contracts that will assure their basic salaries for a substantial period (four years) and then engage in taking part in so called commercial projects (e.g. funding by foreign foundations, sources of the European Commission, UNDP etc.). Namely, funds assured through the commercial project remain to a great extent at the disposal of the head of the department, and as a rule only 10% of the funding value has to be transferred to the public institute. As those sources are used as extra funding opportunities, heads of the departments and project leaders prefer them rather than being concerned with developing strategies of long-term research projects.

A number of projects and the allocation of funds show that the majority of scientific research financed by the MSES falls within biomedical, technical and natural sciences.

Field	No of projects	%	Kuna	%
Natural sciences	317	17.6	30,915,000	24.5
Engineering	345	19.1	22,889,000	18.1
Biomedicine	437	24.2	35,580,000	28.1
Biotechnology	174	9.7	12,208,000	9.7
Social sciences	260	14.4	12,188,000	9.6
Humanities	270	15.0	12,639,000	10.0
Total	1,803	100	126,419,00	100

Table: Scientific projects in Croatia financed by the Ministry (2005) - Fields
Source: Ministry of Science, Education and Sports

6.4. Targeted Basic Research

Research institutions (including the Ministry of Science, Education and Sports) have very modest capability in the intellectual property protection accompanied with an almost total absence of IPR strategy and policies. Since MSES recognized that as the serious limitation factor of commercialization of research results, academic entrepreneurship, and public-private partnership, the CARDS project on establishing IPR infrastructure has been initiated and accepted.

Concerning the exploitation of the results, intellectual property protection and patenting are regulated by the Patent Law and related laws. This area is under the responsibility of the Croatian State Intellectual Property Office (CSIPO).

Since October 2003 there is a new legal framework for intellectual property rights (IPR). In October 2003 the Croatian Parliament passed the following laws in this area: Copyright and Related Rights Law, Patent Law, Trademark Law, Law on Industrial Designs, Law on Indications of Origins of Products and Services, and the Law on Protection of Topographies of Semiconductor Products.⁴⁶⁶ They respect both WIPO international agreements and EU directives. The National Programme of the Republic of Croatia for the Association to the European Union in 2004⁴⁶⁷ includes measures regarding the intellectual property matters.

Intellectual property is under the responsibility of the Croatian State Intellectual Property Office. The Office has registered sixty patent agents. Only two companies in Croatia have presently full-fledged intellectual property departments. Research institutions have modest capability in intellectual property protection and they require a strategy and policy for intellectual property protection. Since this constitutes a serious restriction to commercialisation of research results, academic entrepreneurship, and public-private partnership, a project on establishing IPR infrastructure has been proposed within the CARDS program. The project is entitled Intellectual Property Infrastructure for the R&D Sector and has been recently approved by the European Commission.⁴⁶⁸

6.5. Research as a Bridge between the State and the Economy

The Department of Technology of the MSES has focused on the establishment of a national network of institutions engaged in the development, transfer, application and financing of new technologies. It also works to extend specific measures of government support to the development of technology-based small and medium enterprises (SME). In order to encourage the development of SMEs, the Croatian Government adopted in March 1998 the Program for Promotion and Start-up of Production Based on New Technologies.

In February 2001, the MSES launched the Croatian Program for Technological Development – HITRA. The program was approved by the Croatian Government on April 5, 2001. The Programme is aimed at building up efficient national innovation system through permanent development of the three strategic and long term goals:

⁴⁶⁶ All laws were published in Official Gazette 173/2003. Complete list of intellectual property legislation translated into English is available at the web site of the State Intellectual Property Office of the Republic of Croatia, at <http://www.dziv.hr/dzivnew/en/default.aspx?pArtID=58&selection=4>

⁴⁶⁷ Official Gazette 37/2004.

⁴⁶⁸ Government of the Republic of Croatia. "Information provided by the Government to the Questionnaire of the European Commission, Chapter 17: Science and research", at <http://www.vlada.hr/zakoni/mei/Chp17/Chp17.pdf>

- creation of stimulative policy measures, mechanisms and programs
- creation of technological institutional infrastructure
- establishing the control mechanisms of policy for innovation and technology.

HITRA is especially targeted at public-private-partnership or science-industry cooperation and provides a framework for direct cooperation between entrepreneurs/industry and Croatian higher education institutions and research institutes. The target groups are all the individuals and legal entities with commercially and technically viable ideas and technology-based companies. It is being implemented through two complementary subprograms: The TEST Subprogram (Technology-Related Research and Development Projects) provides financial support to pre-commercial research activities related to the development of new technologies (products/processes/services), as well as to complex projects for technological development. The RAZUM Subprogram (Development of Knowledge-Based Companies) is aimed at financing entrepreneurial projects (set-up, development and expansion of a company) based on new technologies, i.e. products with high added value.

The Business and Innovation Center of Croatia (BICRO) is implementing the RAZUM subprogram. High professionalism in the implementation of the RAZUM subprogram, without administrative influence on decision-making, as well as development of specific knowledge and relevant network of experts for financing, assessment and managing entrepreneurial projects, has been secured by implementing this program as one of the regular activities of BICRO and technology centres.

The TEST Subprogram has been implemented by the Ministry of Science, Education and Sports as one in the array of its activities. A logical sequence of this approach, identical to the RAZUM Subprogram, requires entrusting the implementation of the TEST Subprogram to an institution outside direct influence of the government administration. Therefore, the implementation of the RAZUM Subprogram will be transferred to the Institute for Technology Policy and Development as its regular Activity for the purpose of professionalism, further expansion and promotion. The monitoring of performance of the HITRA program is organized thorough annual reports to the Ministry and Government. A special body for controlling the use of public resources for the HITRA program - Interdisciplinary Control Group - was founded in December 2001.

RTD services offered to industry are organized as follows:

- subsidising technology and development projects in industrial R&D units (entered into the Register kept by MOST) for the purpose of developing or introducing new products, processes or services. If units not entered into the Register kept by MOST or private initiatives projects are subsidized via cooperation with registered research or higher education institutions;
- supporting knowledge-based companies including grants for research and development (30% of a total project value), favourable commercial loans and conditional loans in case of academic entrepreneurship (spin-offs from universities);
- supporting the establishment of technology nuclei (located in industry). At present this includes grants for feasibility studies for establishing/developing a technology nucleus and financing Doctors of Science and technology assistants at technology nuclei.

The Program for Supporting Knowledge-Based Companies also includes identification of research teams required for research activities, organisation and monitoring of research services provided to companies. In addition, there is co-financing of young experts on

technology projects as complementary financing to the program of the Government of the Republic of Croatia entitled From University to Work.

Venture capital in Croatia is in its initial phase mainly due to the lack of proper legal conditions and misunderstanding of the role of technology-based entrepreneurship. There is only one VC fund - Copernicus Capital Adriatic. It was founded in Croatia in 1997 and it has been oriented to large investments. However, there are two foreign funds (SEAF and HORIZONTE) operating in Croatia in the domain of starting-up projects.

There is also the "Program for Investments into Companies' Equity" of the Croatian Bank for Reconstruction and Development (HBOR) intended for small and medium-sized enterprises with development projects that enable profitable operation, intensive growth or increase of employment, and possess required professional knowledge and entrepreneurial skills.

As the development of venture capital is linked to the development of advanced technologies and commercialisation of research, the Ministry of Science and Technology has initiated a systematic development of the VC industry in Croatia with the World Bank through the Science and Technology Project. Assistance in managing and counselling in the field of commercialisation of research results, particularly patenting in scientific and academic community, has not been developed in Croatia. Preliminary steps towards modern science management are connected to participation in the EU RTD programs, particularly EUREKA. In addition, there is ongoing cooperation with the World Bank (TAL-2) on the Science and Technology Project aimed at updating management of RT activities. Development of intellectual property and venture capital based on the use of scientific research and technology development present a part of this project.

The main targets of technology policy are directed to:

- strengthening science-industry cooperation
- strengthening generic research by public-private partnership
- revitalization of industrial research
- commercial use of scientific research
- building up technology capabilities of companies
- developing private incentives for financial investments into technology- based entrepreneurship.

6.6. Private Research Companies

The 1990s brought about a decrease of commercial research due to the significant economic difficulties encountered by the local enterprises. Criticizing the corporate and overall economic establishment of the country to the science and research, Nada Švob Đokić argues they have not provided any inputs worthy of mention in the debate on the organization and institutionalization of science.⁴⁶⁹

Cooperation between business and research has started to improve recently, and more and more large enterprises as well as SMEs and administrative units invest in research activities of universities and institutes. Besides this, some of the enterprises have their own research departments. Several business sector (corporate) research institutes existing in the country are within the following companies:

⁴⁶⁹ Nada Švob Đokić. Some questions of principle, at <http://www.imo.hr/culture/publics/svob01/principle.doc>.

- Croatian Engineering Institute
- Ericsson Nikola Tesla Ltd.
- Hrvoje Požar Energy Institute Ltd.
- INA-Department for Strategic Development, Research and Investments
- Institute for Electric Power, Industry and Energetics Ltd.
- Institute for Improvement and Production of Crops Ltd.
- Končar Institute for Electronics Ltd.
- PLIVA Ltd.
- Ship-building Institute
- Tobacco Institute Ltd.
- Traffic and Communication Institute

Is research and development a highly specialized self-reproducing and branching activity (such as natural and social sciences, applied and basic research), or is it an integral part of various other activities (such as various industries, environmental protection, medicine, social welfare issues)?

The understanding of science as a special activity does not emphasize the difference between experimental development on the one hand and scientific, technical and technological research on the other hand, because it is taken for granted that science as an activity has its own inner developmental dynamics, while the possible application of its results depends on the interested consumers of scientific knowledge.

6.7. Funding of Specific Areas of Research

In Croatia the main S&T funding sources are the state budget, foreign donors and the private sector. The financing of public scientific institutes is conducted by their own budget adopted by the Management Council of the institute upon proposal of the Scientific Council and consent of the Minister. Financing scientific projects, collaborative scientific programs, associate work posts and scientific equipment is allocated from the state budget, based on a public call announced by the Ministry at least twice a year. Estimated gross enterprise expenditure of business items on RTD in Croatia equals between 32 – 45 % of the amount allocated for RTD from the state budget. This amount is invested directly by companies into their development.

6.8. Applied Research for the Development of Specific Products

Science & Technology Policy for the period 2006-2010 prepared by the MSES reports that between years 2001-2005, close to 30 000 000 € was invested in HITRA technology projects with the outcome of several projects being close to market exploitation. Both HITRA's complimentary sub-programs (Technology-related research and development projects (TEST) and Development of knowledge-based enterprises (RAZUM)) are currently in the process of being redefined, and implementation has been entrusted to professional technology management corporations, Business Innovation Center of Croatia, BICRO Ltd. and The Croatian Institute for Technology, HIT Ltd., to ensure quality and transparency in the decision-making process.⁴⁷⁰

⁴⁷⁰ Ministry of Science, Education and Sports. Draft Science & Technology Policy of the Republic of Croatia 2006-2010.

7. TEACHING

Students are persons enrolled in institutions of higher education. There are full-time and part-time students. A full-time student studies on a regular basis either with the support of the Ministry of Science, Education and Sports or by paying for the study himself. A part-time student studies on a part-time basis supported either by himself or by his employer.

According to the research findings done so far, Croatia is at the lower end of European qualifications scale, with only 13 percent of its working population with a higher education degree. The period spent studying is unjustifiably long resulting in a costly and inefficient studying process. In addition, only a small percentage of those who have enrolled at a higher education institution actually finish it.

In spite of a relatively small percentage of the population with a higher education degree, a trend of massification of student population is noticeable. However, societal generators of such massification are mostly the result of economic recession and a high unemployment rate, so youngsters would rather enrol at a faculty than search for a job upon completion of high school. Namely, once enrolled at the universities or polytechnics, students are assured all social benefits. These factors result in an increase in number of students not followed by an adequate increase of investments into national higher education (particularly into its human resources). Therefore, the massification of student population that has been taking place since 1990s is not a result of emergence of modern knowledge-based society and corresponding long term state policy, but rather a reflection of the poor economic situation of the country.

7.1. Undergraduate Education

The annual enrolment of freshman encompasses more than half of all high school graduates.⁴⁷¹ In the winter semester of the 2004/2005 academic year, a total of 128 670 students enrolled at institutions of higher education, which was 6.5% more than the previous academic year. There were 50 050 students enrolled in the first year, which was 5.4% more than the previous academic year. The share of female students was 53.8%, the same as in the 2003/2004 academic year. There were 71.5% full-time and 28.5% part-time students enrolled. The most full-time students enrolled on faculties, even 82.6% (10.9% on professional and 71.7% on university studies), then at schools of professional higher education, 9.6%, polytechnics, 6.5%, and academies of art, 1.3%.

Undergraduate courses provide students with training for graduate courses and the possibility of finding employment in certain specialised jobs. Upon the completion of the undergraduate courses, students are awarded the academic title *baccalaureus* or *baccalaurea*, with their profession also indicated, unless the law specifies otherwise. Professional study therefore primarily gives students the appropriate level of knowledge and skills enabling the performance of trade jobs and educates them for immediate inclusion in the work process.

University study furthermore educates students for work in science and higher education, allowing for additional academic development and application of scientific and professional achievements.

⁴⁷¹ Ministry of Science, Education and Sports (2003). "National Report – Republic Of Croatia", at <http://www.bologna-berlin2003.de/pdf/Croatia.pdf>

7.2. Post-graduate Education

Postgraduate master's study can be academic, professional and artistic. Postgraduate academic study can be enrolled by any person that has completed a corresponding university study. It is normally established as a study aiming at winning a master's degree in science and offering obligatory and facultative courses. An institution of higher education that organises a post-graduate academic study defines, within enrolment conditions, which undergraduate university study is considered correspondent for the enrolment.

Postgraduate professional study and postgraduate artistic study can be enrolled by any person that has completed a related professional undergraduate study lasting for four years. An institution of higher education that organises a postgraduate study, within enrolment conditions, which undergraduate university study is considered correspondent for the enrolment to the post-graduate professional or artistic study leading to the Master's degree. Postgraduate academic study leading to the Master's degree in science may last at least two years. Postgraduate professional study leading to the Master's degree may last for at least one year. University postgraduate artistic study leading to the Master's degree may last at least two years, while postgraduate artistic study leading to the Master's degree organized at a polytechnic or a school of higher learning may last at least one year.

In the 2004/2005 academic year, a total of 5 034 students enrolled in postgraduate studies, which was by 1.5% more than in the previous academic year. There were 2 802 women enrolled (55.7% out of the total number of students enrolled), which is by 2.7% more than in the previous academic year.

According to 5-year age groups, the largest number of students was classified in 25-29 group (43.8%), while the smallest number of students was classified in 35-39 group (10.7%) and under-24 group (12.7%). 30-40 group took 19.6%, and finally over-40 group 13.2% of the total percentage.

Postgraduate academic study was enrolled in by 77.4% of postgraduate students, professional by 21.9% and artistic by 0.7%. Out of the total number of postgraduate students, 76.1% of them enrolled on studies at University of Zagreb.

Out of the total number of students, 56.8 % of them were paying for the study themselves; 27.6% were supported by the employer and 8.6% of them were supported by the Ministry of Science, Education and Sports, while 7.0% were in the category Other.

7.3. Acquiring a Doctorate of Science

In the period from 1 January to 31 August 2005, out of the total of 328 doctoral candidates in 2005, 236 candidates enrolled on doctoral studies and 92 candidates registered doctoral dissertation.¹⁾ The share of women is 44.8%. At Zagreb University 81.1% of all doctoral studies and doctoral dissertations were registered, at Split University 7.6%, at Zadar University 7.3%, at Osijek University 3.1% and at Rijeka University 0.9%.

In the age category the largest number of all doctoral candidates are aged under 29 (42.1%), while the smallest number of candidates is classified in 60-and-over group (0.6%). 30-34 group takes 31.4%, 35-39 group 14.3%, 40-44 group 4.6%, 45-49 group 4.0%, 50-54 group 2.1% and finally 55-59 group 0.9% of the total percentage.

According to the scientific field of studies and dissertations it is calculated that the most often chosen field is Technical Sciences with 24.7%, followed by Natural Sciences and Biomedicine and Health with 19.8% each, Social Sciences with 15.3%, Biotechnical Sciences with 13.4% and finally Humanities with 7.0% of all percentage. The largest number of doctoral candidates are working in Education (45.4%), 15.8% of them are working in Research and development, 10.4% in Health and social welfare, 4.3% in Agriculture, hunting and forestry, 3.7% in Manufacturing and 15.8% in other activities. 4.6% of doctoral candidates are unemployed.

Out of the total number of doctoral candidates 28.4% of them were paying for doctoral study/process of acquiring a doctorate themselves, 39.0% were supported by the Ministry of Science Education and Sports, 31.1% were supported by the employer, while 1.5% belong to the category Other.

	Razina NSKO-a i ISCED-a '97 ¹⁾ NSKO and ISCED '97 level ¹⁾	2001./ 2002.*	2002./ 2003.*	2003./ 2004.
Upisani studenti <i>Students enrolled</i>				
Visoka učilišta²⁾ <i>Institutions of higher education³⁾</i>		112 537	121 722	126 322
Više škole <i>Non-university colleges</i>	5	-	-	-
Veleučilišta <i>Polytechnics</i>	5	16 024	17 470	13 198
Visoke škole <i>Schools of higher learning</i>	5	13 038	13 981	14 595
Fakulteti, umjetničke akademije i visoka vjerska učilišta ²⁾ <i>Faculties, academies of art and institutions of higher religious education³⁾</i>	5&6	83 475	90 271	98 529
Upisani studenti na 1 000 stanovnika <i>Enrolled students per 1 000 inhabitants</i>	5&6	25,36 ³⁾	27,40 ⁴⁾	28,44 ⁵⁾
Studenti koji su diplomirali na dodiplomskom studiju⁶⁾ <i>Graduated students on undergraduate study⁸⁾</i>				
Visoka učilišta <i>Institutions of higher education</i>	5	13 810	14 868	15 762
Više škole <i>Non-university colleges</i>	5	58	-	-
Veleučilišta <i>Polytechnics</i>	5	542	1 238	1 641
Visoke škole <i>Schools of higher learning</i>	5	2 073	2 154	3 032
Fakulteti, umjetničke akademije i visoka vjerska učilišta <i>Faculties, academies of art and institutions of higher religious education</i>	5	11 137	11 476	11 089
Osobe koje su stekle znanstveni naslov⁹⁾ <i>Masters and doctors of science⁹⁾</i>				
Magistri i magistri znanosti <i>Masters and masters of science (MSc)</i>	5	676	777	808
Doktori znanosti <i>Doctors of science (DSc)</i>	6	255	314	321

Table: Students and graduates in academic years 01/02, 02/03, 03/04
Source: State Statistical Bureau

7.4. Curricular Models for Undergraduate and Postgraduate Studies

Higher education has three levels:

- Pregraduate studies
- Undergraduate studies
- Postgraduate studies

Each level of study needs to be harmonized with the European credit system (ECTS) whereby in an academic year a student acquires 60 ECTS credits on the average. Professional studies are conducted in a professional school of higher education or a polytechnic, but can also be conducted at a university.

Under the new Law, higher education is organised according to the system of transferable points. Undergraduate courses, typically lasting for three to four years, bring 180 to 240 ECTS points. Graduate courses, which typically lasting for one or two years, bring 60 to 120 ECTS points. Postgraduate courses can be taken after completing a graduate university course, typically lasting for three years, and the academic title doctor of science (dr.sc.) or doctor of arts (dr.art) is awarded upon completion. The university can also offer postgraduate specialist courses which last for one to two years, by which one can acquire the title of a specialist (spec.) in a certain specialist field.

Professional degree courses are offered at polytechnics and independent schools of professional higher education but also at the university. Professional degree courses last for two to three years and bring 120 to 180 ECTS points upon completion. Upon completion of a professional degree course, the students are awarded the title professional baccalaureate, with the indication of the profession. Polytechnics and schools of professional higher education can organise a specialist professional graduate degree course for people who have completed a professional degree course or an undergraduate university course. The specialist professional graduate degree course lasts for one to two years after which the title of specialist of a certain profession (spec.) is awarded.

The process of establishing the above-mentioned studies in higher education institutions the ECTS system was initiated in academic year 2005/2006. The implementation of the postgraduate courses initiated in accordance with the provisions of the new Law started in academic year 2004/2005.

It is generally considered that curricula should be better linked to the needs of the economy and wider society.

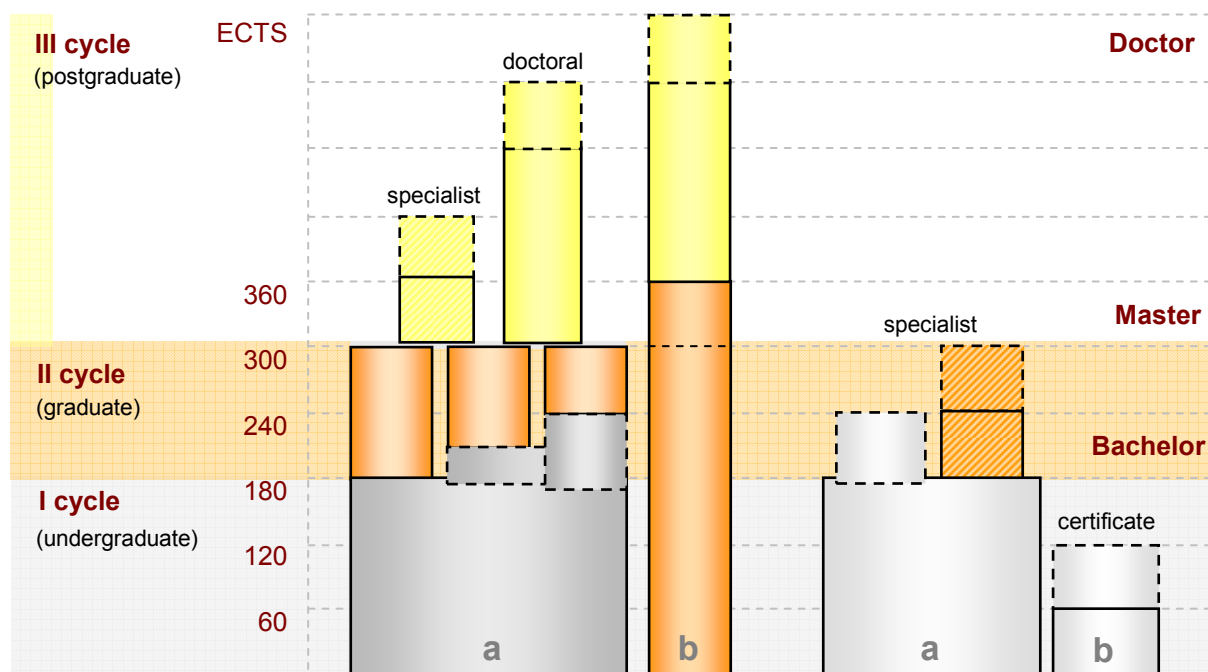


Table: Current structure of tertiary education
Source: Ministry of Science, Education and Sports

7.5. Implementation of the Bologna Process

On June 19, 1999, the Bologna Declaration was signed by twenty-nine European countries and Croatia joined the Declaration two years later, in May 2001. It is hoped that the implementation of the Bologna Declaration principles and its pan-European dimension will help Croatian institutions of higher education and the country's education system to become part of the European system of higher education. The introduction of the three-cycle system of studies, the European quality assurance system, the ECTS, the harmonization of study programmes with European programmes, academic mobility and other factors are expected to contribute to the quality of teaching in higher education institutions, making them more attractive for students originating both from Croatia and from other countries.

With this goal in mind, the MSES has organized many seminars, workshops, lectures and other events in order to facilitate the exchange of experiences and dissemination information on the implementation of the Bologna Declaration in the country. All this has been done with the participation of higher education institutions, students and all those whose work is linked to the implementation of the Bologna Process. The current minister of science, education and sport appointed in 2004 the national working group for monitoring the Bologna process in the institutions of higher education. The national working group actively participates and monitors all events related to the Bologna process: the co-called Bologna follow-up activities, as well as all events at the international scene.

In the academic year 2005/2006 all universities initiated the implementation of the Bologna process, introducing ECTS, three level study structure, diploma supplement, and learning agreement with the aim of facilitating student mobility. Up until then the Universities had not been participating in European mobility programs. However, they were promoting mobility on a bilateral and regional basis.

7.6. Life-Long Learning Courses

A lifelong learning approach is at the heart of the reform of Europe's education and training systems⁴⁷² and Croatian authorities have been continuously warned by EU officials of the need to enhance this educational sector.⁴⁷³ The country was advised that the reform is most urgent in areas such as vocational education and training, adult participation, and the promotion of multi-disciplinary studies in higher education. There is a need to make vocational education and training more attractive and to focus on the skills the labour market really needs. The EC funds have also been used for meeting those goals.⁴⁷⁴

The Law provides the legal framework for the introduction of lifelong learning in Croatian higher education institutions. The institutions may organize training courses in line with the concept of lifelong education, learning and professional training. The Government has designed a national program of life long learning but no special financing has been provided on the national level to encourage further development of life long learning in higher education yet.⁴⁷⁵

So-called "training improvement programmes" that might be considered as continuing training schemes are implemented by:

- the MSES (e.g. programmes for young researchers, grants for training and graduate stud abroad)
- universities
- polytechnics
- scientific research institutes and other specialized organizations (targeted training improvement programs)
- foreign organizations through programs offered at large
- the Croatian Chamber of Commerce implements business education programs for various levels of managers in companies (e.g. company management, introducing quality control into companies)
- other organizations with a need and interest for dissemination of various specialist knowledge (e.g. consulting companies, professional associations etc).

The majority of continuing training improvement schemes are not the responsibility of the MSES, and neither are they organized only at universities. The target groups of such programmes are: young researchers, interns from various domains of professional training, PhD students and holders of a Doctorate of Science (postdoctoral training), as well as all

⁴⁷² The Commission is proposing the adoption of the proposed Integrated Programme for Lifelong Learning (2007–2013) which will increase threefold the financial resources at the EU level compared to the current budget.

⁴⁷³ Compare Ján Figel. "Need for reforms in education and training in Croatia", speech held at the University of Zagreb, at http://europa.eu.int/comm/commission_barroso/figel/speeches/docs/14_04_05_zagreb_uni_en.pdf and Janez Potocnik, Research a key tool for Croatia's EU integration, http://icadc.cordis.lu/fep-cgi/srchidadb?CALLER=MSS_NEWS_HR&ACTION=D&RCN=24827&DOC=3&CAT=NEWS&QUERY=1.

⁴⁷⁴ The CARDS project on vocational education and training helps Croatia modernise its vocational curricula and training programmes. The CARDS Adult Learning Project assists MSES in establishing basic skills programmes in adult education, setting up a database of adult training providers and supporting the training of guidance counsellors.

⁴⁷⁵ See Government of the Republic of Croatia. "Strategy for Adult Learning", November 2004. See also Government of the Republic of Croatia. "Action Plan for the Implementation of the Strategy for Adult Learning in 2005", November 2004. See also Ministry of Science, Education and Sports. National Report on Bologna Process 2004-2005, at http://www.bologna-bergen2005.no/EN/national_impl/00_Nat-rep-05/National_Reports-Croatia_050114.pdf

those interested in advanced technologies and acquiring management skills (management programs e.g. MBA programs and courses).

7.7. Staff Composition of Faculties

At the institutions of higher education teachers are appointed to scientific-teaching, artistic-teaching, teaching, auxiliary teaching and expert grades.

Scientific-teaching grades and artistic-teaching grades are assistant professor, associate professor and full professor. Teaching grades are lecturer, senior lecturer professor at a school of higher education, lector, senior lector, artistic associate and senior artistic associate. Auxiliary teaching grades are assistant and senior assistant. Expert grades are expert associate, senior expert associate and expert adviser.

In the academic year 2005/2006 there were 9 486 teachers working at the institutions of higher education, which is 8.24 % more than in the previous 2004/2005. There were 73.27% teachers working full-time. The share of teachers working part-time increased by 11.87% compared to the previous academic year.

Out of the total number of teachers 51.93% were classified as doctors of science and 20.11% as masters and masters of science, which shows that the number of masters and masters of science hasn't changed compared to the previous academic year. The share of women out of the total number of teachers was 40.61%, which shows an increase of 1.29% compared to the previous year – 33.62% were doctors and 47.59% masters of science. Out of the total number of women among the teaching staff 42.99% were doctors of science, while 23.57% were masters of science.

Due to financial difficulties, or to be more precise, due to a many-year administrative freeze on hiring new staff, the average age of teachers has risen significantly. Almost 2 300 junior researchers and postgraduate scholarship holders represent a renewed basis of personnel, from which the science and higher education system will hire the best. Out of about 4 000 university professors, some 15 percent are internationally recognized, and about 5 percent regularly contribute to internationally renowned professional publications and take an active part in international research projects.⁴⁷⁶

7.8. Elections and Appointments of University Teachers

The elections and appointments of university teachers proceed in accordance with the procedure prescribed by the Law on Scientific activity (Article 101), which prescribes the procedure for the election to scientific ranks. The election and appointments of university teachers are furthermore regulated by the edict Requirements for the election to scientific ranks⁴⁷⁷ issued by the National Scientific Council in 2005. As publication counting makes an important criterion for election, one must criticise its fundamental inadequacy. Some argue that the simple counting of publications the Edict requires as a qualification of academic

⁴⁷⁶ Ministry of Science And Technology, National Report – Republic Of Croatia, <http://www.bologna-bergen2005.no/Docs/Croatia/CROATIA.PDF>

⁴⁷⁷ This edict defines numerical criteria, in terms of publication numbers in internationally recognised journals (as defined by the listing in *Current Contents*) for each of the rungs on the scientific career ladder. But such an oversimplified judgment can never be fair. Some advances are important while others may just be routine publications that nobody reads. Publications usually have more than one author, and contributions by different authors are not necessarily equally valuable. See Stjepan Marčelja, “Regulatory Framework of Science and Higher Education in Croatia”, at <http://www.rphsphyse.anu.edu.au/~stm110/RegulatoryObstacles.pdf>

excellence “has seriously distorted the nature of scientific research in Croatia. It has become more favourable to aim for a large number of mediocre publications than to make a significant advance in a chosen field. As the number of publications but not the number of authors enters as a criterion, mutual support groups have often formed and members freely exchange the favour of coauthorship.”⁴⁷⁸

⁴⁷⁸ Ibid.

	Total Women		Academic degree						Type of working hours			
			Doctors of science		Masters and masters of science		Not holding academic degree		Full-time		Part-time	
			All	Women	All	Women	All	Women	All	Women	All	Women
Total	9 486	3 852	4 926	1 656	1 908	908	2 652	1 288	6 950	2 993	2 536	859
Full professors	1 621	372	1 527	354	17	6	77	12	1 236	290	385	82
Associate professor	1 274	398	1 191	379	8	1	75	18	967	336	307	62
Assistant professors	1 567	647	1 442	604	27	14	98	29	1 116	483	451	164
Professors at a school of higher education	124	29	74	17	41	12	9	-	84	20	40	9
Senior lecturers	594	278	96	38	331	151	167	89	415	218	179	60
Lecturers	800	391	49	14	290	118	461	259	364	198	436	193
Senior lectors	53	43	4	3	21	20	28	20	53	43	-	-
Lectors	37	33	-	-	9	8	28	25	36	32	1	1
Senior artistic associates	5	4	-	-	1	1	4	3	5	4	-	-
Artistic associates	23	11	-	-	3	2	20	9	9	6	14	5
Senior assistants	465	217	428	203	16	8	21	6	368	176	97	41

Table: Teaching Academic Staff, By Grades, Academic Degree, Type Of Working Hours And Sex, 2005/2006 Academic Year
Source: Central Bureau for Statistics, 2006

Note: The number of teachers doesn't represent the actual number of persons employed; the number of teachers working full-time doesn't correspond to the number of real persons, while the number of teachers working part-time is smaller than the represented number, owing to the fact that the same person can work part-time at more than one institution of higher education. The total number of teachers doesn't represent the actual number of persons; one teacher teaching two or more foreign languages or working at two or more institutions of higher education counts for two or more.

7.9. Specialisation and Creation of Centres of Excellence

Novelties in the science system are scientific centres of excellence – groups of scientists or scientific organizations assessed by relevant bodies and proclaimed as such by the Minister.

7.10. Quality Assessment

Recently the quality assessment procedure in accordance with the Bologna process has been introduced. It will allow all students of the first academic year (enrolled in accordance to Bologna legislation) to assess the work and success of all of the lecturers. The results of assessment will be presented to lecturers upon the completion of the summer examination period.

The financing of public higher education institutions from the state budget takes into account the established capacities of each individual higher education institution, the price of a particular course, and a quality assessment based on evaluation. Peer review groups are appointed with the task to nominate evaluators for each project proposal and, based on evaluators' grades, reach a final decision on accepting or declining a project. Projects are contracted for a period of three to five years. Principal researchers of contracted projects submit a report on their research once a year and, based on the evaluation of the report, the Minister decides on continuation of project activities. Following the completion of the project, a final report is submitted, and its evaluation performed by the respective peer review group. There are 45 peer review groups. Projects are classified according to areas of science, and priorities are set within each area.

8. ACCESS TO HIGHER EDUCATION

Citizens of the Republic of Croatia and persons of Croatian nationality domiciled outside the Republic of Croatia, as well as foreign nationals and stateless persons permanently residing in Croatia, have the right to enrol in a course of study under equal conditions. Foreign nationals and stateless persons who are not permanently residing in the Republic of Croatia have the right to enrol in a course of study under the terms set by the Ministry, on the basis of intergovernmental agreements and treaties. The Ministry decides on the level of tuition fees. Students who are foreign nationals, and who will pursue their studies with the status of a full-time student, pay annual tuition fees that are no more than three times higher than those of a full-time study (unless differently specified by a treaty). In private schools, all categories of students bear the costs of their tuition fees.

Under the Law on Scientific Activity and Higher Education, enrolment in a course of study continues to be performed on the basis of a public competition announced by the university or by an independent school of professional higher education or polytechnic. The classification and the selection criteria for the enrolment of candidates are established by the university or by the independent school of professional higher education or polytechnic. Foreign nationals may enrol in a course under conditions equal to those of Croatian nationals, but, in conformity with the decision of the authorised government body or higher education institution, they may be required to partly or fully bear the cost of their studies. Admission to studies may be limited or denied to foreign nationals if the course in question concerns military or police education or other studies of interest to national security.

Students are enrolled at universities pursuant to a call opened by a university, polytechnic or a professional school of higher education conducting the studies at least six months before the beginning of instruction. The call contains the following: conditions for enrolment, number of places, enrolment procedure, information on the documents that need to be submitted, and deadlines for application and enrolment.

University, polytechnic or a professional school of higher education define the procedure for the selection of applications. Under the Constitution of the Republic of Croatia, in the selection of applicants any form of discrimination is forbidden. A university, polytechnic or a professional school of higher education defines the criteria (grades in prior education, types of education completed, entrance or other exams, special knowledge, skills or capabilities, etc) based on which the classification and the selection of applicants is conducted.

A university, polytechnic or a professional school of higher education defines the completion of which secondary school programs is required for enrollment in pregraduate or professional studies.

A person can be enrolled in graduate studies provided he/she has completed appropriate high school education. University defines which high school is appropriate for enrolment in graduate studies, as well as the enrolment requirements for applicants who have completed different high school education or graduate studies. Persons that have completed professional studies (vocational schools) may enroll in graduate studies if that has been provided for in university regulations. Enrolment may be conditioned by passing differential exams.

A person may enroll in postgraduate studies if he/she has completed required graduate studies. A university may have other enrolment requirements.

Exceptionally, under conditions defined by the institution of higher education, a person can be enrolled in certain studies without having completed required secondary education, if the person is extremely talented and can be expected to complete the studies successfully without having completed prior education.

8.1. Funding of Tertiary Education Institutions

Amounts paid by students to cover tuition fees vary depending on the category of student they qualify as at the enrolment exam. There are two categories of full-time undergraduate students. The first one consists of students who are financed by the MSES, and who are enrolled based on successful results at entry examinations. Other students, who have not achieved good results at the enrollment exam, are obliged to pay full tuition fees in order to be enrolled as full-time students. The third category are part-time undergraduate studies (students who are working and studying at the same time). They are also expected to pay part of the tuition fees, however less than the regular students because they do not enjoy all rights that the student status grants. Students enrolled in post-graduate programmes pay postgraduate and doctoral fees. Postgraduate students working at the Higher Education Institutions do not pay the fee usually, but the scientific institution they are employed at. However, this benefit varies from one public institute to another, and there are cases that young researchers pay their own doctoral fees.

Each year the Ministry of Science and Technology reserves a certain quota for the priority enrolment of students who have passed the examination procedure level and who belong to so-called “protected categories”. These include refugees, the children of soldiers who died in the 1990s war, disabled persons of the first degree.⁴⁷⁹

8.2. Foreign Students

Foreign citizens are enrolled under the same conditions as Croatian citizens. However, pursuant to a decision of a relevant government body or institution of higher education, they can be required to pay a portion of or the entire tuition. Enrolment of foreign citizens can be limited or denied if the studies in question are military or police education or other studies of importance for national security.

Country of usual residence	Total	Type of study			University						Out of University
		Scientific	Professional	Artistic	Dubrovnik	Osijek	Rijeka	Split	Zadar	Zagreb	
All	5 034	3 896	1 103	35	26	410	287	342	113	3 773	83
Croatia	4 872	3 765	1 076	31	19	392	283	324	109	3 671	74
Foreign Country – Total	162	131	27	4	7	18	4	18	4	102	9
Austria	1	-	-	1	-	-	-	-	-	1	-
Bosnia and Herzegovina	118	102	16	-	6	14	1	17	4	76	-
Gana	1	-	1	-	-	-	-	-	-	-	1
Italy	2	2	-	-	-	-	-	-	-	2	-
Canada	1	-	1	-	-	-	-	-	-	-	1
Hungary	1	1	-	-	-	-	-	-	-	1	-
Macedonia	5	5	-	-	-	-	-	-	-	5	-
Germany	2	2	-	-	-	1	-	-	-	1	-
Romania	1	-	1	-	-	-	-	-	-	-	1
USA	2	-	2	-	-	-	-	-	-	-	2
Slovenia	19	13	4	2	-	3	3	1	-	9	3
Serbia and Montenegro	6	4	2	-	1	-	-	-	-	4	1
Switzerland	1	1	-	-	-	-	-	-	-	1	-
Spain	1	-	-	1	-	-	-	-	-	1	-
Ukraine	1	1	-	-	-	-	-	-	-	1	-

Table: Postgraduate Students, by Type of Study, Universities, Country of Usual Residence, 2004/2005 Academic Year

Source: Central Bureau for Statistics, 2006

⁴⁷⁹ See related literature: Pedisić, Anita (2000). Stavovi studenata različitog profesionalnog usmjerenja prema osobama s tjelesnim teškoćama (*Students of Various Professional Orientations and their attitudes towards Physically-Handicapped Persons*), Radovi, 39 (16), 79-97. See also Numowicz, A. Darcy; Peko, Anđelka; Štumfol, Božica, (1998). Support for Returnees and Displaced Students in Education: A Case Study, Proceedings: *Kvaliteta u dgoju i obrazovanju* / Rosić, Vladimir (ed.), 403-412. See also International Comparative Research: Under-represented Groups in Tertiary Education - Croatia, at <http://www.staffs.ac.uk/institutes/access/docs/IRCroatia-edited.doc>

9. FINANCING AND EFFICIENCY

The Law on Scientific Activity and Higher Education provides for the financing of public higher education institutions from the state budget, taking into account the established capacities of each individual higher education institution, the price of a particular course, and a quality assessment based on evaluation. The Law in addition stipulates the organizational integration of the university through functional integration, since studying programmes have become university programmes and all components function financially and legally through the university. A full legal integration (by which the faculties will lose their legal identity) should be introduced by the end of 2007. Previously existing transfer of funding from the MSES directly to the faculties deprived the central decision-making and executive organs (the Senate and the Rectorate) of all real means to exercise the responsibilities which they have according to the statutes. Such a structure has led to a great amount of duplication and increased spending.

The financing of public scientific institutes is conducted by their own budget adopted by the Management Council of the institute upon the proposal of the Scientific Council and consent by the Minister. Financing scientific projects, collaborative scientific programs, associate work posts and scientific equipment is allocated from the state budget, based on a public call announced by the Ministry at least twice a year.

Private higher education institutions can also be financed from the state budget according to the rules set by the National Council for Higher Education. The state budget funds assigned to HE institutions are allocated to them as a total amount for all their work, and these funds are then allocated from their budgets to individual items, in accordance with the statute and decisions of their authorised bodies.

Most of the financing is actually spent on salaries. For example, in 2002 only one third of the total budget allocated to the Ministry was spent on R&D activities, constituting about 0.4% of the GDP. In 2003, 15% of the funds allocated to the Ministry of Science, Education and Sports have been used to finance research projects.

According to data from the State Budget, in 1996-2002, from the total budget of the Ministry of Science, Education and Sports there were allocated:

- around 30% for Scientific Research
- around 60% for Higher Education;
- around 2% for the Croatian Academy of Sciences and Arts.

According to data from the State Budget in 2003, from the total budget of the Ministry of Science, Education and Sports there were allocated:

- 29.10 % for Scientific Research
- 60.70 % for Higher Education
- 10.20 % for other costs.⁴⁸⁰

⁴⁸⁰ European Commission, Directorate-General for Research. "A new Candidate to EU Accession, Croatia: S&T developments", pp. 28-29.

According to the former Higher Education Institutions Law, budgetary financing of higher education in Croatia is centralised at the level of the Ministry of Science, Education and Sports, which directly distributes funds among faculties i.e. university units and all other public higher education institutions. The funds for higher education and research work are obtained from the state budget and from other sources like foundations, funds, donations, tuition fees and scholarships.

The Law on Scientific Activity and Higher Education provides for a radical change in the financing of public universities. From January 1, 2006 on state funds are transferred to the central university account (lump sum funding) and consequently distributed to university units taking into account their capacities, the price of a particular course and a quality assessment based on evaluation. Aside from the founders and the state budget, the funds for higher education institutions are also obtained from the budget of the counties, towns and districts, the National Foundation for Science, Higher Education and Technological Development of the Republic of Croatia, the institution's own funds generated from tuition fees, research, art and expert projects, surveys, expert opinions, publishing and other activities, university and other foundations, individuals' direct investments, companies and other legal persons, and from donations. Private higher education institutions can also be financed from the state budget according to the rules set by the National Council for Higher Education.

	2000.	2001.	2002.	2003.	2004.	% GDP
GDP (mil \$)	18.427	19.863	22.812	28.810	34.685	
GDP (mil KN)	152.516	165.639	179.386	193.067	201.176	
Higher education	1.356.658.174	1.416.839.25	1.416.630.792	1.688.450.414	1.863.593.239	0,8682
Science	540.507.329	654.021.660	685.819.013	751.187.122	714.299.081	0,3811
Technology		54.242.296	47.155.529	63.274.869	85.289.837	0,280
International		31.955.579	36.973.920	33.854.163	50.101.873	0,0171
ICT	7.198.394	33.489.754	93.800.559	107.236.816	115.216.749	0,0400
Total MSES	1.904.363.89	2.190.548.5	2.280.379.81	2.644.003.38	2.881.660.955	1,334

Table: % GDP allocated to the MSES

Source: Ministry of Science, Education and Sports

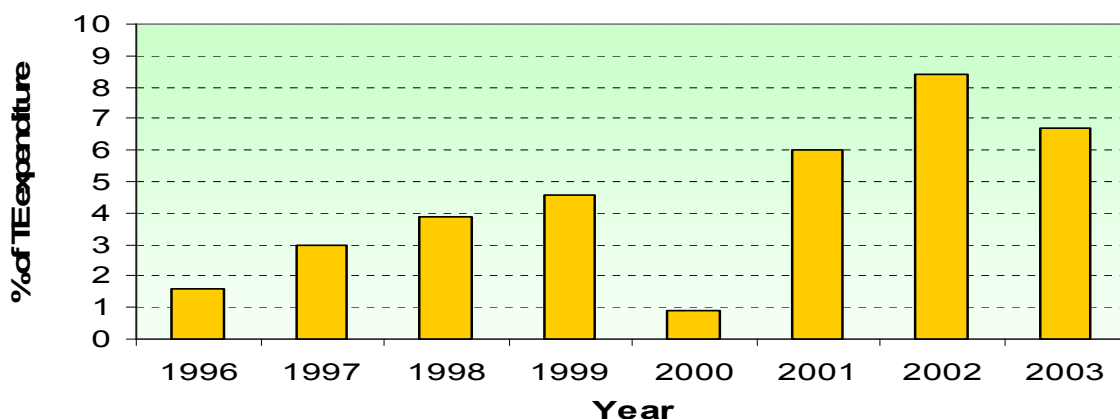


Table: Capital investments from Central Government Budget in tertiary education
Source: Ministry of Science, Education and Sports

The financing of research and academic organisations is increasingly restrictive and Croatia has low GDP expenditure on research. Data from the MSES shows that in 2001 1.09 % of the GDP was allocated to scientific research, where most of those funding was spent on salaries. The investment into R&D has slightly risen to 1.14% in 2005. The EU average investment amounted 1.93% in the same year. The MSES as well as the government are familiar with the Lisbon Strategy objective which requires increased investment into science, the goal being 3% of GDP. Croatia's commitment to work towards the Lisbon research investment goal should become more concrete as the country prepares a national Lisbon programme and in this way sets ambitious goals to approach the 3 per cent objective.

Type of institution	No of projects	%	Amount (Kunas)	%
Universities	1,271	70.5	82,120,000	65.0
Public institutes	324	18.0	31,114,000	24.6
Other institutions	200	11.1	12,942,000	10.2
Polytechnics	8	0.4	243,000	0.2
Total	1,803	100.0	126,419,000	100.0

Table: Scientific projects in Croatia financed by the Ministry (2005) - Institutions
Source: Ministry of Science, Education and Sports

The state budget is the main financing agent in R&D. According to the available data, the private sector does not invest a substantial amount. The foreign donors (foundations/Stiftungen, NGOs) contribute to the organization and execution of various activities (conferences, publications etc.). According to Eurostat, over 10% of tertiary educational institutions funds come from non-profit

organisations and enterprises, to finance in general certain R&D activities performed in tertiary educational institutions.⁴⁸¹

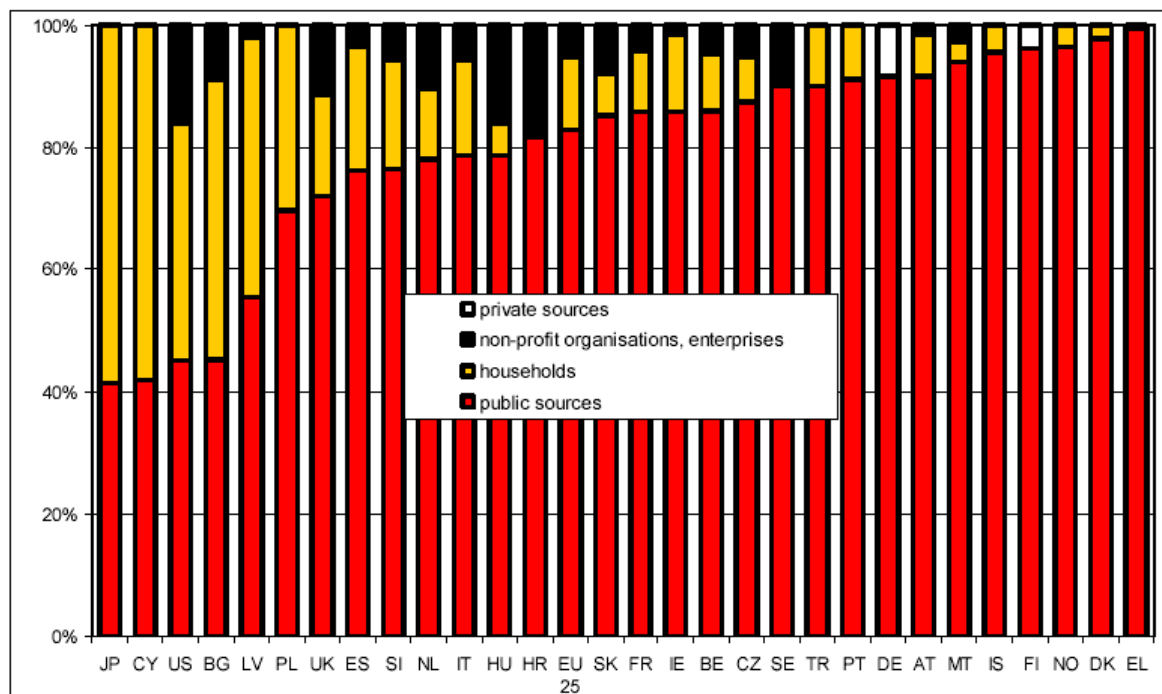


Table: Relative proportions of public private spending on educational institutions, at tertiary level of education
 Source: Eurostat, Education statistics

Country codes: BE: Belgium, CZ: Czech Republic, DK: Denmark, DE: Germany, EE: Estonia, EL: Greece, ES: Spain, FR: France, IE: Ireland, IT: Italy, CY: Cyprus, LV: Latvia, LT: Lithuania, LU: Luxembourg, HU: Hungary, MT: Malta, NL: Netherlands, AT: Austria, PL: Poland, PT: Portugal, SI: Slovenia, SK: Slovakia, FI: Finland, SE: Sweden, UK: United Kingdom, IS: Iceland, LI: Liechtenstein, NO: Norway, CH: Switzerland, BG: Bulgaria, HR: Croatia, RO: Romania, TR: Turkey, US: United States, JP: Japan

10. SCIENCE AWARDS AND SCHOLARSHIPS

National science awards are presented for exceptional achievements in scientific research, for expansion of scientific knowledge, and for scientific achievements in the application of the results of scientific research obtained by the scientists, researchers and junior researchers. The Law on Croatian national science awards provides for four types of science awards. They are as follows: lifetime achievement award, annual science award, annual award for popularization and promotion of science, and annual award for junior researchers. On behalf of the Croatian Parliament, national science awards grants President of Parliament, according to decision of the Committee for national science awards nominated of Croatian Parliament. The Committee is constituted of a chairperson - President of Parliament, Minister of Science, Education and Sports and 12 members, eminent scientists. The legislative period of the Committee is four years.

⁴⁸¹ Pascal Schmidt. "Spending on tertiary education in Europe in 2002", Statistics in focus, 18/2005. Eurostat, Education statistics.

The MSES provides scholarships for young researchers for degree programs of Master and Doctor of Science. Graduate courses of study are organized and implemented by faculties. A request for supporting a young researcher is submitted to the Ministry by the principal researcher of a contracted scientific research project upon consent of the head of the scientific research legal entity that will conclude an employment contract with the Ministry on engaging a young researcher. A principal researcher must submit a progress report on the young researcher. In addition, in 2003 the Government launched an initiative to provide funding for awarding scholarships to scientists (primarily young ones) abroad. The selection criteria are the excellence of a candidate and a foreign institution that will provide specialised training.

11. INTERNATIONAL COOPERATION

Forms of international cooperation in the 1990s mostly related to donations of equipment by foreign institutions.⁴⁸² The international co-operation has started to resurge in the 1990s. Between 1991 and 2000 Croatia and its scientific institutions were incorporated into a wide range of international organisations including ICSU (International Council for Science), IUPAC (International Union of Pure and Applied Chemistry), EERO (European Environmental Research Organisation), ALLEA (All-European Academies), IAP (Inter-Academy Panel), IAMP (Inter-Academy Medical Panel), UAI (Union Académique Internationale) etc.

In the period 1991- 2003 the Ministry of Science, Education and Sports signed 49 bilateral agreements and programs on co-operation in the area of science, technology and higher education. Scientific co-operation is most active with Slovenia, the United Kingdom, Italy, the Federal Republic of Germany, France and the United States of America. Croatian universities and institutes, as well as the Croatian Academy of Sciences and Arts also have their own co-operation agreements with foreign partners.

Following the decision of Heads of States and Governments, on June 18, 2004, Croatia has been offered the status of candidate country to the European Union (EU), which additionally obliged the country's S&T system to join the European Higher Education Area (HEA). EU candidacy should open to Croatia a possibility to participate in European mobility programmes. The opening of this possibility is among the government's priorities. The membership negotiations started with the chapter on Science and Research. Generally the public considers that the negotiations started with an easy to negotiate issue, meaning that the legislation in this field was largely put in line with EU *acquis communautaire*.⁴⁸³

Due to its specificity, the *acquis* in the field of science and research does not require any transposition into the national legal order. Indeed, after the screening of the chapter was completed, the government accepted the proposed negotiating position on March 17, 2005, concluding that Croatian legislation and scientific policy are broadly in line with the *acquis communautaire* as well as with the goals and guidelines of EU policies in this field. The

⁴⁸² Despite improvements in the procurement of equipment Croatian research still lacks up-to-date equipment and that which does exist is often provided through international co-operation projects. Croatia particularly lacks, equipment of major scale, and compensates for this through international cooperation schemes (e.g. with CERN, and other European centres).

⁴⁸³ Chapter Science and Research, <http://www.eu-pregovori.hr/default.asp?gl=200510270000006>

government expressed readiness to open up the negotiations with the EU and will not ask for transitional periods in this chapter.⁴⁸⁴ The government therefore considered that the the transposition of EU legislation is not necessary, but the country should continue to strengthen its administrative and implementation capacities in this field.

Implementation capacities do not relate to the application and enforcement of legal provisions but rather to the existence of the necessary conditions for effective participation in the Framework Programmes. In order to ensure the successful implementation of the *acquis* in this domain, notably the successful association to the Framework Programmes, Croatia will need to create the necessary implementing capacities in the field of research and technological development including an increase of the personnel related to Framework Programmes' activities. In November 2005 the government joined the Sixth Framework Programme of the European Community for Research, Technological Development and Demonstration activities (FP6).⁴⁸⁵ Full participation in this Framework Programme depends on budgetary availability for the payment of the association fee. The Government considered joining the Programmes as a step towards the implementation of the *acquis* in the field of research that could subsequently enhance the development of research policy, infrastructure and the appropriate institutional set-up.

Regional development of scientific cooperation was largely designed by the EU influences. In 2000 Croatia became member of the ESF (European Science Foundation) and since then it has participated in several European scientific programmes.⁴⁸⁶ In addition, Croatia is participating in EU Co-operation in the Field of Scientific and Technological Research programme (the 6th Framework Programme) and participates in several actions, the most important being INCO. As stated already above, Croatia initiated a comprehensive reform of science and started harmonisation with the European Higher Education Standards and the Bologna Process after 2000. In terms of international cooperation, S&T indicators show that Croatian academic community has the potential for more participation in international programs.

Although international co-operation seems to be well developed, Croatia spends only a very little amount of money on it. In 2001, the budget allocation amounted to only 1.44% of the total budget of the Ministry of Science, Education and Sports, while the National Programme for Research and Development for the period 1996 - 1998 previewed 8% of the budget to be spent on international co-operation. In 2003, 2.1 % of the MSES budget was allocated for international co-operation. The same applies to the financial year 2004.

⁴⁸⁴ Government of Croatia: Vlada usvojila pregovaračko stajalište za poglavlje znanost i istraživanje, at <http://www.vlada.hr/default.asp?gl=200603160000011>

⁴⁸⁵ A memorandum of understanding on Croatia's accession to the FP6 was signed in Zagreb by European Science and Research Commissioner Janez Potocnik and Croatian Science and Education Minister Dragan Primorac. See Government Weekly, November 14-20, 2005.

⁴⁸⁶ The National Foundation for Science (NFS) will finance inclusion of Croatian scientists in scientific and EUROCORES programs of European Science Foundation. EUROCORES programmes (EUROpean Science Foundation COLlaborative RESarch programs) aim to create the critical mass necessary for scientific excellence by enabling researchers in different European countries to develop collaboration and scientific synergy. National organizations are financing collaborative research program, and the EFS provides programme coordination and support for the networking of funded scientist.

In cooperation with the Croatian Academy of Sciences and Art, which is a member organization of European Science Foundation (ESF), the National Foundation for Science (NFS) developed a programme to include Croatian scientists in ESF programmes. The main goal of the programme is to include Croatia in the European Research Area. NSF will financially support Croatian scientists, citizens of Republic of Croatia, working in Croatian institutions, with independent research careers and proven excellence in project leadership and publications appropriate to international standards of the field.

Objectives:

- To Include Croatia in European Research Area
- To Enhance the level of competitiveness of Croatia's research area
- To harmonize Croatia's research competences with European standards
- To enhance international cooperation, coordination/association of highly qualified scientists, and to build highly competitive research teams
- To strengthen the relationship between Croatia and the international science community
- Transfer knowledge and technology at European level
- To support the ideas and projects that catalyze excellence in research
- To establish a culture of science and technology innovations
- To include/integrate Croatian scientist in ERA
- To support high quality scientific research
- To contribute to the scientific and technological development of the Republic of Croatia
- To develop strategic fields in Croatia, especially those determined by the NFS in Strategic plan 2004-2008

12. TRANSDISCIPLINARITY

Joint degree studies do not have a tradition in Croatian higher education. However, recently a certain number of new study programs leading to joint degrees have been initiated or are being prepared. The Law opened a possibility for joint degrees, but it does not give any specific definition of a joint/double degree, nor does it stipulate any procedures. The need for further definitions is clearly visible. Joint degrees: currently meetings are being organized to define structure and admission criteria. Double degrees: there is one post-graduate program which gives a double degree (European Studies - organized by Univ. Pantheon - Assas Paris II and Univ. of Zagreb). Joint program in cognitive neuroscience (Doctoral studies) - University of Zagreb, University of Vienna, University of Amsterdam, University Eotvos Lorand and University Semmelweis, Budapest; supported by UNICA as a program with a European dimension, administered from Vienna. Organized within TEMPUS project (in preparation). Joint activity in post-graduate studies in European Integration Law between University of Rijeka, Catholic University in Tilberg and Univ. of Macerata (cross-border students attend studies but no joint degree is awarded). Additional number of joint programs is in preparation⁴⁸⁷ and the National

⁴⁸⁷ Ministry of Science, Education and Sports. National Report on Bologna Process 2004-2005, at http://www.bologna-bergen2005.no/EN/national_impl/00_Nat-rep-05/National_Reports-Croatia_050114.pdf

Council for Higher Education is currently deciding if the programmes of several interdisciplinary studies are to be accepted and certified.⁴⁸⁸

An overreaching activity in the scientific field might be observed in an effort to create an academic communications network in Croatia. The Croatian Academic and Research Network (CARNet) was created in 1991 as a project of the Ministry of Science. In 1995 the Government issued a Decree on founding of the CARNet institution. Although CARNet activities are significant for the whole territory of Croatia, these are primarily targeted at the academic and research community.⁴⁸⁹

12.1. Public-Private-Partnership Models for Research and Teaching

The difficult economic situation and the collapse of major business brought about the elimination of corporate financing of R&D and the links between universities and professional R&D organisations have been cut. The very few companies that survived the economic breakdown have preserved the internal R&D as a resource for normal functioning and future development. Economic activities rely mainly on the import of knowledge and technology, mostly under very unfavourable or unregulated conditions.

There is a possibility for universities and scientific institutes to establish technology parks in order to commercialise scientific results, encourage cooperation between scientists and the business community, and enhance the science-based economy. Existing technology centres are the Technology and Innovation Centre, Rijeka; Croatian Business and Innovation Centre, Zagreb; Technology Centre, Split; Center for Technology Transfer, Zagreb; Research and Development Centre for Mariculture, Ston; Technology Development Center, Osijek.

The Croatian Program for Technological Development or HITRA, previously mentioned initiative of the MSES (page 22), is especially targeted to public-private-partnership (science-industry cooperation) and it provides a framework for direct cooperation between entrepreneurs/industry and higher education institutions and research institutes in the Republic of Croatia.⁴⁹⁰

12.2. Role of Universities in Inter-ethnic Co-operation

Inter-institutional international cooperation was initiated in 1971 through scientific seminars and meetings held at the Inter-university Center for Postgraduate Studies in Dubrovnik.

The quality of higher education in Croatia is the responsibility of the National Council for Higher Education, but the results of its monitoring could be characterized as unsatisfactory. Therefore, one of the key tasks of the reform of higher education in Croatia will be the promotion of 'cultural quality'. It will involve various aspects of external and internal evaluation, including

⁴⁸⁸ Those postgraduate programmes deal with a variety of issues, such as languages, translation, public administration, environmental management, ecoengineering, corrosion etc (Jezik i kognitivna neuroznanost, Javna uprava, Konferencijsko prevodenje, Upravljanje gradom, Poslovno upravljanje u graditeljstvu, Upravljanje okolišem, Ekoinženjerstvo, Korozija i zaštita.)

⁴⁸⁹ For more information on CARNet activities visit the web site at <http://www.carnet.hr/activities>.

⁴⁹⁰ Government of the Republic of Croatia. "Information provided by the Government to the Questionnaire of the European Commission, Chapter 17: Science and research", at <http://www.vlada.hr/zakoni/mei/Chp17/Chp17.pdf>

student evaluations, as well as self-evaluation at the university level, the evaluation of the programmes of study and of individuals.

13. NOT UNIVERSITY RELATED RESEARCH INSTITUTIONS

13.1. Academies of Sciences and Art

There are three academies in Croatia: the Croatian Academy of Sciences and Arts, the Academy of Medical Sciences of Croatia and the Croatian Academy of Engineering.

The Yugoslav Academy of Sciences and Arts was renamed the Croatian Academy of Sciences and Arts (HAZU) first in 1941 and then again in 1991. It was established with the aim of promoting culture, the arts, sciences and education, all of which are essential for the cultural, economic, political and overall progress of Croatia. Even though the official presentation of the HAZU⁴⁹¹ claims the Academy is among the most prestigious scientific research organisations in the country, study on science and higher education in Croatia found that the Academy's level of activity appears to be small. The same study concluded that the Academy seems to have greater flexibility than some other parts of the Croatian academic system in deciding the application of its government grant, though the examples of how this flexibility had been used were not numerous.⁴⁹²

The Academy of Medical Sciences of Croatia⁴⁹³ was founded in 1961 within the framework of the Croatian Medical Association (Hrvatski liječnički zbor) as the Committee for scientific Research of the General Committee of the Association. In 1971 the Committee was renamed the Medical Academy of Croatian Medical Association. In 1983 it was disassociated from the Croatian Medical Association and since then has acted as the Academy of Medical Sciences of Croatia.

The Croatian Academy of Engineering⁴⁹⁴ was established in 1993 in Zagreb as a non-governmental, independent, non-political and non-profit association of prominent scientists in the fields of engineering and biotechnical sciences. The Academy also assembles all higher-educational institutions in the fields of engineering and biotechnical sciences as well as scientific institutes and selected companies from the economy.

13.2. Institutional Structure

The Croatian Academy of Sciences and Arts has nine departments, research units spread over the whole country, museums and art galleries and a library. The Academy has an extensive publishing programme⁴⁹⁵ and it has organized over one hundred scientific meetings, seminars and

⁴⁹¹ Web site of the Croatian Academy of Sciences and Arts at <http://www.hazu.hr/ENG/indexENG.html>

⁴⁹² Academia Europea, op.cit., pp. 6.

⁴⁹³ Web site of the Academy of Medical Sciences of Croatia at <http://www.amzh.hr/eng/index-eng.htm>

⁴⁹⁴ Web site of the Croatian Academy of Engineering at <http://www.hatz.hr/eng/>

⁴⁹⁵ Among the most important of the Academy's numerous publications are: *Građa za povijest književnosti hrvatske* (Documents for the history of Croatian literature, 34 volumes); *Diplomatički zbornik Kraljevine Hrvatske, Dalmacije i Slavonije* (The Diplomatic Codex of the Kingdom of Croatia, Dalmatia, and Slavonia, 19 volumes); *Noviji pisci hrvatski* (Modern Croatian Writers, 12 volumes); *Hrvatski latinisti* (Croatian Latinists, 11 volumes);

conferences focusing on the history and economic development of Croatian regions and towns, as well as on the problems of Croatia's development. Scientific research units are spread throughout the territory of the country, having offices in following cities: Cavtat, Dubrovnik, Korčula, Osijek, Pula, Rijeka, Split, Trsteno, Varaždin, Vinkovci, Zadar and Zagreb. There are nine departments of the HAZU (The Department of Social Sciences, the Department of Mathematical, Physical, and Chemical Sciences, the Department of Natural Sciences, the Department of Medical Sciences, the Department of Philological Sciences, the Department of Literature, the Department of Fine Arts, the Department of Music and Musicology and the Department of Technical Sciences).

The Academy of Medical Sciences of Croatia is a society of elected scientists which is dedicated to the promotion of medical sciences and the the furthering of health. It is an independent, nongovernmental, and nonprofit organization. The seat of the Academy is in Zagreb, while it is active throughout Croatia. The Academy of Medical Sciences of Croatia performs its activities through the Boards, the working bodies for the main scientific fields of medicine. The Boards deal with internal medicine, surgery, public health, psychologic medicine, basic medical sciences, stomatology and veterinary medicine. Besides the Boards, interdisciplinary boards are formed according to need. The Senate is the highest advisory body of the General Committee.

The main organs of the Croatian Academy of Engineering are the assembly, presidency and governing board. There are 14 departments (Department of Systems and Cybernetics, Department of Architecture and Urban Planning, Department of Information Systems, Department of Communication Systems, Department of Power Systems, Department of Transport, Department of Civil Engineering and Geodesy, Department of Mechanical Engineering and Naval Architecture, Department of Chemical Engineering, Department of Electrical Engineering and Electronics, Department of Bioprocess Engineering, Department of Graphical Engineering, Department of Mining and Metallurgy, Department of Textil Technology), 5 committees (Committee for Cooperation with the Economy and Promotion, Committee for Regional Cooperation and Development, Committee for International Cooperation, Committee for Awards and Committee for Ethics) and 6 centres (Center for Development Studies and Projects, Center for Lifetime Education, Center for Environmental Protection and Development of the Sustainable Technology, Biotechnical Center, Center for Geoinformation and Cartography and Center for Graphical Engineering).

13.3. The Specialization of Academies

The simple observation of the academies' names demonstrates they have specialized for some scientific disciplines. Realistically taking into consideration inadequate and non-existent visibility of academies' activities in public, one must question the prudence of such a diversified organization of Croatian academies of sciences.

Građa za gospodarsku povijest Hrvatske (Documents for the Economic History of Croatia, 21 volumes); Djela (Works, 80 volumes), which publish monographs on Croatia as a country, its history, and language; Prirodoslovna istraživanja (Natural History Studies, 107 volumes); Pomorsko pravo (Maritime Law, 6 volumes); Građa za pomorsku povijest Dubrovnika (Documents for the Naval History of Dubrovnik, 6 volumes); Problemi sjevernog Jadrana (Problems of the Northern Adriatic, 6 volumes), etc. In addition, the Academy has published several dictionaries.

13.4. Recruitment of Members

The Croatian Academy of Sciences and Arts counts 143 full members, 92 associate members and 137 corresponding members. New members are elected by the old ones. Recently there was a scandal related to the non-election of prominent Croatian scholar Miroslav Radman in the most recent voting for new full-time members of the Academy. In spite of his long international career and reputation he was rejected by the Academy. This opened up a series of public discussions, bringing the Academy after many, many years into the centre of public interest.⁴⁹⁶

The supreme governing body of the Academy of Medical Sciences of Croatia the General assembly of all members every four years elects a new president of the Academy, new members, the members of Senate, the General Committee, the Supervisory Board and the Honorary Court. In addition, the general Assembly also promotes current members. Total number of members is 422. The acceptance limit is 430.

The Croatian Academy of Engineering has 306 members, as of March 2006. There are 49 full members, 54 associate, 92 collaborating, 30 emeriti members, 2 correspondent members, 15 amici members and 51 supporting members.

13.5. Functions of Academies

The regular annual publication of the Croatian Academy of Sciences and Arts and its administrative messenger is *Ljetopis* (Annals). It has been published since 1887 and one hundred and seven volumes of *Ljetopis* have been published so far. Since the study of Croatian history remained for a long time the main task of the Academy, the number of publications in this field increased considerably. As early as 1868, the Academy came out with the first volume of *Monumenta spectantia historium Salvorum Meridionalium*, a series which publishes larger excerpts from archival documents (53 volumes have appeared to date). *Starine* (Antiquities), a series consisting mainly of fragmentary archival materials dealing with Croatian political and literary history, was first published in 1869. These main editions were divided into series, such as *Monumenta Ragusina*, *Spomenici Hrvatske krajine* (Documents of the Croatian Frontier-Zone), and *Scriptores*, selected works of early Croatian historians. Statutes of Dalmatian towns, feudal laws and early Laws written in Croatian have been published in the series *Monumenta historico-iuridica* (13 volumes). *Zbornik za narodni život i običaje Južnih Slavena* (Collection on the Folk Life and Customs of the Southern Slavs) was first published in 1896., and 54 volumes have been published so far.

In carrying out its duties, the Academy of Medical Sciences of Croatia organizes scientific conferences, symposia, meetings and short graduate courses. These activities include those sponsored solely by the Academy, as well as those co-sponsored by other similar organizations both in Croatia and abroad. In addition, through its studies the Academy opens new programs for health protection and develops them according to the given conditions and circumstances. Together with its members, it has published over 150 books in the field of medicine.

⁴⁹⁶ Compare for example articles from the daily paper: Adriana Piteša. HAZU neće Miroslava Radmana za člana, *Jutarnji list*, 18.05.2006; Adriana Piteša, Tanja Rudež. Slučaj Radman: Imamo akademike koji 32 godine nisu objavili rad, *Jutarnji list*, 19.05.2006; Inoslav Bešker, Skandal je Akademija, a ne izostavljanje Radmana, *Jutarnji list*, 20.05.2006. Similar reactions occurred in other dailies.

13.6. Association of Scientists

Members of the Academy of Medical Sciences of Croatia can be physicians and scientists active in health protection who have made important contributions to medical research and practice. There are four types of members of the Academy of Medical Sciences of Croatia:

- regular members
- collaborating members
- correspondents
- honorary members

They are chosen by the medical Electoral Assembly of the Academy according to scientific criteria. A candidate for membership in the Academy can be nominated by medical societies which are members of the Croatian Medical Association, the Senate and the Boards in the Academy, or by a medical researcher along with written recommendations from five regular members of the Academy. The basic condition for membership in the Academy is that the individual must have a doctoral degree and proof of scientific activity, while the categories of membership depend on the candidate's volume of activity along with his or her contribution to the medical sciences in Croatia and abroad. While the categories of collaborating member and regular member include only Croatian citizens, foreign scientists may become correspondent or honorary members if their work has contributed to the furthering of medicine and health protection in Croatia. To especially deserving members with long term activity and high distinction in their field, the Academy awards the honorary title of laureate at a special celebration - Dies Academicus.

The members of the Croatian Academy of Engineering are:

Physical persons:

- up to 120 Full and Associate Members
- up to 108 Collaborating Members
- Members Emeriti
- Honorary Members
- Correspondent Members
- Members Amici

Legal persons - Supporting Members:

- engineering and biotechnical faculties
- higher engineering colleges
- scientific institutes from the field of engineering
- selected companies from the economy

13.7. Research Institutions

The Croatian Academy of Sciences and Arts runs several research units with part-time and fully employed academic staff. The research units are the Cabinet for Architecture and Urban Planning; Cabinet for the Research and Standardisation of Immunological; Cabinet for the Research of the Structure and Function of the Sensory; Centre for the Chemistry of Organic Natural Compounds; Centre for Scientific Work in Vinkovci; Institute for Corrosion Research and Desalination in Dubrovnik; Institute of Historical Sciences in Dubrovnik; Institute for Historical and Social Sciences in Rijeka; Institute for Historical Sciences in Zadar; Institute of Historical and Social Sciences in Zagreb; Institute for the History and Philosophy of Science;

Institute for the History of Croatian Literature, Theatre and Music; Institute for the Palaeontology and Geology of the Quaternary Period; Institute for Scientific and Artistic Work in Split; Institute for Scientific Work in Osijek; Institute for Scientific Work in Varaždin; Juraj Križanić Cabinet for Legal, Political and Social Sciences and Linguistic Research Institute.

13.8. Prizes and Scholarships

The Awards Committee exists within the Croatian Academy of Sciences and Arts. The Academy of Medical Sciences of Croatia awards annually 2 prizes for the most valuable medical publication. One of them is allocated to an author less than 35 years old. Once a year, the Croatian Academy of Engineering presents awards for extraordinary contributions to science and to the profession, for the realisation of the goals and programmes of the Academy.

13.9. Participation of the Academy in Political Discussions

The Croatian Academy of Sciences and Arts previously took an active role in the discussion of Croatian science. Quite a humbling booklet came out as a result of this, namely a collection of papers from the conference on "Science in Croatia at the Eve of 21st Century".⁴⁹⁷

13.10. International Collaboration

The Croatian Academy of Sciences and Arts collaborates with other academies of sciences and arts, universities, scientific institutions, state bodies, cultural and other institutions, as well as with individual scholars and artists from Croatia and abroad.

Since October 2000, the Croatian Academy of Engineering has been a Member of the International Council of Academies of Engineering and Technological Sciences (CAETS), Washington DC, USA, and since January 2005 an Associated Member of the European Council of Applied Sciences and Engineering (Euro-CASE), Paris, France, EU. Starting from January 1, 2005, the Academy is an Associated Member of the European Council for Applied Sciences and Engineering (Euro-CASE).

13.11. Financing of the Academy

The Croatian Academy of Sciences and Arts is financed by the state.

13.12. Other Not University related Research Institutions

Public institutes are established for the purpose of implementing public service programs in scientific research. They conduct all types of activities, from continuous research activities to contrual scientific research (projects).

The breakdown of the 26 public research institutes according to scientific areas is as follows: 9 in social sciences, 6 in the humanities, 5 in natural sciences, 1 technical (engineering) institute, three institutes in the area of biotechnical sciences (agriculture and forestry) and two institutes in the

⁴⁹⁷ Sunko, Dionis et al. (Eds.) (2000). "Proceedings of the conference Znanost u Hrvatskoj na pragu trećeg tisućljeća" (Science in Croatia at the eve of the third millennium), Zagreb, HAZU, 2000.

area of biomedical sciences (one institute for medical research and occupational health, and one for veterinary medicine). More precisely, the list of public research institutes consists of: Public Research Institutes are Agricultural Institute, Osijek; Croatian Institute for Bridges and Structural Engineering, Zagreb; Croatian Institute of History, Zagreb; Croatian Veterinary Institute, Zagreb; Forest Research Institute, Jastrebarsko; Institute for Adriatic Crops and Karst Reclamation, Split; Institute for Agriculture and Tourism, Poreč; Institute for Anthropological Research, Zagreb; Institute of Archaeology, Zagreb; Institute of Art History, Zagreb; Institute of Croatian Language and Linguistics, Zagreb; Institute of Economics, Zagreb; Institute of Ethnology and Folklore Research, Zagreb; Institute of Geology, Zagreb; Institute for International Relations, Zagreb; Institute for Medical Research and Occupational Health, Zagreb; Institute for Migration and Ethnic Studies, Zagreb; Institute for Oceanography and Fisheries, Split; Institute for Philosophy, Zagreb; Institute of Physics, Zagreb; Institute of Public Finance, Zagreb; Institute for Social Research, Zagreb; Institute for Tourism, Zagreb; Ivo Pilar Institute of Social Sciences, Zagreb; Old Church Slavonic Institute, Zagreb; Ruđer Bošković Institute, Zagreb.

It is expected that most public scientific institutes will be reintegrated into universities. Thus the institutes will become a part of their 'natural environment' and their projects will be interlinked within a broader framework, while at the same time the universities will gain new teaching staff and researchers and acquire new premises and equipment.

14. NOT UNIVERSITY RELATED EDUCATION SECTOR

Universities remain the main source of scientific activity. However, the need for additional professional training of experts for their future work on the creation of a contemporary society resulted in the establishment of polytechnics, which stress the importance of application of acquired knowledge.

A polytechnic is a school of professional higher education which conducts at least three different studies in a minimum of three different fields and can not have schools of professional higher education as a component part. Existing public polytechnics are the Zagreb Polytechnic for Social Sciences; Zagreb Polytechnic for Technical Sciences; Karlovac Polytechnic; Požega Polytechnic and Rijeka Polytechnic.

Schools of professional higher education can be a component part of a university or can be situated outside university. Public Schools of Professional Higher Education are Police School of Professional Higher Education – Police Academy of the Ministry of Interior, Zagreb; School of Professional Higher Education in Agriculture, Križevci; School of Professional Higher Education in Health Services, Zagreb; School of Professional Higher Education in Tourism, Šibenik; Teachers' School of Professional Higher Education, Čakovec and Teachers' School of Professional Higher Education, Petrinja

There are several private higher education institutions accredited by the MSES (those being the Accredited School of Professional Higher Education in Occupational Safety, Zagreb; American College of Management and Technology, Dubrovnik; Baltazar Adam Krčelić School of Professional Higher Education for Business and Management, Zaprešić; Business School of Professional Higher Education, Višnjan; Ino Mirković Accredited School of Professional Higher Education in Music, Lovran; School of Professional Higher Education for Entrepreneurship and

Economics, Zagreb (VERN); Technical School of Professional Higher Education in Pula – Accredited Polytechnic Course of Study; Zagreb School of Economics & Management and Zagreb School of Management with public liability).

15. INTEGRATION INTO THE EUROPEAN RESEARCH AREA

The official documents state that the strategic goal of Croatia is to evolve into a knowledge-based society, to create a basis for the prosperity of the Croatian people and to bring its economic development as close as possible to the standards of the developed countries of the world.

In order to realize its strategic goal Croatia has taken it upon itself to promote education intensively, with an emphasis on higher education:

- The acceptance of European standards in the area of scientific research and higher education has initiated significant changes within Croatian science and higher education, the aim of which is to raise the level of efficiency in these areas and thus facilitate Croatian integration into ERA – European Research Area and EHEA – European Higher Education Area;
- An increase in the number of students will alter the percentage of university and college educated citizens and thus provide Croatia with human resources necessary for its development;
- The planned changes will be made feasible by financially strengthened science and higher education. For this purpose, following the Government's decision of 28 November 2002, in the next eight years the budgetary investment into these areas should increase by at least 10 percent annually, as compared to each preceding year.⁴⁹⁸

The prospects for integrating science and technology in Croatia into the European Research Area are defined by the Strategy for Development of Science in the Republic of Croatia in the 21st Century and the Law on Scientific activity and Higher Education. These documents foresee radical changes in order to create an efficient and stimulating system of science and technology based on the EU model. Integration into the European Research Area is supported through the EU and other European Research Programmes and Initiatives (FP 6, COST, EUREKA, CARDS⁴⁹⁹). The TEMPUS⁵⁰⁰ programme supports the integration into the European Higher Education Area.

By adoption of the Law on Scientific Activity and Higher Education Croatia has made an important step towards the integration of its S&T into the European scientific structures.

⁴⁹⁸ Ministry Of Science And Technology, National Report – Republic Of Croatia, <http://www.bologna-bergen2005.no/Docs/Croatia/CROATIA.PDF>

⁴⁹⁹ The CARDS programme is an important instrument of integration of the Republic of Croatia in EU research and technology development. Three projects have been approved to the Ministry of Science, Education and Sports in fields important for the development of the system of higher education, science and technology (developing infrastructure for intellectual property rights in the area of research and development; quality of higher education and the relevant higher education information system; and recognition of foreign diplomas).

⁵⁰⁰ The Trans-European mobility scheme for university studies enables universities from EU Member States to cooperate with those in the Western Balkans, Eastern Europe and Central Asia, and the Mediterranean partner countries in higher education modernisation projects. Established in 1990 following the fall of the Berlin Wall, Tempus has been renewed three times (Tempus II, Tempus IIbis and Tempus III – 2000 to 2006).

15.1. Information for Participation in EU Programs

The MSES provides the administrative, technical and financial support for the participation of Croatia in several European programmes. One of the principal aims of Croatian participation in these programmes is to underpin the integration of the Croatian system of science and education in the European Research Area and the European Higher Education Area. Assistance in managing and counselling in the field of research and management is not developed in Croatia. The first step towards modern science management is made within MSES/World Bank “Science and Technology Project”.

Cooperation with the European Union in the field of science and education comprises the following programmes, some of which are EU assistance programmes while others are Community programmes or wider European programmes:

- TEMPUS: support for the reform of the higher education system (curriculum development, functional integration of universities, quality assurance, etc.)
- CARDS (Community Assistance for Reconstruction, Development and Stabilisation): EU technical assistance for the implementation of major institutional reforms
- PHARE: pre-accession aid aimed at institution-building and support for the harmonisation of national legislation and practice with EU standards
- Sixth Framework Programme: multilateral research projects aimed at the integration of research activities in Europe, the strengthening of the European Research Area and a better use of existing research capacities
- EUREKA: industry-driven research and innovation projects comprising partners from academia and the private sector
- COST (Cooperation in Science and Technology): cooperation on projects of mutual interest aimed at creating common European standards
- INTERREG: multilateral projects aimed at economic and social development of neighbouring countries and regions, also a Community initiative which aims to stimulate interregional cooperation in the EU
- YOUTH: Community programme aimed at supporting youth policies in Europe, youth mobility and its active participation in building Europe.

Participation in the EU framework programmes serves as a means for further integrating Croatia into the European Research Area. Janez Potocnik, Commissioner on R&D has noted in one of his speeches that “the country has already achieved much with very limited means, but underlined the importance of involvement in Networks of Excellence and Integrated Projects in order to derive maximum benefit.”⁵⁰¹

15.2. SEE ERA Net

The Southeast European Era-Net (SEE-ERA.NET) is a networking project aimed at integrating EU member states and Southeast European countries in the European Research Area by linking research activities within existing national, bilateral and regional RTD programmes. SEE-

⁵⁰¹ Janez Potocnik, Research a key tool for Croatia's EU integration, http://icadc.cordis.lu/fep-cgi/srchidadb?CALLER=MSS_NEWS_HR&ACTION=D&RCN=24827&DOC=3&CAT=NEWS&QUERY=1

ERA.NET is financed by the European Commission and managed by a consortium of 17 institutions from 14 European countries.

15.3. Integration into the European University Network

Within the framework of the Stability Pact for South Eastern the Task Force Education and Youth, the so-called “Enhanced Graz Process“ was initiated. It supports sustainable education reform in Southeast European countries at national and regional level and aims at the inclusion of these countries in a wider European Area of Education. In spite of my continuous efforts, I was not able to find data that would allow to conclude if Croatia is active in those activities.

16. CONCLUSIONS

The decline in investment in science, which took place in Croatia particularly during the 1990s, has had multiple consequences. The number of scholars and scientists has declined and there are severe indicators that a brain drain took place. Obsolete equipment needs to be modernised since the inadequate material conditions make research work in some fields hard.

At a proclamatory level, it is claimed that development of the institutions of higher education and investment in promising young people guarantees national success and future national prosperity. It is in addition hoped that research could help boost Croatia’s dynamism and smooth its effective integration into the European Union. By creating new knowledge and developing new products and services, R&D enables the continuous progression of technology. R&D and technology are the driving forces behind employment, economic development and competitiveness in general. They also have a crucial role in reaching and implementing political decisions in a number of areas, for example in healthcare, food processing, environmental issues, etc.

It can be considered that a normative restructuring of the scientific research sector has been initiated with the introduction of new legislation in 2003. The Law on Scientific Activity and Higher Education introduced a legal obligation to observe the European standards for science and higher education. The application of this Law introduced the Bologna Process as a method of organizing studies. In the framework of undertaken S&T reforms, new national bodies for science and higher education were formed which propose to the Government and the Parliament a medium-term plan of the development of the network of higher education institutions.

The Law on Scientific Activity and Higher Education provides for a radical change in the financing of public universities. Effective January 1, 2006 state funds are transferred to the central university account (lump sum funding) and consequently distributed to university units taking into account their capacities, the price of a particular course and a quality assessment based on evaluation.

The evolution from formal educational systems to a truly lifelong learning approach is an ongoing transformation in Europe. Croatia, being particularly weak in this aspect, is expected to invest more funds and efforts to reform its life-long learning and vocational programmes.

It is furthermore considered that insufficient performance of the private sector in research and development creates the main gap between Croatia and the EU is in terms of R&D. Closing this

gap would be a key challenge for Croatia. The Science & Technology Policy of the Republic of Croatia for the period 2006-2010 has foreseen certain measures that should allow meeting this goal.

In order to achieve the broadly and courageously set goals of the Croatian government, which claims Croatia should become knowledge-based society, it is necessary to increase overall investment in science. This increased investment into science should achieve a goal of 3% of GDP, which from this point seems unrealistic, as much wealthier countries than Croatia have not been successful in meeting this objective. The goal could be partially achieved if more intensive integration of the economic and private sectors would take place. Science financing comes mostly from the part of the state, and it is necessary to increase investments from private enterprises. The country has therefore initiated several programmes a couple of years ago (e.g. HITRA) that so far have not proven significant success.

17. BIBLIOGRAPHY

Academia Europea. "Science and Higher Education in Croatia: Report on a visit by the Academia Europaea", at http://www.unizg.hr/fileadmin/rektorat/dokumenti/iskorak2001/science_higher_education_croatia.pdf

European Commission, Directorate-General for Research. "A new Candidate to EU Accession, Croatia: S&T developments" at <http://europa.eu.int/comm/research/iscp/pdf/croatia.pdf>

Figel, Ján (2004). "Need for reforms in education and training in Croatia", speech held at the University of Zagreb, 14 April 2005, at http://europa.eu.int/comm/commission_barroso/figel/speeches/docs/14_04_05_zagreb_uni_en.pdf

Government of the Republic of Croatia. "Information provided by the Government to the Questionnaire of the European Commission, Chapter 17: Science and research", at <http://www.vlada.hr/zakoni/mei/Chp17/Chp17.pdf>

Government of the Republic of Croatia. "Strategy for Adult Learning", November 2004.

Government of the Republic of Croatia. "Action Plan for the Implementation of the Strategy for Adult Learning in 2005", November 2004.

Ledić, Jasminka; Kovač, Vesna; Rafajac, Branko, (1998). Položaj studenata na sveučilštu u svijetlu analize kvalitete nastave (Position of Students on University in the context of analysis the quality of courses), Društvena istraživanja, 7/4-5, 619-637.

Knežević, Mladen, (1997). Doživljaj otuđenosti prognanika i izbjeglica: samopercepcija i percepcija studenata socijalnog rada (Experience of alienation of refugees and exile: selfperception and perception of students at Faculty of Social Work), Društvena istraživanja, 6/2-3, 343-357.

Ministry of Science, Education and Sports. "National Report on Bologna Process 2004-2005", at http://www.bologna-bergen2005.no/EN/national_impl/00_Nat-rep-05/National_Reports-Croatia_050114.pdf

Ministry of Science, Education and Sports (2006): Draft text of the Science & Technology Policy of the Republic Of Croatia 2006-2010

Marčelja, Stjepan (2005). Regulatory Framework of Science And Higher Education in Croatia, at <http://www.rphsyse.anu.edu.au/~stm110/RegulatoryObstacles.pdf>

Potočnik, Janez (2005). "Research a key tool for Croatia's EU integration", at http://icadc.cordis.lu/fep-cgi/srchidadb?CALLER=MSS_NEWS_HR&LAWION=D&RCN=24827&DOC=3&CAT=NEWS&QUERY=1

Rajčić, Davor (2005). "Komentatr Zakona o znanstvenoj djelatnosti i visokom obrazovanju" (Commentaries on the Law on Science and Higher Education), Zagreb: Hrvatska sveučilišna naknada, 2005.

Rakić, Vini and Ivan Milanović Litre (Eds.) (2005). "Education Sector Development Plan 2005-2010", Zagreb: Ministry of Sceince, Education and Sports, 2005.

Schmidt, Pascal (2005). "Spending on tertiary education in Europe in 2002", Statistics in focus, 18/2005. Eurostat, Education statistics.

Sunko, Dionis et al. (Eds.) (2000). "Proceedings of the conference Znanost u Hrvatskoj na pragu trećeg tisućljeća" (Science in Croatia on the eve of the third millennium), Zagreb, HAZU, 2000.

Švob-Đokić, Nada (ed.). Research and Development Policies in the Southeast European Countries in Transition. Studies and Research Series, 2002, IMO, Zagreb

Švob-Đokić, Nada. Science and Technology in the Republic of Croatia in Kobal, Edvard; Radošević, Slavo (Eds.). Modernization of Science Policy and Management Approaches in Central and South East Europe“, Amsterdam/Berlin/Oxford/Tokyo/Washington, DC : IOS Press, 2005.

Švob-Đokić, Nada. The Transitional Changes in the Scientific Systems of Southeast European Countries in Franičević, Vojo ; Kimura, Hiroshi (Eds.). „Globalization, Democratization and Development“, Zagreb : Masmedia, 2003..

Science, Technology and Economic Development in South East Europe, ROSTE's Science Policy Series, at http://portal.unesco.org/en/ev.php-URL_ID=30430&URL_DO=DO_TOPIC&URL_SECTION=201.html

Šunjić, Marijan (2002). Higher Education in Croatia: Unfinished Reform, International Higher Education (Boston College), No. 26, Winter 2002.

University of Zadar. "Razvojne odrednice Sveučilišta u Zadru za razdoblje 2006-2010",

<http://www.unizd.hr/rektorat/pravni-akti/pdf/Strategija.pdf>

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Research Project UnivSOE

"Institutions of Tertiary Education in Central and South East Europe: Developments, Structures and Perspectives of these Institutions for their Integration into the European Higher Education and Research Area"

Country Report: Greece

Margarita Kastanara

(with the contribution of
Anastasios Moraitis)

INTRODUCTION	334
1. HISTORICAL BACKGROUND	334
2. LEGAL FRAMEWORK	335
2.1. Constitution (1975/1986/2001)	335
2.2. Significant Legal Acts	336
3. STRUCTURE OF HIGHER EDUCATION IN GREECE	340
3.1. Tertiary Education in Greece before 2001	340
3.2. The Situation after 2001	340
3.3. The Role of Ministries	341
3.4. The National Council of Education	342
4. UNIVERSITIES	342
4.1. The 23 Universities	342
4.2. Administration Bodies and Governance of the Universities	345
4.3. University, School (Faculty), Department	346
4.4. Centres of Excellence	347
4.5. University Financing	347
4.6. Student Care	348
5. TECHNOLOGICAL EDUCATIONAL INSTITUTIONS	349
6. GENERAL ASPECTS OF GREEK EDUCATION	350
6.1. Admission in the Tertiary Education (Principal: Numerus Clausus)	350
6.2. Academic Year	350
6.3. Language of Studies	351
6.4. Duration of Studies	351
6.5. Post-Graduate Studies	351
6.6. Doctoral Studies	351
6.7. Tuition Fees	351
6.8. Women and Tertiary Education	352
6.9. Student Syndicalism in Greece – The events of Winter 2006-2007	352
6.10. Academic Asylum	353
6.11. Life-Long Learning	353
6.12. Evaluation Schemes in Tertiary Education	354
6.13. Diploma Supplement – ECTS	355
6.14. First and Second Cycle	355

7. ACADEMY OF ATHENS	356
7.1. Legal Personality and Purpose	356
7.2. History	356
7.3. Role	357
7.4. Impact on Greek Society	357
7.5. Participation in International Organisations.....	357
7.6. Organs	357
7.7. Research Centres of the Academy	357
8. SCIENTIFIC RESEARCH IN GREECE	358
8.1. Legal Framework	358
8.2. Major Research and Technology Entities	359
8.3. Reform of the Legal Framework on Research & Technology	361
9. INTERNATIONAL RELATIONSHIPS	362
9.1. Bilateral Programmes	362
9.2. Multilateral Programmes	363
10. GREEK EDUCATION IN COMPARISON TO OTHER EUROPEAN COUNTRIES.....	363
11. MAIN PROBLEMS OF TERTIARY EDUCATION	363
12. PERSONAL COMMENT	364
ANNEX	365
BIBLIOGRAPHY	367

INTRODUCTION

This report tries to briefly sketch the Tertiary Education System in Greece, its current standard of organisation and function and its main prerogatives for the future. Furthermore, information on the scientific research and development in Greece will be presented. The report is supported by statistical data and legislative information.

1. HISTORICAL BACKGROUND

Education has been a sector of main importance for Greece ever since the Antiquity, with the famous philosophical Schools of 5th and 4th century BC in Athens, going on to the educational establishments in Roman and Byzantine times (the School of Magnaura in Constantinople, founded in the 9th century AD, is considered to be among the first – though not degree-granting – universities in Europe) and sustaining through times of hardship under foreign rule – one of the prime examples of this period was the Phanar Greek Orthodox College, founded in 1454 and also situated in Istanbul.

The history of modern Greek Tertiary Education begins only a few years after the liberation of Greece from the Ottoman oppression (1453-1821). Straight from the beginning, the establishment of a sound education system was considered a constituent part of the huge effort to heal the deep wounds of 400 years of slavery and darkness and establish the modern Greek State practically starting from zero. The first Governor of the liberated Greek State, Ioannis Kapodistrias, a profoundly educated man of deep insight and rich political experience at the service of the Russian Tsars, was particularly interested in setting the foundation for a comprehensive educational system; given, however, the poor financial resources of the devastated from war new State, he mainly focused on primary and secondary education. In the meantime, Ionios Academy was the first highest educational establishment in a Greek region. It was founded in 1823 in Corfu, which was then still a British colony, financed by an admirer of Greece, Count Guilford, and it consisted of 4 Schools: Theology, Philosophy, Law and Medicine. Although it was already closed in 1864, when the Ionian Islands were annexed by Greece, it created the basis for the later University system in Greece. The first University not only on Greek soil, but in the whole of Eastern Mediterranean area as well, was the “Othonian University” (later renamed into “National and Kapodistrian University of Athens”), founded on May 3rd 1837 by Royal Decree of King Otto. It also consisted of four Schools; Theology, Law, Medicine and Arts (Applied Sciences and Mathematics) and at the time of its foundation, it had 33 Professors, 52 students and 75 non-inscribed hearers⁵⁰². Until the foundation of a series of other Universities in the early and later 20th century, the first of which was the Aristotelian University of Thessaloniki, the educational and cultural life of Greece was monopolised by the Athens University, which was connected with the struggles and agonies of the new State.

⁵⁰² <http://www.uoa.gr/uoagr/uoaindex.htm> (last retrieved on 31.7.2007)

2. LEGAL FRAMEWORK

2.1. Constitution (1975/1986/2001)⁵⁰³

Article 16 of the Greek Constitution is dedicated to Education, Arts and Science. Greece belongs thus to the minority of the countries that have included particular and quite detailed provisions on education within their Constitution. The text of Article 16 reads as follows⁵⁰⁴:

1. Art and science, research and teaching shall be free and their development and promotion shall be an obligation of the State. Academic freedom and freedom of teaching shall not exempt anyone from his duty of allegiance to the Constitution.

2. Education constitutes a basic mission for the State and shall aim at the moral, intellectual, professional and physical training of Greeks, the development of national and religious consciousness and at their formation as free and responsible citizens.

3. The number of years of compulsory education shall be no less than nine.

4. All Greeks are entitled to free education on all levels at State educational institutions. The State shall provide financial assistance to those who distinguish themselves, as well as to students in need of assistance or special protection, in accordance with their abilities.

5. Education at university level shall be provided exclusively by institutions which are fully self-governed public law legal persons. These institutions shall operate under the supervision of the State and are entitled to financial assistance from it; they shall operate on the basis of statutorily enacted by-laws. Merging or splitting of university level institutions may take place notwithstanding any contrary provisions, as a law shall provide.

A special law shall define all matters pertaining to student associations and the participation of students therein.

6. Professors of university level institutions shall be public functionaries. The remaining teaching personnel likewise perform a public function, under the conditions specified by law. The statutes of respective institutions shall define matters relating to the status of all the above.

Professors of university level institutions shall not be dismissed prior to the lawful termination of their term of service, except in the cases of the substantive conditions provided by article 88 paragraph 4 and following a decision by a council constituted in its majority of highest judicial functionaries, as specified by law.

The retirement age of professors of university level institutions shall be determined by law; until such law is issued, professors on active service shall retire ipso jure at the end of the academic year at which they have reached the age of sixty-seven.

7. Professional and any other form of special education shall be provided by the State, through schools of a higher level and for a time period not

⁵⁰³ The Greek Constitution currently in force was introduced in 1975, after the fall of the seven-year dictatorship of the colonels (1967-1974). It has been amended twice, in 1986 and 2001, while another amendment is currently on track: the Greek parliament decided in February 2007 that the Parliament elected by the next elections will be a Revisionary one; the next elections will take place at the latest by March 2008.

⁵⁰⁴ Translation taken from the Greek Ministry of Justice; <http://www.ministryofjustice.gr/eu2003/constitution.pdf> (last retrieved on 31.7.2007).

exceeding three years, as specifically provided by law which also defines the professional rights of the graduates of such schools.

8. The conditions and terms for granting a license for the establishment and operation of schools not owned by the State, the supervision of such and the professional status of teaching personnel therein shall be specified by law.

The establishment of university level institutions by private persons is prohibited.

9. Athletics shall be under the protection and the ultimate supervision of the State.

The State shall make grants to and shall control all types of athletic associations, as specified by law. The use of grants in accordance with the purpose of the associations receiving them shall also be specified by law.

The Parliament currently in office has decided to have Article 16 of the Greek Constitution concerning Education and Arts amended; the most controversial amendment proposal refers exactly to the public character of higher education and the prohibition of establishing university level institutions by private persons. The government proposed to have the aforementioned prohibition in § 8 deleted and § 5 modified, so that higher education is no longer provided solely by legal persons under public law⁵⁰⁵. Although the two predominant parties in the Greek Parliament agreed in principal with the proposed changes, numerous heated discussions both within and outside of the Parliament took place and huge social uproar was caused, leading to demonstrations in the streets of Athens and other cities over several weeks and the large majority of Greek universities being closed in protest by the students during several months. The proposal was preliminarily adopted in the Parliament on January 31, 2007⁵⁰⁶. The current parliamentary term in Greece, as of July 2007, will officially end in March 2008 (although it is widely speculated that elections should be expected sometime in the coming autumn). Until the next elections nothing can be certain as to the outcome of the amendment procedure, since this will largely depend on the composition of the next Parliament⁵⁰⁷.

2.2. Significant Legal Acts

The main body of legislation governing tertiary education in Greece consists of two laws: Law 1268/1982 “on the structure and function of Highest Educational Institutions”⁵⁰⁸ and Law 1404/1983 “on the structure and function of Technological Education Institutions”⁵⁰⁹, as amended. Both laws constituted at the time a major breakthrough in the traditional way of life of Greek universities and substantially contributed to the adoption of a more democratic organisation model⁵¹⁰. Major reforms were introduced with regard to the structure of Greek

⁵⁰⁵ See the amendment proposals at <http://www.parliament.gr/ergasies/nomosxedia/EisigisiEpitropon/g-anasy-eis.pdf> (Government) and <http://www.parliament.gr/ergasies/nomosxedia/EisigisiEpitropon/G-ANAPASOK-EIS.pdf> (Opposition) (last retrieved on 31.7.2007).

⁵⁰⁶ Minutes of the Committee on Constitutional Amendment, [http://www.parliament.gr/ergasies/praktika/pdf/SYNTAGMA31012007\(apog\).pdf](http://www.parliament.gr/ergasies/praktika/pdf/SYNTAGMA31012007(apog).pdf) (last retrieved on 31.7.2007).

⁵⁰⁷ According to Art. 110 of the Greek Constitution, the amendment procedure is organised in a complex pattern that involves two consecutive parliamentary terms. Namely, when the Parliament decides (according to the rules set out in art. 110) to have the Constitution amended, it must reach a preliminary decision confirming the necessity of the Amendment and the provisions to be amended. It is the Parliament arising from the next elections (Revisionary Parliament) that will reach the final decisions on the provisions proposed by the previous Parliament; this may well mean that certain proposals will not be adopted.

⁵⁰⁸ Government Gazette A' 87/1982.

⁵⁰⁹ Government Gazette A' 173/1983.

⁵¹⁰ This is not irrelevant with the political change in Greece in 1981 and the rising of the Socialist Party, which was to rule Greece for 23 years, with short intervals in 1988-1989 and 1991-1993.

Highest (AEI) and Technological Educational Institutions (TEI), which were structured in Schools, each School in Departments and each Department in Sectors; autonomy of universities as legal persons under public law and their financing from the State were prescribed; academic freedom and academic asylum were regulated and large-scale participation rights in the university organs were introduced for all groups involved in university life (students, scientific and teaching personnel, administrative personnel), so as to ensure the active participation of all affected actors in the organisation and governance of universities; in that way, the monopoly of professors in the administration of universities was seriously affected. Moreover, a consultation body was introduced by the law 1268/1982, the National Council for Highest Education, which was later replaced by the National Education Council. Furthermore, a large variety of issues was regulated and codified, such as selection procedures for scientific personnel, course curricula and the Studies Regulation, student life and care and post-graduate programmes; the latter were later on separately regulated in Art. 81 of the law 1566/1985⁵¹¹ and Art. 14 of the law 2083/1992⁵¹².

Apart from the basic laws mentioned above, a series of other laws issued over the course of the last 25 years have been of particular importance for Greek higher education. The aforementioned law 2083/1992 introduced a series of reforms in tertiary education: the financial autonomy rules were enhanced and concretised in certain aspects, the modalities of election of university organs were refined and their competences were regulated in a more precise manner, as well as the content of the Regulation of Studies, and several matters concerning the selection and status of academic staff were regulated anew. A number of other provisions concerned the study curricula, post-graduate programmes and doctoral studies, as well as student care. Of particular importance was the introduction of a legal framework for financing research programmes in the scientific and technological sector and the setting-up of an Interuniversity Research Council, as well as the foundation of the Greek Open University, the first long-distance public institution in Greece.

A significant reform was introduced with law 2916/2001⁵¹³. Until then, Highest Education Institutions (AEI's) and Technological Education Institutions (TEI's), though they were both tertiary education units, were considered as being qualitatively different; one would talk of "highest" and "higher" tertiary education respectively. The differences consisted mainly in the objects of study, the study curricula and the necessary qualifications for being selected as a member of the academic staff in each category. Following EU prerogatives and in compliance with the Bologna process, Greece initiated a scheme for bringing TEI's on the same level as AEI's; law 2916/2001 and subsequent pieces of legislation were the main vehicle for this reform. Art. 1 explicitly provides that higher education in Greece consists of two parallel sectors, the university and the technological sector, thus placing them from a technical point of view on the same level. Other provisions of the said law regard the necessary qualifications of teaching personnel in TEI's and changes in structure of the institutions with a view to rendering them equal to the AEI's and providing transitory periods for current students and staff to adjust to the changes. However, although AEI's and TEI's are now equally placed from a legal point of view, in reality a certain period must go by before this upgrading is fully implemented.

Another important piece of legislation is the recently adopted law 3549/2007 bearing the title "Reform of the institutional framework for the structure and function of Higher Educational

⁵¹¹ Government Gazette A' 167/1985.

⁵¹² Government Gazette A' 159/1992.

⁵¹³ Government Gazette A' 114/2001.

Institutions”⁵¹⁴. This law puts into effect a number of reforms with a view to the impending Constitutional amendment and prepares the ground for a series of changes that will be necessary when and if the aforementioned amendment takes place. It is important to have in mind that, with the exception of a few issues, the law does not break new ground, though it reforms the *modus operandi* of tertiary education institutions in Greece, as this has been in place and governed by a series of laws. The really groundbreaking reforms are expected on a medium-term basis and will depend on the outcome of the constitutional amendment process. Being the latest piece of legislation in the field, law 3549/2007 deserves to be presented in more detail in the following.

More specifically, following the structure of the law itself, one can group the changes introduced in the following categories:

1. General principles: Structuring of tertiary education and basic academic freedoms
2. Self-administration and budget-management of Universities
3. Administrative Organisation of Highest Educational Institutions (AEI)
4. Student matters on the undergraduate level
5. School organs and rights and obligations of teaching personnel

1. In accordance with the Bologna Declaration and the changes introduced by law 2916/2001, the law confirms the structuring of higher education in Greece in two parallel sectors, universities and technological institutions (Art. 2), and regulates certain aspects of university life and general aims and goals (Art. 1, 3). Of particular interest is university asylum (Art. 3), which was also one of the main points of controversy in Greece. This institution is connected with particular and deeply rooted democratic sensitivities of the Greek people, a fact that led to an absolute asylum right in the years following the fall of the dictatorship regime in the 70’s. However, asylum became the object of particular misuse in later years, since crimes in the literal sense were committed in universities during sit-ins and the police were unable to intervene. The new article provides that the Rector’s Council (for Universities) and the Council (for Technological Institutes) will be competent to order or prohibit the entrance of law enforcement powers into the Universities; the special Asylum Committee (in which also a representative of the students took part), which bore the relevant competence until now, was deemed ineffective.

2. With respect to the self-administration of universities, the government seeks to reinforce it and prepare Greek universities for the transition to a status of legal persons under private law (or whichever other legal form may be deemed useful). Each University is obliged to draft its own Operation Regulation or adjust the existing one to the provisions of law 3549/2007 (Art. 4). Moreover, the budget and general planning framework has been reformed; each University must henceforth draft a “four-year academic-strategic plan”, the basic content of which is set out in the law (Art. 5). The position of a Secretary is established in each University, whose main function will consist of the coordination and facilitation of the action of the University organs (Art. 6).

3. Art. 8-10 of the law 3549/2007 amend provisions concerning the election of University organs, the formalities for restructuring overlapping Schools and Departments and setting up Deontology Committees.

4. The 4th Chapter contains certain important and, therefore, hotly disputed reforms. Apart from matters such as Student Support Services (Art. 12), scholarships and student loans (Art.

⁵¹⁴ Government Gazette A' 69/2007.

13), free textbooks and libraries (Art. 15), semester duration (Art. 16), university courses held in foreign languages (Art. 17) and transparency and social accountability of universities (Art. 18, 19), it is for the first time provided that the study period should not exceed the normally anticipated, according to the studies programme, minimum number of semesters by 100% (Art. 14). Special provisions apply with regard to students already studying and students wishing to interrupt their studies for a certain period and for important reasons, as well as those repeatedly having failed certain obligatory exams. Although the overall number of students exceeding the limits set by the new law (the so called “eternal students”) is not proportionally high in comparison with those finishing their studies duly (or at least within twice the time needed), this provision provoked intense commotion and led to long and heated discussions (which resulted in the overtime being raised from 50% to 100%).

5. The 5th Chapter contains a series of detailed provisions as to the competences of School Organs (Art. 20-21), the means of representation and opinion expression of students and teaching personnel (Art. 22), the requirements and procedure for the selection and appointment of teaching personnel (Art. 23-25) and the duties and rights of its members (Art. 26-27).

In a nutshell, the most problematic new provisions were those concerning the asylum, the maximum duration of studies and those hinting towards a certain convergence between the way tertiary education institutions and market entities operate.

More than 60 laws and by-laws are currently in force regulating higher education in Greece⁵¹⁵. Especially in later years there has been a boom in legislative activity on educational matters due to the country's effort to improve the existing framework according to modern needs and comply with the aims and goals set by the Bologna process. Except for the aforementioned milestone pieces of legislation, further important laws could be mentioned, such as law 2158/1993⁵¹⁶ on the National Scholarship Foundation (IKY), laws 2341/1995⁵¹⁷ and 2413/1996⁵¹⁸ concerning minority schools and Greek education institutions abroad, law 2552/1997⁵¹⁹ codifying provisions on the Greek Open University, laws 2752/1999⁵²⁰, 3369/2005⁵²¹ and 3577/2007⁵²² concerning life-long learning, laws 3255/2004⁵²³ and 3404/2005⁵²⁴ providing inter alia organisational guidelines for international post-graduate programmes, law 3328/2005⁵²⁵ setting up a new body (Interscientific Organisation for Recognition of Academic Titles and Information, in greek D.O.A.T.A.P), a fully operational ENIC/NARIC for recognition in Greece of diplomas and degrees obtained abroad and reforming the relevant procedure, law 3374/2005⁵²⁶ organising a comprehensive evaluation model for Greek universities and law 3391/2005⁵²⁷ founding the International Hellenic University.

⁵¹⁵ For a nearly complete list of those laws, see Explanatory Statement to law 3549/2007, <http://www.parliament.gr/ergasies/nomosxedia/EisigisiEpitropon/510/m-aei-eis.pdf> (last retrieved on 31.07.2007), p. 3.

⁵¹⁶ Government Gazette A' 109/1993.

⁵¹⁷ Government Gazette A' 208/1995.

⁵¹⁸ Government Gazette A' 124/1996.

⁵¹⁹ Government Gazette A' 266/1997.

⁵²⁰ Government Gazette A' 248/1999.

⁵²¹ Government Gazette A' 171/2005.

⁵²² Government Gazette A' 130/2007.

⁵²³ Government Gazette A' 138/2004.

⁵²⁴ Government Gazette A' 260/2005.

⁵²⁵ Government Gazette A' 80/2005.

⁵²⁶ Government Gazette A' 189/2005.

⁵²⁷ Government Gazette A' 240/2005.

3. STRUCTURE OF HIGHER EDUCATION IN GREECE

3.1. Tertiary Education in Greece before 2001

Since the early 80's tertiary education in Greece had been characterised by its double-natured character. It was divided into two circles with different philosophies. Highest Educational Institutions (AEI's), while also oriented toward professional qualification, had a more theoretical scope and a predominantly academic character. Technological Educational Institutions (TEI's), on the other hand, had a less intense academic profile and were mainly focused on professional training in the technological sector (at least those domains that were not already covered by the Polytechnical Schools, which in Greece have always enjoyed University status) and other professional areas, such as opticians, health care personnel, etc. Beside this "bipolar system", a third "unofficial" sector had been in place, comprising mainly certain schools of vocational training, ecclesiastical Schools, etc (vide infra 3.2.).

Apart from those education institutions, which were all officially recognised by the State, in Greece several educational centres in the form of private Universities and Colleges have been functioning for years without attaining official recognition by the State. Some of them are commonly known by the name "Laboratories of Free Studies" (Εργαστήρια Ελευθέρων Σπουδών, EES), whereas others are franchises of foreign Universities, such as the University of Indianapolis or the State University of New York. Other institutions are privately run without being official franchises of foreign institutions, although affiliations are possible; such as the ALBA Graduate Business School, the Mediterranean College, the Deree College, BCA, etc. The aforementioned institutions offer programmes mainly in business and financial studies, as well as a wide array of other objects of study and vocational training in general (graphic design, journalism, gastronomists, technicians, beauticians, etc.). Some of those institutions managed to have certain vocational rights recognised by the State for their graduates, but academic recognition is firmly denied, mainly due to the constitutional prohibition of private tertiary education institutions. This has caused many problems for Greece in cases where the private institutions are franchises or offer joint programmes with recognised Universities of EU-Member States, especially from the United Kingdom. The problem is expected to be solved after the impending constitutional amendment (although it is not sure how many of these institutions would withstand the quality controls that are expected to be implemented for private tertiary education institutions).

3.2. The Situation after 2001

As mentioned before, law 2916/2001 introduced major reforms with regard to Highest Education in Greece. The law explicitly provided that Highest Education in Greece consists of both the university and the technological sectors, which are to be regarded as parallel (Art. 1, as amended by law 3549/2007). Although the distinction between AEI's and TEI's remained, it henceforth refers only to the object of studies and the general philosophy of each category and has nothing to do with a relation between "higher" and "highest" educational institutions; both are highest education institutions. Those two sectors each perform a function complementary to each other, having discrete sets of features, roles and missions. The Universities focus on teaching and developing science, promoting innovative knowledge and effectively preparing the future academics of the country. The Technological Institutes focus on the applied theory and science, on the scientific training in its applied dimension. At the same time great effort is put into rendering the two parallel sectors of Higher Education in Greece equal from an academic point of view, although it will take some time before concrete results on this goal become obvious.

Apart from the two parallel sectors of Highest Education designated as such in law, a third category also exists⁵²⁸, which is based upon Art. 16 § 7 of the Constitution; it consists in the higher educational institutions offering vocational or any other special training for a period no longer than three years. This third category is quite general and mainly comprises vocational training in the fields of art and tourism, as well as officers in the navy, the army and the public order agencies. Religious education until recently also belonged to this category, but Higher Ecclesiastical Schools were elevated to the status of Highest Education Institutions with the law 3432/2006⁵²⁹. Similarly, the Highest School for Pedagogical Technological Education (A.S.PA.I.T.E), which mainly prepares persons with technological training to teach in secondary education institutions, was integrated into Technological Highest Education. Consequently, nowadays the “third sector” of Greek tertiary education mainly comprises the Merchant Marine Academies⁵³⁰, the Higher Schools for Dance⁵³¹ and Drama⁵³², the Higher Tourist Education Schools⁵³³, the Higher Military Education Schools of the Ministry of National Defence⁵³⁴ and the Higher Police Academies⁵³⁵.

The Higher Education Institutes are entitled to autonomously define their curricula, which are thereafter checked and approved by the Ministry of Education and Religious Affairs.

3.3. The Role of Ministries

Education policy in the Hellenic Republic is mainly implemented by the Ministry of National Education and Religious Affairs (YPEPTH) which is assisted in its work by several YPEPTH bodies with specific missions, jurisdiction and responsibilities. In the context of official education system, either in cooperation with it, or independently, education prerogatives are also allocated to the following Ministries, depending on the respective object of education institutions:

- Ministry of National Defence
- Ministry of Development
- Ministry of Labour and Social Security
- Ministry of Rural Development and Food
- Ministry of Culture
- Ministry of Public Order
- Ministry of Mercantile Marine

⁵²⁸ *Kyriazis, Athanassios*, National Report – Hellas 2005-2007 (Report of the Greek Ministry for Education and Religious Affairs to the Bologna 5th Ministerial Conference in London in May 2007), <http://www.dfes.gov.uk/londonbologna/uploads/documents/GreeceNationalReport.doc> (last retrieved on 31.7.2007), p. 4; <http://www.ekep.gr/Education/tritobathmia.asp> (last retrieved on 31.07.2007).

⁵²⁹ Government Gazette A' 14/2006.

⁵³⁰ Law 2638/1998, Government Gazette A' 204/1998, as amended.

⁵³¹ Presidential Decree 457/1983, Government Gazette A' 174/1983.

⁵³² Article 26 of the law 1158/1981, Government Gazette A' 127/1981, in combination with the Presidential Decrees issued by virtue of this provision.

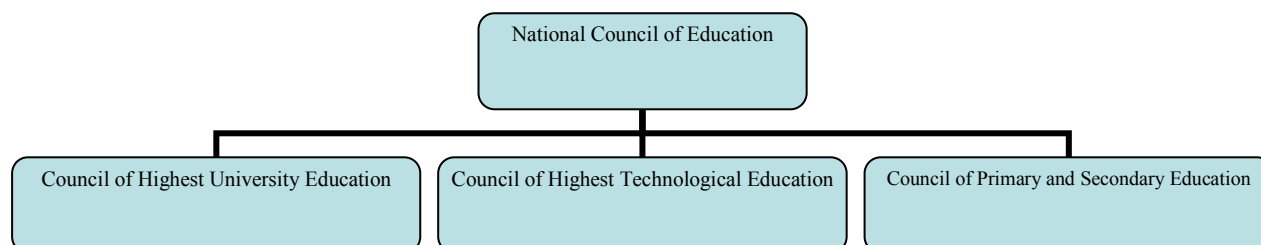
⁵³³ Law 3105/2003, Government Gazette A' 29/2003.

⁵³⁴ Military education in Greece includes numerous Schools in all forces (marines, navy, air force); for relevant information, both on those belonging to Highest Education and the Lieutenant Schools, and links, *vide* <http://www.mod.mil.gr/Pages/MainAnalysisPage3.asp?HyperLinkID=3&MainLinkID=143#first> (last retrieved on 31.07.2007).

⁵³⁵ Law 2226/1994, Government Gazette A' 122/1994, as amended.

3.4. The National Council of Education

It is the advisory body for major matters of educational planning and policy to the Minister of Education and Religious Affairs. The Presidential Decree 127/2003⁵³⁶ regulates matters relevant to its organisation, function and administrative structure.



4. UNIVERSITIES

4.1. The 23 Universities

1. National and Kapodistrian University of Athens

It was founded on 3 May 1837 and was housed in the residence of the architect Stamatis Kleantes. It was the first University, not only in the newly established Greek State, but in all of Balkans and the Eastern Mediterranean in general. It was called ‘The Othonian University’⁵³⁷, before its present name. Between 1895 and 1911, about one thousand new students entered the faculty every year. The number increased to two thousand at the end of World War I. This fact led to the decision to introduce entrance examinations for all the faculties beginning in the academic year 1927 – 28.

2. National Technical University of Athens (N.T.U.A.)

In Greece it is also called ‘National Metsovion Polytechnic’ as a matter of honour to the donors Stournaris, Tositsa and Averof who came from Metsovo (a village in the West North part of Greece). It is the oldest and most prestigious educational institution of Greece in the field of technology. The year of foundation was 1836. It is closely linked with Greece’s struggle for independence, democracy and social progress.

3. Aristotle University of Thessaloniki

It is the largest University in Greece. It was established in 1925, during the first Greek Democracy after a proposal of Alexandros Papanastasiou, a leading political figure at the time. The campus covers about 23 hectares close to the centre of Thessaloniki. It comprises 9 Faculties organised into 39 Schools as well as 3 independent Schools. It has about 95 000 undergraduate and postgraduate students.

4. Athens University of Economics and Business

It was founded in 1920 and its first name was Athens School of Commercial Studies. It is the third oldest Higher Education Institution in Greece and the oldest in the general fields of

⁵³⁶ Government Gazette A' 114/2003.

⁵³⁷ Named after the first King of Greece.

economics and business. In research carried out by Der Spiegel magazine among 500 European Universities, it was listed in the 25th place.

5. Agricultural University of Athens

This University is the result of a series of efforts for systematic agricultural education in Greece, which go back to the period of the Kapodistrias⁵³⁸ administration when a Model Farm was founded at Tyrintha in 1829. The Agricultural University is the evolution of the Highest College of Agriculture of Athens, which was established in 1920 during the Venizelos administration. That historical period of foundation is considered rather crucial for the country. Greece was trying to recover from the war and the tragic events in Asia Minor. Poverty and dislocation reigned. In that period, the University had to confront the problem of refugee settlement, the reform of land ownership, the organization of cooperatives, and the modernization of agricultural production to rid Greece of the threat of hunger. Nowadays it consists of 7 Faculties.

6. Athens School of Fine Arts

It was founded in 1837. Its goals are to improve the artistic competences of students, to provide theoretical and practical knowledge through teaching and research and to contribute fully to the cultural, social and economical worth and development of the country. In 1984 a department of Fine Arts was established in the Aristotle University of Thessaloniki.

7. Panteion University of Social and Political Sciences

Its foundation goes back to 1927. Nowadays approximately 8000 students are registered in 10 Departments. In the University, 13 post-graduated programmes, 3 Research Institutes and 18 Research Centres are running.

8. University of Piraeus

Founded in 1938 – under the title ‘School for Industrial Studies’- and organised by the Industrialists and Tradesmen Association. It consists of 7 Departments like Economics, Business Administration, Statistics & Insurance Science, Informatics.

9. University of Macedonia. Economic and Social Sciences

It was established in 1948 as the Graduate School of Industrial Studies and after modifications was renamed as today and currently it has 5 Departments. Its aim is to prepare, in the economic field, fully qualified scientists for the public and private sector who are able to cope with the needs of the Greek and International Market.

10. University of Western Macedonia

One of the newest Universities in Greece, founded in 2002. It has currently 4 Departments that used to be part of the Aristotle University and they are now under its administration.

11. University of Patras

It is the third largest University with the fastest development. Founded in 1964, it is running 22 Departments with a large number of sectors.

12. University of Peloponnese

It was founded in 2000. It is located – 6 Faculties – in Tripolis, but other Faculties are in the process of being established in several capitals of the district of Peloponnese.

⁵³⁸ Kapodistrias: The first Governor of Greece after the war with the Turkish conquerors.

13. University of Ioannina

Its foundation was in 1964 and it consists of 17 Departments.

14. Democritus University of Thrace

It was established in July 1973. It is named after the ancient Greek philosopher Demokritos who was born in Avdira, Thrace. It is organised in 18 Departments.

15. University of Crete

It was founded in 1973 and it is developed in 2 cities and 3 campuses in the biggest island of Greece, Crete.

16. Technical University of Crete

Established in 1984, the Technical University of Crete has six Departments (Management & Production Engineering, Mineral Resources Engineering, Electronic Engineering & Computer Engineering, Environmental Engineering, Architectural Engineering and Sciences, which only offers postgraduate studies), fifty-seven laboratories and particularly rich research activity.

17. Aegean University

Established in 1984, it is one of the newest Universities in Greece. Having 17 Departments, its general administration is located in the island Lesbos.

18. Ionian University

It is the descendant of the first University in Modern Times that was in operation in Corfu for forty years, from 1824 to 1864 (see Chapter Ionian Academy).

19. University of Thessaly

The seat of this University is the city of Volos and it was founded in 1984.

20. Harokopio University

Its foundation dates back to 1929. It is divided into 3 Departments: Home Economics & Ecology, Dietetics & Nutritional Science, Geography.

21. University of Central Greece

It was founded in 2003 with its seat in Lamia. It has two Departments, one on Informatics and Applied Biomedicine and one on Regional Economic Development.

22. Hellenic Open University

It was founded in 1997/98 and it is located in Patra. Its aim is to provide education via distance learning teaching. Its philosophy is that everybody has the right to education in whichever age he is. Home is the main place of learning and the student is able to choose the time, the rhythm, the style.

23. Hellenic International University

Founded in 2005, the Hellenic International University is aimed at foreigners who wish to study in Greece. It has three Schools, the School of Humanities, the School for Economy and Administration and the School for Technological Sciences. It offers both undergraduate and post-graduate programmes.

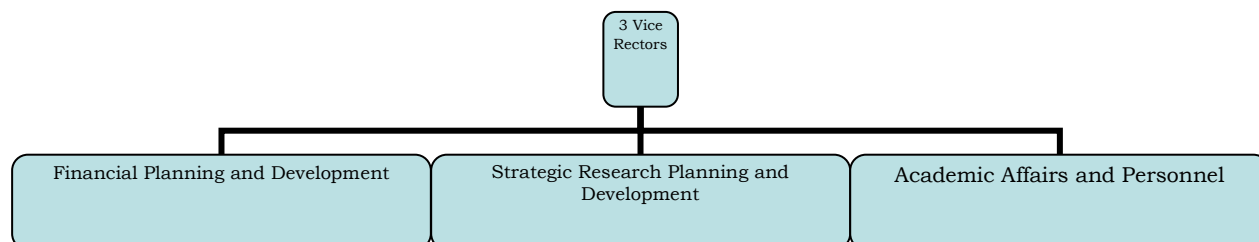
4.2. Administration Bodies and Governance of the Universities

RESPONSIBILITIES	University	School (Faculty)	Department	Sector
Leadership	Rector (+ 3 Vice Rectors)	Dean	Chairman (+ Assistant Chairman)	Director
Decision making (higher level) ⁵³⁹	Senate	General Assembly	General Assembly	General Assembly
Decision making (lower level)	Rector's Council	Dean's Council	Executive Committee	
Executive Power	Rector's Council	Dean's Council	Executive Committee	

Source: Ministry of Education and Religious Affairs

The administrative bodies, the modalities of their election and their competences are regulated in detail in Art. 8 et seq of law 1268/1982, as amended.

The Rector and the three Vice – Rectors are elected for 3 years terms of office from the body of electors. The body of electors consists of a. all the scientific personnel of the University, b. the representatives of the undergraduate students (equal to the 80% of a.), c. the representatives of all the other categories (equal to the 25% of a.).



The Dean is elected for a 3-year term of office from the body of electors. The body of electors consists of the bodies of electors that elect the Presidents of all the Departments that compose the Faculty.

The President and the Assistant President are elected for a 2-year term of office from the body of electors. The body of electors consists of a. the sum of the scientific personnel of the Department, b. the representatives of the undergraduate students (they are equal to the 80% of the a.), c. the representatives of all the other categories (they are equal to the 15% of the a.).

The Director of the Section is elected for a 1 year term of office from the General Assembly of the Section.

⁵³⁹ Decisions on the academic affairs of each department are made by the Department's General Assembly. Decisions on academic, economic and administrative matters usually involve the formation of ad hoc committees. Standing committees are also formed on an annual basis, e.g. for the Library, the Computer Center. The Director of each postgraduate programme is a professor appointed by the General Assembly of the corresponding Department.

The Senate of the University consists of: a. the Rector and the three Vice-Rectors, b. the Deans of the Faculties, c. the Presidents of the Departments, d. one representative of the undergraduate students of each Department, e. two representatives of the post - graduate students of the University, f. six to eight representatives of the scientific personnel from every level except that of the the Professors, g. four representatives of all the other categories of the personnel.

The Rector's Council consists of the Rector, the three Vice – Rectors, one student representative and the Director of the Secretariat of the University.

The Dean's Council consists of the Dean, the Presidents of the Departments and one representative of the undergraduate students of each Department.

The General Assembly of the Faculty consists of the General Assemblies of the Departments.

The General Assembly of the Department consists of a. all the members of the scientific personnel (highest limit: 40 people), b. representatives of the undergraduate students (they are equal to the 50% of a.), c. representatives of the post – graduate students (they are equal to the 15% of a.)

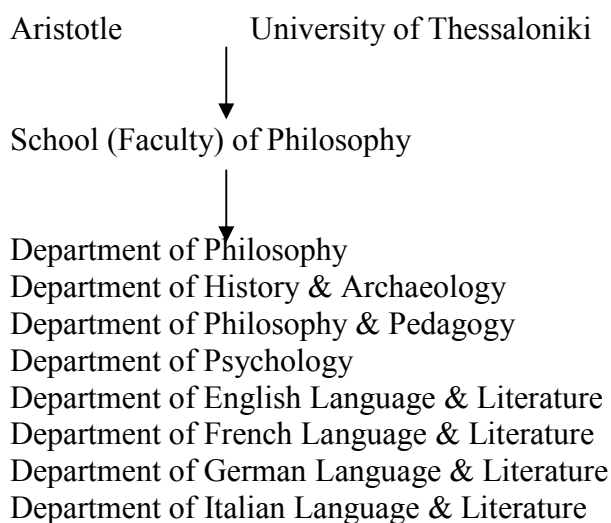
Schools are divided into Departments. The Department coordinates the teaching of part of the subject area of the School.

The representatives of students in the University bodies are appointed for an annual term by the student union of each school, which functions either as a legal entity of private law or as a union of individuals (until the approval of its statutes). All the students of a School can become members of a student union.

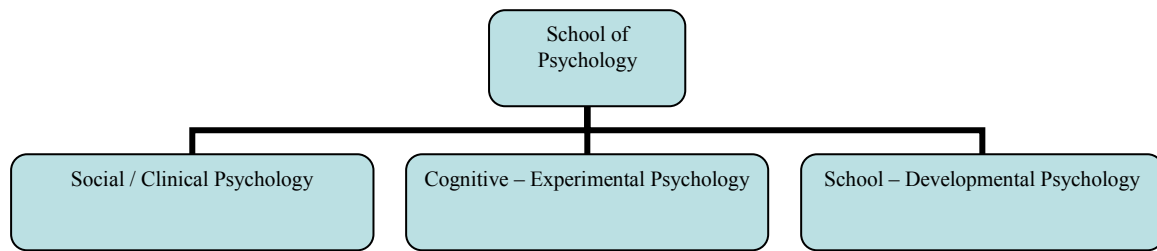
4.3. University, School (Faculty), Department

In Greece, the academic structure is divided into four levels (Art. 6 of the law 1268/1982). On top is the Academic Institution, which is divided into Schools (or Faculties). Each School is divided into Departments. The Department is the basic functional academic unit and it specialises in a certain cognitive subject and grants a Degree or Diploma⁵⁴⁰. The Department consists of Sectors which have a more specific subject.

For example:



⁵⁴⁰ On an exceptional basis, Departments of the Philosophical Schools may run distinct studies programmes, which lead to distinct Degrees.



The Ministry of Education is responsible for: the establishment, the renaming, the fusion, the abolition of the mentioned parts of the academic structure.

4.4. Centres of Excellence

In Greek Universities the following general subject categories are available. Each is divided into directions/specialities (there are about 259 available directions throughout Greece)

- Natural Sciences
- Mathematics & Computer Sciences
- Sciences of Earth & Environment
- Agronomy
- Technical Sciences
- Health Sciences
- Sciences of Education
- Law
- Sciences of Economy & Administration
- Social & Political Sciences
- Languages & Literal Sciences
- Humanities
- Architecture & Urban Planning
- Fine Arts
- Sports Sciences
- Sciences of Communication
- Multidisciplinary field (e.g. Philosophy – Pedagogic & Psychology. Methodology – History & Theory of Science)

4.5. University Financing

Article 16 of the Constitution guarantees an advanced level of self-governance and academic freedom to the Universities. At the same time, however, the Universities are under the supervision of the Minister of National Education. The main reason for the Ministry supervision over the Universities is the fact that 99.9% of university budgets are state financed. The way in which each University decides to allocate its resources is controlled by the State (which of course significantly reduces the real autonomy of Universities). The yearly budget has to be approved by the Ministries of Education and Finance. The new law

3549/2007 introduces a compulsory four-year academic-strategic planning for all Universities (Art. 5), the purpose of which is to enhance their financial and academic self-governance⁵⁴¹.

Special Matters of Finance

There are three mechanisms to obtain external resources of finance:

The Committee of Research (it exists in every University) is responsible for attracting and organising possible proposals and budgets from external sources. The Association for Development and Management of the University's Property is an institution of enterprising spirit that belongs to the University and functions under the control of the Senate. Its aim is to handle – in the best way possible – the property of the University. Finally, the Universities have the alternative of establishing Research Institutes, which have independent financial management and they can achieve financing by providing scientific or technological services to state or private actors.

4.6. Student Care

A series of benefits are provided to all students, regardless of whether they study in AEI's or TEI's. Apart from the lack of tuition fees, the State also provides medical insurance to all students, free textbooks and, under certain circumstances, accommodation on grounds of need; university restaurants offering reduced prices for students are also set up and students have discounts on means of public transportation (relevant provisions can be found primarily, but not only in laws 1268/1982, 1404/1983, 3457/2007). State scholarships are also awarded by the National Scholarship Foundation to the best students of each department on a yearly basis.

⁵⁴¹ Explanatory Statement to law 3549/2007, p. 4.

5. TECHNOLOGICAL EDUCATIONAL INSTITUTIONS

The following educational institutions belong to the Technological sector of Highest Education in Greece:

ASPAITE
TEI of Athens
TEI of Epirus
TEI of Chalkida
TEI of Crete
TEI of Thessaloniki
TEI of Ionian Islands
TEI of Kavala
TEI of Kalamata
TEI of Western Macedonia
TEI of Lamia
TEI of Larissa
TEI of Mesologgi
TEI of Patras
TEI of Serres
TEI of Piraeus



Position of TEIs in Greece

■ Seat of TEI

● Branch⁵⁴² of TEI

Structure

Each TEI consists of – at least – two Schools. Each School consists of – at least – two Departments with corresponding specialities. The Department is the basic academic unit. It is divided into two or three groups of courses and every group corresponds to a scientific or technological field. The structure is practically the same as that of the AEI's. With the difference that the President is at the top of the hierarchy. TEI's offer course studies in a total of 81 specialisations in the following fields:

⁵⁴² Branch of TEI: This is the educational unit which is situated in a distance longer than 30km from the main TEI and consists of one School or maximum three independent Departments.

- Graphic Arts and Art Studies
- Management, Economics and Administration
- Health and Caring Professions
- Applied Technology
- Food Technology and Nutrition
- Agricultural Technology
- Music Technology
- Informatics
- Communication

6. GENERAL ASPECTS OF GREEK EDUCATION

6.1. Admission in the Tertiary Education (Principal: Numerus Clausus)

Admission to tertiary education institutions is principally regulated by law 2525/1997⁵⁴³, as amended. Students are admitted in the Tertiary Education according to their performance at national level examinations, taking place at the third grade of Upper Secondary School (Lyceum). The number of students allocated to each University and TEI is laid down annually by the Ministry of Education, after relevant proposal of the Universities. Selection is based on the student's performance during the third class in six general and orientation lessons, on the basis of nation-wide examinations (Panellinies), which include oral and written grading. Successful admission of the participants to the Tertiary Education results take into account three factors: a. marks, b. order of preference (each student fills in an application with the schools they wish to attend), c. the number of the available positions in each institution. A certain number of places in the TEI's are reserved for TEE (Secondary Technical Schools) graduates. Moreover, special quotas apply for young athletes, disabled persons, Greeks living abroad and a few other categories.

E.U. citizens can study at the TEI's free of charge, but they must meet certain financial requirements if they would like to study at Greek Universities.

With regard to the Hellenic Open University, since demand is usually high, students are selected by drawing lots; moreover, all candidates must have completed 23 years of age, since the main aim of the Hellenic Open University is to encourage long-distance learning and, therefore, is mainly addressed to older age groups.

6.2. Academic Year

The academic year is divided into two semesters. Every Department provides the students with the equivalent Diploma (in Greek: Ptychio). A University Diploma can have several directions/specialities, according to the studying objective.

The responsibility of the undergraduate Studying Programmes belongs ultimately to the Departments.

The institutions and the organisation of the postgraduate Studying Programmes has to be approved first by the Senate and then from the Ministry of Education and Religious Affairs.

⁵⁴³ Government Gazette A' 188/1997.

6.3. Language of Studies

The educational programmes are offered in Greek language. However, taught courses in foreign languages are usually offered for incoming Erasmus students. According to Art. 17 of the new law 3549/2007, the Senate may decide that doctoral theses can be written or whole parts of undergraduate or post-graduate studies can be held in a foreign language.

6.4. Duration of Studies

UNIVERSITIES

For the majority of Departments, the duration of studies that leads to the Degree or Diploma is at least 4 years⁵⁴⁴. It is 5 years for the Polytechnics, Agronomy, Forestry, Dentistry, Veterinary Medicine, Pharmacy and for the Fine Arts. Finally, for graduating from the Medicine Department, one needs 6 years.

Postgraduate studies last at least 1 year and for the completion of a PhD 3 years is the minimum duration.

TEIs

Studies last four years for a total of eight semesters, which include also a final semester devoted to the preparation of the dissertation. During their studies, the students may also practice their future profession on a trial basis.

As mentioned before, one of the reforms introduced by the recent law 3549/2007 is the maximum duration of studies up to a 100% of the regular duration of studies (Art. 14).

6.5. Post-Graduate Studies

These studies lead to a post-graduate Diploma of Specialization. Greek Universities offer about 213 post-graduate courses (plus the 12 of the Hellenic Open University), which allow students to specialize in certain fields. They are open to University and TEI graduates. The students are chosen through a selection process or their (oral and/or written) examination results. A necessary qualification is the knowledge of – at least one – foreign language. The duration of a post – graduate course is at least one year.

6.6. Doctoral Studies

These studies lead to a Doctorate Degree. They provide high-level specialization of knowledge and promote innovative knowledge. In the case of Universities that offer post-graduate courses, it is essential to have a Post-graduate Diploma in order to obtain a Doctorate. Permission to prepare a doctoral dissertation at Universities which do not offer regular post-graduate courses is granted to applicants who meet certain prerequisites. Certain University departments such as the Polytechnic award only a Doctoral Degree. The departments themselves lay down the admission requirements.

6.7. Tuition Fees

From the beginning of the function of the Higher Education Institutions until 1844, students had to pay tuition fees. During the period between 1844 and 1911, free of charge education

⁵⁴⁴ The academic year consists of two semesters with 13 full weeks of tuition and 3 weeks of examinations.

was imposed by law. Tuition fees were introduced again from 1911 until 1963. Since 1963, public higher education has been free in Greece.

The free character of tertiary education is something almost sacrosanct in Greece; the Greek Constitution (Art. 16 § 4) provides that all Greeks are entitled to free education in all levels in public education institutions. Nowadays, however, certain post-graduate programmes (e.g. programmes offered by the University of Macedonia and the Economic University of Athens or the Piraeus University) charge annual tuition fees. Moreover, law 3391/2005 on the Hellenic International University provides that students will have to pay fees, which are set by Ministerial Decision; the same applies for the Hellenic Open University.

6.8. Women and Tertiary Education

Some milestones in the struggle of women for equality in education are following⁵⁴⁵:

- 1871: The first woman was accepted in the tertiary education (Music Academy of Athens)
- 1884: The first woman in the University of Athens (Faculty of Philosophy)
- 1885: The first woman in Medicine

For the current quotas of women participation in Greek higher education, see Table 5.

6.9. Student Syndicalism in Greece – The events of Winter 2006-2007

The routes of the student syndicalism can be traced back in the late 70's, the first years after the colonel's dictatorship, and the early 80's, when the Greek Socialist Party assumed power for the first time. Law 1268/1982 laid the first foundations of student participation in university governance. Students were given for the first time the possibility to form a strong regulating factor inside the Universities. It strengthened their voices and allowed them to decide and to be active with respect to their own education matters.

Student syndicalism has since come a long way and it has always born the strong influence of politics. Most student parties existing today in tertiary education use this syndicalism as the main means in order to bring forward and establish their political ideas on University policies. They are a power of support, but quite usually of dispute, as well. With regard, especially, to sporadic abuses over the last decades of the power conferred to students, there is wide-spread doubt as to whether the representatives of the students' parties really express the anxieties and act to the benefit of the student or whether they are just the mouthpiece of the political parties. This is combined with a certain tendency of the students during the last few years not to participate actively in university political life; the past academic year (2006-2007) was a veritable exception due to the mass protests that government plans provoked.

Student syndicalism and its power was during late 2006 and well into spring 2007 one of the main causes of concern for the government, for the Greek society and for tertiary education as a whole. A really active student mass went to the streets demonstrating, occupied Universities for many months and nearly blew up the past academic year. More than 300 Schools were closed down by students in an effort to prevent the government from revising Article 16 of the Constitution and promulgating further reforms. The government and the Ministry of Education, on one hand, and the opposition on the other were surprisingly unanimous with regard to these matters (at least until student protests became quite massive), but so were the

⁵⁴⁵ Anderson, Lynn R. & Malikiosi-Loizou, Maria, Personality and trends of the students of the Greek highest educational institutions, National Centre for Social Studies, Athens 1980, pp. 19 *et seqq.*

students and the scientific personnel, although the long sit-ins and the dangers those entailed for the exam period also caused breaks within the students' and the professors' fractions.

Although the situation is quite multi-faceted, depending on the point of view of each one, perhaps the main arguments of each side can shed some light onto this conflict that really shook the Greek society for many months; these arguments may also explain the difficulties experienced in Greece because of the Bologna process, especially with regard to the bachelor+masters studies scheme (3+2 years). It is useful to keep in mind, however, that the major point of concern for the students was not the Bologna process, but rather allowing private Universities to be founded.

For the government, private Universities mean:

- improvement of the State Universities because of the antagonism,
- solution for the young people who wish to study and because of the fact that they do not succeed in the entrance examinations, they are forced to leave the country and look for foreign Universities,
- a boost for the economy.

For the students, on the other hand, private Universities mean:

- abolition of a rather important and crucial right of the Greek nation; the right to education free of charge,
- the downgrading of the State Universities and of their services,
- the development of a concurrence whose only aim would be the profit of the capitalism.

6.10. Academic Asylum

It has been mentioned before that the academic asylum right is one of the most valuable institutions of Greek academia, a phenomenon deriving from the political experiences of our people after World War II. The scope of academic asylum is the fortification of academic freedom and the safeguarding of scientific research and the free exchange of ideas.

The quintessence of the asylum right is the fact that the intervention of law enforcement agencies on university premises is principally and strictly forbidden by law. The Police, e.g., or other forces may enter the university only upon invitation by the competent authority of the educational institution or when flagrant crimes or crimes against life are being committed. The competent organ used to be, until the recent law 3549/2007, the Asylum Committee, which consisted of representatives both of the students and the professors. This organ, however, was deemed incapable of preventing large-scale catastrophes in the occupied Universities, as well as other crimes. For this reason, the relevant competence was transferred to the Rector's Council for the Universities or the Council for the TEI's (Art. 3 § 5 of the law 3549/2007).

6.11. Life-Long Learning

It was mentioned before that life-long learning has been regulated in a series of Greek laws, such as laws 2752/1999, 3369/2005 and 3577/2007. The first efforts consisted of setting up the so-called Choice Studies Programmes (PSE) with law 2752/1999, which were aimed at providing life-long learning opportunities to secondary education graduates who did not have the chance to continue into tertiary education, as well as to tertiary education graduates who wished to enhance and update their knowledge in a variety of fields. PSE's were not quite

welcome, because the professional rights of the holders of such titles were unclear and there were concerns that the professional rights of tertiary education graduates could be harmed. A more systematic effort was made with law 3369/2005. Life-long learning encompasses all learning procedures, including practical experience. Vocational training is divided in initial and on-going (Art. 1). A set of establishments are set up to provide life-long learning, the most important of which are the following (Art. 2): for people not having completed compulsory basic education: Schools of Second Chance have been founded, for secondary education graduates: Adult Education Centres, the Prefecture Committees of People's Training and for graduates up to the tertiary sector: the Parent Schools. Graduates of highest education may receive further training in the Institutes for Life-long learning (Art. 9). Initial vocational training is offered by the Institutes of Professional Training and on-going vocational training by the Centres for Professional Training. Furthermore, third-grade trade unions may found and run life-long learning establishments. Furthermore, a National Accreditation Centre is set up which will evaluate and accredit the life-long learning programmes (Art. 3, 5). Internal and external evaluation procedures are also regulated (Art. 8). Law 3369/2005 was complemented by law 3577/2007, which sets up a National Coordination Unit for a Comprehensive Life-long Learning Programme by the name "Solon", which will form the Greek National Agency within the framework of the EU action programme in the field of lifelong learning 2007-2013⁵⁴⁶. Although no concrete reactions similar to the ones against the PSE's have taken place so far, it seems quite possible that the new contextual framework of life-long learning will have much better perspectives.

6.12. Evaluation Schemes in Tertiary Education

Schemes of internal and external evaluation have been envisaged by law 3374/2005. Such evaluation schemes have rather been a rarity in Greece until now, but they are bound to become increasingly important in the years to come, especially if the planned Constitutional reform is successful and private tertiary educational institutions are allowed; effective evaluation will then become of essence in the process of accrediting such private institutions. They are still, however, a source of discord in academic circles: during the protests of winter 2006-2007 one of the points of controversy was the evaluation of academic staff by the students, to which the professors strongly objected.

Law 3374/2005 prescribes that teaching, research and all other academic activities of highest education institutions will be subject to evaluation. This evaluation will focus on the "systematic, informed and detailed assessment, highlighting and recording" of the academic performance of the tertiary education institutions by means of objective criteria, with a view to identifying eventual shortcomings and ensuring a high level of highest education (Art. 1). Evaluation must be conducted at least once every four years and is carried out in two stages: internal (Art. 4), conducted by the academic units themselves, and external (Art. 7), conducted by a team of independent specialists (Art. 8). An independent administrative authority by the name of "Hellenic Quality Assurance Agency in Highest Education" (Art. 10) is set up, which will oversee the evaluation procedures altogether and assemble the Specialists' teams responsible for the external evaluation. Moreover, in each highest education institution a Quality Safeguarding Unit (Art. 2) and in each academic unit (Schools or Departments) Internal Evaluation Units (Art. 5) with the participation both of academic staff and student representatives have been set up. The results have been publicised (Art. 9).

⁵⁴⁶ Pursuant to Decision No 1720/2006/EC of the European Parliament and of the Council of 15 November 2006 establishing an action programme in the field of lifelong learning, *OJ L 327, 24.11.2006, p. 45-68*, and the Commission Decision of 26/04/2007 relating to the respective responsibilities of the Member States, the Commission and the National Agencies in implementation of the Lifelong Learning Programme (2007-2013) C (2007) 1807/F of 26/04/2007.

The law has been in force for less than two years, so it is rather still early to derive conclusive results from its application, which at the time are still rather rudimentary. The Hellenic Quality Assurance Agency has organised seminars for the Rectors and the Presidents of the TEI's and has been paving the way for the relevant procedures to begin, according to sources of the Ministry for Education and religious Affairs⁵⁴⁷, within 2007.

6.13. Diploma Supplement – ECTS

Law 3374/2005, except for the evaluation system, also provides for the Diploma Supplement and the ECTS implementation. All students graduating from any Greek Higher Education Institution, beginning from the academic year 2006-2007, will be provided with a Diploma Supplement, fully correspondent to the EU/CoE/UNESCO Diploma Supplement Format, issued in English and Greek free of charge (Art. 15)⁵⁴⁸.

Moreover, the ECTS, which was also introduced by law 3374/2005 (Art. 14), must be compulsorily implemented in all first and second cycle programmes beginning from the year 2006-2007. In Greece another credit system is currently used which is based on the number of teaching hours. ECTS has been fully implemented by the TEI's since 2004⁵⁴⁹.

6.14. First and Second Cycle

Greece has come to be known as a rather Bologna-sceptic country. However, it has become obvious from the above that many important steps have been taken towards the implementation of the Bologna incentives. A point still quite controversial is, however, the implementation of the first and second cycle. From the Greek national report at the London Ministerial Conference in May 2007⁵⁵⁰, it becomes clear that from the government's point of view there is no problem. Both cycles are described as being fully implemented for many years. One cannot disregard the fact, however, that the minimum duration of the bachelor cycle in Greece is four years, which is hardly compatible with the Bologna plans.

In Greece, there is indeed wide-spread scepticism of the three-year first cycle study programmes. This derives not only from practical difficulties related to having to "fit" the existing curricula into shorter time spans. It is also connected to a substantial grade of distrust towards the bachelor programmes, especially as far as the professional rights of the holders of such degrees are concerned. Judging by the experience of Greek students who hold three-year bachelor degrees, e.g. from the UK, and later faced great difficulties both in having their degrees recognised and finding satisfactory jobs, the three-year cycle is not particularly popular in Greece. Another reason for opposing the Bologna first and second cycle scheme is the fear that professional rights might become limited due to extended specialisation. Several years ago, among the first Universities, where an effort was done to apply the Bologna study plan were the Polytechnical Schools (civil engineers, mechanical engineers, etc.), which already have five-year study programmes. The Ministry thought that it would be simple to replace the five-year "bachelor" with a three-year bachelor plus a two-year master's programme. This proposal was met, however, with considerable opposition by the students, who claimed that if this was to apply, they would then reach an impasse, because the bachelor degree alone would guarantee them no sufficient professional rights, whereas the master's programme, being specialised, would substantially narrow their options later on in the market.

⁵⁴⁷ Kyriazis, National Report Greece, p. 12.

⁵⁴⁸ Kyriazis, National Report Greece, p. 15.

⁵⁴⁹ Kyriazis, National Report Greece, p. 16.

⁵⁵⁰ Kyriazis, National Report Greece, p. 7.

This is the reason why the Ministry for Education does not envisage taking further action in the field. Eventually, it will perhaps be obliged to do so, but until the time comes, the first and second cycle will be a quite thorny issue of the Bologna implementation process in Greece.

7. ACADEMY OF ATHENS

7.1. Legal Personality and Purpose

The Academy of Athens has the legal status of a legal person under public law and is supervised by the Ministry of Education and Religious Affairs. It is the highest research foundation in Greece.

According to its Regulation, the Academy is composed of 3 Sections:

- Sciences (Mathematics, Physics, History of Physics, Applied Exact Sciences, Medicine)
- Humanities & Fine Arts (Literature, History, Fine Arts, Language, Archaeology)
- Ethical & Political Sciences (Theology, Philosophy, Law, Political, Economical and Social Sciences)

The main purpose of Academy is:

- the cultivation and promotion of Sciences, Humanities and Fine Arts
- guidance and mentoring for teaching and post-graduate programmes of the institutions of Tertiary Education
- the conduct of scientific research and study (in the areas of agriculture, industry, shipping, national economy in general)
- giving expert opinions to the State in the previous areas⁵⁵¹
- communication and co-operation between the Academy and its members with Academies and fellow Academics.

In pursuit of these objectives, the Academy:

- supports scientific research
- participates in international scientific organisations and projects
- carries out publications and offers grants and scholarships
- confers awards and honorary distinctions.

Currently, there are 13 Research Centres and 10 Research Offices in operation, all with specialized Libraries, plus a central one.

Since 2002, the Academy supervises the Foundation for Medical and Biological Research.

7.2. History

The Academy was founded in 18 March 1926, as an Academy of Sciences, Humanities and Fine Arts. Directly following its establishment, it became a member of two major organisations: the International Union of Academies and the International Council of Scientific Unions. The establishment of the Academy was the culmination of long and tireless efforts that lasted almost a century. Its name is a reference to Plato's Academy and the

⁵⁵¹ More specifically: the Academy issues consultations, proposals, adopts decisions and judgments for the instruction and guidance of the bodies and authorities of the State.

spiritual glory of ancient Athens⁵⁵². The first attempt to establish an Academy was made in 1824, during the Greek Revolution. Underlying all these efforts, the era's ideology, which connected national independence and the development of education, is revealed.

7.3. Role

On numerous occasions, the Academy has intervened into international bodies on matters concerning culture, the environment, universal values, national and human rights.

The denunciation of the persecution of the Jews during the Second World War and the defence of the rights of Cypriots to self-determination are the best examples of international intervention. Furthermore, on a national level, during the German occupation or at times when the democratic institutions were suspended (e.g. the 1967-1974 Dictatorship), the Academy fought to maintain its moral and spiritual independence. On numerous occasions it has offered its services through its expert opinions and proposals.

7.4. Impact on Greek Society

The Academy continues to have a lasting impact on Greek society with its work on all levels. This becomes all the more obvious by the donations and bequests made by individuals and various bodies. Their management allows the Academy to continue to serve its purpose (mentioned before).

7.5. Participation in International Organisations

During the past decade, the Academy has joined the following international organisations:

- The All European Academies (ALLEA)
- European Academies Science Advisory Council (EASAC)
- Inter Academy Council (IAC)
- Inter Academy Medical Banner (IAMB)

The Academy also supervises a major research centre abroad, namely the Hellenic Institute of Byzantine and Post-Byzantine Studies of Venice.

7.6. Organs

The Council of the Academy consists of the President, the Vice President, the Secretary General, the Secretary for Proceedings, the Secretary for Publications. The President's tenure of office is annual. The Vice President of the preceding year becomes *ex officio* the next President of the Academy.

7.7. Research Centres of the Academy

- Research Centre for Modern Greek Dialects
- Hellenic Folklore Research Centre
- Centre of Research for Medieval and Modern Hellenism
- Research Centre for the History of Greek Law
- Research Centre for the study of Modern Greek History
- Research Centre for Greek and Latin Literature
- Research Centre for Astronomy and Applied Maths

⁵⁵² According to Thucydides, 'the city that is the center of education for Greece'

- Research Centre for Greek Philosophy
- Research Centre for Atmospheric Physics and Climatology
- Research Centre for Antiquity
- Centre of Research into Greek Society
- Research Centre for Byzantine and Post – Byzantine Art
- Research Centre for Scientific Terms and Neologisms
- Research Centre of Pure and Applied Maths

8. SCIENTIFIC RESEARCH IN GREECE

According to Ch. Anagnostou and his article, ‘Matters of scientific research in the modern Greece’, research in Greece is at a significant turning point. The non-existence of scientific background and of substantial backing-up by social groups and political parties, as well as the perception that research is a luxury for Greece, are the main characteristics of the current situation. Research and technology are not the basic priorities of the State.

8.1. Legal Framework

Scientific research and technology in Greece is mainly governed by law 1514/1985⁵⁵³, as amended by law 2919/2001,⁵⁵⁴ and a series of further laws. The General Secretariat for Research and Technology⁵⁵⁵, which replaced the Ministry for Research and Technology and belongs to the Ministry of Development, bears the main competence in matters of research and technology and supervises the complex nexus of legal persons under public law conducting research in various sectors; its main body is the National Council for Research and Technology (E.S.E.T). The Ministry of Defence is actively involved in all research projects related to defence issues through the Research and Technology Centre for National Defence (K.E.T.ETH.A); the Ministry for Agriculture is also involved in the activities of the National Foundation for Agricultural Research (ETH.I.AG.E), as is the Ministry of Health and Welfare with respect to research activities in hospitals and medicine schools. A series of legal persons under private law under the supervision of the Ministries of Development and Economy & Finance have also been set up with the purpose of encouraging scientific research in Greece, such as the “Venture Capital in Advanced Technology SA” or the “Industrial Research and Technological Development Holding SA”.

Law 1514/1985 differentiates between “free choice research”, which is conducted irrespective of any potential direct practical applications and is aimed at promoting scientific knowledge, and “oriented research”, which is integrated into the five-year “Development Project for Research and Development (DPRD)” of the GSRT or the EU Framework Programmes and aims at improving the quality of life, the economy and the defence of the country. Research in Greece may be conducted both by public organisations and private entities, which may submit to the GSRT research proposals and seek financing within the framework of the DPRD. “Free choice research” is conducted in National Research Centres, AEI’s and TEI’s; over 70% of research in Greece is conducted in universities and in the aforementioned Centres. Research entities supervised by the State are divided into Research Centres and Research Institutes; the Institute is the basic research unit, specialising in a particular field, whereas the Centre covers numerous scientific and technological fields. Research Centres and Institutes are established with Presidential Decrees issued following relevant proposal of the Minister for Development

⁵⁵³ Government Gazette A' 13/1985.

⁵⁵⁴ Government Gazette A' 128/2001.

⁵⁵⁵ www.gsrt.gr (last retrieved on 31.07.2007).

and the advisory opinion of the ESET and they may also be established within an AEI or a TEI, in which case they also bear the title “academic”.

8.2. Major Research and Technology Entities

Some among the many research entities currently functioning in Greece under the Supervision are the following:

1. National Observatory of Athens⁵⁵⁶

It was founded in 1842 and is the oldest research institution in the modern Greek State. It is a national research center and operates as a legal person under public law. It is organised into 5 Institutes:

- Institute for Astronomy and Astrophysics
- Institute for Environmental Research and Sustainable Development
- Geodynamic Institute
- Institute of Space Application and Remote Sensing
- Institute for Deep Sea Research, Technology and Neutrino Astroparticle Physics NESTOR

2. Foundation for Research and Technology – HELLAS (FORTH)⁵⁵⁷

Starting in the early 80's from the Crete Research Center, the Foundation for Research and Technology (FORTH) has come to be one of the two main national research centres in Greece and has assumed a leading role with a wide spectrum of scientific and cultural activities in Greece. Its main fields of action are: high quality basic research, development of innovative technology, collaborations with industrial partners within and outside Greece, creation of spin-off companies, promotion of specialized services and products, development of Science and Technology Parks, educational activities in collaboration with Universities, publication of textbooks and monographs and contributions to vocational training. Moreover, it acts as a consultant on various programmes for regional development in Crete, Macedonia and Epirus and encourages collaboration with countries in the Balkans and the Eastern Mediterranean. It also promotes culture by organising exhibitions, publishing books, and producing music albums which document the rich folk tradition of Greece.

It consists of seven Institutes located in the cities of Heraklion (Crete), Patras (Peloponnesos) and Ioannina (Epirus):

- Institute of Computer Science
- Institute of Applied and Computational Mathematics
- Institute of Molecular Biology and Biotechnology
- Institute of Electronic Structure and Laser
- Institute of Chemical Engineering and High Temperature Chemical Processes
- Institute for Mediterranean Studies (IMS)
- Institute for Biomedical Research

3. National Centre for Social Research (EKKE)⁵⁵⁸

It is the successor of the Centre for Social Sciences that was founded in 1959. It specialises in social research and pursues the creation of a scientists' networks with research entities both in Greece and abroad. It consists of three active Institutes:

- Institute for Civil and Rural Sociology
- Institute for Social Policy

⁵⁵⁶ http://www.gsrt.gr/default.asp?V_ITEM_ID=2381 (last retrieved on 31.07.2007)

⁵⁵⁷ http://www.gsrt.gr/default.asp?V_ITEM_ID=632 (last retrieved on 31.07.2007).

⁵⁵⁸ http://www.gsrt.gr/default.asp?V_ITEM_ID=628 (last retrieved on 31.07.2007).

- Institute for Political Sociology
- and one inactive: the Institute for Ethical Values and Social Behaviour.

4. National Centre for Scientific Research ‘Demokritos’⁵⁵⁹

It was founded in 1959 and it is a medium-sized, multidisciplinary research Centre. It conducts basic and applied research in the fields of Nanotechnology, Microsystems, Control of Environmental Pollution, etc. The Institutes of Demokritos are:

- Institute of Nuclear Physics
- Institute of Nuclear Technology and Radiation Protection
- Institute of Material Science
- Institute of Informatics and Telecommunications
- Institute of Microelectronics
- Institute of Physical Chemistry
- Institute of Biology
- Institute of Radioisotopes and Radio-diagnostic Products.

5. Research Centre for Biomedical Sciences “Alexander Fleming”⁵⁶⁰

It is a newly founded research centre which has already achieved international acclaim thanks to its highly qualified scientific staff. It comprises two Institutes, the Institute for Immunology and the Institute for Molecular Biology and Genetics, which are active in the fields of cellular immunology, genetic research, the study of intra- and extra-cellular functions, etc.

6. Hellenic Pasteur Institute⁵⁶¹

Initially founded in 1920, it entered a new era in 1975 after the bilateral agreement between the Greek Government and the Institute Pasteur in Paris. Today, it is a private, non-profit organisation operating under the supervision of the GSRT and the Ministry of Health and Welfare. It is active in the fields of Research, Public Health and Education.

7. National Research Foundation⁵⁶²

Founded on 1958, the National Research Foundation aims at organising, financing and reinforcing scientific work in humanities and physical sciences. It currently runs six Research Institutes:

- Institute for Modern Greek Studies
- Institute for Byzantine Studies
- Institute for Greek and Roman Antiquity
- Institute for Biological Research and Biotechnology
- Institute for Theoretical and Physical Chemistry
- Institute for Organic and Pharmaceutical Chemistry.

It also comprises a series of services with a nation-wide scope, such as the National Documentation Centre, the Centre for Molecular Analysis and the Laboratory of Hormonal Receptors, and promotes Greek participation in international organisations and for a through its International Relations Office.

⁵⁵⁹ http://www.gsrt.gr/default.asp?V_ITEM_ID=626 (last retrieved on 31.07.2007).

⁵⁶⁰ http://www.gsrt.gr/default.asp?V_ITEM_ID=630 (last retrieved on 31.07.2007).

⁵⁶¹ http://www.gsrt.gr/default.asp?V_ITEM_ID=2391 (last retrieved on 31.07.2007).

⁵⁶² http://www.gsrt.gr/default.asp?V_ITEM_ID=627 (last retrieved on 31.07.2007).

8. Centre for Research and Technological Development⁵⁶³

This is a non-profit government research center with the mission of carrying out basic and applied research. It was created on March 2000 and consists of:

- The Chemical Process Research Institute
- The Informatics and Telematics Institute
- The Transport Research Institute
- The Institute of Agrobiotechnology

9. Greek Centre for Marine Research⁵⁶⁴

The result of the fusion of the National Centre for Marine Research and the Institute of Sea Biology of Crete, the main scope of the Greek Centre for Marine Research consists in conducting scientific and technological research on various aspects of the marine environment and developing practical applications in the field. It consists of five institutes:

- Institute of Biology and Genetics
- Institute of Internal Waters
- Oceanographic Institute
- Institute of Aquaculture
- Institute of Marine Biological Resources

10. Greek Atomic Energy Commission⁵⁶⁵

Founded in 1958, the EEAE is responsible for matters of nuclear energy, nuclear technology and population protection from ionized and non-ionized radiation. It has four laboratories and participates inter alia in the Interuniversity Post-Graduate Studies Programme in Medical Physics and Radiation Physics.

With regard to research financing quotas, 46% is effectuated in the AEI's, 22% in the Research Centres and 32% in the business sector. Research expenditure rises up to 0.6% of the GDP, whereby the business sector contributes with 32%. These quotas have shown a slight rise since 2006 (see Table 8), but are still far below the EU average, where research expenditure constitutes 1.9% of the GDP and business contribution reaches 50%. The total scientific staff of the country amounts to 14 748 researchers, 71% of whom belong to the AEI's, TEI's and academic research institutes; only 15% of the total number of researchers belongs to the private sector.⁵⁶⁶

8.3. Reform of the Legal Framework on Research & Technology

In October 2005 an interministerial law-preparing committee was set up with the task of reforming the current legal framework on Research and Technology. The committee examined the legislation in force in 8 countries that have excelled in effective management of research resources, such as Finland, the USA, Holland, etc. In July 2007 the Committee concluded its work and on the 17/07/2007 the Ministers for Development and Education & Religious Affairs presented a draft law for Research and Development⁵⁶⁷ which will replace

⁵⁶³ http://www.gsrt.gr/default.asp?V_ITEM_ID=631 (last retrieved on 31.07.2007).

⁵⁶⁴ http://www.gsrt.gr/default.asp?V_ITEM_ID=629 (last retrieved on 31.07.2007).

⁵⁶⁵ http://www.gsrt.gr/default.asp?V_ITEM_ID=637 (last retrieved on 31.07.2007).

⁵⁶⁶ Data taken from the Press Release of the Greek Ministry for Development of the 17.07.2007, [http://www.ypan.gr/docs/D.T.\(17-07-](http://www.ypan.gr/docs/D.T.(17-07-07)Neo%20thesmiko%20plaisio%20gia%20ereuna%20technologia%20kainotomia.doc)

07)Neo%20thesmiko%20plaisio%20gia%20ereuna%20technologia%20kainotomia.doc (last retrieved on 31.07.2007).

⁵⁶⁷ For the text of the draft law, see [http://www.ypan.gr/docs/D.T.\(26-07-](http://www.ypan.gr/docs/D.T.(26-07-07)thesmiko%20plaisio%20eravnas%20technologias.doc)

07)thesmiko%20plaisio%20eravnas%20technologias.doc; for the Explanatory Statement,

the existing legal framework. The basic guidelines and aims of the draft law, on which the reform of the existing framework is based, are the following:

- European prerogatives, as prescribed in a series of documents related to the Lisbon Strategy, are taken into account.
- The competent organs for research policies, the ways in which such policies are planned and implemented, their financing and evaluation are regulated anew on the basis of objectivity, effectivity and transparency.
- The co-operation between research entities and higher education institutions is set on a new basis and is intensified.
- Closer co-operation between industry and science is encouraged.
- Active participation of the Greek research and technology system in international networks and joint ventures is promoted.

Of central importance are the structural changes introduced in the system supervising research and technology in Greece. A National Programme for Research and Technology has been set up which will be run by the Interministerial Committee on Research and Technology, the Ministries for Development and Education & Religious Affairs, the National Council on Research and Technology and the National Organisation on Research and Technology; the latter, considered to be one of the major breakthroughs of the new law, will be a legal person under private law that will control in a comprehensive manner all aspects of research activity in Greece. The draft law mainly provides for substantially more transparent procedures in the setting up of institutional organs responsible for supervising and co-ordinating research and technological development in Greece. However, in order to achieve the goal of promoting and increasing research in Greece, more generous financing by the State and sufficient incentives for the private sector are necessary.

9. INTERNATIONAL RELATIONSHIPS

Greece has developed various relations on the international, bilateral and multilateral level. It is member of the Council of Europe (1949), UNESCO (1945), OECD (1964), European Union (1981). It participates in the creation of educational policies within its institutes and implements educational action and programmes.

The objectives of the Lisbon strategy and the Bologna and Copenhagen processes have been taken into consideration and special measures are envisaged. There is also a particular emphasis on the educational cooperation between the countries of South – Eastern Europe and the Mediterranean.

A new body – DOATAP – was set up in 2005 in order to provide information, to adapt to the developments in the EU and to deal with the recognition of foreign degrees.

Furthermore, pursuant to Act 3255/2004 a special programme on the development of transnational programmes in post-graduate studies was institutionalized.

9.1. Bilateral Programmes

The Greek Ministry of Foreign Affairs in cooperation with the Ministry of Education, the Ministry of Culture and the General Secretariats for Youth, Sport and Research-Technology concludes Educational-Cultural agreements and programmes. Such agreements encourage the mobility of students, researchers, academics and the goal is the exchange of knowledge,

experience, aspects of everyday life, information. Greece has concluded such educational agreements with 73 countries from every continent.

9.2. Multilateral Programmes

Greece participates in a variety of programmes such as SOCRATES, ERASMUS MUNDUS, LEONARDO DA VINCI, TEMPUS aiming to empower the European and international dimension in education. Greece has become actively involved in relevant initiatives by means of the life-long learning schemes put into effect (see supra 6.11.). The essential improvement in EU languages learning is also actively promoted.

Erasmus:

Students have the opportunity to attend courses in another European country or to work on their diploma or PhD thesis.

Tempus:

This programme concerns the co-operation between European Union and (former) Eastern European countries in order to promote the development of systems for Higher education in the latter. Financial aid is allocated in the fields of research and technology. Also, there are exchanges of undergraduate and graduate students and of research and teaching personnel.

International Association for the Exchange of Students for Technical Experience (IASTE):

It provides professional employment to Greek students during the summer period in foreign enterprises or University labs.

Association des Etats Generaux des Etudiants de l' Europe (AEGEE):

The Athens AEGEE was established in 1986 and it has about 500 members. Since that time, it has organised several events such as educational trips, conferences, seminars and meetings on various subjects.

10. GREEK EDUCATION IN COMPARISON TO OTHER EUROPEAN COUNTRIES⁵⁶⁸

Greece is the third country in the European Union, after Belgium (32%) and France (31%) with the highest percentage of young people (18 to 24 years old) studying in the Higher Education.

It is considered as one of the leading countries that promotes intensively and systematically the young people to the Universities, although financial support is unexpectedly low.

Lastly, Greece provides the students with the convenience of finishing their studies without restricting a special age limit.

11. MAIN PROBLEMS OF TERTIARY EDUCATION

The main problems of the institutions are:⁵⁶⁹

- Financing problems
- Close dependence and manipulation from each current government
- Non-existence of equipment and substructure
- Non-existence of organised post-graduate curriculum

⁵⁶⁸ Data taken from an article of the newspaper 'To Βήμα', 17 / 09 / 2000, based on the Indicators of Quality Measurement on Education concerning the countries of European Union.

⁵⁶⁹ According to Michalis Chletsos and his article: State and Private Universities, Coexistence or Line-up facing each other.

According to D.G. Tsaousis – professor of Panteios University and author of the book “The Greek University on the verge of 21st century”, the relationship between the University and the students remains until today faceless and traditionally antagonistic. The University is just a mechanism for the provision of educational services. It lacks integration in everyday life and society, it protects its strict, close and distant character and the ultimate dominance of the professors, its only focus is on the pursuit of truth and the deeper examination of knowledge. Generally, it remains stuck in the past and it shows itself rather slow to follow the changes and the needs of the era and to broaden its horizons.

The field of research is, as briefly discussed above, at a rather disappointing level in Greece. Generally, Greece has come to be known not for research conducted on its own soil, but as a “brain-exporting” country to the West Europe and North America.

According to the preliminary report of Euro Stat, only 0.58% of the GDP and 0.17% of the individual expenditure is invested in research. The good news is that FP7: 2007 – 2013 offers new perspectives for Greek researchers: new programmes, new goals, satisfactory money subsidies will – hopefully – support the research field, especially if the impending legislative reform manages to achieve the aims and satisfy the criteria so eagerly awaited from it.

12. PERSONAL COMMENT

The significance that Greeks attribute to education is primarily the result of their political, historical, social and family background. For them, tertiary education is one of the main factors, if not the most important, leading to social acclaim, economic and professional success and a significant standard of living. And this mentality persists in spite of the fact that in recent years there has been a substantial increase in unemployed graduates.

In any case, regardless of recurring trends and changing conditions, education has always been and will continue being important national and social capital. In view of the challenges that Greek education has to face in the European and international context, each government bears a heavy responsibility for bringing Greece in line with international developments. It became clear from the data mentioned above that a substantial body of law is already in force and it is in position to bring about the change that is so much sought after nowadays. A lot is still to be done, but the springboard can and should be the existing rules. When both the government – whichever government – and the citizens are ready to effectively observe the existing framework, it will be made possible to proceed to further progress and achieve a standard that will bring Greece on an equal position with its counterparts in the EU and the international scene.

As a closing remark, it becomes obvious that also in the educational field, as in many others, Greece will be able to move forward, if it approaches the Bologna process, instead of the inconsistent behaviour that has been adopted until now, with a more critical spirit that will allow it to realise the substantial benefits for Greek education that may be derived from this process.

ANNEX

Table 1. Higher Education in Greece

The Higher Education in numbers (year :2002)	
Amount of Students admitted in the Tertiary Education	83000
<u>Universities</u>	
Number of Universities	20
Number of Departments	237
Number of students admitted in the Universities (annually)	40000
Number of postgraduate Programmes	233
Number of postgraduate students	12000
<u>Hellenic Open University</u>	
Number of undergraduate students	6000
Number of undergraduate students	5000
<u>TEIs</u>	
Number of Institutions	14
Number of Departments	127
Number of students admitted in TEIs (annually)	43000

Source: Ministry of Education and Religious Affairs

Table 2. Students and Graduates in the Universities

Numbers of students and graduates in the Universities				
Academic Year	Students in Universities	Graduates (First Degree)	Postgraduates	PhD Owners
1998 - 99	266.103	21.154	1.354	796
1999 - 2000	276.902	22.784	2.275	1.049

Source: Ministry of Education and Religious Affairs

Table 3. Centres of Excellence

Academic Year 2004 - 2005	
Popular Centres of Excellence among students	Percentage of Students
Social Studies – Administration-Economics - Law	35%
Humanities – Fine Arts	16.9%
Sciences	21.1%
Mechanical engineering – Processing - Constructions	10.7%
Education	10%

Source: Ministry of Education and Religious Affairs

Table 4. The distribution of University students in the levels of Tertiary Education

Academic Year 2004-2005		
Undergraduate Students		
Total	Men	Women
192.913	80.596	112.317
Postgraduate Students		
Total	Men	Women
26.922	11.798	15.124
Doctoral Students		
Total	Men	Women
22.314	12.654	9.660

Source: Ministry of Education and Religious Affairs

Table 5 . Relation of men/women in the matter of scientific staff

Academic Year 2004 - 2005			
Scientific Staff			
	Total	Men	Women
	13.390	9.024	4.366

Source: Ministry of Education and Religious Affairs

Table 6 . Numbers and countries of origin of foreign students in Greek Universities

Academic Year 2004 - 2005	
Region	Number of undergraduate and postgraduate students in Greek Universities
Africa	201
Latin America	40
Asia	9.292
Europe	1.193
Australia	4

Source: Ministry of Education and Religious Affairs

Table 7 . Relation between scientific and non-scientific staff in the Greek Universities

Academic Year 2004 - 2005	
Scientific Staff	13.390
Non-Scientific Staff	7.345

Academic Year 2004 - 2005	
Non – Scientific Staff	
Special Technical Lab. Staff	2.409
Administrative Staff	4.396

Source: Ministry of Education and Religious Affairs

Table 8. Research Expenditures in Greece (2006)

Index	Greece
Gross Domestic Expenditure on Research & Development in relation to GDP	0.58%
Business contribution to the Gross Domestic Expenditure on Research & Development	30%

BIBLIOGRAPHY

Books, articles and other texts:

- Anderson, Lynn R. / Malikiosi-Loizou, Maria, Προσωπικότητα & στάσεις των φοιτητών των ελληνικών ανώτατων εκπαιδευτικών ιδρυμάτων (Personality and trends of the students of Greek highest education institutions), National Centre for Social Studies, Athens 1980.
- Chletsos, Michalis, State and Private Universities, Coexistence or Line-up facing each other
- Fragkos, Hristos, Επίκαιρα θέματα παιδείας (Current issues in education), Gutenberg Editions 1986
- Tsaousis, D. G., Το ελληνικό Πανεπιστήμιο στο κατώφλι του 21^{ου} αιώνα (Greek University on the verge of the 21st century), Gutenberg Editions 1993.
- Kakavoulis, Alex. K. (assistant Professors in the University of Crete), Ευρωπαϊκή διάσταση στην παιδεία (The European Dimension in education), Athens 1993.
- Kintis, Antreas, Η ανώτατη εκπαίδευση στην Ελλάδα – Ανατομία και σκέψεις για την αναδόμησή της, (Highest Education in Greece – Anatomy and thoughts on its reconstruction), Gutenberg Editions 1980
- Kyriazis, Athanassios, National Report – Hellas 2005-2007 (Report of the Greek Ministry for Education and Religious Affairs to the Bologna 5th Ministerial Conference in London in May 2007), <http://www.dfes.gov.uk/londonbologna/uploads/documents/GreeceNationalReport.doc> (last retrieved on 31.7.2007).
- Sakis Karagiorgas Foundation, Το Πανεπιστήμιο στην Ελλάδα σήμερα: οικονομικές, κοινωνικές & πολιτικές διαστάσεις (The University in Greece nowadays: economic, social and political dimensions), Athens 1991
- Vergis, Dimos & Task Force, Τι είναι πανεπιστήμιο. Τι είναι πτυχιούχος. Στοιχεία για το ελληνικό πανεπιστήμιο (What is a university. What is a graduate. Data on Greek universities), Athens 1975
- Ομάδες εργασίας «Προς αναθεώρισιν του νόμου του διέποντος τα Α.Ε.Ι.» Οργάνωση και λειτουργία των ανώτατων εκπαιδευτικών ιδρυμάτων – Νόμος-πλαίσιο σε σχέδιο (Task Forces „For the reform of the law governing AEI’s“ Organisation and function of highest educational institutions – Draft law), Athens 1975.
- Έκθεση και Εισηγήσεις της Επιτροπής Ευρωπαϊκών υποθέσεων προς την Σύνοδο των Πρυτάνεων και Προέδρων Δ.Ε. των Ελληνικών Πανεπιστημίων, Τα ελληνικά πανεπιστήμια στην Ευρώπη του 2000 (Report and Suggestions of the European Affairs Committee to the Rectors’ and Presidents’ Plenum of the Greek Universities, Greek Universities in Europe of 2000), Athens 1992.

- Minutes of the Greek Parliament Committee on Constitutional Amendment, [http://www.parliament.gr/ergasies/praktika/pdf/SYNTAGMA31012007\(apog\).pdf](http://www.parliament.gr/ergasies/praktika/pdf/SYNTAGMA31012007(apog).pdf) (last retrieved on 31.7.2007)
- Explanatory Statement to law 3549/2007, <http://www.parliament.gr/ergasies/nomosxedia/EisigisiEpitropon/510/m-aei-eis.pdf> (last retrieved on 31.07.2007)
- Explanatory Statement to Draft law on Research and Technology, <http://www.parliament.gr/ergasies/nomosxedia/EisigisiEpitropon/552/U-TECHNO-EIS.pdf> (last retrieved on 31.07.2007).
- Press Release of the Greek Ministry for Development of the 17.07.2007, [http://www.ypan.gr/docs/D.T.\(17-07-07\)Neo%20thesmiko%20plaisio%20gia%20ereuna%20technologia%20kainotomia.doc](http://www.ypan.gr/docs/D.T.(17-07-07)Neo%20thesmiko%20plaisio%20gia%20ereuna%20technologia%20kainotomia.doc) (last retrieved on 31.07.2007)

Interviews:

- Bajiatis Anastasios, Director of University Budget, Aristotle University of Thessaloniki.
- Petridou Georgia, Responsible of the Marketing Department, Research Committee, Aristotle University of Thessaloniki.

Universities web-sites:

<http://uoa.gr/uoagr/uoaindex.htm>
http://www.ntua.gr/en_index.htm
http://www.auth.gr/home/index_en.html
<http://www.aueb.gr/index.htm>
<http://www.aua.gr/site/index.html>
<http://www.asfa.gr/greek/index.html>
<http://www.panteion.gr/gr/new/>
<http://www.unipi.gr/panepistimio/istor-panep.html>
<http://www.uom.gr/index.php>
<http://www.uowm.gr/academic.htm>
<http://www.upatras.gr/education/structure/structure.php?lang=el>
<http://www.uop.gr/university.shtml>
<http://www.uoi.gr/about/history.php>
<http://www.duth.gr/index.en.php?position=university&file=index>

<http://www.uoc.gr/>
<http://www.aegean.gr/>
<http://www.ionio.gr/central/gr/university>
http://www.uth.gr/main/index/index_en.html
<http://www.hua.gr/tmimata.php>
<http://www.hua.gr/tmimata.php>

Sites used for drafting the Report:

http://www.ypepth.gr/el_ec_home.htm
<http://www.academyofathens.gr/>
<http://www.eurydice.org/portal/page/portal/Eurydice>
http://ec.europa.eu/dgs/education_culture/index_en.html
<http://www.rc.auth.gr/>
<http://www.gsrt.gr>
<http://www.academyofathens.gr/>

Research Project UnivSOE

"Institutions of Tertiary Education in Central and South East Europe: Developments, Structures and Perspectives of these Institutions for their Integration into the European Higher Education and Research Area"

Country Report: Kosovo

Arben Hajrullahu

1. FORSCHUNGS- UND LEHRINSTITUTIONEN	370
1.1. Koordination von Forschungs- und Lehrinrichtungen.....	370
1.2. Regionale und Internationale Einbindung.....	371
1.3. Verwaltungsstrukturen.....	371
1.4. Verfassungsrechtliche Grundlagen.....	372
2. DIE UNIVERSITÄTEN.....	372
2.1. Forschung.....	373
2.2. Lehre.....	373
2.3. Zusammensetzung des Lehrkörpers	374
2.4. Effektivität und Qualität der Lehre	374
2.5. Integrationsfunktion	376
2.6. Trends.....	376
3. DER AUßERUNIVERSITÄRE SEKTOR IM BEREICH DER FORSCHUNG	376
3.1. Akademie der Wissenschaften	376
3.2. Sonstige außeruniversitäre Forschungsinstitutionen.....	378
3.3. Einbindung in den Europäischen Forschungsraum.....	378
3.4. Problembereiche.....	378
4. DER AUßERUNIVERSITÄRE SEKTOR IM BEREICH DER BILDUNG	379
4.1. Ausbildungsinstitutionen	379
4.2. Einbindung in den Europäischen Hochschulraum	379
5. FAZIT	379

1. FORSCHUNGS- UND LEHRINSTITUTIONEN

Die Akademie der Wissenschaften und Künste Kosovos (Akademia e Shkencave dhe e Arteve e Kosovës) besteht seit 1974 bzw. 1978. Es gibt zwei Universitäten: in Prishtina (seit 1970⁵⁷⁰) und in Mitrovica (seit 2001⁵⁷¹).

Die Universität Prishtina besteht aus akademischen und Verwaltungseinheiten (im Original ist die Rede von Organisationseinheiten). Die akademischen Einheiten bestehen aus Fakultäten und aus „Fachhochschulen“ (Faculties for Applied Sciences, BA und MA, derzeit insgesamt drei: Faculty for Business in Peja; Faculty for Technical Sciences in Mitrovica; Faculty for Technical Sciences in Ferizaj).

Nach dem Jahr 2000 wurden ungefähr 20 privaten höheren Bildungseinrichtungen lizenziert. Der Lizenzierungsprozess von privaten höheren Bildungseinrichtungen, die sie sich im Widerspruch zu geltenden Gesetzen⁵⁷² oft Universitäten nennen, wurde von vielen Unregelmäßigkeiten begleitet und dementsprechend lässt die Seriosität und Qualität dieser Institutionen meist sehr viel zu wünschen übrig. Im Prinzip es geht dabei in erster Linie um Profit und um schnelles zu einem Abschluss kommen und nicht unbedingt um Studium oder Forschung. Die privaten höheren Bildungseinrichtungen sind oft nur eine „schwache Kopie“ der öffentlichen Universität Prishtina, die auch große Schwierigkeiten hat, die Qualität im Studium und in der Forschung zu erhöhen. Es gibt dennoch auch einzelne Ausnahmen, etwa die Amerikanische Universität in Kosova (American University in Kosovo), die als seriöser gilt.

1.1. Koordination von Forschungs- und Lehreinrichtungen

Für die Koordination der universitären und Forschungsangelegenheiten ist das Ministerium für Bildung, Wissenschaft und Technologie (Ministry of Education, Science and Technology) zuständig. Die Zusammenarbeit zwischen diesem Ministerium und der Universität in Mitrovicë ist sehr schwach. Viel mehr könnte getan werden. Doch seit der Wahl in Juli 2006 von einem neuen Rektor an der Universität Prishtinë, Dr. Enver Hasani, hat die Zusammenarbeit zwischen der Universität Prishtinë und dem Wissenschaftsministerium deutlich verbessert.

Innerhalb der Universitäten gibt es wenig Koordination: Beispielsweise ist die Zusammenarbeit zwischen den einzelnen Fakultäten nicht zufrieden stellend, ganz wenige Studierende absolvieren Wahlfächer außerhalb der eigenen Fakultät.

⁵⁷⁰ Die Universität in Prishtina wurde gemäß dem Gesetz über die Gründung der Universität Prishtina (Ligj mbi Themelimin e Universitetit të Prishtinës, Fletorja Zyrtare e KSAK, nr. 33/69, më 18 Nëntor 1969) gegründet. Dieses Gesetz wurde am 13. Februar 1970 im Amtsblatt veröffentlicht. Der 15. Februar 1970 wird als Gründungstag der Universität Prishtina gefeiert. Einzelne Fakultäten hat es in Prishtina auch vor 1970 gegeben, seit Anfang der 1960-er Jahre. Derzeit hat die Universität Prishtina 17 Fakultäten, 63 Abteilungen, mit etwa 33.000 Studierenden und ca. 2000 Eingestellten.

⁵⁷¹ Die Universität im Norden Mitrovicas funktioniert unter starkem Einfluss bzw. de facto Kontrolle der Republik Serbiens. Mit der Unterzeichnung von UNMIK/REG/2003/14, On the Promulgation of a Law Adopted by the Assembly of Kosovo on Higher Education in Kosovo, 12 May 2003 (Law No. 2002/3) seitens des Sondervertreters der Vereinten Nationen (Special Representative of the Secretary General of the United Nations) wurde die Universität Mitrovica auch durch kosovarischeres Recht legalisiert.

⁵⁷² Um den Namen Universität verwenden zu können, muss eine Bildungseinrichtung laut Gesetz mindest fünf Fakultäten mit insgesamt mehr als 3500 Studierenden vorweisen können. Vgl. UNMIK/REG/2003/14, On the Promulgation of a Law Adopted by the Assembly of Kosovo on Higher Education in Kosovo, 12 May 2003 (Law No.2002/3)

1.2. Regionale und Internationale Einbindung

Die Universität Prishtina hatte Kooperationsabkommen (formelle oder informelle) mit einzelnen europäischen Universitäten (z.B. mit der Universität in Jena, Deutschland) schon seit ihrer Gründungszeit in den 1970-er Jahren. Gute Kooperationsbeziehungen werden mit den Universitäten in Albanien, insbesondere mit den Universitäten in Tiranë und Shkodër, aufrechterhalten. Weitere regionale Kooperationsabkommen werden derzeit auch mit den Universitäten in Skopje und in Podgorica ausgearbeitet. Nach 1999 wurden auch einige Kooperationen mit diversen europäischen, aber auch amerikanischen, kanadischen, usw. Universitäten zustande gebracht bzw. einige bestehende Kooperationsabkommen ausgeweitet. Die Kooperation mit österreichischen Universitäten wird immer betont, insbesondere mit Grazer Universitäten. Des Weiteren bestehen auch Kooperationen mit den Universitäten aus Hannover, Freiburg usw.

Im Allgemeinen darf jedoch nicht unerwähnt bleiben, dass die Einbindung in konkreten und langfristigen Kooperationen sowie gemeinsames Unternehmen im Bereich der Lehre und Forschung meist nicht gegeben oder nicht ausreichend ist. Die Bedürfnisse der Universitäten nach Öffnung, Internationalisierung und Einbindung in internationale Studien- und Forschungsprogramme sind enorm. Die Einbindung in europäische Strukturfonds für Wissenschaft und Forschung erscheint als notwendige Maßnahme, um die Funktionalität der Universitäten und anderen Bildungs- und Forschungseinrichtungen sicherstellen zu können. Die „ad hoc Mentalität“ im Bereich der Kooperation mit Bildungs- und Forschungsinstitutionen sollte durch langfristige und strukturierte Kooperationen ersetzt werden.

1.3. Verwaltungsstrukturen

Das Ministerium für Bildung, Wissenschaft und Technologie ist zuständig für Bildungsfragen auf allen Ebenen und für Forschung. Die Abteilung, die sich mit Technologie und Forschungsfragen auseinandersetzt, ist viel weniger entwickelt als andere Abteilungen innerhalb dieses Ministeriums.

Etwa seit einem Jahr wurde vom Ministerium für Bildung, Wissenschaft und Technologie ein unabhängiger Rat gegründet, der eine Beratungsfunktion über Bildungsfragen übernommen hat. Des Weiteren wurde auch eine so genannte „Gruppe für die Promotion des Bologna Prozesses“ gegründet, in der überwiegend Universitätsprofessoren tätig sind.

Es gibt kaum (praktisch keine) Forschungsfördereinrichtungen, obschon laut dem Regierungsprogramm und –budget formell zumindest 0,7% (!) der GDP für Forschung vorgesehen ist. Die gegenwärtigen Investitionen in den Forschungsbereich liegen jedoch unterhalb der vorgeschriebenen 0,7%. Sie sollen um die 0,5% des BIP betragen. Diesbezüglich existieren keine offiziellen Daten. Nur einzelne ausländische Stiftungen verteilen manchmal Stipendien, um in ausgewählten Gebieten kleine Forschungsprojekte durchzuführen.

Was die Entwicklung der Forschungsquote betrifft, kann man im Fall Kosovos nach 1999 eher von Normalisierung des Lehrbetriebes reden als von systematischer und institutionalisierter Forschung im Sinne eines wissenschaftlichen Forschungs-Begriffes. Nur einzelne Personen oder Institutionen, meist NGO-s oder Think Tanks, unternehmen kleine Forschungsprojekte. Insofern ist Forschung keine öffentliche Angelegenheit (!), sondern ein Anliegen, das nur von privaten einzelnen Individuen und Stiftungen getrieben wird.

1.4. Verfassungsrechtliche Grundlagen

Die Autonomie der Universitäten und die Freiheit der Wissenschaft sind rechtlich festgesetzt. In der Realität jedoch sind die Universitäten und Forschungseinrichtungen stark politisiert. Universitäten werden oft als Arena für tagespolitische Zwecke missbraucht. Doch in letzter Zeit ist eine langsame De-politisierung – auch wenn nur ansatzweise – bemerkbar. Auch aus diesem Grund können die Universitäten, die ferner über äußerst eingeschränkte personelle und finanzielle Ressourcen verfügen, ihre Funktionen nicht erfüllen. Allgemein fehlt eine günstige Arbeitsumwelt für Tätigkeiten im Wissenschafts- und Forschungsbereich.

2. DIE UNIVERSITÄTEN

Die Universitäten sind öffentliche Institutionen, die durch Gesetze des kosovarischen Parlaments gegründet. Die gesetzliche Grundlage wird von mehreren Quellen als gut bewertet. Doch die Implementierung der Gesetze – wie auch in anderen Bereichen – ist der schwache Punkt

Bemühungen, die Universitäten im Sinne des Bologna-Prozess zu reformieren bzw. diese Reformen zu implementieren. Die meisten vierjährigen Diplomstudien wurden abgeschafft. Es wurden dreijährige Grundstudien, zweijährige Master Studien und dreijährige Doktoratstudien eingeführt. Nur die Fakultäten für Medizin und Tiermedizin behielten das fünfjährige Grundstudium bei.

Abgesehen von den erfolgreich eingeführten formellen Reformen wurde jedoch auf inhaltlicher und methodologischer Ebene wenig reformiert. Wenn die Professoren nicht „reformiert“ werden, wird auch die Lehre nicht reformiert.

Im Fall Kosovas wurde die Einrichtung einer eigenen Universität in den 1970-er als ein wichtiger Schritt für die Selbstständigkeit des Landes bewertet. Parallel zu Ausbildungs- und Forschungszwecken zeigt die Geschichte der Universität Prishtina, dass diese Universität ihre Funktion auch in der Opposition des jugoslawischen kommunistischen Regimes und später des serbischen Apartheidregimes (1989-1999) sah. Das mag nach 1999 ein Grund sein, warum die großen politischen Parteien ständig die Universität für tagespolitische Zwecke zu instrumentalisieren versuchen bzw. manche Abteilungen quasi in „Parteizweige“ umgewandelt haben. Dies erschwert deutlich den (inhaltlichen) Reformprozess.

Bezüglich der Organisation, so wird in den öffentlichen Universitäten eher das demokratische Model praktiziert, da sowohl Studenten als auch das akademische Personal an Entscheidungsprozessen zumindest mittelbar beteiligt sind. Jede akademische Einheit, Fakultät, Abteilung, usw., nimmt durch Vertreter der Professoren, Assistenten, Studierenden und Verwaltungsbediensteten an den Entscheidungen teil.

Auf der gesamten universitären Ebene wird aus einzelnen akademischen Einheiten eine Kommission für akademische Politiken gebildet, die dem Universitätssenat Vorschläge unterbreitet.

Die Universitätsorgane werden nach den Regeln und dem Verfahren des Kapitels 2 des Statuts der Prishtina Universität bestellt. Der (Universitäts-) Senat als das höchste akademische Organ der Universität wählt auf Vorschlag der Fakultäten die Studiendekane. Die Fakultäten müssen mehr als einen Kandidaten für den Posten des Dekans vorschlagen. Der (Universitäts-) Senat setzt sich aus folgenden Personen zusammen: Der Rektor; Prorektoren; alle Dekane; je einen Vertreter von jeder akademischen Einheit der Universität; sieben Vertreter vom Studentenparlament; zwei Vertreter aus den Reihen der nicht-akademischen Universitätsangestellten. Der Leitungsrat der Universität (zusammengesetzt aus neun gewählten Vertretern – fünf vom Universitätssenat und vier vom Bildungsministerium) wählt mit mindestens fünf von insgesamt neun Stimmen den Rektor der Universität Prishtina.

Die Funktion des Rektors ist in erster Linie die Führung der Universität. An der öffentlichen Universität Prishtina stellt Rektor eine mächtige Person dar. Er wird gewählt/ ernannt unter dem Einfluss des täglichen Politikgeschehens. Aus diesem Grund ist er nicht frei vom politischen Einfluss auf das akademische Leben. Die Dekane der 17 Fakultäten sind gewöhnlich machtlos und marginalisiert.

Der Leitungsrat der Universität ist das wichtigste Führungsorgan der Universität und entscheidet auf Basis der Forderungen der einzelnen Fakultäten über den Finanzierungsrahmen der Fakultäten.

Zu 60% werden die Universitäten aus öffentlichen Mitteln finanziert. 40% werden von der Universität selbst, etwa durch Studiengebühren, aufgebracht. Seit Ende 2005 verwaltet die Universität ganz autonom alle finanziellen Mittel, die sie selbst generiert. Die Autonomie der Universitäten wurde de jure kontinuierlich erhöht. Doch de facto wird die Autonomie der Universitäten derzeit nicht von dem (fehlenden) Staat, sondern von den politischen Parteien gefährdet.

2.1. Forschung

Wissenschaftliche Forschung wird kaum systematisch und längerfristig in institutionalisierter Form betrieben und sie wird im Prinzip m.E. mehr in Richtung „Wahrheitssuche“ gelenkt. Betreffend den mangelnden Forschungsgeist liegt das Problem u.a. auch in den vor-universitären Bildungseinrichtungen, in denen oft der Ehrgeiz der Schüler nicht gefördert sondern „erstickt“ wird. Mechanisches Lernen ist immer noch zu stark präsent. Anwendungsorientierte Grundlagenforschung, Innovation und die Entwicklung von Patenten sind nicht die Regel, sondern die Ausnahme. Produktorientierte Anwendungsforschung existiert kaum, die ersten Schritte wurden etwa in der Fakultät für Landwirtschaft und Bodenkultur unternommen.

Das Ministerium für Bildung, Wissenschaft und Technologie entscheidet in Absprache mit den Universitäten über die finanzielle Grundsicherung und Schwerpunktbildung.

Der wissenschaftliche Nachwuchs wird quasi ausschließlich durch ausländische Nachwuchsprogramme, meist durch europäische und amerikanische Stipendienprogramme, ausgebildet.

2.2. Lehre

Bezüglich der Philosophie hinter der Lehre, so dominiert im Durchschnitt der Ansatz, der wenig bis gar nicht marktorientiert ist. Dieses Bildungssystem fördert zu wenig, um nicht zu sagen „bekämpft“, die innovative Kapazität des Einzelnen. Dieses Phänomen beginnt in den Schulen und wird entweder auf der universitären Ebene fortgesetzt oder es ist dann schon zu spät, sich neue Bildungsansätze anzueignen.

Das Ausbildungsmodell sieht ein Drei-Stufen-System vor: das BA-, MA- und als die höchste Stufe das Ph.D- Studium.

Das gesamte höhere Bildungssystem in Kosova basiert sich auf die Bologna-Deklaration. In den letzten Jahren ist der *Bologna-Reformprozess* ein mehrfach verwendeter Begriff, hinter dem sich oft nur „Scheinreformen“ auf dem Papier verstecken. In der Praxis wurde insbesondere inhaltlich und methodisch wenig reformiert – nur die formelle Gliederung der Studiengänge wurde verändert, um das 3+2+3 System einzuführen. Viele Beteiligte im Bologna-Reformprozess erwecken den Eindruck, dass sie im Wesen die Grundphilosophie dieses Prozesses entweder nicht kennen oder in Wirklichkeit nicht implementieren wollen, da dadurch mehr Arbeit entsteht und es wenig Förderung von öffentlichen Einrichtungen gibt.

Berufsbegleitende Aus- und Weiterbildung ist schwach entwickelt. Erst im 2005 wurde ein entsprechendes Gesetz⁵⁷³ verabschiedet, dass es als Ziel erklärt „to promote the life long learning for all individuals“ (Art. 1.1).

2.3. Zusammensetzung des Lehrkörpers

Gemäß Art. 178/2 des Statuts der Universität Prishtina (Fassung vom 5. Juli 2004) sieht die Zusammensetzung des Lehrkörpers wie folgt aus:

- Ordentlicher Professor;
- Assoziierter Professor (eng. Associate Professor);
- Assistent Professor;
- Assistent;
- Junger Assistent;
- Lektor.

Die Männer sind in vielen Fakultäten überproportional im Vergleich zu den Frauen vertreten. Doch Art. 7 des Statuts der Universität Prishtina legt fest, dass Frauen bei gleichen Qualifikationen für die entsprechende Beschäftigung Vorrang gegenüber Männern haben.

Nach 1999 intensivierten sich die Versuche – meist durch ausländische Förderungsprogrammen wie vom Open Society Institute, WUS-Austria, etc. – jüngerer und im Ausland ausgebildetes Lehrpersonal zur Verfügung zu stellen. Doch die Nachhaltigkeit diese Unternehmungen ist oft wegen der schwierigen finanziellen Verhältnisse vor Ort und wegen eines „des-integrativen“ Ansatzes der alten Führungs-Strukturen nicht gewährleistet, die junge Mitarbeiter oft nur schwer akzeptieren. Die Universitäten brauchen mehr junge Mitarbeiter.

An den Universitäten arbeiten überwiegend Kosovaren albanischer Ethnizität. Nach 1999 ist die Zahl der ausländischen Gastdozenten, etc. deutlich gestiegen. Für die in der Minderzahl lebenden Volksgruppen sind an der Universität Prishtina reservierte Studienplätze vorgesehen. In Pejë gibt es eine „Faculty of Business“ in bosnischer Sprache. In Prizren gibt es eine Fakultät, Erziehungswissenschaften, für die türkische Volksgruppe. Die serbische Volksgruppe setzt die Anfang der 1990-er Jahren eigenführte Trennung auf ethnischer Basis fort und erkennt das kosovarische Bildungssystem nicht an.

2.4. Effektivität und Qualität der Lehre

Die meisten Studienfächer sind vorhanden. Solche die bis vor ca. fünf Jahren nicht existierten wie beispielsweise Ethnologie, Psychologie, Politikwissenschaften, Master in Informatik, usw., wurden nach 1999 neu, meist ohne ausreichendes Lehrpersonal, Literatur, Lehrpläne, Finanzen, etc., gegründet. Insofern haben die neuen Studienfächer auch die meisten Schwierigkeiten im Lehrbetrieb.

Studienfächer, die in den öffentlichen Universitäten nicht angeboten werden, wie Kriminologie beispielsweise, werden oft von Privatinstitutionen der höheren Bildung angeboten. Für die Privatinstitutionen der höheren Bildung ist das oberste Gebot finanzieller Profit, und sie betreiben ihre Tätigkeiten in der Regel ohne jegliche Qualitätskontrolle.

Bezüglich der Studierenden, ist die Matura die Voraussetzung für den Universitätszugang. Seit der Einführung in 2002/03 der neunten „Orientierungs“-Klasse werden für die Matura dreizehn erfolgreich abgeschlossene Schuljahre vorausgesetzt. Vorher setzte die Matura zwölf erfolgreich abgeschlossene Schuljahre und das Grundstudium vier anstatt wie gegenwärtig drei Studienjahre voraus. Für alle Studienrichtungen gibt es an der Prishtina Universität

⁵⁷³ UNMIK/REG/2005/43, On the Promulgation of the Law on Adult Education and Training Adopted by the Assembly of Kosovo, 7 September 2005. (Law No. 02/L-24, 22 July 2005).

Aufnahmeprüfungen, da von ca. 30.000 Maturanten jährlich ungefähr nur 5.000 Studienplätze angeboten werden können. Insofern ist die Konkurrenz um die Studienplätze sehr groß. Das Ministerium für Forschung, Wissenschaft und Technologie legt jedes Jahr zusammen mit der Universität die Quote fest.

Stellen für Forscher-Lehrer werden öffentlich ausgeschrieben. Viele Forscher-Lehrer, die kompetent sind, sehen sich meist gezwungen, wegen schlechter Gehälter und mangelnder vernünftiger Arbeitsmöglichkeiten – Bibliotheken, Arbeitsräume und -ausstattung – mehrere Jobs gleichzeitig ausüben und haben somit keine ausreichende Zeit für Lehre und Forschung. Einige sind auch nur gelegentlich als externe Lehrbeauftragte an der öffentlichen Universität tätig.

Evaluierung findet entweder nicht statt oder die Ergebnisse führen nicht notwendig zur Förderung von erfolgreichen Professoren. Im Art. 219 des Statuts der Universität Prishtina wird festgelegt, dass die Universität selbst ein Kontrollsystem entwickelt, um die Qualität und die Ziele der Universität abzusichern / zu erreichen.

Förderungen für Publikationen und Forschung sind praktisch nicht existent, obwohl im Kapitel 5, Art. 171-175, über „Wissenschaftliche Forschung und Wissen“ des Statutes der Universität Prishtina die Rede von der Förderung international wettbewerbsfähiger Forschungsergebnisse (siehe insb. Art 172) ist. Doch in letzter Zeit werden einige erste konkrete Schritte unternommen, um die Zahl der Publikationen und insbesondere der Fachübersetzungen zu erhöhen.

Die Universitäten werden größtenteils von öffentlichen Mitteln finanziert. Ein Teil der Finanzierung erfolgt durch Studiengebühren.

Im Bezug auf die Internationalität, die Zahl der ausländischen Studierenden ist sehr klein. Die meisten ausländischen Studierenden sind ethnische Albaner aus Serbien und Montenegro, da sie keine Studienmöglichkeiten in ihrer Muttersprache in ihren Herkunftsländern haben. Seit der Gründung einer albanischsprachigen Universität in Tetovo (Mazedonien) ist die Zahl der Studierenden aus Mazedonien stark zurückgegangen. Es gibt sehr wenige Studierende, die nicht aus der Balkanregion stammen und sich meist mit Albanologie oder länderspezifischen Studien beschäftigen.

Export von Studenten und Forschern findet im großen Ausmaß statt. Das Interesse der Studierenden, im Ausland zu studieren, ist sehr groß. Doch im Durchschnitt schaffen es nur sehr wenige, im Ausland ein Studium abzuschließen. Es gibt einzelne, im Prinzip ausländische, Austausch- und Förderprogramme, die meist nicht längerfristig angelegt sind und meist auf keiner sicheren finanziellen Basis stehen. Es bestehen ebenfalls einzelne bi- und multilaterale Forschungskooperationsabkommen, die jedoch längst nicht genug sind – und meist keine nachhaltigen Effekte haben. Sie bleiben oft nur auf formeller Ebene bestehen. Die Universitäten nehmen teil an internationalen Programmen. Meist sind dies TEMPUS Projekte. Es gibt Gastforscher, die jedoch meist nur kurze Zeit im Land bleiben.

Hinsichtlich der Transdisziplinarität, primär geht es oft um die Etablierung und Stabilisierung der einzelnen Disziplinen – sowohl in Hinsicht der Lehre und des Personals als auch in finanzieller Hinsicht. Erst seit einigen Jahren setzt sich die Idee der inter- und multidisziplinären post-graduale Lehrprogramme stärker durch. Einzelne erste Ansätze der Transdisziplinarität sind bemerkbar, meist durch neue internationale Förderprogramme initiiert, z.B. TEMPUS Projekte. Beispielsweise gibt es transdisziplinäre Masterprogramme in Mathematik und Elektrotechnik und es werden Programme vorbereitet, die Soziologen, Politik- und Wirtschaftswissenschaftler einbeziehen.

Ebenfalls gibt es keine PPP-Modelle im Bereich von Forschung und Lehre. Einige erste Schritte/Tendenzen in diese Richtung werden an den technischen und landwirtschaftlichen Fakultäten bemerkbar. Es gibt ebenfalls keine Stiftungsprofessuren. Wirtschaft und Industrie beteiligen sich nicht an der Finanzierung der Universitäten. In ganz wenigen Fällen gibt es

Kooperationen zwischen der Industrie und den Universitätseinrichtungen, z.B. am landwirtschaftlichen Institut.

Organisierte/institutionalisierte Programme, die die Verbindung zwischen öffentlichen Wissenschaftseinrichtungen und Unternehmen fördern, gibt es kaum. Es gibt einige wenige Wirtschaftsunternehmen, die ihre Wurzeln in Wissenschafts- und Forschungseinrichtungen haben.

Wenn es um das Rollenbild des Wissenschaftlers geht, so dominiert eindeutig das eines Einzelkämpfers und Wahrheitssuchers.

2.5. Integrationsfunktion

Die Instrumentalisierung der Universitäten für tagespolitischen Zwecken schwächt eindeutig die potentielle Konfliktbewältigungskraft dieser Institutionen. Es gibt keine speziellen Konfliktbewältigungsaktivitäten abgesehen von der Tatsache, dass immer mehr Veranstaltungen auch in Sprachen der verschiedenen Volksgruppen angeboten werden. Im Allgemeinen wird die Universität von der Mehrheit der Bevölkerung als wichtige Institution wahrgenommen und respektiert.

Die Bildungseinrichtungen sind seit Anfang der 1990-er Jahre zwischen den Kosovaren der albanischen und serbischen Ethnizität auf ethnischer Basis getrennt. Andere Volksgruppen sind nach 1999 im kosovarischen Bildungssystem Schrittweise integriert. Es gibt auch reservierte Studienplätze für die in der Minderzahl lebenden Volksgruppen.

2.6. Trends

Sowohl im Bereich der Ökonomisierung als auch der Internationalisierung gibt es Fortschritte. Doch von Trends reden kann man nur unter Vorbehalt. Die instabile politische und somit auch die wirtschaftliche Lage haben einen negativen Einfluss auf die weitere Entwicklung der Universitäten. Die mangelnden finanziellen Mittel sind ein großes Problem und die Universitäten schaffen es kaum, mit den jüngsten Entwicklungen Schritt zu halten.

Bezüglich der Reformen, so wird hauptsächlich die formelle und inhaltliche Implementierung des Reformprozesses gemäß der Bologna-Deklaration angestrebt.

Die hochmotivierten Studierenden mit großem Potential machen die Stärke der Universitäten in Kosovo aus. Zu den Schwächen zählt ein schwaches voruniversitäres Bildungssystem, mangelnde finanzielle Mittel, mangelnde Literatur in den Bibliotheken, fehlende Labors, etc. Von der EU erwartet man sich eine dauerhafte Einbindung in europäische und anderen Austauschprogrammen.

3. DER AUßERUNIVERSITÄRE SEKTOR IM BEREICH DER FORSCHUNG

3.1. Akademie der Wissenschaften

Die Akademie der Wissenschaften und Künste Kosovos (Akademia e Shkencave dhe e Arteve të Kosovës) wurde zuerst am 30. Dezember 1974 durch die Verabschiedung eines Gesetzes⁵⁷⁴ als Verein der Wissenschaften und Künste Kosovos (Shoqata e Shkencave dhe Arteve të Kosovës) gegründet. Am 18. April 1978 wurde vom kosovarischen Parlament ein Gesetz über

⁵⁷⁴ Ligji mbi themelimin e Shoqatës së Shkencave dhe Arteve të Kosovës, KK Nr. 011-96, Prishtinë, 30 Dhjetor 1974.

die Gründung der Akademie der Wissenschaften und Künste Kosovos verabschiedet, in dem im Art.1. festgelegt wird, dass der am 30. Dezember 1974 gegründete Verein der Wissenschaften und Künste Kosovos die Arbeit als Akademie der Wissenschaften und Künsten Kosovos fortsetzt.⁵⁷⁵

Im Zuge der Ereignisse am Ende der 1980-er Jahre verabschiedete das Parlament der Republik Serbien ein Gesetz⁵⁷⁶, in dem praktisch die Auflösung der Akademie der Wissenschaften und Künste Kosovos vorgesehen wurde. Doch die Arbeit der Akademie der Wissenschaften und Künste Kosovos wurde in einer Okkupationssituation fortgesetzt. Am 23. Februar 1994 vertrieb die serbische Polizei die Mitarbeitern der Akademie der Wissenschaften und Künsten Kosovos aus dem Akademiegebäude. Die Akademie der Wissenschaften und Künsten Kosovos setzte ihre Arbeit in einem Privathaus fort – wie auch andere Bildungsinstitutionen zu dieser Zeit. Nach 1999 kehrten die Mitarbeiter der Akademie der Wissenschaften und Künsten Kosovos wieder in ihre Büros zurück. Am 28. Juli 2004 wurde ein neues Gesetz über die Akademie der Wissenschaften und Künsten Kosovos verkündet.⁵⁷⁷

Die Akademie ist eine öffentlichrechtliche Körperschaft mit Selbstverwaltung. Sie versteht sich als eine Gelehrtenengesellschaft. Innerhalb der Akademie der Wissenschaften und Künsten Kosovos bestehen keine Forschungsinstitute. Die Akademie hat keine finanzielle Mittel für Preise oder Nachwuchsförderung. Öffentliche Vorträge bietet sie selten an, und wenn ja dann eher nicht öffentlich, sondern nur für die eigenen Mitglieder. Manchmal werden jedoch fachspezifische wissenschaftliche Symposien und Konferenzen veranstaltet. Die Akademie fungiert vollkommen autonom. In forschungspolitischen Angelegenheiten erteilt sie gelegentlich Politikberatung. Finanziert wird sie durch öffentliche Mitteln und einzelne Förderungen wie z.B. vom Open Society Institut. Da die wirtschaftliche Entwicklung sehr eingeschränkt ist, ist somit auch die Verbindung Wissenschaft - Industrie schwach ausgeprägt.

Der Rat der Akademie der Wissenschaften und Künsten Kosovos fungiert als das höchste Leitungsorgan dieser Akademie, in dem alle Mitglieder – ordentliche und korrespondierende – teilnehmen. Externe Mitglieder haben kein Stimmrecht.

Der Rat der Akademie der Wissenschaften und Künsten Kosovos verabschiedet das Statut, das Arbeitsprogramm, wählt ordentliche und korrespondierende Mitglieder, wählt den Präsidenten der Akademie, usw.

Die Akademie der Wissenschaften und Künsten Kosovos ist für alle Wissenschaftszweige offen und sie ist in Sektionen organisiert. Derzeit existieren vier Sektionen: Sprache und Literatur; Sozialwissenschaften; Naturwissenschaften; Sektion der Künste.

Derzeit hat die Akademie 25 Mitglieder. Davon sind 19 ordentliche und 6 korrespondierende Mitglieder. Zusätzlich zu dieser Zahl werden auch die externen und die Ehrenmitglieder als Mitglieder der Akademie der Wissenschaften und Künsten Kosovos mitgezählt. Fast alle ordentlichen und korrespondierenden Mitglieder sind Kosovaren der albanischen Ethnizität.

Die Akademie sieht es als eine große Leistung an, dass sie seit ihrer Gründung Mitte der 1970-er Jahre ‚überleben‘ konnte und eine funktionierende Akademie der Wissenschaften und Künste Kosovos etablieren konnte. In Zukunft wird die Intensivierung der Kooperationen mit

⁵⁷⁵ Ligji mbi Akademinë e Shkencave dhe Arteve të Kosovës, KK Nr. 612-1/78, Prishtinë 18 Prill 1978.

⁵⁷⁶ Vgl. insbesondere Art. 29 und Art. 30 des Gesetzes (Zakon o Srpskoj Akademiji Nauka i Umetnosti) über die Serbische Akademie der Wissenschaften und Künste, Nr. 215, Beograd 20. Juli 1992.

⁵⁷⁷ Law on Academy of Science and Arts of Kosovo, No. 2004/19, 16 June 2004. UNMIK/REG/2004/25, On the Promulgation of the Law on Academy of Science and Arts of Kosovo, 28 July 2004.

Schwesterinstitutionen in der Region, Europa und in Überseeländern sowie eine bessere finanzielle Stellung angestrebt.

Fast alle Mitglieder der Akademie sind – oder zumindest waren – auch an der Universität tätig und man kann von guten Beziehungen zwischen diesen Institutionen reden.

Da erst 2004 ein neues Gesetz über die Akademie der Wissenschaften und Künste Kosovos verabschiedet wurde, ist mit keinen baldigen formellen Änderungen zu rechnen.

Bezüglich internationaler Einbindung muss zu erst bemerkt werden, dass sie im Rat der Akademien der Wissenschaften und Künsten anderer föderaler Einheiten im ehemaligen Jugoslawien vertreten.

Die engste Zusammenarbeit besteht derzeit mit der Akademie der Wissenschaften und Künste der Republik Albanien. Es bestehen Kooperation auch mit Akademien der Wissenschaften und Künste aus Kroatien, Slowenien, Belgien (die flämische), mit der British Academy, „Akademie der Vierzieger“, etc.

3.2. Sonstige außeruniversitäre Forschungsinstitutionen

Die größte außeruniversitäre Forschungsinstitution ist das Albanologische Institut in Prishtinë (Instituti Albanologjik). Des Weiteren bestehen auch außeruniversitäre Forschungsinstitutionen wie: Das Institut für den Schutz des Kulturellen Erbe Kosovos (Instituti për Mbrojtjen e Trashigimisë Kulturore të Kosovës); Das Historische Institut (Instituti i Historisë); Das Archäologische Institut (Instituti i Arkeologjisë).

Abgesehen von einigen privaten Forschungsinstituten wie z.B. dem Institut Riinvest oder der Wirtschaftskammer Kosovos (Oda Ekonomike e Kosovës), die jedoch primär die Wirtschaftsinteressen der Unternehmer vertritt, sind Forschungsgesellschaften als Kooperationen zwischen Staat und Wirtschaft unbekannt.

Einige einheimische think tanks und NGO-s betreiben auch kleine Forschungsprojekte. Des Weiteren sind auch „Zweigstellen“ der größeren internationalen Organisationen/Stiftungen wie International Crisis Group, Friedrich Ebert Stiftung, etc. vor Ort präsent und versuchen in bestimmten Bereichen zu forschen.

3.3. Einbindung in den Europäischen Forschungsraum

Es fehlt an Information über die Mitwirkungsmöglichkeiten für Forscher an Programmen der EU. Ganz wenige kennen die EU-Programme in diesem Bereich. Die Initiativen wie SEE ERA Net erscheinen da als sinnvoll, vorausgesetzt dass es um nachhaltige und lebensfähige Kooperationen geht.

3.4 Problembereiche

Die finanzielle Stellung der Wissenschaftler und Forscher muss verbessert werden. Die finanzielle Lage der Wissenschaftler und Forscher ist mehr als schwierig, sie ist erniedrigend. Dabei müssen nachhaltige und tief greifende Maßnahmen im Gang gesetzt werden. Sowohl internationale als auch kosovarische Verantwortungsträger sind für diese düstere Lage verantwortlich. Diese Lage ist nicht nur auf die armen wirtschaftlichen Verhältnisse zurückzuführen, es hat auch mit dem Desinteressen an Bildung, Wissenschaft und Forschung zu tun. Solange bei der Ressourcenumverteilung in der Gesellschaft Bildung, Wissenschaft und Forschung überhaupt keine Prioritäten darstellen, wird dieses Land keine ‚Zukunft‘ haben.

4. DER AUßERUNIVERSITÄRE SEKTOR IM BEREICH DER BILDUNG

4.1. Ausbildungsinstitutionen

Die zweijährigen Fachhochschulen wurden schrittweise abgeschafft. Neue vierjährige Studien z.B. für die Ausbildung von Pädagogen wurden eingerichtet. Weitere Trainings werden von diversen lokalen und internationalen öffentlichen und privaten Organisationen angeboten. In den letzten Jahren wurden auch für alle Stufen – Kindergarten bis Studium – private Bildungsinstitutionen etabliert.

4.2. Einbindung in den Europäischen Hochschulraum

Im Sinne einer nachhaltigen Philosophie ist die Einbindung in den Europäischen Hochschulraum schwach ausgeprägt. Es besteht aber großes Interesse, in den Europäischen Hochschulraum durch dauerhafte Programme eingebunden zu werden. Der Wille aller Beteiligten und vor allem jüngerer Mitarbeiter, sich an wissenschaftlichen Kooperationen zu beteiligen, ist eindeutig erkennbar. Doch dieses scheitert meist daran, dass diejenigen, die die Kapazitäten und den Willen haben, den Reformprozess voran zu bringen, wegen der schlechten Arbeitsbedingungen meist nur kurz in der Wissenschaft tätig sind. Nur ganz wenige kompetente Leute können sich es leisten, in der Wissenschaft tätig zu bleiben.

Was fehlt ist fast alles, vor allem finanzielle Mittel und vor allem nachhaltige Strategien und Visionen, die jetzigen Bildungsinstitutionen zu wettbewerbsfähigen und modernen Wissenschaftseinrichtungen zu machen, in denen sich Forschung und Innovation entwickeln können.

5. FAZIT

Das Universitätsmanagement sollte sicherstellen, dass zumindest Minimalbedingungen für eine „normale“ Umgebung für Forschungs- und Lehraktivitäten gewährleistet sind. Der Mangel an angemessenem Raum und angemessenen Einrichtungen, insbesondere an Büchern in den Bibliotheken (vor allem an neuen Büchern, und Büchern in anderen Sprachen als in Serbisch aus der Zeit des Kommunismus), dämpft jede Chance für moderne Forschungs- und Lehraktivitäten. Die Steigerung der Human- und Finanzressourcen im Bildungssektor sollte integraler Teil nachhaltiger Entwicklungsstrategien sein.

Bildung und Forschung müssen zu einer Priorität des Staates werden. Die EU sollte die Regierung unterstützen und darauf drängen, mehr Aufmerksamkeit der Bildung zu widmen.

Österreich und die EU sollen alle öffentlichen Universitäten des Westbalkans in strukturelle Programme integrieren und die Fonds für Austauschprogramme für Lehrende und die Studierende in beiden Richtungen – vom und nach Westbalkan – steigern. Jeder Student auf dem Westbalkan sollte eine reelle Chance haben mindestens ein Semester auf einer westlichen Universität zu verbringen. Westeuropäische Studenten sollten ermutigt und unterstützt werden, in den Ländern und auf den Universitäten in der Region zu studieren und forschen. So sollte das Erasmus- Programm auch auf die Länder des Westbalkans erweitert werden.

Research Project UnivSOE

"Institutions of Tertiary Education in Central and South East Europe: Developments, Structures and Perspectives of these Institutions for their Integration into the European Higher Education and Research Area"

Country Report: Macedonia

Zoran Ilievski

1. TEACHING AND RESEARCH INSTITUTIONS	382
2. PUBLIC UNIVERSITIES IN MACEDONIA	384
2.1. Ss. Cyril and Methodius University	384
2.1.1. <i>Management of UKIM</i>	385
2.1.2. <i>Funding of UKIM</i>	387
2.1.3. <i>Autonomy of UKIM</i>	387
2.1.4. <i>Teaching at UKIM</i>	388
2.1.5. <i>Research at UKIM</i>	389
2.1.6. <i>International Co-operation of UKIM</i>	390
2.2. University St. Kliment Ohridski, Bitola (UKLO).....	391
2.2.1. <i>Management of UKLO</i>	391
2.2.2. <i>Funding</i>	932
2.2.3. <i>Autonomy</i>	392
2.2.4. <i>Teaching</i>	392
2.2.5. <i>Research</i>	392
2.2.6. <i>International Cooperation</i>	393
2.3. University of Tetovo (TeU)	393
2.3.1. <i>Organization of TeU</i>	394
2.3.2. <i>Management of TeU</i>	394
2.3.3. <i>Funding of TeU</i>	394
2.3.4. <i>Teaching at TeU</i>	395
2.3.5. <i>Research at TeU</i>	395
2.3.6. <i>International Co-operation of TeU</i>	395
2.4. University Goce Delcev, Stip	395
2.5. Macedonian Academy of Sciences and Arts	396
2.5.1. <i>Members of MASA</i>	396
2.5.2. <i>Organizational Structure of MASA</i>	396
2.5.3. <i>Management of MASA</i>	398
2.5.4. <i>Financing of MASA</i>	398
2.5.5. <i>Scientific Research of MASA</i>	399
2.5.6. <i>International Co-operation of MASA</i>	400
3. PRIVATE UNIVERSITIES IN THE REPUBLIC OF MACEDONIA	401
3.1. South-East European University, Tetovo.....	401
3.1.1. <i>Organization</i>	402
3.1.2. <i>Management</i>	402
3.1.3. <i>Co-operation with the Business Community</i>	403
3.1.4. <i>Funding</i>	404
3.1.5. <i>Teaching</i>	404

3.1.6. <i>Research</i>	405
3.1.7. <i>International Co-operation</i>	406
3.2. European University	406
3.2.1. <i>Organization</i>	407
3.2.2. <i>Management</i>	407
3.2.3. <i>Funding</i>	408
3.2.4. <i>Teaching</i>	408
3.2.5. <i>Research</i>	408
3.2.6. <i>International Cooperation</i>	409
3.3. New York University Skopje (NUYS)	409

1. TEACHING AND RESEARCH INSTITUTIONS

Public institutions:

- University Ss. Cyril and Methodius, Skopje
- University St. Kliment Ohridski, Bitola
- University of Tetovo, Tetovo
- University Goce Delcev, Stip
- Macedonian Academy of Science and Arts, Skopje

Private institutions:

- South-East European University, Tetovo
- European University, Skopje and Struga
- New York University Skopje

FON University

American College Skopje

The Law for Higher Education enacted by the Parliament of the Republic of Macedonia founded the public institutions for tertiary education.⁵⁷⁸ Domestic or foreign legal or private persons can found private institutions for tertiary education.⁵⁷⁹

The Law for Higher Education from 2000 distinguishes four types of institutions for tertiary education:

- Universities
- Faculties
- Academy of Science and Arts
- Schools for Higher Specialization

Public universities in Macedonia are legal entities with their own bank account, structure as well as functions, prescribed in their statutes. The Faculties that are part of the public universities are also legal entities, have their own bank accounts and statutes that give their structure and functions, which should be in accordance with the statute of the universities.⁵⁸⁰ Schools for higher specialization can perform tertiary education activities (i.e. graduate, post-graduate and applied studies) and research in their area of specialization.⁵⁸¹ Private institutions for tertiary education are also legal entities with their own financial autonomy and statutes regulating their organization and functions.⁵⁸²

All institutions for tertiary education in Macedonia form together an **Inter-University Conference**.⁵⁸³ The Conference is constituted by the rectors of the universities, the presidents of the University Senate's, 3 members from each University Senate, 2 Deans from each University, the Deans of the private tertiary education institutions that are not part of any University, as well as 5 student representatives. The general secretaries and the vice-rectors of all universities also take part in the Inter-University Conference without the right to vote. The institutions for tertiary education can also cooperate institutionally and form joint infrastructure (campuses, laboratories, information centers etc).

⁵⁷⁸Republic of Macedonia, "Law for Higher Education", Official Gazette No 64/2000, 3 August 2000, Art 33

⁵⁷⁹Ibid, Art.34

⁵⁸⁰Ibid, Art. 7

⁵⁸¹Ibid, Art.19

⁵⁸²Ibid, Art. 7

⁵⁸³Ibid, Art. 62

The national percentage dedicated to tertiary education has decreased from 1.4% ten years ago to 0.47% of GDP today, while the annual research budget equals roughly 0.03% of the national budget.⁵⁸⁴

The Minister of Education and Science proposes the annual budget of the **Fund for Tertiary Educational Activities**. The finances for the Fund mainly come from the State Budget, but they can also come from interest rates, dividends, gifts, foundations and other income. The Fund is managed by a Managing Board of 15 members from the academic community in Macedonia.⁵⁸⁵ They should proportionally cover members from the social, technical and natural sciences, as well as arts. The president and 6 members of the Fund are appointed by the Government on a proposal of the Minister of Education and Science, while the other 8 members are elected by the Inter-University Conference. Two of the members of the Managing Board can be students. The Ministry of Education and Science undertakes the executive, administrative and expert activities of the Fund, in a manner decided by the Minister. The Board decides on issues of distribution of finances to institutions for tertiary education.

The activities that the Fund covers include:

- international cooperation,
- publishing,
- procurement of technical equipment and servicing of the current equipment,
- procurement of literature and other academic resources,
- scholarships for talented and outstanding students,
- scholarships and student credits for improving the student standard

Generally, the Fund supports public institutions for tertiary education. However, the Managing Board could also fund a private institution. In its legal competence, the Fund does not have the obligation to finance scientific research projects. The institutions for tertiary education have the possibility to raise income through offering training to national and foreign legal persons, consulting services, copyrights and patents, interest rates and dividends, as well as gifts and donations.⁵⁸⁶ The public institutions for tertiary education can also introduce tuition fees (for co-financing) if they do not receive sufficient finances from the Fund to cover the expenses for educational activities. Nevertheless, the Fund must approve how high the tuition fees will be.

The quality of tertiary education is preserved through accreditation and evaluation.⁵⁸⁷ Accreditation means approval and recognition by the Board for Accreditation consisting of 15 members, of which 9 are University professors elected by the Inter-University Conference, 2 are members of the Macedonian Academy of Sciences and Arts and 4 University professors appointed by the Government.

Evaluation is performed on three levels:

1. External evaluation; performed by an Agency for Evaluation consisting of 9 members, University professors, elected by the Board for Accreditation on a proposal by the Inter-University Conference;

⁵⁸⁴UKIM, Institutional Review of Ss. Cyril and Methodius University in Skopje, Skopje, January 2003, p.74

⁵⁸⁵Ibid, Art. 84

⁵⁸⁶Ibid, Art. 88

⁵⁸⁷Ibid, Art. 23

2. Self evaluation; performed by the University Commission for Evaluation consisted of professors and students elected by the University Senate;
3. System of evaluation of the quality of the academic staff.

The autonomy of the institutions for tertiary education is protected by law and it consists of autonomy in the intellectual freedom of the members of the academic community, the research and teaching activities, the management of the institutions and the autonomy of physical infrastructure.⁵⁸⁸ The police and other state organs can enter the premises of the institution only with consent of the managing officials and the institutions for tertiary education have the right to appeal to the courts if their autonomy is infringed.

The Program for Tertiary Educational Activities provides the goals, development, finances, capacities, human resources, technical equipment and infrastructure of the public institutions for tertiary education. The Government of the Republic of Macedonia forms the Program for a period of 4 years. After the Government receives the opinion of the Inter-University Conference on the Program, it submits the Program to the Parliament for adoption. The implementation of the Program is done through annual programs of the universities. These programs are prepared together with the annual financial budget of the university. The Managing Board of the Fund for Tertiary Education is in charge of the financial realization of the Program.

The public universities that have experience and practice in research are now lacking resources, in all respects, being constantly challenged by the massification of tertiary education. This process is fostered by the fact that all faculties, except medicine and fine arts do not require entry exams for the future students. The quotas for student enrollment at the public universities are determined by the Government. Public universities charge two types of tuition fees – a “state” quota and fee (approximately 200 EUR per year) and a “private” quota and fee (ranging from 400 to 1000 EUR) for the students that did not manage to enter the state quota. The students ranking is based on their high school grades, in addition to entry exams for medicine and fine arts.

The national percentage dedicated to tertiary education has decreased from 1.4% ten years ago to **0.47% of GDP** today, while the annual research budget equals roughly **0.03%** of the national budget.

2. PUBLIC UNIVERSITIES IN MACEDONIA

2.1. Ss. Cyril and Methodius University

The Ss. Cyril and Methodius University (UKIM) was formed in 1949 with 77 permanent teachers and 989 students.⁵⁸⁹ In 1998 in Bologna the University signed to the Magna Charta Univerzitatium. Today it has 24 Faculties, 10 scientific and scholarly institutes and 6 accompanying members. Over the course of its existence, UKIM has awarded over 90 000 Bachelor degrees, 5 000 MA degrees and over 2 000 Doctor of Science degrees. For the most part, UKIM's facilities are in Skopje, the capital of Macedonia. However, two Faculties are situated in Stip and UKIM has one accompanying member from Strumica.

⁵⁸⁸Ibid, Art.10-14

⁵⁸⁹UKIM, Self-evaluation Report of Ss. Cyril and Methodius University in Skopje, January 2003, p.6

Table 1: Structure of membership of UKIM⁵⁹⁰

Faculties	
1. Faculty of Architecture	13. Faculty of Forestry
2. Faculty of Building Construction	14. Faculty of Medicine
3. Faculty of Electrical Engineering	15. Faculty of Pharmacy
4. Faculty of Mechanical Engineering	16. Faculty of Dentistry
5. Faculty of Technology and Metallurgy	17. Faculty of Physical Education
6. Faculty of Natural Sciences and Mathematics	18. Faculty of Dramatic Arts
7. Faculty of Economics	19. Faculty of Music
8. Faculty of Law "Iustinianus I"	20. Faculty of Fine Arts
9. Faculty of Philosophy	21. Faculty of Security
10. Faculty of Philology "Blaze Koneski"	22. Faculty of Mining and Geology in Stip
11. Faculty of Agriculture	23. Faculty of Pedagogy "St Klement of Ohrid"
12. Faculty of Veterinary Medicine	24. Faculty of Pedagogy "Goce Delcev" in Stip
Scientific Institutes	Accompanying members
1. Institutes of Earthquake, Engineering and Engineering Seismology	1. Student Centre, Skopje
2. Institute of Economics	2. Studentski Zbor, newspaper and publishing house
3. Institute of Sociological, Political and Juridical Research	3. Student Job Service
4. Institute of Natural History	4. Medical Centre
5. Institute of Agriculture	5. Skopje Institute of Materials Investigation
6. Institute of the Macedonian Language "Krste Misirkov"	6. Institute of Southern Agricultural Cultures, Strumica
7. Institute of Folklore "Marko Cepenkov"	
8. Veterinary Institute	
9. Institute of Cattle Breeding	
10. Institute of Macedonian Literature	

2.1.1. Management of UKIM

The management structure of UKIM can be described as "the medieval corporative model".⁵⁹¹ The University Senate is composed of representatives from the members of the University

⁵⁹⁰Ibid

⁵⁹¹Terminology used according to the "Questionnaire for the Research Area SEE",

and 10 student representatives. The management is done by a Rector and three Vice-Rectors, all professors at the University are elected by the Senate. The main executive decision is brought by the Rectors Board, composed of the Rector and three Vice-Rectors and the heads of the Faculties and Scientific Institutes of UKIM. There is only one student representative at the executive decision level. There are no representatives from private companies or other delegates from any sector of economy or society taking part of the management structure of UKIM.

The management of UKIM is done through the work of the **University Senate, Rector and Rector's Board**.⁵⁹² Apart from adopting the rules and regulations of UKIM, the University Senate is also a managing and expert body. It is composed of two professors from each Faculty that are members of UKIM, one member from each scientific institute, 3 members from all accompanying members of UKIM and 10 student representatives. The Senate members are elected by the scientific councils of the members of UKIM. The scientific councils of each member of UKIM are composed of all the professors, representatives of assistants and students from that institution.

The Rector, Vice-Rectors and the General Secretary of UKIM also take part in the work of the Senate but they do not have the right to vote.

The Rector is the managing body of UKIM and this position is incompatible with any other public or political function. The Rector holds the executive prerogatives for implementation of the Senate's decision. The Rector represents the University at home and abroad. The scientific councils of UKIM's members propose the candidates (full time professors) for Rector to the Rectors Board that selects two candidates, which are presented to the University Senate. The Senate elects the Rector, with secret ballots, with majority of votes of all members.

The University has four Vice-Rectors: for Education, for Science, for International Cooperation, and for Finances, Investment and Development. They are proposed by the Rector and elected by the Senate with majority vote at the time of the election of the Rector. The Rector, the Vice-Rectors, the Deans of all Faculties, Directors of Scientific Institutes and one Student Representative together form the Rector's Board. The Rector's Board elects the General Secretary of UKIM and is in charge of the main executive decisions. The Rector's Board also forms commissions and boards that support the work and policy development of the University.

UKIM also has set up several specialized organizational units for development for education and research⁵⁹³. They are: International Seminar of Macedonian Language, Literature and Culture; University Computer Centre and integrated University IT system; Macedonian Academic Research Network; and integrated University Library System.

The Rector's Board of UKIM in March 2004 adopted a "Strategy for Development of Ss. Cyril and Methodius University in Skopje for the period of 2004-2010".⁵⁹⁴ The main task of the strategy is to adapt the current norms and documents with the Bologna Process. The strategy is suppose to bring forth "an integrated University that will nurture the spirit of

⁵⁹²UKIM, Statute of Ss. Cyril and Methodius University, University Herald No 60, 28 February 2005, Ch. V, Art. 51-130.

⁵⁹³UKIM, Statute, Ch. IX

⁵⁹⁴UKIM, 84th Rector Management Session, Skopje, 31 March 2004

commonness, democracy and quality, with clear mechanisms for international cooperation in education and research"⁵⁹⁵

2.1.2. *Funding of UKIM*

As a public university, UKIM receives most of its funding from the Budget of the Republic of Macedonia through the Ministry of Education and Science. The University Senate adopts an annual financial plan and submits it to the Ministry of Education and Science. The annual financial plan needs to be approved by the Managing Board of the Fund for Tertiary Educational Activities. The University has some financial autonomy, mostly exercised through the following activities:⁵⁹⁶

- managing and distributing assets and finances provided by the Fund for Tertiary Educational Activities
- management of finances received from foundations, consultancy services, patents, tuition fees for postgraduate studies, interest rates and dividends.
- establishing funds for research projects and founding scientific research projects
- cooperating with business entities from local, national, regional and international level.

So far UKIM has exercised mostly the first prerogative of its legal competence for financial autonomy, while the other prerogatives have been neglected. Plans for future funding follow the same logic as before. The Strategy for Development for 2004-2010 states that "financial support for the educational, social and institutional mission of the University remains to be provided by the state"⁵⁹⁷

2.1.3. *Autonomy of UKIM*

The Autonomy of UKIM is exercised through the academic freedom of the members, the autonomy of management and financial autonomy.⁵⁹⁸ Academic freedom includes education, research, art and other applied activities without external influence and control, freedom of student enrollment under pre-determined criteria, freedom of curriculum and syllabi development, freedom of teaching and assessing methods, freedom of studying and expressing student opinion, freedom of organizing postgraduate studies, awarding academic degrees and employment of staff. Having its autonomy of management, UKIM can plan and implement education and research programs, it can set up its structure, create and implement its own statute, and cooperate with other national and international institutions and organization.

Under the current legislation, the staff members of UKIM are conceived as civil servants and the basic salary is paid by the Ministry of Education and Science. Having the status of civil servants also means that the University "has been unable to hire new academic staff due to an IMF imposed hiring freeze".⁵⁹⁹ In addition, since the current PhD programs are run under the old "mentor" system they attract few students. UKIM does not have a strategy dedicated to

⁵⁹⁵UKIM, Strategy for Development of Ss. Cyril and Methodius University in Skopje for the period of 2004-2010, Skopje p. 3

⁵⁹⁶UKIM, Statute, Art. 27

⁵⁹⁷UKIM, Strategy for Development of Ss. Cyril and Methodius University in Skopje for the period of 2004-2010, Skopje p. 23

⁵⁹⁸Ibid, p. 25-27

⁵⁹⁹UKIM, Institutional Review of Ss. Cyril and Methodius University in Skopje, Skopje, January 2003, p.75

training PhDs and forecasts are that "this institution is going to face a significant shortage of academic staff".⁶⁰⁰

2.1.4. *Teaching at UKIM*

The management of the faculties comprising UKIM is responsible for the development and implementation of the teaching curriculum. The curricula are subdivided into "studies", "departments" and "study groups".⁶⁰¹ When developed they should get the consent of the Rector's Board. The teaching instructors have full liberty in preparing and implementing the course syllabi, which is to be pre-approved by the management of the Faculty. There is no involvement of representatives from any sector of the economy in the process of curriculum development; hence, quite often it is not responsive to the needs of the labor market.

Student's specialization starts at the entry level, since they enroll in a Faculty that covers a specific field of science. For transfer between study programs, students must start at the entry level in a new Faculty. Some Faculties offer to their students a more narrow specialization during their studies. At UKIM there are undergraduate studies offering "Bachelor of Science" upon completion, and postgraduate studies awarding "Specialization", "Master of Science" and "Doctor of Science". The minimum time required to complete undergraduate studies is four years (eight semesters) at most faculties, five years in the case of technical sciences and six for studies in medicine. Precise figures for the studying time are unavailable although "the wide spread impression is that students rarely graduate in the minimum time period".⁶⁰² The aim of the undergraduate studies is to provide the student with "wider knowledge in a given field, skills and critical, objective and creative approach so that a graduated student is ready to engage and implement his knowledge in new problems that are based on wider principals and approaches".⁶⁰³

The postgraduate studies can last two semesters, after which a "Specialists" degree is awarded, or four semesters, after which "Master of Science" is awarded. The organization of "Doctor of Science" is the responsibility of a professorial mentor, and is based only on research work without any courses. There are no post-Doctoral programs offered at UKIM.

While the implementation of the Bologna Process is underway at UKIM, much remains to be done in this respect. Many faculties have changed their curricula and adopted more innovative teaching and assessment methods (i.e. the Faculty of Law, Faculty of Economics, Faculty of Pharmacy, Faculty of Philology etc) and introduced a credits accumulation system. However, at University level credit transfer between faculties is still impossible, as well transfer between UKIM and other Macedonian universities.

UKIM's Strategy for Development aims to improve the teaching by:

- Developing compatible study programs based on a system compatible with the Bologna Process
- Developing study programs based on two cycles
- Introducing a system of credit accumulation, ECTS compatible

⁶⁰⁰Ibid

⁶⁰¹UKIM, Strategy for Development of Ss. Cyril and Methodius University in Skopje for the period of 2004-2010, Skopje p. 29

⁶⁰²UKIM, Institutional Review of Ss. Cyril and Methodius University in Skopje, Skopje, January 2003, p.83

⁶⁰³UKIM, Strategy for Development of Ss. Cyril and Methodius University in Skopje for the period of 2004-2010, Skopje p. 30

- Implementation of the Diploma Supplement
- Mobility in European space for higher education
- Development of international study programs and improving the European dimension in higher education
- Providing employment possibilities in the European labor market, i.e. providing life long learning

Lecturing and assessment methods at UKIM still favor the "encyclopedistic approach". Lectures are teacher oriented, and "very little attention is given to implementing knowledge, skills building and critical thinking"⁶⁰⁴. The teacher has a dominant, autocratic role in class, neglecting class interaction and student participation. Even though lately innovative teaching methods have been introduced, especially by younger lectures, the "teaching and research equipment is largely outdated" at UKIM.⁶⁰⁵ This is a great impediment to the reform process in this respect. Student assessments are based on the "ability and capability of the students to reflect the course content, and on the subjective value scale of the lecturer".⁶⁰⁶ To overcome the current problems, the Strategy of UKIM for 2004-2010 proposes to:

- Implement the concept of learning outcomes in the education process
- Introduce IT and Internet in the classes
- Train the academic staff in innovative teaching and assessment methods

2.1.5. *Research at UKIM*

The scientific institutes that are members of UKIM are dominantly engaged in research activities, but scientific research is done also in all of the faculties that are members of UKIM. The Scientific Institutes are primary financed by the Ministry of Education and Science to conduct research, while research done at the faculties is only on singular projects. Research activities are predominantly of "international character and financed by foreign organizations and foundations, of which majority are European programs for development of the higher education".⁶⁰⁷ Research of the historical and cultural identity of the "Macedonian people and nationalities living in the Republic of Macedonia would be of public interest" in the views of UKIM.⁶⁰⁸

Research outcomes are rarely integrated in the teaching curricula, so there is a discrepancy between individual research activities and the relevance to the offered study program. However, some scientific institutes that also run postgraduate programs widely use their research projects as part of the teaching materials, for example "in areas of interdisciplinary research activity such as the projects at the Institute for Sociological, Political and Juridical Research".⁶⁰⁹ In general, research is not receptive to the social and economic developments and there is lack of communication between the universities and the local community.

The typical academic staff member at UKIM has an insular perspective, which in many cases has led to "a loss of international references in academic work and out-of-date teaching knowledge".⁶¹⁰ Because of the economic stagnation in the country, technical equipment and

⁶⁰⁴Ibid, p. 40

⁶⁰⁵UKIM, Institutional Review of Ss. Cyril and Methodius University in Skopje, Skopje, January 2003, p.75

⁶⁰⁶UKIM, Strategy for Development of Ss. Cyril and Methodius University in Skopje for the period of 2004-2010, Skopje p. 41

⁶⁰⁷Ibid, p. 53

⁶⁰⁸Ibid

⁶⁰⁹UKIM, Institutional Review of Ss. Cyril and Methodius University in Skopje, Skopje, January 2003, p.85

⁶¹⁰Ibid, p.83

laboratories are not up to date. The finances provided to the scientific institutes usually cover only the running costs and salaries, and very little resources are left for research activities. For this reason many of the research projects conducted by the scientific institutes last for several years. Another outcome of the economic deprivation is the "decrease of cooperation between scientific research and economic subjects".⁶¹¹ Nevertheless, UKIM claims that "stakeholders from the business community . . . are satisfied with the services of the University and satisfied with the knowledge of the graduates"⁶¹², even though they are seldom consulted prior to research activities.

Intensive developments in this respect at UKIM are unlikely since no new solutions or ideas of how to overcome the present situation are offered. The Strategy for Development focuses mostly on the preparation of a strategy for scientific research in the Republic of Macedonia, which is supported by the Government, and on forming a unit for planning and coordination of scientific research at the University.

2.1.6. International Co-operation of UKIM

Being the oldest University in Macedonia UKIM has a long-standing tradition of international cooperation. The first agreements for University cooperation were signed in 1967 with the University of Halle in Germany and the University of Bradford in Great Britain. Since then UKIM has concluded agreements with 56 other Universities worldwide and has bilateral cooperations with 75 Universities.⁶¹³ UKIM is actively participating in the following international programs and networks:

- PHARE-TEMPUS programs (has been part of 56 TEMPUS projects in the period of 1996-2002 together with the University in Bitola)
- Regional Inter-University Cooperation
- Pact for Stability - Graz Process
- Corridor 8 - Mediterranean network of universities
- CEEPUS - Central European Universities Network

For UKIM cooperation with universities from "countries of South East Europe is of primary importance".⁶¹⁴ The track record of cooperation with universities in the region is rather good, and it falls down in the process of stabilization and association. Cooperation should be in terms of creating common study programs and priority areas are: tourism, earthquake engineering, regional economic development, culture, regional integration, environmental studies, the fight against organized crime and networking. Practical steps to be taken include: forming a commission for international studies at the Inter-University Conference, so that "study programs at universities in Macedonia can be harmonized", and a reorganization of UKIM's Department for International Cooperation.⁶¹⁵

⁶¹¹UKIM, Strategy for Development of Ss. Cyril and Methodius University in Skopje for the period of 2004-2010, Skopje p. 54

⁶¹²UKIM, Institutional Review of Ss. Cyril and Methodius University in Skopje, Skopje, January 2003, p.85

⁶¹³UKIM, International Cooperation, www.ukim.edu.mk (accessed on 21 March 2006)

⁶¹⁴UKIM, Strategy for Development of Ss. Cyril and Methodius University in Skopje for the period of 2004-2010, Skopje p. 57

⁶¹⁵Ibid

2.2. University St. Kliment Ohridski, Bitola (UKLO)

UKLO was founded in 1979 as the second state University in Macedonia. It includes the following faculties, the Higher Medicine School and research institutions in the cities of Bitola, Prilep, Ohrid and Skopje⁶¹⁶:

Table 2. Structure of Membership of UKLO

Faculties	No. of students
1. Faculty of Technical Sciences - Bitola	2397
2. Faculty of Economics - Prilep	2178
3. Faculty of Tourism and Hotel Business - Ohrid	2169
4. Faculty for Teachers and Pre-School Trainers - Bitola	1873
5. Interdisciplinary Public Administration Studies - Bitola	291
6. Faculty of Biotechnological Sciences - Bitola	724
7. Police Academy - Skopje	324

Higher Medicine School – Bitola	1439 students
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Total number of students: 11395

Research Institutes	Location
1. Hydrobiological Institute	Ohrid
2. Tobacco Institute	Prilep
3. Institute for Old-Slavic Culture	Prilep

Accompanying members	Location
1. University Library “St.Kliment Ohridski”	Bitola
2. Student Residence “Koco Racin”	Bitola

2.2.1. Management of UKLO

The management principles and structure are the same as UKIM. While UKIM has 4, UKLO has only 2 Vice-Rectors: for Education and Science and Financial Questions, Investments and Development. During our visit to the UKLO Rector’s Office, it was noted that Faculties enjoy a great degree of independence and autonomy within the framework of the university. Therefore, suggestions to move closer to the concept of an “integrated university”, which would give greater competences to the university, are met with fierce resistance from the Faculties. This remark would be also valid for UKIM.

⁶¹⁶ UKLO, Report on the work of the St.Kliment Ohridski University for the academic year 2004/2005.

2.2.2. *Funding*

The funding mechanisms and principles are the same as UKIM. The percentage of finances that come from the State Budget equals roughly 30% of the total budget of UKLO. The remaining 70% come mainly from different fees paid by the students and donations.

2.2.3. *Autonomy*

The legal provisions regulating the autonomy of this University are identical to the provisions for UKIM.

2.2.4. *Teaching*

The problems regarding hiring new academic staff, due to their civil servant status and the connected IMF restrictions are also acute at UKLO. The total number of academic staff at UKLO is 327. Out of this number, there are only 29 assistants and 50 junior assistants. Out of the 50 junior assistants, only 22 are with permanent employment at the UKLO, while the rest are on short-term contracts, which can be renewed. It is self-evident that with this number of junior academic staff it is not possible to do even a simple renewal of the ranks of the senior academic staff in the future.

The principles of organization of post-graduate and PhD programs are the same as UKIM.

A peculiarity of UKLO is that the University itself manages Interdisciplinary Studies of Public Administration, which are headed by the Rector's Board. Part of the income of the Rector's Board is coming from the tuition fees from these studies. Currently a process of accreditation for post-graduate studies of Public Administration is under way.

There are efforts to implement the principles and requirements from the Bologna process but practice significantly lags behind the adopted legal provisions for their implementation.

Lecture and assesment methods are the same as in UKIM.

The strategy for development of teaching and research, as well as the methods for evaluation at UKLO, contain the same provisions and aspirations as UKIM.

2.2.5. *Research*

Faculties in the framework of UKLO did not performed any of their own research in the academic year 2004/2005. The only research undertaken by UKLO in the previous academic year was done by the research institutes (which altogether employ a total of 54 academic staff):

- Hydrobiological Institute – 6 research projects
- Tobacco Institute- 6 research projects
- Institute for Old-Slavic Culture- 9 research projects⁶¹⁷

However, individuals from the academic staff at various Faculties have participated in international research projects in the framework of the TEMPUS and CARDS programmes,

⁶¹⁷ *Ibid.*

participated at international conferences and were published in national and international publications.

2.2.6. International Cooperation

Although UKLO does not have a Vice-Rector in charge of international cooperation, there are 2 persons employed at the Rectors Office dealing with these issues.

UKLO has participated in projects of the PHARE-TEMPUS Programs, within the Stability Pact – Enhanced Graz Process and CEEPUS. UKLO is a member of EUA.

UKLO has signed an Agreement for Cooperation with the Dutch NGO “Academic Training Association” with which it cooperated in the organization of the International Winter University and International Summer University, taking place in Macedonia in 2005, together with Universities from Macedonia, SEE and the EU.

UKLO has bilateral partnership relations and contacts with many Universities in the region, as well as in Germany, France and the USA.

Joint European projects with significance for the entire University that were performed in 2005:

1. “Strategy for European Integration of Universities” CARDS Programme
2. “Integrating and structuring of international cooperation in universities in the Republic of Macedonia”.

Projects for structural and complementary measures:

1. “Multilingual internet on a step by step basis- mathematics for all”
2. “Exchange of best practices in the implementation of ECTS”

During the last year, only 2 professors from abroad have come to teach at UKLO in exchange programs and 1 professor from UKLO went to teach abroad. In the year 2004/2005 there was a total of 17 foreign students studying at UKLO. During our visit to the Rector’s Office, it was noted that even with UKLO’s participation in ERASMUS and SOCRATES Programs it will be difficult to expect that the number of foreign students will rise dramatically, since these programs are based on reciprocity. UKLO could not attract many foreign students because of the very small number of academic staff able to teach in a world language.

2.3. University of Tetovo (TeU)

The University of Tetovo (TeU) was declared a public University in February 2004, despite its existence from 1994. The State University of Tetovo was established in December 17, 1994 as an initiative of Albanian intellectuals in Macedonia, Albanian political parties, non-political associations and all the people in the country and outside of the country dedicated to building an educational base.⁶¹⁸ As an accredited public University it is part of the Inter-University Conference, but unfortunately its statute and other articles and regulations are not publicly accessible.⁶¹⁹ The majority of students are of Albanian ethnic origin, but expectations are that University policies will be developed to attract students of different

⁶¹⁸TeU, Rectors Welcome, <[www.http://www.unite.edu.mk/rector_w.html](http://www.unite.edu.mk/rector_w.html)> (accessed on 30 March 2006)

⁶¹⁹They can not be found on the official web site, and when requested they could not be produced by the office of the Vice Rector and by the office for International Cooperation at the visit to TeU on 30 March 2006.

ethnic communities.⁶²⁰ The University had problems with infrastructure when an ownership dispute arose over the building that TeU was using. The University had to be moved, and now it is functioning in two separate and distant buildings. One is used only for lecturing and the other is hosting the Rectorate, Departments and Student services, and some classrooms as well. Since it is very recently established as an official institution for tertiary education, it suffers from a lack of technical equipment, library premises, human resources and office space.⁶²¹

2.3.1. *Organization of TeU*

The University is composed of five Faculties.⁶²² They are:

- Faculty of Natural Sciences
- Faculty of Economics
- Faculty of Polytechnic
- Faculty of Human Science and Arts and
- Faculty of Law

2.3.2. *Management of TeU*

The University has a Rector and two vice Rectors: one for Finances and one for Education and Science.⁶²³ It also has a:

- Chancellor;
- Secretary;
- Department of Staff and Organization,
- Department of Foreign Relations
- Sector of Protocol
- Department of Finance
- Sector of Libraries
- Office of Investment
- Office of Administration
- Department of Information
- Branch of Services and Procurement
- Jurist and
- Students Services

The administration of the University is consisted of 30 technical administrators in various field of work.

2.3.3. *Funding of TeU*

As a public University, TeU is financed by the Ministry of Education and Science It also raises some finances from the tuition fees that are paid by the students. Data on the budget, policies and distribution of finances at TeU was not available for the purpose of this research.

⁶²⁰Cf. Quotas for Macedonians in the Tetovo University, in Vest, daily newspapers, No 1163, 19 May 2004, <www.vest.com.mk> (accessed on 30 March 2006)

⁶²¹Interview with Nora Ziberi, assistant to the Vice Rector for Education and Science, Tetovo 30 March 2006

⁶²²TeU, Faculties <<http://www.unite.edu.mk/>> (accessed on 30 March 2006)

⁶²³TeU, Departments, Ibid (accessed on 30 March 2006)

2.3.4. *Teaching at TeU*

The teaching staff of the University consists of: 270 lecturers, of whom 91 are full-time and 179 are employed part-time. The academic staff of this University has a spectrum of general educators, new assistants and full-time professors who are the highest caliber that the academic staff and intellectual staff possess.⁶²⁴ Some professors from "UKIM, University of Pristina and South-East European University also teach at TeU".⁶²⁵ The educational programs are made to be "in accordance with the ones from the Ss. Cyril and Methodius University in Skopje".⁶²⁶

The total number of students is 12 036, out of which 10 226 are citizens of Macedonia, while 1 100 are foreign students. Of the total number of students, 8 229 are full-time students, while 1 997 students attend lectures on a part-time basis. In 2005/06 TeU intended to enrol 1 235 students, of which 564 full-time, 410 full-time with co-financing and 261 on part-time attendance.⁶²⁷ Enrolment is done based on high school GPA, there is no system of testing in place. A maximum of 100 points is distributed as maximum of 70 points from combined average of two high school courses that are most relevant for the undergraduate studies, and maximum of 30 points of the courses: mother tongue and foreign language.⁶²⁸ All students that have won more than 50 points are eligible to study with co-financing

The total number of students who have graduated since 1994 is 940. 120 of them have already received a diploma while others are still undergoing procedures for the recognition of their diplomas.

2.3.5. *Research at TeU*

There are no research centers established yet at TeU, and no research projects could be identified during the time of the visit of the premises.

2.3.6. *International Co-operation of TeU*

TeU has established communication with "very few Universities".⁶²⁹ The person in charge of International Cooperation at TeU has been at this post for less than three weeks, and could confirm only communication with Universities from Washington, New York and Veliko Trnovo in Bulgaria.

2.4. **University Goce Delcev, Stip**

A new state university was established in 2007, which will start its work in October 2007 - the University of Goce Delcev in Stip, in the eastern part of Macedonia, finally gives students from this part of the country the opportunity to study closer to home. The new university will encompass the faculties of law, economics, computer science, agriculture, a higher medicine school and a faculty of agriculture. Since the recruitment procedures of the academic staff and

⁶²⁴TeU, Rectors Welcome, <www.unite.edu.mk/rector_w.html> (accessed on 30 March 2006)

⁶²⁵Cf. Interview with Azis Polozhani, Minister of Education and Science, in Utrinski Vesnik, daily newspaper, No 1387, 03 February 2004, <www.utrinski.com.mk> (accessed on 30 March 2006)

⁶²⁶Ibid

⁶²⁷TeU, Call for enrollment of students at the State University in Tetovo in 2005/06, 4 May 2005, p.2

⁶²⁸Ibid, p. 3

⁶²⁹Interview with Arburim Iseni, Office for International Cooperation of TeU, Tetovo 30 March 2006

students at this university are ongoing, further inquiry into its work will have to be done once the university has started its work.

2.5. Macedonian Academy of Sciences and Arts

The Macedonian Academy of Sciences and Arts (MASA) was formed with a Law enacted by the National Parliament of the Socialist Republic of Macedonia on 22 February 1967 "as an exclusive scientific and artistic institution that should encourage development of science and arts".⁶³⁰ In 1996 the Assembly of the Republic of Macedonia enacted a Law for the Macedonian Academy of Science and Arts.⁶³¹ The Law provides for the "status, tasks, financing, election of Academics and their rights and the structural set up of the Academy".⁶³² MASA adopts its own statute that provides for: internal structures, rights and obligations of the Academics, implementation of its tasks and provides for transparency of the work. It rewards an annual prize "Vita Pop Jordanova" for the best young scientist in the country. MASA can be described as a public law association with some forms of self-government.

2.5.1. Members of MASA

MASA can have regular members, foreign members and honorary members.⁶³³ Candidates for regular members of MASA can be nominated by the departments of the Academy, by at least three individual members of MASA, as well as by scientific councils of institutions for research and tertiary education. MASA's departments nominate foreign and honorary members. Exceptional scientists and artists that are citizens of Macedonia with a permanent residence in Macedonia and whose work has received international recognition, can be elected as regular members. Exceptional scientists and artists, citizens of Macedonia who are residing outside the country, as well as foreign citizens, whose work has received international recognition and is important for the Republic of Macedonia can be elected as foreign members of MASA. Persons that have extraordinary credit for the development of the science and arts in the Republic of Macedonia can be elected as honorary members of MASA. Membership in MASA is life-long. New members are elected every third year with a secret ballot. At the moment MASA has 38 regular members, 1 honorary and 28 foreign members, out of which: 5 are from the natural sciences; 6 are from the social sciences, including economics; 18 are from humanities; 4 are from health and medical science and 5 are from engineering and technical sciences.⁶³⁴ Out of all of the members, 8 are under the age of 70, 3 members are under the age of 60 and there are no members under the age of 50.

2.5.2. Organizational Structure of MASA

The main organs of MASA are the Assembly and the Presidency.⁶³⁵ The Assembly of MASA is the highest organ and it consists of all of the members of the Academy. However, only the regular members have the right to vote. The Presidency is elected by the Assembly. It consists of a President, one or more vice Presidents, secretary of MASA, secretaries of the departments and other members elected by the Assembly. Only the regular members of

⁶³⁰Macedonian Academy of Science and Arts, Skopje 2004, p.3

⁶³¹Republic of Macedonia, Official Gazette No 13/96

⁶³²Ibid, Art.1

⁶³³Ibid, Art.11

⁶³⁴MASA, Answers to UNESCO-ICSU-IAP Project: Enhancing the Participation of Academies of Sciences from Eastern European and CIS Countries in International Science Cooperation

⁶³⁵Republic of Macedonia, *Law for the Macedonian Academy of Science and Arts*, Official Gazette No 13/96, Ch. III, Art. 18-24

MASA can be elected for members of the Presidency. Currently the Presidency of MASA has nine members.

MASA also has working bodies that can be permanent and temporary. Three permanent working bodies are set in the statute of MASA. They are: the Board for scientific and artistic activities, Publishing Council and Board for International Cooperation.⁶³⁶ The basic organs of MASA are the departments where the Academics perform their rights and obligations. A new department can be formed if there are at least five regular members of the Academy that can take part in the work of that department. The Assembly on a proposal of the Presidency forms the Departments.⁶³⁷ Currently MASA has five departments:⁶³⁸

- Department for Linguistic and Literary Science (covers Linguistics, Slavic studies, Balkan studies, literature, theory of literature and literary hermeneutics, comparative literature, philology, history, folklore)
- Department for Social Sciences (covers economy and finance, demography, statistics, law, political sciences, philosophy, history, art history, archeology, pedagogy, etc.)
- Department for Mathematical and Technical Science (covers Mathematics, physics, chemistry, architecture, engineering, energy, technology, electronics, automatisisation, computer sciences, information technology, communication technology, etc.)
- Department for Biological and Medical Science (covers Biology, biotechnology, molecular biology, agriculture, agroecology, botany, pedology, medicine, veterinary medicine and other related fields) and
- Department for Art (covers Literature, history of literature, comparative literature, aesthetics, music, painting, sculpture and art criticism)

There are also five research units within the MASA structure:⁶³⁹

- Research Centre for Genetic Engineering and Biotechnology (works on Sustainable energy development, environment, greenhouse gases, negentropy, quantum neurodynamics, neurofeedback, solar cells, atomic collision)
- Research Centre for Energy, Informatics and Materials (works on Molecular medicine, molecular basis of monogenic diseases and cancer, molecular epidemiology of infectious diseases, DNA fingerprinting, forensic medicine)
- Lexicographic Centre (works on the project of Macedonian Encyclopaedia, Macedonian Dictionary of Scientific and Professional Terminology (various areas of science), history of the culture of Macedonia, Balkan cultures, history, etc.)
- Centre for Strategic Research (works on long-term interests of the Republic of Macedonia, national strategy issues, investments, economic and technological development, demographic and migration trends, Balkan studies, political communication, relations with neighboring countries, etc.)
- Research Centre for Areal Linguistics (works on linguistic interference, contact change, linguistic geography, factor 'space' in the evolution of a language, Balkan languages, Slavic languages, morpho-syntactic Balkanisms, international linguistic atlases).

⁶³⁶ MASA, Statute of the Macedonian Academy of Science and Arts (Integrated Version), Skopje 2005, Art. 95

⁶³⁷ Ibid, Art. 102

⁶³⁸ MASA, Answers to UNESCO-ICSU-IAP Project: Enhancing the Participation of Academies of Sciences from Eastern European and CIS Countries in International Science Cooperation, ANNEX 1. AREAS OF RESEARCH COVERED BY RESEARCH INSTITUTIONS MANAGED BY THE ACADEMY

⁶³⁹ Ibid

MASA also has an Archive and a Library that act as specialized units. The Archive is outside of the integrated network of Archives in the Republic of Macedonia and its competence is nation wide.⁶⁴⁰ It holds 110 personal fonds, MASA's main archive from 1967, 11 collections and 16 projects. The oldest materials are manuscripts from the XIV century, but most materials are from the XIX and XX centuries. The Library stores around 140 000 volumes, of which 50 000 are monographs and 90 000 are journals and newspapers.⁶⁴¹ The Library performs regular exchange of materials with 450 institutions from the country and abroad, and about 2/3 of the annual income in the Library is through exchange. MASA also has a Secretariat that is in charge of administrative, financial and technical issues.

The research centres employ thirteen active full-time researches and four administrative and support staff, but there are also scholars and researchers from other scientific institutions that participate in the work of the research centres.⁶⁴² Beside that at MASA there are 35 full-time employees. 19 work in the secretariat, publishing department, financial department, library and archives of the library, and 16 persons are in charge of technical support and maintenance of the building.

2.5.3. *Management of MASA*

The Assembly enacts the most important acts and regulations for the work of MASA (the statute, financial plan, forming of departments and units for scientific and artistic activities etc.), elects the President, vice Presidents and Secretary of the Academy. The Presidency has the executive function and implements the decision of the Assembly. It is also the main managing body of MASA, i.e. it adopts proposals for scientific research and arts projects that are to be financed by MASA, provides the finances and evaluates the implementation. In addition, the Presidency decides on the organization and financing of scientific conference and artistic shows. The Presidency is also in charge of the publishing activities of MASA. The Assembly meets 3-4 times per year, the Presidency about 10-12 times, departments 8-10 times, various committees and boards 3-4 times per year.⁶⁴³ About half of the meetings are devoted to managing issues of the Academy and half are devoted to research issues.

2.5.4. *Financing of MASA*

The main financing for MASA comes from the national budget, but the Academy can also receive finances from foundations and gifts and raise income from publishing and other activities.⁶⁴⁴ The Presidency of MASA prepares and implements the annual financial plan.⁶⁴⁵ On average, the annual budget of MASA is around 777 000 euro. The break-down shows that around 347 000 euros are for staff and office expenses, 300 000 euros are for projects, conferences, exhibitions and other activities, and about 30 000 euros are spent for international cooperation.

⁶⁴⁰Macedonian Academy of Science and Arts, Skopje 2004, p.37

⁶⁴¹Ibid, p.38

⁶⁴²MASA, Answers to UNESCO-ICSU-IAP Project

⁶⁴³Ibid

⁶⁴⁴Republic of Macedonia, *Law for the Macedonian Academy of Science and Arts*, Official Gazette No 13/96, Art. 10

⁶⁴⁵MASA, Statute, Ch. VI, Art. 131-134

2.5.5. *Scientific Research of MASA*

Scientific research at MASA is done on the basis of annual and multi-annual research projects.⁶⁴⁶ Initiatives for research projects can come from individual Academics, Departments, Research Centres, but also from any tertiary educational institution in the Republic of Macedonia and from the Government. The Presidency decides which initiatives will be supported based on an opinion from the Board for Scientific and Artistic Activities. On average research projects at MASA last for three years, but some macro-projects may take longer.

In 2005 MASA had 50 research projects that were financed by the Fund for Scientific and Artistic Activities of the Academy.⁶⁴⁷ The Department for Linguistic and Literary Science had 9 projects, the Department for Social Sciences had 5 projects, the Department for Mathematical and Technical Science had 5 projects, the Department for Biological and Medical Science had 6 projects and the Department for Art had 9 projects. From the research centers the Research Centre for Energy, Informatics and Materials had 4 projects, the Research Centre for Genetic Engineering and Biotechnology had 2 projects, the Lexicographic Centre had 4 projects, the Centre for Strategic Research had 4 projects and the Research Centre for Areal Linguistics had 2 projects.

In addition, in 2005 MASA had 10 scientific research projects that were financed from other sources.⁶⁴⁸ Of them the Research Centre for Energy, Informatics and Materials had 8 projects of which two were founded by the EU, two by GEF/UNDP, one by EU/ESF, one by the Austrian Government, one by IAEA and finances for one were a donation from "Zafir Sarafov". UNESCO-ROSTE financed two research projects of the Research Centre for Genetic Engineering and Biotechnology.

MASA also takes part in 16 international research projects that are financed by GEF/UNDP, UNESCO-ROSTE, EU/ESF and the European Commission programs COST and FP 6.⁶⁴⁹

The scientific program of MASA for 2006 included 64 scientific research projects, of which 45 were a continuation from previous years and 18 are new ones. 54 projects will be financed by the Academy, and 10 projects are expected to be financed from other sources.⁶⁵⁰

The research projects are very rarely done in cooperation with the business community in Macedonia. Cooperation with business entities is mostly based on "receiving financial support and sponsorship from companies for organizing scientific conferences".⁶⁵¹ However MASA has good cooperation with the Government and often does research and prepares strategic reports for development of some sectors. Titles of the most recent Advisory Reports include:

⁶⁴⁶Ibid, Ch. II, Art. 2-8

⁶⁴⁷MASA, Decision for annual reports of scientific research and artistic projects financed by the Fund for Scientific and Artistic Activities of the Academy in 2005, No 03-350/1, 20 March 2006

⁶⁴⁸MASA, Decision for annual reports of scientific research projects financed from other sources in 2005, No 03-351/1, 20 March 2006

⁶⁴⁹MASA, Answers to UNESCO-ICSU-IAP Project: Enhancing the Participation of Academies of Sciences from Eastern European and CIS Countries in International Science Cooperation, ANNEX 4. INTERNATIONAL RESEARCH PROJECTS IN WHICH THE ACADEMY COOPERATES

⁶⁵⁰MASA, Program for the work of the Macedonian Academy of Science and Arts in 2006, Skopje, January 2006

⁶⁵¹Interview with Nada Gligorova, MASA office for International Cooperation, Skopje, 20 March 2006

- Evaluation of Technology Needs for GHG Abatement in the Energy Sector (2004)
- Strategy for Improvement of Health Protection of the Population in the Republic of Macedonia (2001)
- Agricultural Development Strategy in the Republic of Macedonia to 2005 (2001)
- Energy Sector Development Strategy for Macedonia (2000)

MASA has also been included in the preparation of the following national strategies:

- National Development Strategy for Macedonia: Development and Modernization. (1997)
- Export Strategy for the Republic of Macedonia. (1999)

MASA regularly publishes two publications every 6 months: *Prilozi* (Contributions) and *Godisnik* (Annual). In the last five years MASA has published 35 issues of *Prilozi* and *Godisnik*, and about 110 books (monographs, project reports, proceedings of symposia, etc.).

The Research Centre for Genetic Engineering and Biotechnology organizes specialized studies in the fields of molecular biology and genetic engineering for postgraduate students from the Faculty of Medicine and from the Faculty of Natural Sciences and Mathematics of the Ss Cyril and Methodius University in Skopje.

2.5.6. *International Co-operation of MASA*

MASA has signed agreements on scientific cooperation with 23 other Academies, but cooperates with 4 more, and is member in 8 international academic associations and organizations.⁶⁵²

Agreement on scientific cooperation signed with Academies of Sciences:

- Albanian Academy of Sciences, Tirana, Albania (signed in 2000)
- Australian Academy of Social Sciences, Canberra, Australia (1995)
- Austrian Academy of Sciences, Vienna, Austria (1996)
- Flemish Academy of Sciences and Arts, Brussels, Belgium (2003)
- National Academy of Sciences of Belarus, Minsk, Belarus (1996)
- Bulgarian Academy of Sciences, Sofia, Bulgaria (1999)
- Chinese Academy of Social Sciences, Beijing, China
- Croatian Academy of Sciences and Arts, Zagreb, Croatia (1994)
- Academy of Sciences of the Czech Republic, Prague, Czech Republic (1993)
- Estonian Academy of Sciences, Tallinn, Estonia (1995)
- Hungarian Academy of Sciences, Budapest, Hungary (1997)
- Academy of the Mediterranean and Fondazione Laboratorio Mediterraneo, Naples, Italy (1999)
- Montenegrin Academy of Sciences and Arts, Podgorica, Monte Negro (1996)
- Polish Academy of Sciences, Warszawa, Poland (1993)
- Academia Romana, Bucuresti, Romania (1997)
- Russian Academy of Sciences, Moscow, Russia (1995)
- Serbian Academy of Sciences and Arts, Belgrade, Serbia (1996)
- Slovak Academy of Sciences, Bratislava, Slovakia (1995)
- Slovenian Academy of Sciences and Arts, Ljubljana, Slovenia (1992 and 2005)

⁶⁵²MASA, Answers to UNESCO-ICSU-IAP Project: Enhancing the Participation of Academies of Sciences from Eastern European and CIS Countries in International Science Cooperation, ANNEX 3. Academies with which the Academy cooperates.

- Royal Academy of Lettres, History and Antiquities, Stockholm, Sweden (1980)
- National Academy of Sciences of Ukraine, Kyiv, Ukraine (1997)
- British Academy, London, United Kingdom (1996)
- Royal Society, London, United Kingdom (1993)

Agreements signed with other Institutions:

- Italian National Council of Research (Consiglio Nazionale delle Ricerche – CNR), Roma, Italy (agreement signed in 2005)
- Center for Strategic Research of the Ministry of Foreign Affairs of the Republic of Turkey, Ankara, Turkey (2003)

Membership in International Academic Associations and organizations:

- ALLEA (All European Academies' Association) (since 1996)
- InterAcademy Panel on International Issues (IAP) (since 1997)
- ICSU (2003)
- InterAcademy Medical Panel (IAMP)
- Union Académique Internationale (UAI), Brussels, Belgium (1998)
- Association Internationale d'Études du Sud-est Européen (AIESEE), Paris, France
- Central- and Eastern European Network of Academies (CEN), (2003)
- Inter-Academy Council for South- East Europe (2001)

The Academy also has regular communication and contacts with:

- Turkish Academy of Sciences (TUBA), Ankara, Turkey
- Academy of Sciences of Bosnia and Herzegovina
- European Academy of Sciences and Arts, Salzburg, Austria
- Société Européenne de culture, Venice, Italy

3. PRIVATE UNIVERSITIES IN THE REPUBLIC OF MACEDONIA

3.1. South-East European University, Tetovo

Higher education has been one of the points of contention between the Macedonian and Albanian communities in Macedonia. In July 2000 a new higher education law was introduced to allow for the use of the Albanian language and other languages in private tertiary institutions in Macedonia. Recommendations which facilitated this process were proposed by Max van der Stoel and international education experts. Max van der Stoel, who was OSCE High Commissioner on National Minorities at the time (and is now Personal Envoy of the OSCE Chairman-in-Office) initiated a project to develop a University which would improve the opportunities for higher education in minority languages.

Funds for the project were sought from the international community, namely the OSCE, the EU and the USA (which were the biggest donors). The Government of Macedonia donated the piece of land where the University is situated.

SEEU (informally known as the “Stoel University”), where the teaching is performed on Albanian, Macedonian, English and other world languages, was established in October 2001 with the following main aims:

- (i) to contribute to the solution of the problem of Albanian language higher education;
- (ii) to promote inter-ethnic understanding;
- (iii) to ensure a multilingual and multicultural approach to teaching and research; and
- (iv) to develop its teaching programme in a broad international and European perspective.

The SEEU has developed policies that provide for multi-ethnic cooperation and everyday communication and interaction of members of different ethnic communities. Their preferences in student enrolment and staff recruitment are to cover as many members from different ethnic communities as possible. Currently of the 6 000 students, 4 580 are Albanian, 1 300 are Macedonian, 100 are Turkish, and 20 are Roma (who were enrolled using positive discrimination principle, lowering the standards of enrolment and the tuition fees).

3.1.1. Organization

SEEU is a unitary University with five Faculties, featuring undergraduate and Master programmes:

1. Faculty of Law
2. Business Administration
3. Public Administration
4. Communication sciences and technologies and
5. Pedagogical Methodology Training.

All programmes offered by the University are modular and follow the pattern of the European Credit Transfer System (ECTS) in conformity with the Bologna Agreement, giving students the flexibility to specialize or take a more broadly-based programme, and giving SEEU diplomas recognition in a wide international/European perspective.

3.1.2. Management

The **University Foundation Board** is the governing body of the 'University Foundation Tetovo', which until recently consisted of two foundations; The International Foundation in Zurich and the local University Foundation in Tetovo.

The University Foundation Board consists of local and international members and they are, in accordance with the law of the Republic of Macedonia, responsible for the assets donated to or acquired by the University project, and for approving the budget and audited accounts of the University. **The members of University Foundation Board are the same as the University Board.**

The duty of the **Advisory Board** is to advise the University Board on international development and to help the University make and maintain international contacts. The Advisory Board consists of prominent experts in higher education and in international organisations.

The **Rectorate** is, under the leadership of the Rector as the principal academic officer of the University, responsible to the University Board for the effective working and good order of the University and for its management within the policies determined by the University Board.

The Rectorate is responsible for:

- presentation of proposals to the University Board concerning the educational character and mission of the University, taking into account the recommendations and opinions of the Senate and the Council;
- implementation of the decisions of the University Board and of its Executive Committee;
- the organisation, direction and management of the University and leadership of the staff;
- the preparation of annual estimates of income and expenditure for consideration by the University Board, and the management of budget and resources within the estimates approved by the University Board.

The Senate is the principal academic organ of the University, except where provided otherwise in the University Statute. The Senate shall advise the University Board through the Rectorate on the development of the academic activities of the University and the resources needed to support them, including the creation, merger or removal of departments.

The **Senate** consists of the following members:

- The Rector;
- The Pro-Rectors;
- The Professors;
- The Deans of Faculties, and Heads or Directors of other academic units who are not Professors;
- Two members elected by and from the academic staff in each Faculty or other unit not within a Faculty;
- One member per Faculty elected by and from the students in each Faculty;
- One member elected by non-academic staff.

The **University Council**, which consists of Deans and Directors of Centres as well as the Rectorate, is the policy, planning and resources organ of the University, acting as a channel of communication between the Senate, the Rectorate and the Faculties and Centres and deciding on issues delegated to it by the Statute or by other bodies.

3.1.3. Co-operation with the Business Community

In the Committee for Curricula Development in each Faculty, there are two stakeholders' members (i.e. in the Faculty for Business Administration there are members from industries and private companies, at the Faculty of Law there are lawyers and judges). This provides a direct link to the stakeholders and enables adaptation of the study program to the labor market needs.

Another track of cooperation is the consultancy and training offered by SEEU. There are some seminars for IT and financial expertise that are offered to employees of private companies.

Twice per year SEEU organizes for its students a "Fair of possibilities", a labor market fair, where private companies and future employers present themselves to the students, and where the students can come in contact and communication with them.

Private companies very rarely sponsor research projects. Sometimes, rarely, they provide donations to SEEU. When it happens it is in the form of providing technical equipment (Link,

an Insurance Company, has donated some PCs) or some other practical need of the University.

3.1.4. Funding

As can be seen in Table 3. the largest part of SEEU funding comes from the tuition fees paid by the students (which are in average around 1300 EUR per year), commercial activities of the university, donations and income from consultancy.

Table 3. Funding of SEEU

Combined budgets excluding loan charges			€mio		
YEAR	2004-5	2005-6	2006-7	2007-8	2008-9
Income					
Tuition Fees	6.65	7.19	7.91	8.70	9.57
Commercial	0.32	0.36	0.40	0.44	0.49
Other	2.40(1)	2.40(3)	0.51(5)	0.58(5)	0.66(5)
Total	9.37	9.95	8.82	9.72	10.72
Expenses					
Staff	3.56	3.80	4.00	4.90	5.50
Facilities	1.62	1.80	1.90	2.00	2.10
Administration	0.47	0.50	0.50	0.50	0.50
Learning Res	0.90(2)	0.50	0.50	0.50	1.00(2)
Work Study	0.12	0.12	0.12	0.12	0.12
Fac. Development	0.50	0.40	0.40	0.50	0.50
Building	1.70	0.30	0.80	0.70	0.50
Depreciation	0.50	0.50	0.50	0.50	0.50
Total	9.37	9.92(4)	8.82	9.72	10.72
Notes					
1. €2m EC; €0.4m IF					
2. Computer replacement					
3. €2m EC, €0.4m Consultancies					
4. €2m EC unallocated					
5. Consultancies					

3.1.5. Teaching

Currently SEEU employs a total of 204 academic staff. For staff to hold substantive academic posts (i.e. PhDs), SEEU is heavily reliant on part-timers. Almost all of these part-timers hold “full-time” appointments at the Universities in Skopje, Prishtina or Tirana, where the (minimum) teaching obligations for a “full-time” salary can be discharged in one day a week or less, although the Law on Amendments to the Law on Higher Education (July 2003) provides for an increase in the hours of full-time staff in the state Universities and provides a formula by which SEEU has established a new remuneration policy. In those Universities staff may undertake two or more “full-time” teaching loads in return for extra pay. At SEEU,

full-time employment entails being available throughout the working week and precludes other employment unless approved by the Board; pay is two to three times more than for a single “full-time” load in the state universities. The average part-time contract is for 55-60% of full-time, with those based in Skopje tending to have a higher fraction and those more distant a lower fraction.

The University’s Course curriculum is completely organized according to the European Credit Transfer System and organized as three-cycled studies.

By a process of flexible use of languages, students are encouraged to learn how to communicate effectively in Albanian and Macedonian, as well as in English and/or other international languages. However, the University is “still not entirely clear about its language policy in teaching. Having in mind the sensitivity of this question, the so called strategy of 'flexible use of languages' was implemented. But until now this was done without any further explanation of what this term means in terms of financial, academic, social and psychological influence in reaching the agreed goals. The common conclusion in all debates on this topic is that the University should define the strategy of use of languages in a clear and transparent way...”⁶⁵³

Table 3 illustrates the situation post-“Bologna changes”. The second and third cycle programmes in the Faculty of PMT depend on the future development of the Faculty.

Table 3. Studying cycles at SEEU and languages used

Third Cycle (PhD)		English	English	English	English	
Second Cycle (MA)		English or Albanian	English or Albanian	English or Albanian	Flexible use of Languages	
First Cycle (BA)	IV year	Albanian	Albanian	Flexible use of Languages (English in Private and Public International Law Yrs 3&4)	Flexible use of Languages	Flexible use of Languages
	III year	English	English			
	II year	Flexible use of Languages	Flexible use of Languages			
	Preparatory Year	Flexible use of Languages	Flexible use of Languages			
		BA	CST	LAW	PA	PMT

3.1.6. Research

Every Faculty has established a Centre for Research. However, they are at their beginning and more oriented to providing consultancy to the local community and business entities than to doing specific scientific research. The services that these centres have offered so far are on two levels:

1. Training seminars for members of different organizations (i.e. preparation of business plans, marketing strategies, etc.)
2. Providing concrete services to business entities, local government or NGOs (i.e. the Centre for Business Development offers financial services, and the Centre for Human Rights offers NGOs cooperation in preparation and implementation of concrete projects)

⁶⁵³ SEEU, Strategic Plan 2004-2008.

SEEU has started to publish its own scientific journal. The first issue came out in 2005. It will come out every 6 months and contain academic papers and research findings of the staff at SEEU. The Board of the journal is composed of professors from the University and visiting professors.

There is a specific budget line in the University budget for supporting research projects. It is set at 2% of the total budget. Project ideas and initiatives are submitted to the Rector's Office and they are chosen on a competitive basis. Support can be full or partial. The projects should be community oriented and focused on solving practical problems (i.e. there is research being done by SEEU, full support-100% of finances, looking at the possibilities for local economic development in the Polog valley. It is a year-long project, main activities are scanning and detecting local resources, and the follow-up will be submitting the outcomes as investment initiatives to economic subjects or to international donors).

They have no specific activities, like training or research programs, targeting inter-ethnic issues.

3.1.7. International Co-operation

The number of international links is growing, from the first link with Indiana University in the United States, to a total of ten formal links at institutional level (Indiana, Tirana, Prishtina, Gazi, Nantes, Rennes I, Angers, St Gallen, Vienna, Pittsburgh), several links to individual Faculties at the two Macedonian state universities and others (e.g. Tirana), and a number of other links are being finalized e.g. with Maastricht School of Management. These links cover a range of issues including curriculum development, staff development and exchanges. As is very often the case, not all are adequately funded and some national and international financial support will be needed for them to operate effectively. Discussions are taking place with USAID on possible further financial assistance for links with US universities and it is proposed to use some of the new EC resources to build up links for staff development. In return, in due course, SEEU hopes to be able to reciprocate by offering research opportunities and teaching exchange.

SEEU has also built up its own international Faculty members from one in 2001 to ten in 2003 and has embarked on a staff development programme for younger staff in the United States and Europe.

3.2. European University

The European University (EuU) was accredited in 2005, and is a continuation of another private initiative. It grew out of the Faculty of Social Sciences that was established in 2003 by two private investors. The ownership structure of the European University is the same. The statute of the University as well as other articles and regulations, cannot be found on the official web site and are not publicly accessible.⁶⁵⁴ The curriculum of EuU is "totally compatible with Bologna standards and offers 3+2 studies".⁶⁵⁵ The University has established two branches, one in Skopje and one in Struga. The educational program is the same at both places. At the EuU they insist that their main characteristics are:⁶⁵⁶

⁶⁵⁴ When requested they could not be produced by the Public Relations Office at the meeting in Skopje on 28 March 2006. A comment was made that usually they are not publicly distributed.

⁶⁵⁵ Interview with Ana Zdravkovska-Ilievska, Public Relations Office, European University, Skopje 28 March 2006

⁶⁵⁶ Ibid

- Individual approach to students
- Teamwork
- Skill building for professional development
- Testing of theoretical knowledge

The University has its own building in Skopje on 6 floors with total of 35 000 m², in its premises it has 11 lecture rooms, 9 cabinets, 2 laboratories, 72 PCs and 12 laptop computers.⁶⁵⁷

3.2.1. *Organization*

The EuU is composed of the following Faculties and education tracks:⁶⁵⁸

- Faculty of Economical Science, with
 - Banking management
 - Marketing management
 - Accounting and Finances
- Faculty for Legal and Political Sciences,
 - European Law and Law of EU
 - Legal Studies
 - Diplomacy and International Politics
- Faculty for Applied European Languages,
 - Business and International Trade
- Faculty of Informatics
 - Software Engineering
- Faculty for Detectives and Security of Property and Persons.

The plans for 2006 onwards are to introduce five new Faculties, again some of them having different education tracks, including a Faculty for Communicology and Faculty for Political Science. The proposal has been submitted to the Board of Accreditation, and the expectations are that it will be approved and implemented from October 2006.

The EuU also has a library with some 1 500 titles and several reading rooms. The University has established a Career Centre with the aim to link the business community with their students. Their main activity is providing student information for internships and practical work, and helping students to identify possible future employers. They also track their alumni and provide recommendations to their graduated students.

3.2.2. *Management*

The management of the EuU is done by the Managing Board and by the Board of Directors. The Managing Board is made of the owners of the EuU, and the Board of the Directors is made of a Director and Vice Director, employed by the Managing Board, and the Heads of the Sectors of the EuU that are in charge of the administrative and financial issues, and student services. The main decisions regarding the finances and management are taken by the Management Board, and the Board of Directors is more in charge of the day-to-day activities of the EuU, but also has some other functions, for example procurement of technical equipment.⁶⁵⁹

⁶⁵⁷European University, <www.europeanuniversity.edu.mk> (accessed on 27 March 2006)

⁶⁵⁸Ibid

⁶⁵⁹Interview with Ana Zdravkovska-Ilievska, Public Relations Office, European University, Skopje 28 March 2006

The EuU has a Senate, comprised of members of the academic staff and some students, which elects the President of the Senate, the General Secretary and the Rector's Board.⁶⁶⁰ The Rector's Board is made of the Rector and three Vice Rectors: one for Education, one for Science and one for Students. Each Faculty of EuU has its own Dean, but they can be part of the Senate or the Rector's Office.⁶⁶¹ The Senate and Rector's Office decide mostly on educational questions concerning the curriculum and methods of teaching.

3.2.3. *Funding*

The EuU is a privately funded institution for tertiary education. The main sources of its income at the moment are the tuition fees, which are 2 000 euro per student per year. Distribution and usage of the financial resources depends on the Managing Board and the Board of Directors.

3.2.4. *Teaching*

The EuU has a teaching staff of "some 60 professors, and around 50 assistants, while the total number of enrolled students is above 3 000".⁶⁶² Sometimes lectures for the students are organized with experts and professionals from various fields.

The EuU offers undergraduate studies, awarding "Bachelors Degrees" upon graduation. Students also have the possibility to continue with a postgraduate program at one of the Faculties, where "Master Degree" is awarded. There is no interdisciplinarity among the postgraduate programs. The EuU does not offer PhD courses.

There is no testing for the enrolment of the students. Selection is done on the basis of high school GPA, where maximum of 60% is on basis of the total GPA, and maximum of 40% is on the basis of the results in the high school courses that are most relevant for the undergraduate studies. The EuU offers the "Boris Trajkovski" scholarship to the best student of the generation of first year students. Retaining the scholarship is conditioned with having the highest cumulative GPA in the generation.

Assessment of students is done through evaluating participation, presentation, student work and some form of testing or essay writing.

In 2005 EuU organized a training seminar for Public Relations for journalist and spokespersons. In was their first activity of this kind, and they had trainers from Macedonia and Serbia.

3.2.5. *Research*

The EuU still does not have centres for scientific research, but "each Faculty plans to establish one in the near future".⁶⁶³ At the moment no research projects can be pointed out that were organized or supported by this university. Even though officials claim that around 80% of their academic staff is engaged in some research projects as individual experts. The finances

⁶⁶⁰Precise number of members and policies of functioning could not be identified.

⁶⁶¹Interview with Ana Zdravkovska-Ilievska, Public Relations Office, European University, Skopje 28 March 2006

⁶⁶²Ibid

⁶⁶³Ibid

for these projects come from various sources, while it remains unclear if EuU supports scientific research.

Their publishing activities are focused on materials and books prepared by their academic staff. Their priority is preparing and publishing textbooks for the courses that are taught at EuU. The professors are not obliged to prepare a textbook, but it is "generally expected from them and it could influence their future promotion and career".⁶⁶⁴

3.2.6. *International Cooperation*

The EuU cooperates mostly with other Universities from the region. It cooperates with around 10 Universities from the Balkan region, of which 3 from Serbia and Montenegro, 3 from Romania and 2 from Bulgaria.⁶⁶⁵ At the day of the visit to EuU there were representatives from the Ministry of Education and Science in charge of TEMPUS projects having a meeting with the Dean of the Faculty for Legal and Political Sciences.

The EuU is an associate member of the International Assembly for Collegiate Business Education (IACBE). IACBE is a Specialized Accrediting Body for Business & Business-Related Degree Programs at the Baccalaureate and Graduate Degree Levels in Colleges and Universities.⁶⁶⁶ It measures the effectiveness of Business Education through Outcomes Assessment.

3.3. **New York University Skopje (NUYS)**

The NYUS is consists of the Faculty of Business Administration, Faculty of Business Law, Faculty of Communication and Information Studies, Faculty of Computer Science and Information Technology, Faculty of English language and Literature, Faculty of International Relations, Politics and European Studies. The project team visited the UNYS and had the following findings:

- The tuition fees: 590 EUR per course for undergraduate studies, 9 000 EUR for Master's studies.
- Language of teaching is only English. Teaching is in small groups, no more than 25 students. Currently no research is performed, except by individual professors in different projects.
- There is a Macedonian, Greek, German and American academic staff.
- Management: Rector and Academic Council (consists of Deans). Body making decisions on economic matters: the Assembly of Co-founders.
- The majority of students are Macedonian, Albanians are also present.
- The UKIM is seen as the biggest competition for now, but NYUS expects to overrun UKIM on the long run.
- Problems: The Government is trying to solve a social problem- the problem of unemployment. The majority of students are studying only because they cannot find employment.
- The most important thing, according to NYUS is to strike a balance between academic freedom and financing.
- NYUS does not want to be an institution exclusively for teaching, but also for research.

⁶⁶⁴Ibid

⁶⁶⁵Information on precise universities and forms of cooperation could be provided during the interview.

⁶⁶⁶International Assembly for Collegiate Business Education, <<http://www.iacbe.org/>> (accessed on 29 March 2006)

Research Project UnivSOE

"Institutions of Tertiary Education in Central and South East Europe: Developments, Structures and Perspectives of these Institutions for their Integration into the European Higher Education and Research Area"

Country Report: Montenegro

Branka Bošnjak

1. RESEARCH AND TEACHING INSTITUTIONS	411
1.1. Introduction	411
1.2. Co-operation of Institutions	411
1.3. Involvement in Regional and International Research and Teaching Programs	411
1.4. Allocation of Competences	411
1.5. Advisory Bodies	412
1.6. Financial Management	413
1.7. The Development of the Research Quota	413
2. THE CONSTITUTIONAL FRAMEWORK	413
3. THE UNIVERSITIES	414
3.1. Legal Basis	414
3.2. Functions of Universities	414
3.3. Autonomy	414
3.4. University Bodies	415
3.5. Funding of University Institutions	416
3.6. Research	416
3.7. Teaching	417
<i>3.7.1. Curricular Models for Undergraduate and Postgraduate Studies</i>	<i>417</i>
<i>3.7.2. Implementation of the Bologna Process</i>	<i>418</i>
<i>3.7.3. Courses for Life-Long Learning and Vocational Training</i>	<i>418</i>
3.8. The Composition of the Faculty Staff	418
3.9. Quality Assessment and Quality Assurance	419
3.10 Financing and Efficiency	420
3.11. International Co-operation	421
3.12. Transdisciplinarity	422
3.13. Co-operation between Industries and Universities	422
3.14. Role of Universities play in Inter-ethnic Co-operation	422
3.15. Reforms, Trends and Expectations	423
4. NOT UNIVERSITY RELATED RESEARCH INSTITUTIONS	423
4.1. Academy of Sciences and Art	423
4.2. Other Not University related Research Institutions	425
5. INTEGRATION INTO THE EUROPEAN RESEARCH AREA	425
6. THE NOT UNIVERSITY RELATED EDUCATION SECTOR	425
7. INTEGRATION INTO THE EUROPEAN UNIVERSITY NETWORK	425

1. RESEARCH AND TEACHING INSTITUTIONS

1.1. Introduction

The Montenegrin Academy of Sciences and Arts, the University of Montenegro, and a few private institutions of higher education exist on the tertiary educational level.

The University of Montenegro is the first and only university in Montenegro. There are fifteen faculties, one independent post-secondary school, and three post-secondary schools within faculties and four research institutes. All of the mentioned institutions are within the University of Montenegro. The University realizes fifty-nine study programs (48 academic and 11 applied study programs) in seven different towns in Montenegro.

Since the new Law on higher education was adopted in 2003 prescribing the possibility of establishing private faculties in Montenegro, two private faculties have been opened. The opening of another three faculties is envisaged for the next academic year which would create the preconditions necessary for establishment of the first private university.

1.2. Co-operation of Institutions

The Managing Board governs the university and the Rector manages it. The University Senate is the supreme academic body. Deans are the heads of faculties and directors are the heads of institutes. The highest academic bodies at faculties i.e. at institutes are councils for teaching-scientific issues, i.e. for teaching-artistic issues. Presidents are the heads of academies.

There is good cooperation among these institutions particularly in some common scientific projects.

1.3. Involvement in Regional and International Research and Teaching Programs

These institutions cooperate directly or through their units with numerous scientific and educational institutions in the country and abroad. Cooperation with foreign institutions is realized through direct access to numerous international research and educational associations and networks, as well as through agreements on direct cooperation.

The University of Montenegro is involved in several projects within the Tempus program of the European Union, which is designed to help the process of social and economic reform and development of the countries that are not members of the European Union. The Tempus program focuses on the development of the higher education systems in these countries through cooperation with institutions from the Member States of the European Community. The programme is based on the understanding that higher education institutions are of particular importance for the social and economic transition process as well as cultural development.

1.4. Allocation of Competences

The Government of the Republic of Montenegro determines the national strategy for higher education; plans higher education development in Montenegro along with cooperation with institutions; founds public and other institutions, in accordance with this law; ensures resources for public institutions for financing teaching and research of public interest, in accordance with this law and may participate in co-financing of private institutions and students enrolled in them.

The ministry responsible for education and science prescribes the content and form of Diploma and Diploma Supplement issued by institutions; gives proposals for determining models for financial support for students and their realization; promotes student and academic

staff mobility within European higher education area as well as at the wider international level; follows international agreements and conventions for academic and professional recognition of qualifications and provides information to the public on the status of foreign qualifications; promotes equal opportunities and accessibility of higher education, development and staff training, lifelong learning and other aspects of higher education; promotes links between public institutions, private institutions, economy and trade in Montenegro; promotes links among all institutions in Montenegro and higher education institutions in neighboring countries and regions; issues licenses to institutions; passes regulations for enactment of this law and supervises enforcement of provisions of this law.

1.5. Advisory Bodies

There is a Higher Education Council. It was founded by the Government. The Higher education council analyses the state and achievements in higher education, gives professional proposals to the Government for the improvement of the higher education area, and to this end has the following special authorization: to prepare the starting point for shaping the proposal of the national higher education strategy; to define the basic standards and norms for granting licenses and to give its opinion to the Ministry regarding awarding, altering or revoking a license; to give its opinion for measures for appointment of academic staff; to give its opinion during the procedure for determining norms for higher education financing; to determine measures for the assessment of study programmes from the view of their international comparability and duration of studies; to undertake periodical controls of licensed institutions' quality and to issue certificate on accreditation and re-accreditation; to undertake periodical assessment of the quality of courses and programmes delivered by accredited institutions; to give its professional opinion and makes proposals to the Government depending on quality assessment regarding the financing of higher education institutions and assistance to students attending courses or programmes with institutions and to perform other activities prescribed by this law and foundation enactment.

The Higher Education Council is particularly responsible for the promotion of higher education quality in Montenegro. Through the processes of licensing, quality assessment and accreditation, in accordance with professional and transparent methods, the Council assists higher education institutions in developing their possibilities and improving and maintaining the quality of their activities.

The Higher Education Council comprises 11 members appointed by the Government for a period of six years. The Higher Education Council is made up of eight representatives who are prominent experts in the field of higher education, science and technology, proposed by the university and academy of sciences and arts, and three representatives of economy and social activities, who are proposed by the Association of Employers of the Republic and the civil sector.

There is also a Council for Scientific Research. It was founded by the Government. The Council analyses the state and achievements in scientific-research activity, gives professional suggestions to the Government and to that end has special authority to:

- prepare and propose the Strategy
- propose priorities from the Strategy for the current year
- give its opinion for measures for appointment into scientific/academic titles
- give its opinion on laws and other regulations regarding the scientific-research activity and other fields, and which ensures general conditions for supporting scientific-research activity and use of its results;
- give its opinion in the procedure for determining the amount to be allocated for financing the Strategy priorities;
- follow the realization of the Strategy;

- cooperate with the Council of Higher Education;
- perform other responsibilities regulated by this law and by the act on the establishment of the Senate.

1.6. Financial Management

In Montenegro there are no specialized institution for the financial management and fostering of research.

The institution receives resources from:

- the budget of the Republic
- the provision of intellectual services
- income obtained through products and services sale
- donations, sponsorships, legacies and foundations;
- projects and agreements with national and foreign research institutions and consultant activities;
- economic societies, institutions and associations resources;
- foreign funds resources
- other sources

The Republic, by privilege regarding taxes and by other measures, encourages legal and physical entities to invest in the realization of the scientific-research activity established by the present law.

1.7. The Development of the Research Quota

- 2000. budget approved for science	1 381 264.71€ realized	595 435.31€
- 2001.	1 862 767.15€	660 663.08€
- 2002.	1 170 319.16€	685 700.38€
- 2003.	1 436 763.18€	1 269 404.76€
- 2004.	1 306 912.48€	1 267 307.70€
- 2005.	789 375.91€	

By 2005 the salaries for the staff employed in the scientific institutes were settled from the above quoted amount, and starting from 2005 salaries for the employees of the scientific institutes are settled from the University budget. The amount allocated to science in the Republic of Montenegro represents 0.04% of the National income.

The amount allocated to scientific-research activity, besides the resources of the Ministry of Education and Science (quoted above), includes also a part of resources from the budget of CANU (Montenegrin Academy of Sciences and Arts), University of Montenegro, other ministries, ZAMTES (Republican Bureau for International Scientific, Educational, Cultural and Technical Cooperation), as well as from other institutions having research as one of their activities.

2. THE CONSTITUTIONAL FRAMEWORK

Scientific-research work within and outside of the University is carried out in line with the Law on scientific-research activity adopted in 2005. The Ministry of Education and Science is in charge of the realization of scientific-research work, in accordance with this Law.

Liberty of scientific research is prescribed by the Law on scientific research activity. The scientific-research activity is an activity of public interest. Performing scientific research activity is free and available to all national and foreign physical and legal entities.

3. THE UNIVERSITIES

3.1. Legal Basis

The University of Montenegro works in accordance with the Law on Higher Education and the Statute of the University. There are several by-laws such as the Rules on conditions, criteria and procedure of enrollment into the first year of studies, the Rules of studying at undergraduate studies, the Rules of studying at postgraduate studies, the Rules of doctoral studies, the Measures for election into academic and scientific titles, the Rules of procedure for recognition and equivalence of a foreign diploma and keeping of a register, the Rulebook on the work of Court of Justice, etc.

The Law of Higher Education was adopted in 2003. The Statute of the University of Montenegro was adopted in 2004. The legal reforms in the area of Higher Education were finished three years ago. The legal framework is like at most European universities.

3.2. Functions of Universities

The University is established as a higher education institution having the following objectives:

- to be the leading centre for the advancement of knowledge, thought and scholarship in Montenegro;
- to play a leading role in the scientific, educational, cultural, social and economic development of Montenegro;
- to assist in the process of promoting democratic citizenship;
- to seek to create and maintain the highest standards in teaching and learning and the application of knowledge;
- to acquire, preserve, transfer and develop in a critical manner the culture and established scientific and artistic knowledge and values by way of a unique scientific-research, artistic and educational activity.
- to get connected with the regional and international higher education communities in order to accept the international standards and positive experiences in the higher education field.

3.3. Autonomy

The University is autonomous in executing its functions. The work of the University is based on academic freedom and academic autonomy, public openness, cooperation and partnership of the employed staff at the University, students and other participants in the higher education process, principles of establishing the European higher education and research area and creating the possibility for acquiring a high level of education throughout a lifetime.

The University realizes its activity through faculties, academies, institutes and higher specialized schools as organizational units and direct realization of individual study programs. The organizational units of the University may independently become members of professional associations.

3.4. University Bodies

The managing organ of the University is the Managing Board. The supreme academic body of the University is the Senate. The chief administrative officer of the University shall be the Rector.

The Managing Board consists of 13 members as follows:

- seven representatives of academic staff,
- three members from outside (representatives of the founder and the public),
- two representatives of the students, of which one is a student of undergraduate studies and one a representative of the students of postgraduate and doctoral studies;
- one representative of non-academic staff.

The Senate elects representatives of academic staff by a procedure determined in a special act adopted by the Senate. The Government elects the members from outside. The Student Parliament elects the student representative of the undergraduate studies by a procedure determined in a special act. The postgraduate and doctoral student association elects their representative by a procedure determined in a special act, or by direct elections in the above-mentioned structure. The representative of non-academic staff is elected by the Syndicate of the University pertaining to non-academic staff.

The Senate consists of:

- the Rector,
- the Vice-rectors,
- one member being elected from the range of/among and by the academic staff, as a rule holding the highest title, at each faculty, academy, institute and independent high professional school, without considering the number of permanently employed persons having academic title, and one more additional member for faculties and academies having more than 25 permanently employed employees having academic title, and
- student representatives in number which may not be under 15% of the total number of members of the Senate, considering that in the structure regular undergraduate students, students of postgraduate and doctoral studies should be represented.

Representatives of undergraduate students elect a Students Parliament by a procedure determined in a special act. Representatives of postgraduate and doctoral studies elect their associations by procedure established by special act and by direct elections in the given structure.

The procedure of the election of the Rector is as follows: Candidates are proposed by the Councils of the faculties, academies, institutes, independent high professional schools, five members of the Senate at least. Candidates for the Rector present their development programme for the University at the public meeting of the Senate. Councils of faculties, academies, institutes and independent high professional schools decide/declare on the proposed candidates by secret voting and give their support to the two candidates having the most votes, under condition that the candidates obtained at least 1/3 votes of the present members of the Council. The Senate states a list consisting of at most two candidates having the highest support of University organizational units, considering that the candidates must be supported by at least 1/3 of the organizational units of the University. Members of the Senate vote secretly and the Senate shall propose to the Managing board of the University one candidate having the highest number of votes. If the Managing Board of the University does not execute the election of the proposed candidate, the procedure of the election of the Rector

is to be repeated within three months, and the Managing Board designates the performer of the duty of the Rector among the academic staff representatives in the Managing Board of the University for the three-month period.

The democratic model with participation of students and all academic staff in all decision-making processes is the basis of the organization of universities.

3.5. Funding of University Institutions

The university institutions are funded from the following sources:

- University Budget
- Tuition fees and other fees paid by the students
- Intellectual and other services
- Donations, presents and legacies
- Projects and contracts with national, international, state and private entities aimed at promoting teaching, research and consulting activities.

3.6. Research

Scientific-research work is realized through scientific-research projects. The scientific-research project is conducted by the manager of the project, who creates of his own team of co-workers taking part in the project realization, and he is in charge of the organization and realization of research activities.

There is, in general terms, investigator-driven basic research at the University, but since it is not sufficiently recognized and awarded it has been diminished and reduced to a few scientists who carry out their research for the the sake of science and without a particular purpose in mind.

Fundamental research is mainly targeted, but unfortunately, because of the inadequately equipped laboratories (lack of equipment and out of date equipment) it is not possible to obtain imposing results which can be considered as significant innovations or for patents.

In view of defining priorities and encouraging and monitoring the scientific-research activity, the Strategy for scientific- research activities has been adopted.

The strategy stipulates, in particular:

- priorities in scientific-research activity;
- dimension of the scientific-research activity;
- general amount of resources aimed to financing priorities;
- plan for allocating the yearly amount of financial means aimed at scientific-research activity;
- number of young researchers with the scientific title of doctor of science in developing fields of priority;
- necessary scientific-research infrastructure;
- scientific information system.

The Strategy has been adopted for an 8 year period. The strategy has been adopted by the Government of the Republic of Montenegro, on the proposal of the Council for scientific-research activity. The Government has established the Council for scientific-research activity for improving scientific-research activity. The Council analyses the situation and achievements in scientific-research activity, gives professional proposals to the Government and to this end has special authorities to prepare and propose the Strategy, propose priorities from the Strategy for the next year, give its opinion on measures for the granting of academic titles, give its opinion on laws and other regulations regarding scientific-research activity and

other areas, and which provide general conditions for encouraging the scientific-research activity and use of its results, give its opinion on the procedure for determining the amount for financing the Strategy priorities, follow the realization of the Strategy and cooperate with the Council for Higher Education.

There is no special training for scientific, academic staff and post-docs. Mainly young scientists go to universities and other scientific institutions abroad in view of further specializing and obtaining new knowledge and skills. Most of them go abroad on the basis of the different exchange programmes and as grant holders of foreign government scholarships. Their home institutions, due to their unfavorable financial situation, often only participates in costs of their training.

There are only a few applied and development research projects financed by the Ministry of Education and Science, together with economic subjects participating in these projects with the aim of developing specific products or increasing productivity. In 2005 only three projects of this kind were financed. The reason for such a small number of this kind of project is to be found in our society, which is still in the transition process followed by a bad situation in most of the economic subjects which are to be privatized or are undergoing the privatization process.

3.7. Teaching

The underlying philosophy of “education“ is:

- to establish, improve and develop knowledge, science, art and culture;
- to transfer the general, scientific and professional knowledge and skills through teaching and research and
- to provide a possibility to acquire higher education throughout life.

Universities should provide for a “general” education in the tradition of classic humanities and specific training in preparation for the labor market.

3.7.1. Curricular Models for Undergraduate and Postgraduate Studies

Degrees and diplomas obtained at the University of Montenegro are the following:

- applied undergraduate studies diploma - after completed applied studies (study programme lasting 3 years), and after obtaining a certificate upon the completion of high school;
- academic undergraduate studies diploma - after completed research oriented studies (study programme lasting at least 3 years), and after obtaining a high school certificate;
- specialist studies diploma - after completing a study program lasting up to one year, and after obtaining applied undergraduate or academic undergraduate studies diploma;
- applied master studies diploma - after completing the study programme lasting up to 2 years, and after obtaining applied undergraduate studies or academic undergraduate studies diploma;
- diploma of academic title of master of science - after completing a study program lasting up to 2 years, and after completing an academic undergraduate studies program, both of which last a minimum five years;
- diploma of academic title of doctor of philosophy - after completing a study program lasting up to 3 years, after obtaining an academic undergraduate studies diploma and defending a doctoral dissertation. It is the final goal.

According to the needs, faculties organize various programs of professional development and training.

3.7.2. Implementation of the Bologna Process

As of the academic year 2003/2004, the first year of studies at the University of Montenegro is organized at most faculties in accordance with Bologna Declaration principles.

In the academic year 2004/2005, this regime of studying applied in the first year of studies at all faculties.

Full implementation of this system is foreseen by the year 2009.

3.7.3. Courses for Life-Long Learning and Vocational Training

Unfortunately, there are no courses for life-long learning. But according to the Statute of the University, the University can organize life-long learning programs out of programs which already have accreditation.

Since the reform of the university is underway, the introduction of this kind of course at the University probably will start soon, the necessary legal regulations being already established. As for the courses for professional training and practical work, a certain number of applied study programs already exists at the University, and some faculties organize professional training with an accent on practical application of knowledge acquired at these institutions, such as: Faculty of Economics organizes training for PR managers, Faculty of Law organizes the School of democracy, Faculty of Metallurgy and Technology organizes training for welders, etc.

3.8. The Composition of the Faculty Staff

The Managing Board upon the proposal of the Senate determines the number of Faculties and High Schools of the University and of the study programs. Faculties and High Schools so created may be dissolved or merged. The Managing Board upon the proposal of the Rector and the Senate determines the number and positions of staff at any faculty and high school.

Each Faculty has a council consisting of:

- Dean
- Vice-dean
- Professors and Assistant Professors
- A certain number, determined by the Senate upon the proposal of faculties, of other academic staff elected by the faculty staff, and
- A certain number determined by the Senate upon the proposal of the faculty, of student representatives elected by students at the faculty.

The ratio of professors/assistants is 365/356, of men/women 555/215 (data from academic year 2001/2002) and of scientific/non-scientific staff 794/400. The latest analysis of the age structure was carried out in 2001. According to that analysis average age of full professors was 57, Associate Professors 53 and Assistant Professors 40.

The last analysis of the national and ethnic adherence of the teaching staff at the University of Montenegro dating from 1997 indicates that of 593 of the employed in teaching 308 of them declared themselves as Montenegrins, 82 as Serbs, 58 as Yugoslavs, 3 as Albanians, 3 as Muslims, 2 as Bačka Croats, 1 as Polish, 2 as Russian, 1 as Slovak, 4 as Croatian, 117 did not declare themselves, and 12 as unknown.

3.9. Quality Assessment and Quality Assurance

The University performs a self-evaluation procedure, i.e. evaluation and assessment of the quality of its courses of study and work conditions. Self-evaluation is performed continuously, in accordance with the University statute. Self-evaluation methods are determined depending on curricula, teaching equipment, qualification of academic staff, teaching method, percentage of students who pass exams, percentage of graduates and other necessary indicators of the successful work of the institution. Assessment of curricula quality is performed by the Higher Education Council for each program during a maximum five year period, by appointing expert bodies (committees) for particular curricula. International experts may be included into expert bodies as consultants.

Selection of candidates to be enrolled into the first year of undergraduate studies is based on two cumulative criteria:

- results obtained in secondary school (school leaving exam)
- results obtained at the entrance exam (for faculties of arts)

Persons who have completed adequate undergraduate studies have the right to enroll in postgraduate studies. A person who has the academic title of master of science or a master of arts can enroll into doctoral studies.

The requirements for appointment and promotion to any grade, except at the faculties of arts are the following:

- for the title of Professor the applicant must hold at least the degree of Ph.D. or equivalent, demonstrate a high level of knowledge and scholarship in the subject, evidenced by publication in refereed international and domestic scientific journals, textbooks, monographs, participation at international conferences and other activities and show evidence of academic leadership;
- for the title of Associate Professor the applicant must hold at least the degree of Ph.D. or equivalent, have publications in refereed international and domestic scientific journals, demonstrate good performance in teaching and research work and show mastery of the subject in the appropriate field;
- for the title of Lecturer and High School Teacher the applicant must demonstrate good performance in teaching and research work evidenced normally by the possession of the degree of Master and be registered for the degree of Ph.D.;
- for the title of Teaching or Research Assistant the applicant must show competence in teaching or research respectively, must have the average grade in studies not lower than 8 or equivalent and be under 35 years of age.

At the Faculties of Arts:

- for the title of Professor the applicant must have made public international presentations of artistic works, in exhibitions, in music, in drama, or the equivalent, have contributed at a high level to the development of arts and culture, normally hold at least the degree of Master or equivalent and show evidence of academic leadership;
- for the title of Assistant Professor the applicant must have produced recognized artistic works or public presentations and demonstrate good performance in teaching;
- for the title of Lecturer and High School Teacher the applicant must demonstrate good performance in teaching and evidence of scholarly work or public exhibitions;
- for the title of Teaching Assistant the applicant must show competence in teaching or research respectively, must have the average grade in studies not lower than 8 or equivalent and be under 35 years of age.

All appointments are made on the basis of academic merit without discrimination on any grounds. All appointments to the grade of Associate Professor, Assistant Professor, Lecturer or High School Teacher are held for an initial period of five years, which may be renewed by the Senate upon the proposal of the Faculty of the High School Council, in accordance with the procedures for the initial appointment. Appointment to the grade of Professor is done for an undetermined time period.

Scientific-research activity at scientific institutes is performed by persons with a title in research, or science, in accordance with the Law on scientific-research activity.

The titles in research are researcher and senior researcher. A person with acquired at least a high school degree and who is engaged in research may be elected to the title of “researcher”. A person with acquired master of science academic degree and having published scientific papers may be elected to the title of “senior researcher”. More precise conditions, the time period the person is elected for, the way and procedure of the appointment into research titles are regulated by the statute of the institution.

Titles in science are: science assistant, senior science assistant and science councillor. A person with the doctor’s degree may be elected to the scientific title of “science assistant”, “senior science assistant”, or “science councillor”. The election into a scientific title is performed for a period of five years, except for the scientific councillor, who is elected for an indefinite time period. The election into higher academic titles is performed after the expiration of the election into lower title time period. The way and procedure of the election into academic titles, as well as other questions related to the election are regulated by the statute of the institution.

There are 22 566 graduate degrees (diploma, four-year duration), and 166 bachelor degrees (according to the new reformed system), 12 461 two-year studies degrees, 180 master theses and 150 PhD theses awarded at the University of Montenegro.

3.10 Financing and Efficiency

The University is funded from the following sources:

- Budget resources allocated to science and research to the public interest
- Tuition fees and other fees paid by the students
- Intellectual and other services
- Donations, presents and legacies
- Projects and contracts with national, international, state and private entities aimed at promoting teaching, research and consulting activities.

Tuition fees can either be paid from the budget or the student pays for them. The Government of Montenegro determines the number of students to be enrolled into the first year of studies, as well as the tuition fee for self-financed students.

The Rector is responsible for the preparation of annual estimates of income and expenditure for consideration by the Managing Board, and the management of budgets and resources within the estimates approved by the Board.

The Managing Board appoints independent auditors to conduct an audit annually on the proper use of resources and avoidance of fraud and to issue a certificate thereon. The auditors also report, as and when requested by the Board, on the adequacy of financial control measures at the University, the cost-effective use of resources, adequate collections and special studies at any of the faculties and university units, or on administrative services.

3.11. International Co-operation

Foreign citizens have the right to be admitted to higher education institutions in Montenegro under the same conditions as the citizens of Montenegro, in accordance with this law and the statute of the institution.

The Government of Montenegro determines the number of foreign students to be enrolled into the first year of studies, as well as the tuition fee. At the University of Montenegro there are around 170 of foreign students in total. Most of them come from the former Yugoslav republics.

Regarding the export of students and researchers, the tendency to perform post-graduate studies abroad is increasing. As for the researchers, the tendency of going abroad for a long-term stay is considerably reduced. The largest so called "brain drain" is registered in the period from 1990-1998 (time of the disintegration of the former Yugoslavia) when from the University of Montenegro alone 49 doctors and magisters of science, the majority of scholars and assistants, representing the majority of young prospective staff left for abroad. Presently, with implementing the Bologna declaration principles enhanced student and researcher mobility is enabled, but large financial barrier is still present because of the large difference in living standard between the EU countries and Montenegro.

Regarding the integration into international networks, the University of Montenegro is a member of the European University Association (EUA), Community of Mediterranean Countries Universities. Since 2002 a number of projects have been realized at the University of Montenegro within the European Union programmes: TEMPUS, SOCRATES, ERASMUS-MUNDUS.

The University of Montenegro cooperates with UNESCO, Council of Europe, American Councils, WUS-Austria, British Council, DAAD, etc.

The University cooperates directly or through its units with numerous scientific and educational institutions in the country and abroad. Cooperation with foreign institutions is realized through direct accession to numerous international university associations and networks, as well as through agreements on direct cooperation.

The University has agreements on scientific and educational cooperation with universities in Bari, Rome, Warsaw, Moscow, Shkodra, Bremen, Oslo, Bergen, Turin and Pescara.

In the framework of the agreements on bilateral cooperation at the Ministry of Education and science and the Republican Bureau for International Scientific, Educational, Cultural and Technical Cooperation there are 7 scientific projects with Slovenia submitted for 2006/2007 and 3 projects submitted with Former Yugoslav Republic of Macedonia. The call for project proposals in the framework of the bilateral cooperation with Greece is now open.

Since 2002, the University of Montenegro has been involved in several projects within TEMPUS programme of the European Union. Tempus projects which were realized or the realization of which is in the course are as follows:

- JEP 16127 – Standardization of Curriculum for Electrical Machines Using Multimedia
- JEP 16072 – Information and Communication Technologies in Health Care
- JEP 16050 - Developing Quality Assurance in Higher Education
- JEP 16081 - Improvement of Teaching Quality in South East Europe
- JEP 16061 – A European Space of Justice
- JEP 16098 – Small and Medium Enterprise Network in BiH and SM
- JEP 17023 - Development of a Model of a University Management
- JEP 17027 - Upgrading Undergraduate Business Studies in FRY

Tempus projects the University of Montenegro is currently applying for are: SCM Introduction of Quality Assurance System at the University of Montenegro and JEP Rebuilding of the International Relations Office at the University of Montenegro.

The University has also intensive cooperation with German Rectors Conference, UNESCO, Council of Europe, American Council for International Education, WUS – Austria, British Council, DAAD etc.

The University hosts a certain number of visiting scholars. Most of them are coming from the countries of former Republic of Yugoslavia, considering the fact that there is no language barrier. Also at the study programme for teacher training in the Albanian language there are a large number of visiting scholars coming from Albania who teach at this study program. The Faculty of Philosophy in Niksic is hosting several lecturers from different countries. Faculty of Economics often hosts lecturers from abroad to teach at post-graduate studies and at the final year of undergraduate studies.

3.12. Transdisciplinarity

Generally, research and teaching has being isolated through specification of research subjects and disciplines within particular subdivisions of the universities.

Regarding inter-disciplinary programs, as of the present academic year a postgraduate study programme has been organized at the Faculty of Economics, for which, beside the students that have graduated from economics, also students who have graduated from other faculties with four year study programme can apply. Those students who have graduated from other faculties are provided with a possibility of organizing a preparation program for them, of the entrance test, which would sublimate in itself the knowledge necessary for attending the course.

3.13. Co-operation between Industries and Universities

Economic actors do participate in the financing of the universities through charging for the intellectual services the University is offering them, and also through participating in the costs of the realization of some joint development projects. A Fund for the enhancement of the staff base of the University was formed last year, where economic actors (such as Telekom of Montenegro) invest their resources in university staff training, as well as in training of non-university staff engaged in activities of general social interest.

Generaly, cooperation between industries and the university does exist, but it is considerably reduced comparing to the earlier situation because of the difficult situation the industry of Montenegro finds itself in. There are also no spin-off enterprises

3.14. Role of Universities play in Inter-ethnic Co-operation

At the University of Montenegro teacher training in the Albanian language study programme has existed for already two years, which has considerably enhanced inter-ethnic cooperation. Since the management of the university is distributed between three supreme university administration bodies – the Senate, the Rector, and the Governing Board – there are no conflict management activities at the University. There are also no specific research activities or seminars organized at the University.

Since there is a Teacher Training Study programme in the Albanian language attended by the students of The Albanian minority and a number of a foreign students or students adhering to different ethnic groups studying at the University, there is a level of multy-ethnicity at the University but there are no ethnic distances or discrimination between the students at the university level.

3.15. Reforms, Trends and Expectations

The university reform has already been completed. Generally there is a trend toward greater international involvement. In the framework of its different projects the EU offers the possibility of mobility and training of the academic staff. However, there are only few projects offering financial assistance for the modernization of the laboratory equipment, which is mainly inadequate and misused to enable the achievement of significant results and patents. Our scientific institutions mostly can assure only the academic staff of good quality, but not the equipment necessary for joint preparation of the scientific-research projects within different EU programmes. Investing in equipment would be particularly important for enhancing the scientific-research activity in Montenegro.

4. NOT UNIVERSITY RELATED RESEARCH INSTITUTIONS

4.1. Academy of Sciences and Art

The Montenegrin Academy of Science and Arts (CANU) was founded in 1973. CANU is an independent scientific organization which associates distinguished scientists and authors\creators in all fields of sciences and arts. It works according to the Law, which was adopted in 1976. There are by-laws, such as the Statute of the Academy, Standing orders on the work of the Parliament, Rules of procedure on the work of the Presidentship of the Academy and Rules of procedure of the boards for particular science fields...

The Academy realizes its activities through following departments: social sciences department, natural sciences department and arts department. The work is carried out through divisions for particular science fields.

Members of the Academy are elected during a special session of the Parliament of the Academy. Regular members are elected by regular, and the rest of members by regular and irregular members of the Academy. Members of the Academy are elected by secret voting. The candidate who has won the majority of votes of the elective body is elected for the member fo the Academy. The Statute of the Academy regulates more closely the criteria, manner and procedure for the Academy members election. Candidates for the members of the academy may be proposed by: sections of the Academy, at least three members of the Academy, higher education institutions, science institutions, academies of arts, associations and societies in the area of science and arts.

In view of realizing its activities the Academy has in particular the responsibility to:

- organize and perform, independently and together with other scientific institutions, scientific research.
- organize individual scientific and artistic work and scientific work in other scientific institutions.
- support the qualification and training of the scientific and artistic new generations.
- issue publications in the field of science and arts containing the results of the scientific and artistic work;
- encourage and cultivate scientific critics;
- organize collection of scientific materials, scientific literature, as well as of other sources of knowledge in the field of science and arts.
- propose initiatives and give suggestions and opinions to the state bodies and other holders of the economic, cultural and public life in order to enhance conditions for scientific work and artistic creation, promote science organizing and solve particular long-term and current material and spiritual social development issues.

The Montenegrin Academy of Sciences and Arts is an association of scientists, i.e. an assembly of elected members thereby honoring their scientific achievements. Now, there are 41 members (28 regular and 13 honorary) and 17 corresponding members of the Academy.

Regular and irregular members of the Academy have a right to a monthly allowance for the contribution to the execution of the programmes and objectives of the Academy.

The Academy annually awards three prizes to young and successful scientists from the fund !Petar Vukcevic!. Also, the Academy awards 3 scholarships per year to the best students. At awarding prizes and scholarships it is taken care that all fields of science and arts are equally represented.

For the corresponding member of the Academy may be elected an distinguished scientist or artist, citizen of the Serbia and Montenegro, whose place of residence is out of territory of the Republic of Montenegro, and whose results of work in the field of science, or arts represent a high achievement and have general recognition.

For the corresponding member of the Academy may be elected a foreign citizen, distinguished scientist, or artist who cooperates with the Academy or is in other way meritorious for the science or arts development.

Within its activity the Academy has an intensive cooperation with other academies of sciences and arts, scientific and higher education institutions, research and development centers, scientists and other creators, scientific and arts associations and other kinds of scientists and artists forms of organizing abroad (last year agreements on cooperation with the academies of sciences and arts of Turkey and Romania were signed, agreements with the academies of Slovenia, Albania, Ukraine, Moldova, Belorussia, Estonia, Greece, Slovakia, Bosnia and Herzegovina, Macedonia, Bulgaria, Russia, etc. already exist, and negotiations with Croatian academy of science are on course).

The Academy realizes its activity by realizing the scientific research, publishing scientific results, organizing scientific meetings and other forms of scientific and artistic activity, through sections/departments, boards and other forms of organization and work stipulated in accordance with the Statute of the Academy.

The Academy is an independent institution with rights, obligations, commitments and responsibilities it has on the basis of the Constitution, law, the Statute of the Academy and other positive provisions. The Statute and other general enactments of the Academy stipulate its organization, work and administration manner, in accordance with the law.

The resources for the work of the academy are provided from the budget of the Republic, based on the work program of the Academy. Resources of funds, legacies, foundations, resources deriving from contracts with third persons, resources from donors and from other sources may be used for the work of the Academy. The resources of the Academy are stipulated and allocated by the financial plan of the Academy. The Academy, in accordance with the law, disposes independently of its resources. The Academy can be financed also on the basis of resources realized through the contracts with third persons for giving intellectual services.

CANU is an independent scientific organization which associates distinguished scientists and authors in all fields of sciences and arts, with the aim to develop the scientific thought, generate and enhance art, perform scientific research and to encourage independently or in cooperation with other scientific organizations the work and the activity of scientific organizations and scientists.

Membership in the Academy is acquired exclusively on the basis of scientific achievements, and not on the basis of the ethnic adherence. Currently, regular and irregular members of the Academy declare themselves as Montenegrins and Serbs.

Considering that the Academy was established almost in the same time as the University of Montenegro, the most significant achievement of the Academy is considered its contribution to the establishment of the scientific-research institutions within the University of

Montenegro, in which way the Academy has considerably contributed to the scientific activity development in Montenegro, and especially to the scientific institutionalisation.

The Academy is, also, very proud of its book-publishing. The Academy publishes continual, periodical and occasional publications (Annual\Yearbook, Messenger\Herald of the natural sciences department, Messenger of the social sciences department and Messenger of the arts department), and monograph volumes (Collection of scientific meetings papers, Special editions, Special papers, Historical sources, Critical publications, Bibliographies, Catalogues, Jubilean issues and Memorials). 280 volumes from different fields of sciences and artistic creation have been published so far.

The Academy has set forth the objective to finalise the macroproject of the Encyclopedia of Montenegro, the continual work on which began in 1997. The General alphabet is prepared, and around 500 authors are engaged in writing the texts of the terms.

Among the goals of the Academy is also to give a significant contribution to further promotion of research activity in Montenegro through realizations of different projects, organization of scientific meetings of interacademic and international character, at which the results of scientific-research work are being presented, through academic speeches, scientific tribunes and “round tables”.

Within its activity the Academy cooperates with other academies of science and arts, scientific and higher education institutions, research and development centers, scientists, artists and other creators, scientific and artistic unions and with other forms of scientists and artists organizing. Currently there are no reform plans.

4.2. Other Not University related Research Institutions

Within large industrial subjects (such as Aluminium Plant and Steel works Niksic) there are research institutes established with the aim of innovating and improving the production. These institutes had a good cooperation with the University, however after the privatisation of these industrial subjects the agreements on cooperation that were signed with these institutes have not yet been renewed. There are no private researchs companies in Montenegro and no private companies run their own research departments.

5. INTEGRATION INTO THE EUROPEAN RESEARCH AREA

There is sufficient information for taking part in EU programs but it is very difficult to comply with all the requirements necessary for participating in one of the EU programs.

6. THE NOT UNIVERSITY RELATED EDUCATION SECTOR

There are no educational institutions in the tertiary sector except the university.

7. INTEGRATION INTO THE EUROPEAN UNIVERSITY NETWORK

The University of Montenegro is a member of EUA (European University Association) and its recent reform activities are aimed to the integration into the European Higher Education Area.

Research Project UnivSOE

"Institutions of Tertiary Education in Central and South East Europe: Developments, Structures and Perspectives of these Institutions for their Integration into the European Higher Education and Research Area"

Country Report: Romania

Eva Lahnsteiner and Bogdan Aurescu
(with comments of Monika Vlad)

1. GENERAL CONSIDERATIONS	428
2. RESEARCH AND EDUCATIONAL INSTITUTIONS	428
2.1. Coordination/Cooperation of the Institutions	430
2.2. Regional and International Involvement	430
2.3. Administrative Structures	431
2.3.1. <i>The Ministry</i>	431
2.3.2. <i>Independent Advisory Bodies</i>	431
2.3.3. <i>Research Promoting Facilities</i>	432
2.4. The Development of the Research Quota	433
3. THE CONSTITUTIONAL FRAMEWORK	434
3.1. The Allocation of Competences for Research and Universities	434
3.2. Laws and Regulations	434
4. THE UNIVERSITIES	435
4.1. Legal Basis	435
4.2. Development and Recent Reforms	436
4.3. The Adequateness of the Legal Framework for Universities	437
4.4. Model of Organisation	438
4.5. Autonomy vis-à-vis the State, the Economy and other Social Factors	438
4.6. University Bodies	439
4.7. Funding of University Institutions	440
4.8. Research	440
4.9. Teaching	440
4.10. The Implementation of Bologna Process	441
4.11. Courses for Life-Long Learning and Vocational Training	442
4.12. The Staff Composition at the Faculties	442
4.13. Specialisation and Creation of Centres of Excellence	443
4.14. Quality Control and Quality Assurance	443
4.14.1. <i>Selection of the Students</i>	444
4.14.2. <i>Application, Appellate Procedure for Researcher and Teacher</i>	445
4.14.3. <i>Out-Put Evaluation</i>	445
4.14.4. <i>Financing and Efficiency</i>	447
4.14.5. <i>Tuition Fees</i>	448
4.14.6. <i>The Control of Financial Management</i>	448
4.15. International Co-operation	449
4.15.1. <i>Entrance into the National Universities</i>	449
4.15.2. <i>Foreign Students</i>	450

4.15.3. <i>Export of Romanian Students and Researchers</i>	451
4.15.4. <i>Integration into International in Particular European Networks</i>	452
4.15.5. <i>Bilateral and Multilateral Agreements on the Cooperation of Research</i>	453
4.15.6. <i>International Programs</i>	453
4.15.7. <i>Visiting Researchers Active</i>	454
4.16. Transdisciplinarity	454
4.17. Public-Private-Partnership Models for Research and Teaching	455
4.18. The Role-Model for Scientists	455
4.19. Inter-ethnic Co-operation	456
4.20. Trends	459
4.20.1. <i>Market Orientation – Greater International Involvement</i>	459
4.20.2. <i>University Reforms</i>	459
4.20.3. <i>Strengths, Weaknesses, Needs and Expectations from EU-Member States</i>	460
5. RESEARCH OUTSIDE THE UNIVERSITY REALM	460
5.1. Academies of Arts and Science	460
5.2. The Structure of the Romanian Academy	461
5.3. The Academy’s Self-Definition	462
5.4. Functions	462
5.5. International Contacts and Participation in Projects	464
5.6. Financing	464
6. OTHER RESEARCH INSTITUTIONS OUTSIDE THE UNIVERSITIES	464
7. EDUCATION OUTSIDE THE UNIVERSITIES	467
8. INTEGRATION INTO THE EUROPEAN UNIVERSITY NETWORK	469
9. CONCLUSION	469

1. GENERAL CONSIDERATIONS

MVlad: An analysis of this topic should not ignore the political situation in post-communist societies. In the words of Claus Offe, the anti-communist revolutions were “revolutions without a revolutionary theory”. This confusion today affects the lack of orientation during the endless “transition”. “Capitalism by design”, performed by an elite without expertise is the main source of disaster. This affects the educational process in many respects: incompetent people in key decision making positions have a communist heritage and are supported by the post-communist structures. The most frequent methods of teaching are memorizing, being afraid to ask questions and finally cheating in the exams.

Professors who care about their pupils transform the exam into a seminar, thereby trying to repair the damage done to the young minds through Stalinist methods. Of course grading becomes difficult, if not impossible under these circumstances.

The political class, which invests 2% of the national budget into education, is totally unprepared for the challenges raised by the emerging civil society. The most important potential Romania has is its intellectual force. The generation born right after the fall of communism will perform the much needed “creation of reform-oriented elites”. Until now, reform has been approached, but never performed, by the former communist nomenclatura. There is a very relevant thought of Jean Jaures I will use as a motto for the degeneration of the teaching model, particularly in Romania:

“You never teach others what you know, nor what you wish. You teach others WHAT YOU ARE.”

This means that the human spirit is, at first, character. And that Romania needs a moral reform in order to give values their due respect in the teaching area. Since Western Europe and Eastern Europe use the same concepts for different realities, a research project on the potential danger of verbal confusion and on the significance of languages should be done Europe wide. Let us start with the significance of the word REFORM itself!

There is no profound implementation of the Acquis communautaire, since principles of European legislation are automatically transferred, but not explained.

In order to achieve a successful reform of the educational system, we first need a new Constitution. But one drafted by liberal elites, not by theorists of Marxism still explaining the rule of law in “reformed” universities! Since the first Romanian Constitution was adopted in 1866, there have been 7 Constitutions. This means that no generation ever lived under the rules of one single fundamental law. Recent political scandals and crises were due to conceptual mistakes in the Constitution, regarding the functioning of public authorities. If a new Constitution is adopted in 2 or 4 years, new principles on the educational system will finally draw drastic incompatibilities between being a university professor, for example, and pretending to teach in addition to earning your living from other sources. Today, many amateurs are judges, prosecutors, managers of big businesses, but they wish to teach as an afternoon hobby. Since the law does not clearly define the limits of such cumulated professional activities, there will be no quality in the teaching environment ever, in spite of the creation of many new control authorities. MVlad

2. RESEARCH AND EDUCATIONAL INSTITUTIONS

MVlad: A general comment on the hypocrisy of the brain-drain: this should never be criticized in a country which shows the most unacceptable disrespect for its intellectuals. For example: a doctoral thesis defended at prestigious, world-famous university is not recognized in this country. The signal is clear: A Ph.D from Stanford is not good enough for the popular

university of Onesti city. I wish to insert this unusual comment here, since a flood of “reformed” institutions follows.

Private and public institutions operate higher education in Romania. In 2003/04 there existed 122 research and teaching institutions with 754 faculties and 620 785 students.⁶⁶⁷ The following types of research and teaching institutions can be distinguished: Universities, academies, institutes, colleges and schools for postgraduate studies. University education consists of short-term studies at colleges (3 years) and long-term studies (4-6 years) and postgraduate education, including doctoral studies. Article 55 (1) of the Law on Education enumerates the higher research and teaching institutions and mentions: “Universities, institutes, academies and schools for post university studies.” According to Government Decision 567/2005, the doctoral studies are organized as a distinct cycle of university studies and the institutes of higher education organizing doctoral studies become Institutes Organizing Doctoral University Studies.

Private universities, but also newly established public universities or faculties, must pass a process of accreditation and are then subsidized by the state. They are part of the national educational system and are in principle subject to the same regulations as public universities. They are, however, independent regarding their organization and their method of operation within the legal frame. Unlike public universities they can also prescribe tuition fees independently and without any limitations.⁶⁶⁸ In 2003/04 there were 67 (18 accredited) private universities with altogether 241 faculties.⁶⁶⁹

MVlad: There is no significant difference in academic quality between public and private universities. “Buying education” and diplomas is widely spread at public universities as well, since the number of places with tuition fees are increasing here, in spite of the Constitutional provisions clearly guaranteeing free education! Sure, private universities are more desperate for money, therefore they have partnerships with non-academic institutions who sponsor them in exchange for being allowed to use the ridiculous title of “associated professors”. Also, the new fashion is to fight for so-called “European certificates”, which give an appearance of knowledge and assure the outdated public servants that they may keep their jobs forever if they graduate from a “Master in European Studies”.

University colleges are either independent or they are, as in most cases, integrated into universities. Universities should offer college training courses in all subjects for which they are accredited in the area of long-term studies. These short-term studies should be abolished and changed into license studies (Bachelor in Austria). There are also university colleges established in cooperation with foreign universities (e.g.: College Franco-Roumain d’Etudes Europeennes, created by the Faculty of Law, University of Bucharest and University of Paris I Sorbonne).

Institutes: The study programs at institutes are practise-oriented and the classes offered are limited to certain subject areas. There exists e.g. the ITC, an institute for computer engineering.

Academies were the first educational establishments in Romania at university level. The first one (Academy Vasiliana) was established in the year 1640. Today the academies usually possess one main educational emphasis, such as music, arts, sports, military or diplomacy.

⁶⁶⁷ http://www.insse.ro/anuar_2004/zip_r2004/cap15-invatamant.pdf

⁶⁶⁸ <http://www.eurydice.org/Eurydice/Application/frameset.asp?country=RO&language=EN>

⁶⁶⁹ http://www.insse.ro/anuar_2004/zip_r2004/cap15-invatamant.pdf

The Academia Romana (Romanian Academy) could be compared to an academy of sciences. The academy does research and conducts postgraduate programs, in particular PhD-programs. MVlad: This appreciation is not sufficient. Let me just mention that the President of the Romanian Academy of Science –of course composed of 99% white males – admired the Lexicon of Saxon Dialects in Transylvanian as a “scientific work which should be translated into Romanian!” This much about the nationalistic approach to universal culture, notwithstanding the considerable salary a member of the Romanian Academy of Science receives for simply being “a member”.

Besides the universities and the research institutes of the industry there are publicly financed research institutes and private organizations which do research, e.g. the National Institute for Research and Development in Computer Science (ICI-<http://www.ici.ro/>) or PATRIR-Peace Action, Training and Research Institute of Romania (http://www.transcend.org/patrir_intro.htm) or the Research Institute eAustria in Timisoara (<http://www.ieat.ro/>).

2.1. Coordination/Cooperation of the Institutions

The higher educational institutions are under the supervision of the Ministry of Education and Research and their functioning is coordinated and set forth by it. Every year the principals must hand in to the Ministry a report on the condition of their institutions. This report has the status of a public document.

How higher education institutions and research institutes cooperate: The cooperation between them is related to experience gained by professors and students working and/or being trained in these research institutes. Sometimes students are trained or work for short periods of time (usually a few months) in these institutes. Students can also get help from research staff in the institutes while preparing the diploma project. There are also cases of PhD students who pursue their PhD program within research institutes. A small number of professors work at the same time as researchers in research institutes (e.g. in the research institutes of the Romanian Academy).

According to the Law 287/24 June 2005, the creation of university consortiums is set forth. Art. 2 defines the consortium as “a voluntary association of general interest established on the basis of a partnership contract, concluded in authentic form between two or more institutions of higher education, at least one of them being accredited”. The research and development entities can participate in the creation of a consortium (but not in more than one). According to the recent draft of the new Romanian Law on Higher Education, which is currently under public debate, the possibility for creating consortiums composed by universities and institutes of research on the basis of partnership contracts is provided for. Also, in the structure of the institution of higher education may include “institutes, centres or laboratories for organizing research”.

However, the cooperation and collaboration contracts between universities and research institutes are still rare. MVlad: In reality, such consortiums are fusions where the smaller universities are literally swallowed by those having more capacity to attract students and more money. This is usually a first step towards absorption.

2.2. Regional and International Involvement

Romanian universities and research institutes are involved in numerous international and European cooperation programs. At European level Leonardo da Vinci II, Socrates II, TEMPUS, ERASMUS and PHARE should be mentioned. (Details see later.)

Cooperation at regional level was institutionalized by the Black Sea University Network. The Ministry of Education and Research has concluded more than 200 bilateral cooperation agreements with approx. 100 other foreign state parties. The Ministry of Education and Research distributes information on European research programs like FP 6 Programs to encourage universities to increase involvement in international cooperation in the area of research.

2.3. Administrative Structures

2.3.1. The Ministry

The Ministry of Education and Research is responsible for both areas. It is responsible for coordination, financing and supervision of education and research institutes. MVlad: One small remark, the current “minister” of education has no idea how many stars the European Union flag has. He criticized his “incompetent advisors” because of this, in a televised show.

2.3.2. Independent Advisory Bodies

There are some advisory councils under the authority of the Ministry of Education and Research which play an important role in the area of financing and development of research. Except for the Council of Principals, these councils are not independent.

The Council of Principals consists of the principals of all accredited higher educational institutions and is consulted by the Ministry as an advisory council. It played an important role in the reorganization of the curriculum. Acc. to Law 288/2004 the Ministry of Education and Research fixes the duration of studies after a recommendation of the Council of Principals, which finally has to be confirmed by government decision.⁶⁷⁰

The National Agency for Qualifications in Higher Education and Partnership with the Economic and social environment (ACPART) (Agentia Nationala pentru Parteneriatul Universitatilor cu Mediul Economico-Social)⁶⁷¹ was founded by government decision in 2001 and has the task to promote cooperation between higher educational institutions, economic operators and other organizations and institutes. The Agency should encourage partnerships in the area of vocational training and specialization, transfer of technology, technology parks, labour market analyses, opening of educational institutions towards the economy and the absorption of graduates into the labour market. The development of an entrepreneurial dimension of the Romanian universities should be promoted. The Agency is also responsible for the implementation of TEMPUS III programs.

The National Agency for Academic Evaluation and Accreditation (Consiliul National de Evaluare Academica si Acreditare, CNEAA) was responsible for quality assurance and the process of accreditation between 1993 and 2005. The Agency was subordinated to the Romanian parliament. It was replaced by the Romanian Agency for Ensuring the Quality of Higher Education, which is in charge of both accreditation of institutions of higher education and quality control.

Such provisions are very improperly adopted through “emergency rules”, a very inappropriate way of setting rules in an educational system. It is rather proof of a totalitarian practice, which

⁶⁷⁰ New Report

⁶⁷¹ www.apart.ro

is to avoid the vote of a stronger majority in parliament through regular laws. Emergency ordinances may be adopted by a simplified procedure!

2.3.3. *Research Promoting Facilities*

The National Council for the Financing of Higher Education (Consiliul National pentru Finanțarea Învățământului Superior, CNFIS): Its main task is to report the financial needs of the educational institutions to the Minister of Education and Research and to make recommendations regarding the annual distribution of funds. It also gives recommendations regarding the division and distribution of foreign aid and the structure of grants and other supports for students financed by the state. The Council also suggests amendments to the law and is involved in the verification of the financing of educational institutions.⁶⁷²

The National University Research Council (Consiliul National al Cercetarii Stiintifice din Învățământului Superior, CNCSIS): It is the most important organization for the funding of research at universities and postgraduate research programs. It has the function of a government representative and its functions under the authority (MVLad correction) of the Ministry of Education and Research. (MVLad: finally, some competent people managed to function inside these structures, breaking with the terrible post-communist rule of promoting nephews, wives, mistresses and other relatives of influential people).

It should serve as an interface between research and politics and should support the points of view of the academic arena towards the government. It has been a member of the European Science Foundation since 2003.⁶⁷³ The CNCSIS plays an important role in the allocation of funding and in research evaluation. The funds are allocated on a competitive basis and project-oriented and are part of the extraordinary funding of education and research, which shall contribute to “building excellence”. This money makes up 8% of the public funds at most for the complete funding of research and is allocated by the Ministry upon the recommendation of the CNCSIS. The funds are not recoverable and are paid to individual researchers or coordinators of projects and are designed for the use in a precise time-table. The CNCSIS establishes selection criteria for the funding of research out of public funds and offers an institutional frame for fair competition within the Romanian university system and promotes the establishment of authentic selection criteria.

The CNCSIS shall create a positive environment for research and in particular for highly qualified young scientists. The CNCSIS should give incentives to scientists or research teams and promote team building and help scientists who are involved in projects to diversify their resources. It is part of the present program of the CNCSIS to form regional competence centres with an excellent infrastructure and management capacities within the university network to develop the capacity, to identify new external and internal resources of research financing.

Lately a significant increase of interactions and cooperation between CNCSIS and CNFIS could be recognized.

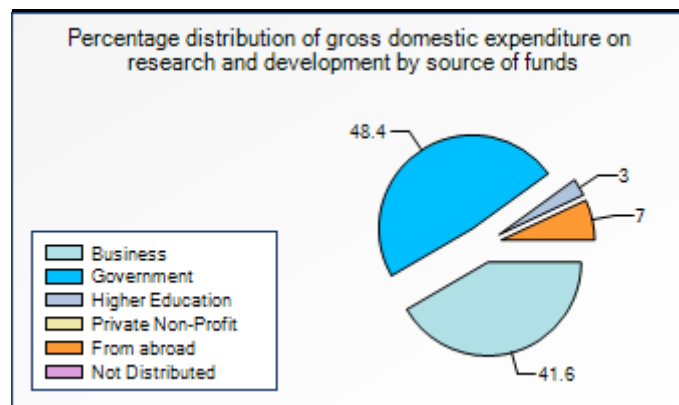
The National Authority for Scientific Research (Autoritatea Nationala pentru Cercetare Stiintifica, ANCS): it is a body subordinated to the Ministry of Education and Research having the mission to elaborate, implement, monitor and assess the policies in the field of research and development, as well as in the field of innovation. It also coordinates the execution of the State budget funds allotted for R&D activities. It was created in 2005. It supervises 7 institutions (institutions and centres of scientific research, technological

⁶⁷² <http://www.cnfis.ro/index.html> (homepage)

⁶⁷³ <http://www.cncsis.ro/English/home.php>; regulations for the operation and organization of the National University Research Council, <http://www.cncsis.ro/English/Granturi/regulations.pdf>

development and innovation), as well as 18 national institutes of research and development under its coordination. A complete list of these bodies can be found in the annexes of the Government Decision 1449/ 17 November 2005 regarding the functioning of ANCS.⁶⁷⁴

Research Expenditure 2002/03



2.4. The Development of the Research Quota

In 2006, the State budget allotted 0.38% of GDP (public funds) for research, which is almost double than in 2005 (0.26%). For 2007, the proposed figure is 0.58%. (prediction for 2009 – 0.93%)

During 1999-2001, the funds for research coming from economic agents were bigger than the public funds. In the period 2002-2003, the funds coming for research from economic agents were ca. 40% of the overall figure.

During 2001-2005, within the research programs financed through public funds, under the coordination of the Ministry for Education and Research and the Romanian Academy,

- the spending for fundamental research was ca. 25%-30%
- the spending for applicative research was ca. 70%-75%

The weight was on research dedicated to industrial technologies, technical sciences and engineering.

As far as economic agents' funds for R&D are concerned, in order to reach the 2% target in 2010, they have to grow 10 times (in 2005, the percentage was 0.2%). Certain general measures are envisaged for promoting this growth:

- adoption of specific fiscal packages to stimulate funding of R&D by economic agents
- promotion of financial services and instruments to support R&D activities of economic agents
- reorientation of the State Aid instruments, in accordance with the EU Law, for supporting the R&D activities of economic agents.

⁶⁷⁴ http://www.mct.ro/ancs_web/index.php?action=viewart&artid=656&idcat=113

3. THE CONSTITUTIONAL FRAMEWORK

MVlad: Quoting constitutional provisions are quite irrelevant, since important concepts like “academic freedom” are not defined, and since there is growing public awareness that the Constitution should be changed. But it is still symptomatic for the situation in Romania, of course.

3.1. The Allocation of Competences for Research and Universities

Article 135 (2) of the Constitution states that the Romanian state is required to protect national science and technological research. Romania is a centralized state and therefore there is only one national legislator and all laws have to be passed by parliament. The execution is usually in the hands of the Minister of Education and Research (Ministrul Educației și Cercetării). For the area of culture the Minister of Culture and Religious Denominations is responsible. A state minister is entrusted with the coordination of activities in the area of culture, education and European integration.⁶⁷⁵

3.2. Laws and Regulations

Academic freedom per se is not included in the Fundamental Rights Catalogue of the Romanian Constitution. Constitutional guarantees can be derived from the right of freedom of speech and the right of autonomy of the universities.

In the Statute on the Teaching Staff, chapter IV deals with the rights and duties of teachers. The teaching staff at universities is also bound by it and there is no provision dealing with academic freedom per se. Article 95 (1) of this Law says that teachers are also bound by the provisions included in the university charter. Academic freedom is, however, included in every ethic codex of the universities, and students as well as teachers are bound by it. The corresponding provision from the codex of the Academy for Economic Studies in Bucharest is eg:

“Article 7. Academic freedom

(1) A.S.E. is a space where professional and scientific values are protected and they can be freely expressed against any intervention, pressure and external manipulation of them. Are excluded the acts of political obedience or ideological conformism. The members of our community are protected from any act of manipulation, persecution or censorship, no matter of its source. In the same time, a climate of legality and morale engagement will be foster in order to respect the other’s freedom.

(2) No matter of political orientation or religious beliefs of those who work in our institution, the academic freedom is enhanced though the right of being different, the encouraging of critical approaches, the cooperation and intellectual partnership. The academic freedom also protects the right to privacy and confidentiality.”

The Codex of the University of Bucharest is similar:

“Article 1. The University of Bucharest provides their members with complete academic freedom, protecting them against requests, pressures or constrains of political, religious or economic nature, as well as against censorship, on the following condition: they have to respect the scientific, legal and ethical standards and to proof professional responsibility.

⁶⁷⁵ Romanian Government www.gov.ro

- a. The research results obtained by the university members are not to be modified, hidden or denied, not even when they injure some ideologies or religious beliefs, raising reactions from their representatives.
- b. The moral duty of scientific objectivity obliges the members of the university to reject the idea of 'produce' results suggested by sponsors.
- c. The academic freedom is not to be used as an argument to reject scientific and ethical criticism that are necessary for research evolving.
- d. No person, under no circumstances, within the University of Bucharest has the right to impose religious beliefs, political attachments or other forms of convictions that can only constitute private issues of each of the members of the institutions.
- e. the University of Bucharest protects the right to confidentiality of it's members (students, professors, technical staff, etc). Any private issue would only be referred to with the approvals of the dean and principal of the university and only in the case of just requests."

The University charters and codes of conduct of other universities are similar.

4. THE UNIVERSITIES

4.1. Legal Basis

Higher educational institutes, public as well as private, can only be founded by law after they passed a process of accreditation. This is prescribed by Law no. 88/1993 on the Accreditation of Universities and the Recognition of Degrees.

The most important legal basis for all areas of education is the Law on Education (Legea învățământului) from 1995 with its amendments. It is the Law no. 84/1995 of July 24, 1995, published again in the Law Gazette no. 1147 of 19 December 2005. Also of importance are Law no. 28/1997 on the Statute on the Teaching Staff and Law no. 88/1993 on the accreditation of higher educational institutions and about the recognition of diplomas.

MVlad: There is lots of public discussion about this legal project, but no REAL public debate. The same can be said about the legal project on the status of teachers and university professors, which has been posted on the internet without inviting comments or amendments. Waiting for public debate is totally different from inviting dialogue!

The Law on Organization of University Studies no. 288/2004 introduced a 3-stage study system in line with the Bologna process. At the same time, article 16 (1) of this law prescribes that the short-term studies cannot start – anymore at public universities as of the academic year 05/06 or these studies are changed into studies with a final degree (1st step Bologna). However, at the moment the college studies according to the old system still exist.

Law no. 60/2002 made it possible for students studying at private universities to take final examinations at public universities and through Law no. 62/2002 the governmental regulation on Romanian universities abroad was legitimized. Of importance are also emergency regulations and regulations of government and of the Ministry of Education and Research as well as government decisions.⁶⁷⁶

The charter of the universities is passed by their senate under consideration of the laws.

⁶⁷⁶ Romania Ministry of Education, Research and Youth General Division for Higher Education Country Report European Conference of the Ministers of Education Berlin, September 2003.

4.2. Development and Recent Reforms

Higher education arose in the middle of the 17th century in the area of today's Romania. The first university, the Academia Vasiliana, was founded in 1640 for the studies of Latin and Slavonic studies. The "Academia Domneasca" from "Sf. Sava" in Bucharest was founded in 1680. It existed until 1814 and the academic language was Greek. In 1707 a similar institution was founded in Iași. In 1835 the Academia Mihaileana in Iași was founded, where in Romanian was taught and which consisted of 4 faculties. These were philosophy, jurisprudence, theology and one for other courses like philology, engineering and economy. In 1818 the first university was founded in Bucharest, which offered almost all study areas and teaching took place only in Romanian. The first university which was designed according to modern principles was founded in 1860 in Iași. In 1864 the common university of Bucharest was founded, which included a philosophical, philological, juridical and soon afterwards also a medical faculty. At the same time in Bucharest and Iași the academies for music and visual arts and the academies for fine arts were founded. The first Law on Education dates from 1864 and was the basis for the modern Romanian education system. The University of Cluj can be traced back to a Jesuits College from 1581, which had the Italian Antonio Possevino as its first principal. In 1776 a German university was founded by Maria Theresia, which was, however, replaced by Joseph II by a Latin Piaristen Liceum. In 1872, an exclusively Hungarian university was founded, which became in 1919 an exclusively Romanian university. Due to the Vienna Dictate, resulting in a territorial cession of Northern Transylvania to Hungary, in 1940 the Romanian university was removed from Cluj and the Hungarian University in Szeged was transferred to Cluj. After 1945 the Romanian university was retransferred and named the "Babeș University" Cluj, while the Romanian state established the Hungarian Bolyai University. In 1956 both universities were united to become the Babeș-Bolyai University Cluj.

In 1997 the Ministry of Education and Research started the "University Training and Research Project". It was financed by the national budget, with Mill \$ 50 from the World Bank and with Mill \$ 9.6 financial aid of the EU. The implementation of the project led to an improvement of university management and quality teaching, to new curricula and to further development of the postgraduate education and of research programs. Through a PHARE program of the EU, a new financing mechanism was developed which was based on the conclusion of contracts between universities and ministries. The project was completed in 2001 and led to infrastructure reforms namely to the foundation of the CNFIS and the CNCSIS.

The acceptance of the Copenhagen Declaration and the necessity of changes in the context of the Bologna process led to the present reform program and to the draft of a development strategy for 2002-2010.

The reform triggered a change from a centrally organized system with subsidies on application to a decentralized system which is based on institutional autonomy and on academic freedom as well as on independent financing and responsibility.

MVlad: This comment really means nothing, it is the commonly used communist wooden language!

At present, Romania applies the development strategy for 2002-2010. The latest reforms almost exclusively can be traced back to the implementation of the Bologna process and were realized step by step starting in 1999. Short-term studies and long-term studies were more clearly defined and at the same time a clear separation between universities and university

colleges was introduced. National standards were introduced for the temporary authorization and accreditation of educational institutes as well as the ETCS.

Curricula became more flexible by offering more choices and gradually a more individual time of study was made possible. Internal and external evaluations were expanded and a university ranking was introduced, which is relevant for the financing. A global financing method was introduced which used the number of students as the main indicator. The changes were also caused by the strong increase in the number of educational institutions. While in 1989 only about 30 higher educational institutions existed, in 2001 the number had increased to 141 universities nationwide. The system of private universities was strongly changed after 33 of them were closed because of crass violation of quality standards, bad organization and curricula. In the past –and in the present –due to corruption and other irregularities several private universities have been accredited with no reason and it is planned to re-accredit all studies and universities in the name of quality assurance by a special council.

According to the data provided by the National Authority for Scientific Research in the Annual Report of 2005 (regarding the government policies in the research-development and innovation field), the system of higher education comprises 125 institutions of higher education, out of which 56 are public universities (with 742 faculties) and 18 private universities.

The new law on higher education is (MVlad: not) discussed and would have been planned already for the school year 2005/06. A new draft is under public debate since October 2006 and it is planned for adoption by the end of 2006. MVlad: In July 2007 the law is still not adopted, although there has been a public debate with university presidents country-wide recently.

4.3. The Adequateness of the Legal Framework for Universities

MVlad: Romania needs a transformation of the mass universities into elite-forming universities. The legal framework should promote this change. Also, there is a terrible decline in the use of libraries and of sources of scientific and artistic information, versus widely-used forms of subculture.

The Law on Education and the Statute on the Teaching Staff support certain situations in the educational system which has had an adverse effect on a sustainable implementation of the educational reform. These laws contain centralistic, populist and egalitarian tendencies, which lead to a strong bureaucratization. Furthermore they cause an isolation of the educational institutes from their economic, administrative and cultural surrounding and discourage people from producing scientific research. Therefore a change of the legal frame is necessary. At the moment the only realistic change exists in first changing the existing legal system and to create the basis to pass a university law and a separate school law based on a modern law on education.

An administrative reform should accompany this process, which changes the organization and the domain of business of the Ministry of Education and Research. The priorities of this reform should contain e.g.: a new, simpler staff structure with a reintroduction of the department structure e.g. a department for libraries, department for research, etc. The responsibility of leading staff should be defined more clearly and encouraged. The quality of

the staff should be increased and highly qualified experts should be consulted e.g. in advisory committees. Functional autonomy should be introduced.⁶⁷⁷

4.4. Model of Organisation

The composition and the mode of appointment of university organs as well as the participation of students in decision-making processes are prescribed by law.⁶⁷⁸ The following institutions with leading functions are provided for: senate, faculty council, college council, department councils and bureau of the professorship. Further organs and committees can be set up by the university charters.

One quarter of the members of the faculty council has to consist of students⁶⁷⁹ and the student organisations are consulted at the national level by the Ministry of Education and Research.

The university is conducted by the senate, which is headed by the Rector. According to the law all faculties have, as prescribed by the university charter, the right to representation. Students and the scientific staff are also represented according to the university charter.

The deans, the heads of the departments and the heads of the colleges possess a legal right to membership.⁶⁸⁰ The administrative office of the senate consists, according to the law, of the Rector, the Vice-rectors, the scientific secretary, the administrative director and a student representative. The Rector can invite further persons, like representatives of interest groups, to the meetings.

According to the draft of the new Law on Higher Education, the senate is headed by a president. The Rector cannot be a member of the senate. There is a clear distinction between the deliberative bodies of the universities (the senate and the board) and the executive ones (rector, pro-rector, deans, pro-deans etc). A person can be member either of a deliberative or of an executive body.

The attributes of the senate are to initiate, analyze, and adopt policies and strategies regarding academic management, and to ensure the quality of teaching and research within the university.

The Board will be composed of 7 members: 3 nominated by the senate, 3 by the minister of education, and one by the trade unions of professors. In the case of private universities, instead of the 3 members nominated by the minister of education there are 3 members nominated by the founders of the university. After nomination, the Board is appointed by the minister of education for a 3-year mandate. The competence of the Board is to ensure the administrative and financial-economic coordination of the university.

4.5. Autonomy vis-à-vis the State, the Economy and other Social Factors

MVlad: The autonomy vis-à-vis state is rather rhetorical. Legal provisions guarantee it, but old mindsets do not allow a factual autonomy. Also, private universities are treated like step-children by the Romanian state. For example, private universities pay fees of thousands of Euros just for registration of Master programs with the Ministry of Education and Research, fees which are not required from public universities. Of course the Romanian state invests nothing in private universities either.

⁶⁷⁷ Marga, (2004) University Reform Today, p 37-38.

⁶⁷⁸ Article 67 et seq Law no. 128/1997 on the Statute on the University Teaching Staff (Lege privind Statutul personalului didactic)

⁶⁷⁹ Article 69 (1) Law no. 128/1997 on the Statute on the University Teaching Staff (Lege privind Statutul personalului didactic)

⁶⁸⁰ Article 68 (1) Law no. 128/1997

The autonomy of the universities is guaranteed under the heading “Right to Education” in article 32 (6) of the Romanian Constitution. Article 89 et seq of the Law on Education explains the article of the constitution in more detail. Article 92 (2) reads: “Academic autonomy refers to the management of the institution, structuring and workflow, classes and research, administration and financing.” The autonomy is based on the right of the universities to decentralized, self-management and on the right to academic freedom without any political, ideological or religious limitations. The autonomy is also based on the right to accept competences and duties in accordance with national strategy plans, which are set by law. MVLad: These duties, competences and rights - “rights and duties” are other names for being obedient and obey to the state abuse – are new forms of totalitarian thinking, since rights and duties are not properly defined by law as well as the rules which govern the academic life can be found in the charter of the universities. But the universities, public as well as most private institutions, are financially completely reliant on the state and therefore the autonomy of higher education is just an empty phrase. Furthermore, in the draft of the law on higher education the principle of autonomy will not be established.

In Romania, the financing of the research has two sources: First the fundamental research in the context of the FP6 and FP7 priorities and second applicative research in the context of the national plan for research and innovation, where there are several national priorities and the financing is based on contracts of the research staff or research centres with partners from microeconomic environment.

In conclusion, the autonomy of research vis-à-vis the economy is not complete. Concerning other social forces, it can be said that there is complete autonomy of research.

Research institutes have been massively destroyed during post-communism. There is a timid revival of projects, but with European funding and under full-time employment as an ideal setting. There cannot be quality research without a full-time basis. This also means that researchers should be able to earn enough money in order to devote all of their time to doing research.

4.6. University Bodies

The members of the senate are partly determined by the Statute on the Teaching Staff and partly by the respective university charter. The deans, heads of departments and the heads of the colleges have a legal right to membership.⁶⁸¹ According to the legal basis, all faculties have the right to adequate representation stated in the university charter. Students and scientific staff are also represented according to the university charter. The head of the professorship, the head of the department, the dean and the vice-dean and the principal of the colleges as well as principal and vice-principal are elected by a secret ballot for 4 years. All of them have to be university professors or at least assistant professors. Rectors and deans may have this position for a maximum of two mandates.

The Rector is elected by the senate and the Minister of Education has to confirm the election by regulation.⁶⁸² The Rector can also be removed from office by the Minister of Education under consent of 2/3 of the senate members.⁶⁸³ The university statutes state more detailed regulations on the election of the other organs in various ways.

⁶⁸¹ Article 68 (1) Law no. 128/1997

⁶⁸² Article 74 (1) Law no. 128/1997

⁶⁸³ Article 74 (3) Law no. 128/1997

4.7. Funding of University Institutions

The universities have autonomy in distributing their funds. There are lots of debates on how the funds are distributed within the university. The money is distributed to the faculties, depending on the number of students.

The faculty also has autonomy regarding the use of funds allocated. The distribution among the departments does not follow any criteria. Some people within the university state that there is a fight of interests between departments instead of rational argumentation.

MVlad: There is a conflict of interests due to the fact that private interests prevail over public interests, so groups fight each other ignoring the public benefits or the students' interests.

4.8. Research

The universities and research institutes are not able to create the settings for such activities to take place.

However, the Romanian legislation regarding the conditions for promotion of professors in higher professional degrees/positions encourages individual research. E.g. in order to become an assistant professor, a university lecturer has to be director of a grant project for scientific research or participate in 3 such grant projects. The subject of such research topics/projects is at the free choice of the researcher/professor (they are not "oriented" via a pre-established lists of themes/subjects); the quasi-majority of these projects is based on the idea of searching the truth without any other purpose in mind.

MVlad: Doing research is a gift which should be respected and cultivated by the state and by the gifted researchers themselves. Hard work is not encouraged, but the "Cut and paste method" widely spread. Really gifted researchers are isolated and often lack the money and influence in order to publish at their scientifically recognized publishing houses.

4.9. Teaching

Slowly, an interdisciplinary approach comes into action, with the very beneficial European assistance, for example in the efforts of joint degrees with universities in Austria, Germany, and France.

In the academic year 2005/06⁶⁸⁴ a 3-stage model was introduced for long-term studies.

- 1st step license (Nivel Licenta): usually 8-10 semesters (180-240 ECTS); Title: eg Economist licentiate.
- 2nd step master (Masterat): (90-120 ECTS or 60 ECTS) – master;
- 3rd step doctorate: (Doctorat) (duration 3 years, in special cases 4 or 5)

Table 2. Types of higher education, duration and mode of finalization of studies

No.	Type	Duration	Field	Finalization of studies
1.	Short-term (university college)	3 years	All	Graduation examination
2.	Long-term	4 years	Socio-humanistic Economic Artistic Sportive	License examination
		5 years	Technical Agricultural	Diploma examination
		6 years	Medicine Veterinary medicine	License examination
			Architecture	Diploma examination

68

Master: For admittance the finalization of a long-term study program, no matter from which field, is required. A master thesis has to be written and a “Master diploma” is awarded.

Doctorate: The doctorate is the highest academic education. It can be completed in all fields of science and arts. The legal basis of the doctorate is found in Law Nr. 288/2004. Special provisions for the application of this law are issued by the Minister of Education and Research and require the approval of the government. One can receive the doctorate either at a higher educational institution or at a research institute. The Romanian Academy has its own doctoral program. These institutions are authorized by the Ministry after a recommendation of the National Council for the Certification of Academic Degrees, Diploma and Certificates (CNATDCU) to run their program. These authorized institutions are called “Institutions Organizing Doctoral Studies” (IOD). The senate and the scientific council respectively of each institution release their own regulations according to their criteria of accreditation. For admittance to the doctoral study a master’s degree is required. Depending on the field, other prerequisites can be required. If you want to study law in Cluj you have to be able to speak two foreign languages. These studies can be done as a 4-year full time study program or as a part-time study. You need to attend seminars and have to pass exams. In addition a scientific piece of work –a paper - has to be written.

According to Government Decision 567/2005 and the Order of the Minister 4491/2005 regarding the organization of doctoral studies, the doctorate will become a distinct cycle of university studies. Two forms of doctorate are set forth: the scientific and the professional doctorate. There are two successive phases within the doctoral program: the advanced university training program (for 2-3 semesters, with 8-10 courses, seminars per week; during this phase, the project of the scientific research program is drafted. Pending its approval, together with the topic of the PhD thesis, the PhD candidate is promoted in the next phase) and the scientific research program (for 3-4 semesters during which the candidate prepares research reports). For justified reasons, (these are not clear, so one may interpret this statement abusively) the scientific research program can be extended for 1-2 years. As a rule, the thesis is to be defended in public session after 3 years since the registration of the candidate in the doctoral program.

DEA: The diploma can be compared to the French Diplôme d'Etudes Approfondies and should offer additional knowledge in the field of the attended long-term study. It takes 2 to 3 semesters, a final piece of work has to be written and a DEA diploma is awarded. Besides the diploma additional courses are offered where specialized knowledge is taught. In the field of medicine there are special forms of postgraduate courses, for which diploma or certificates are awarded.

Short-term university studies (Colleges): Short-term university studies usually take 3 years. There are exceptions e.g. for graduates of pedagogic schools which have to attend a pedagogic college only for 2 years to receive a degree. In principle, the graduates of these short-term university studies are only allowed to attend post-university courses and special training courses and no master program or DEA. However, the senate can set conditions under which graduates of these short-term studies can continue their studies in a long-term study program. In particular, credit transfers are possible.

4.10. The Implementation of Bologna Process

Romania takes part in the Bologna process. The Secretary of State for Higher Education is the representative in the Follow-up Group and works directly with the Council of Principals. The

Head Office for Higher Education within the Ministry of Education and Research is entrusted with the implementation of the Bologna goals and strategies.

In June 2004 a “Team of Bologna Promoters” was founded with the help of subsidies of the Socrates-Program of the European Commission. Its main task is to inform, to advertise and to support the educational institutions, so that the implementation of the Bologna process will be a success. All members of the team have worked in the area of higher education and are e.g. rectors, deans and professors as well as employees of the offices for international relations at universities. The implementation of the Bologna process was the main reason for the most important reforms that recently took place.

4.11. Courses for Life-Long Learning and Vocational Training

According to a governmental statement, lifelong learning and further education are two important priorities for the Romanian educational system. The introduction of corresponding programs made amendments to the laws and effective tactics and strategies necessary. Chapter IV of the Law on Education constitutes the legal frame on permanent education. The articles 133 et seq constitute the legal frame for corresponding educational programs. Special training courses for adults, further education or retraining can be offered by individuals and legal entities in cooperation with educational institutions or alone. After attendance of the courses a certificate is issued which is recognized on the labour market. The law guarantees support to course participants, e.g. the right of public servants to receive further payment, mileage allowances or other kinds of allowances. The law also makes the foundation of institutes and networks for open learning or distant learning by the usage of modern means of communication and technologies possible. The law applies to all universities in Romania, therefore numerous faculties offer corresponding programs.

In 1999, the Open University of Great Britain and the University of Bucharest founded the Centre for Distance Education for Civic Society (Codecs) in Bucharest. The teaching language is English. Codecs is financially supported by the British government.⁶⁸⁵

4.12. The Staff Composition at the Faculties

The Statute on the Teaching Staff⁶⁸⁶ mentions the positions of the teaching staff. These are: University teacher (preparator universitar), university lecturer (lector universitar), associate professor (conferentiar universitar), university professor and consulting professor.

According to the draft of the new Law on Higher Education, the position of university lecturer is not anymore included among the positions of the teaching staff. The same draft enumerates the didactic research positions: research assistant, scientific researcher 1st degree and scientific researcher 2nd degree.

In 2003/04 17 343 men and 12 794 women were teaching at Romanian universities. 42.45% were women; in 1993 only 30.8% were women.⁶⁸⁷

As for ethnic or national affiliation, there is improvement in the sense of a special quota for Hungarians and Roma. There is tremendous effort to give Roma an education, and some

⁶⁸⁵ <http://www.codecs.ro>

⁶⁸⁶ Law 128/1997

⁶⁸⁷ http://www.insse.ro/anuar_2004/zip_r2004/cap15-invatomant.pdf

young Roma desperately try to overcome their condition. It is a very positive social turn, thanks to European minority protection policy and legislation (MVlad).

MVlad: Romania is a paternalistic society, where women are subject to declared hatred, often by corrupt judges who pretend to be professors. But there is a general passivity of women to accuse such behaviour. Also, depersonalization of the important relationship between professors and students happens because of the widely-used electronic communication. Regarding the age of the staff, many retired judges, economists, former officers who excellently served the communist Romanian state wish to teach and they are the disaster of the academia. Through bribes and aggressive behaviour, they manage to usurp important management positions in private universities.

4.13. Specialisation and Creation of Centres of Excellence

The classical comprehensive university does not exist anymore in Romania. The medical students are usually taught at specialised universities and also the artistic and fine arts are taught at particular academies and universities. The universities for farming and veterinary medicine are also set up separately. There are, however, no clear regulations. For example, theatre, drama and film can be found in some places at universities of art in other places they are taught at general universities. Technical subjects are partly taught at institutes, at technical universities and at general universities.

There are universities which have specialized in certain fields. This is often the case at private universities. There is a public university for architecture or an academy for economics. The different confessions also run universities, academies and institutes of their own. There are also 7 military universities and institutes respectively as well as one university for sports and physical education. A diplomatic academy (currently under the name “Romanian Diplomatic Institute”) has existed for 6 years already.

4.14. Quality Control and Quality Assurance

GENERAL COMMENT: The information below has to be amended by taking into account the fact that the National Agency for Academic Evaluation and Accreditation (Consiliul National de Evaluare Academica si Acreditare CNEAA) has already been replaced by the Romanian Agency for Ensuring the Quality of Higher Education (ARACIS) (see the Emergency Ordinance of the Government 75/2005, approved by Law 87/2005 regarding the quality of education.) In 2006, a new Methodology for ensuring the quality, for the provisional accreditation and for accreditation of institutions of higher education was adopted by ARACIS. See for details <http://www.edu.ro/index.php/articles/c356/>.

Quality control takes place extensively at different levels. The evaluation system is presently being reformed. The Ministry of Education and Research is generally responsible for the evaluation of the educational system. The National Agency for Academic Evaluation and Accreditation (Consiliul National de Evaluare Academica si Acreditare CNEAA) plays a major role. The Agency has been responsible for quality assurance and the process of accreditation since 1993 and runs committees for the external evaluation and accreditation of educational institutions. The Agency is independent and is only subject to direct parliamentary control. The Agency has been a member of the International Network for Quality Assurance Agencies in Higher Education (INQAAHE) since 1996 and a member of the Central and Eastern European Network of Quality Assurance Agencies in Higher Education (CEEN) since 2002. The Agency has been trying to become a member of the

European Association for Quality Assurance in Higher Education (ENQA) although it does not take part in its activities. It is important that all public and private universities must pass a process of accreditation, which is conducted by the CNEAA. The process consists of two steps. The first step is a so-called “trust” diploma procedure, which authorizes the institution to hold exams. In the second step the institution is authorized to give/organize final examinations and to award academic titles. The introduction of new study programs is also subject to a similar process. First a temporary permit is granted and an accreditation only takes place after numerous examinations.

It is also important that the evaluation of a university has an effect on the financing by the state.⁶⁸⁸

4.14.1. Selection of the Students

The possession of a “baccalaureate diploma” (= high school exam, Matura) or a comparable certificate is an entrance prerequisite. The selection takes place either through entrance exams with or without consideration of the high school certificate, or according to the performance at the national baccalaureate exam and other performances at school. The value of the individual candidates can vary, depending on the field of study. If entrance exams are held they must be coordinated with the school curriculum and the schoolbooks of high schools and all candidates may take the examination in the language in which they were taught the corresponding subject at school. This guarantees equal opportunities for graduates of schools of national minorities. The exact entrance criteria and the procedure are set independently by each institute of education according to the university autonomy. However, when assessing a university both in the process of accreditation and in the process of quality control, the number of points for universities which decide to organize entrance exams is bigger. The Ministry of Education and Research, however, provides general guidelines by regulation.

The Ministry of Education and Research decides the number of places to study and fixes a certain number of students who are financed by the state. Universities can, however, accept more students, who then must pay for their studies. The students are accepted according to their ranking in the entrance exams and their written application. The best students receive the places free of charge.⁶⁸⁹

MVlad: This is shameless lie. Good students rarely have a chance to get in without charge, and the children of the new-riches are exempted automatically from fees! I know desperate situations when a father died because he had three jobs in order to pay the taxes for his daughter, the best student in class. Still, students finally rebel and strike against such abuses, which is quite encouraging lately.

This regulation leads to the following situation: many students who have Romanian as their mother tongue, attend a study program in German language since it is easier if they have excellent knowledge of German (because they went to a German private school before) to receive a study place free of charge there.⁶⁹⁰

⁶⁸⁸ Transparency of Academic Qualifications as a Gateway for Professionals’ Free Movement in Europe - Final Report.

⁶⁸⁹ <http://www.eurydice.org/Eurybase/Application/frameset.asp?country=RO&language=EN>

⁶⁹⁰ This conclusion is based on personal experience at the University of Cluj. In the winter term 2003, no third year student of philosophy had German as his/her mother tongue. For the study program philosophy/sociology in German 12 study places free of charge were offered (which was quite a lot) in comparison with the 62 in Romanian.

Direct enrolment without an entrance procedure for study places free of charge is also possible. The prerequisites are fixed by the Ministry of Education and Research every year. This possibility is offered to students who achieved extraordinary results at national and international competitions. The Ministry of Education and Research publishes a list of competitions which are generally acknowledged, and from which the universities can select autonomously the relevant ones for their institution. Of practical importance are the national and the international “Education-Olympics”, which are highly appreciated in Romania. According to the decision of the government no. 1004/2002 pupils who have won prizes at these events are allowed to study free of charge at two faculties of public universities.

For certain fields of study like architecture, sports, music or artistic subjects, students have to pass an additional aptitude test.

The basic criteria to be accepted into a postgraduate study program, excluding the doctorate, are prescribed by the Ministry of Education and Research and are completed by regulations, passed by the university senates. The selection process in DEA programs and master programs usually takes place through entrance examinations on a competitive basis.

The potential candidates for a doctorate program have to pass a challenging acceptance and selection procedure on a competitive basis. The entrance procedures take place every year at the beginning of the academic year and are carried out by a selection committee. The selection process is based on exams and on an assessment of the command of a foreign language.⁶⁹¹

4.14.2. Application, Appellate Procedure for Researcher and Teacher

The rector appoints staff members after they have gone through a predefined selection procedure. Assistant professors and professors are, however, only appointed when the Minister of Education and Research gives an order to do so.

The candidates must on the one hand satisfy (depending on the position) certain criteria and on the other hand go through an “open recruitment procedure”, which is conducted by the educational institution. The universities are independently responsible for the organization and execution of the selection, recruitment and contesting procedures. In spite of this, extensive details are prescribed by law. The law requires that all vacant teaching positions be published at least 45 days before the beginning of the semester at the bulletin board and at least in one national newspaper. Depending on the position, a minimum age is required and a certain time must have passed since the finalization of the study program. The committee which is entrusted with selecting the staff, consists of university professors and is selected by the faculty council and the senate.

4.14.3. Out-Put Evaluation

GENERAL COMMENT: The information below has to be amended by taking into account the fact that the National Agency for Academic Evaluation and Accreditation (Consiliul National de Evaluare Academica si Acreditare CNEAA) has already been replaced by the Romanian Agency for Ensuring the Quality of Higher Education (ARACIS) (see the Emergency Ordinance of the Government 75/2005, approved by Law 87/2005 regarding the quality of education.) In 2006, a new Methodology for ensuring quality, for the provisional

⁶⁹¹ <http://www.eurydice.org/Eurybase/Application/frameset.asp?country=RO&language=EN>

accreditation and for accreditation of institutions of higher education was adopted by ARACIS. See for details <http://www.edu.ro/index.php/articles/c356/>.

There are two different evaluation procedures for universities: the internal and the external evaluation. The latter is conducted by the CNEAA. The criteria for the external evaluation are connected to the fundamental tasks of the institutions. The CNEAA fixes the “assessment” criteria and distinguishes five categories of indicators. These are:

1. teaching staff,
2. curriculum,
3. infrastructure,
4. research,
5. financial management.

The external evaluation starts with temporary accreditation, 3 years later the accreditation takes place and then every five years an external evaluation is carried out. If the necessary standards are not met, a period of one year is granted for improvement. If the standards can still not be met, it can be forbidden that the university accepts new students in the concerned study program. If the whole university is concerned, parliament is consulted, which can abolish the legal basis of the university. This has already happened to quite a number of private universities.

At first an evaluation committee writes preliminary reports, which are presented to the universities for verification. Then the expert committee prepares a final report based on internal evaluation. This report is first discussed in the plenum by the CNEAA, then adopted and can contain recommendations for the university. The report is then transmitted to the Ministry and then sent together with its remarks to the university and is then published with the consent of the university. The final decision on the accreditation of curricula is taken by the government, the final decision on the accreditation of new universities by the legislature.

The internal evaluation is carried out by the faculty council or by the committees of the departments. This task is accomplished by evaluation committees at university level. The criteria are provided by the CNEAA and can be summarized in 7 baskets:

1. tasks and aims of the university,
2. student performance (e.g. the labour market situation of graduates),
3. content of the study program,
4. performance in teaching,
5. research,
6. infrastructure,
7. financial situation and management.

In the area of output evaluation of research, the general importance of the research results are taken into account as well as the number of publications and their quality. The national and international recognition of research results of the university, of the department or of research programs are also included in the evaluation.

Students are involved in the process as members of committees of the departments. University charters usually state that the opinion of the students (individually or expressed by their representatives) should be taken into account.

The individual performance regarding teaching and research of the scientific university staff is evaluated according to the legal specification every year and the results have an effect on

the payment.⁶⁹² The method of individual evaluation is prescribed by the Ministry of Education and Research after being confirmed by the government. The evaluation is carried out according to specific indicators. In accordance with the corresponding Regulation no. 238/2000 the following evaluation criteria have to be taken into account:

- publication of didactic material
- research
- national and international recognition
- teaching and support of students
- activities within the scientific society. (e.g. membership in committees)

The weighting of the evaluation criteria is decided by the senates every year. They can also introduce additional criteria which support the developmental policy of the institution and promote competition between universities. The sum of all criteria always has to be 100% and every indicator is evaluated on a scale from 0 to 5. The evaluation is carried out by the principal and is based on the recommendation of the chairs/heads of the departments, which are performed by the deans.

At the moment, the system for quality assurance is under reform. MVlad's comment: this is a typical communist phrase, saying nothing. More agencies means less quality.

Right now the focus of the CNEAA lies rather on accreditation. The evaluation of ongoing projects is rather in the background and is left to the internal evaluation. Since 2005 a draft has been in discussion and a law should be passed soon. A global approach to the evaluation of the complete educational system taking into account special methods for different levels of education should be found. It will work together with national and foreign universities as well as with European institutions (like the ENQA). In addition to that, the Ministry of Education and Research finances the research project CALISRO, which is based on detailed studies and discussions with scientific staff to develop and later introduce mechanisms for quality assurance.

4.14.4. Financing and Efficiency

In principle, the universities finance themselves through:

- money allocated on a contractual basis from the budget of the Ministry of Education and Research.
- money from various activities of the universities (like education programs, which are not free of charge, fees, adult education, renting contracts, transfer of technology, research contracts, etc.).
- money from other sources (like interest, donations, sponsoring, taxes, charges, etc.).

The basic financing for university places free of charge is assured through funds from the national budget. The amount varies depending on the kind and specification of the study program and according to other criteria like quality of the education. The financing is guaranteed through contracts with the Ministry of Education and Research. Besides the contracts about the publicly financed places, agreements about grants and about the social funds for students, about support for dormitories, about special investments, additional agreements about the funding of research as well as purchase and maintenance of equipment for the university are concluded.

Additional funding is provided by public funds and external sources like project grants which do not have to be paid back as well as subsidies granted by the CNCSIS and similar sponsors.

⁶⁹² Law no. 128/1997, Statute on the University Teaching Staff.

Among the supplementary financing through the budget of the Ministry of Education and Research one finds:

- support for university dormitories
- money granted according to specific legal provisions for certain projects and urgencies in the area of equipment of buildings, infrastructure and major repair projects.
- grants which are distributed on a competitive basis for research at universities. Universities compete e.g. for research programs, which are financed by Ministry of Education and Research (eg AGRAL, VLASAN, BIOTECH).

4.14.5. Tuition Fees

The Romanian Constitution states in article 32 (4) that public education should be free of charge and that the State shall award grants:

Art. 32 (4) RomCon: “State education shall be free, according to the law. The State shall grant social scholarships to children or young people coming from disadvantaged families and to those institutionalized, as stipulated by the law.”

Still, since the last educational reform took place there is the possibility of introducing tuition fees at public universities. Every year the government fixes a quota of places financed by the national budget. The exact number of these places is then determined every year by regulation of the Ministry of Education and Research on the recommendation of the Senate. Public universities can, however, accept additional students. With these additional students universities have to agree on the payment of tuition fees. These tuition fees are calculated by the senates according to the studies expenses.⁶⁹³ The number of places for which tuition fees have to be paid is usually 45-55%. Depending on the university, faculty and study program, however, the percentage can vary. For the execution of the entrance exams the universities may levy charges (according to the Law on Education), from which children of teachers are excluded, if they want to enter a public institution.

Students who live in university dormitories have to pay the costs for it partially. Universities offer full stipends as well as grants, which are granted on a competitive basis.⁶⁹⁴ Private universities can collect tuition fees from all their students.

According to Government Decision 769/2005 on granting scholarships, some scholarships may be granted to students living in rural areas if they have passed all exams, did not repeat any year of studies and if they agree to conclude a contract to teach, after graduation, in rural areas for a period of time at least equal to the one for which they benefited from scholarship. Reformulation by MVlad and comment: this is a typical communist regulation, totally against the principle of freedom of thought.

Also, students who live in places other than university dormitories may apply for monthly stipends, if they prove that the gross income per family member is not bigger than the gross minimum wage per national economy.

4.14.6. The Control of Financial Management

The financial management has to be taken into account both in the external and at the internal evaluation and at the final accreditation as an evaluation criterion. The CNEAA sets that the

⁶⁹³ Law 441/2001

⁶⁹⁴ <http://www.eurydice.org/Eurybase/Application/frameset.asp?country=RO&language=EN>

type of financing sources, the usage of the earnings, investments in further development and the acceptance of financial responsibility have to be taken into account in the evaluation.⁶⁹⁵

The CNFIS and the CNCSU give recommendations on the financial evaluation, which are then confirmed by the Ministry. These are then used to calculate the financial needs of the institutions. Based on these results, the Ministry of Education and Research concludes various financing contracts with the universities. The Ministry of Education and Research has to approve the budget of every university by regulation after acceptance of the state budget.⁶⁹⁶

4.15. International Co-operation

4.15.1. Entrance into the National Universities

The number of students who study at their own expense in Romania is limited by law to 3 500 per year. Foreign students have to register themselves at the Ministry of Education.

The Ministry of Education grants stipends to foreign students. Most of the times the high tuition fees do not have to be paid (completely or partly) and places in dormitories are provided. The stipends are granted under the following conditions:

- on the idea of reciprocity based on bilateral agreements
- because of Romanian interests for 150 students at most
- 80 stipends are granted by the Ministry of Foreign Affairs to students who come from countries with which there is no cultural agreement.
- 40 stipends are granted by the Minister of Economy and Trade to stimulate economic cooperation and contacts.
- 30 stipends are granted by the Minister of Education within special cooperation programs between ministries and institutions and are reserved for excellent students.
- 50 stipends are granted by the Romanian culture forum to foreigners of Romanian origin or to other foreigners with special interests in Romanian culture or science.

Foreign students who do not receive a stipend have to pay very high tuition fees. All foreigners must prove sufficient knowledge of the Romanian language in a language exam or are required to follow a pre-study language course. Students have to pay tuition fees for the preparation year, and the language courses during the semester can cost up to € 300 per month. At some universities, however, language courses are offered free of charge to foreign students. Applications for a place to study have to be submitted to the university both for short-term studies and long-term studies until September 1st of the academic year. Foreign students can also send their application documents to a Romanian embassy or to the Ministry of Education and Research. The Ministry of Education and Research grants special stipends to foreign students and there are special provisions for students from the Republic of Moldova. In 2002 9 730 incoming students were studying in Romania (only regular students excluding exchange students).

⁶⁹⁵ <http://www.cneaa.ro/english.htm>

⁶⁹⁶ <http://www.eurydice.org/Eurydice/Application/frameset.asp?country=RO&language=EN>

Tuition fees for foreign students, who pay on their own for their studies:

Study Profile	Undergraduate Education	Postgraduate Education
Technical, economics, humanities, agronomy, sports	320 USD per month	340 USD per month
	360 USD per month	380 USD per month
Medical and pharmaceutical		
Musical and artistic	470 USD per month	495 USD per month
Dramatic arts, theatrical and film direction	760 USD per month	800 USD per month

Region	Tuition Fee (USD)
Moldau	4100
Asien u. Naher Osten	1500
Griechenland	1250
übriges Europa	1150
Ukraine	750
Afrika	650
Amerika	200

4.15.2. Foreign Students

In the academic year 2002/03 9 730 foreign students were enrolled as regular students in Romania. In 2003/04 there were only 9 006. The number has been declining significantly for years: In 2001/02 there were 10 608 students, in 1999/00 there were 12 591 and in 1998/99 even 13 279. Students from Israel and the Republic of Moldova are, however, an exception: For students coming from the Republic of Moldova there are special provisions regarding admittance, tuition fees and stipends since many of them do not have the possibility to study in their native country and in Romanian respectively.

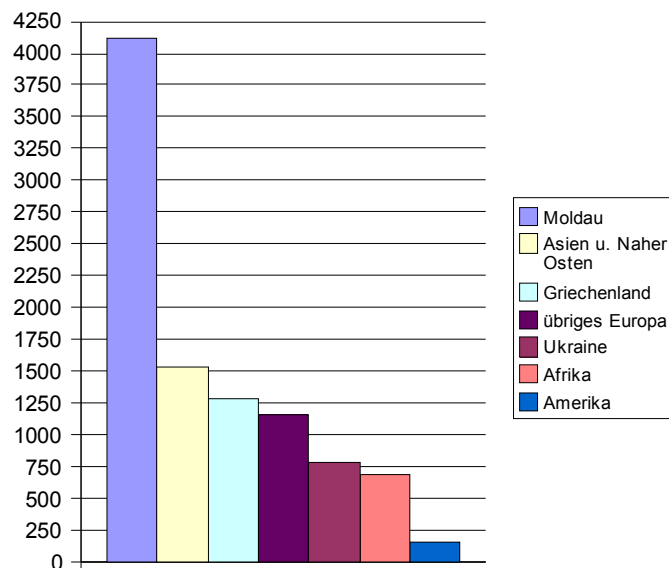
MVLad: This is due to the special relationship to Moldova, since this republic was a Romanian territory before Soviet occupation.

7 329 students were from Europe, among them 4 111 from the Republic of Moldova, 1 283 from Greece, 782 from the Ukraine, 302 from Albania, 213 from Serbia and Montenegro, 186 from Bulgaria, 128 from Germany and 5 students from Austria.

1 534 students were from Asia and the Middle East, among them 471 from Israel, 213 from India, 127 from Jordan, 112 from Pakistan and 135 from Syria.

685 students were from Africa, 225 of these from Tunisia and 175 from Morocco. 126 students were from North America, 30 from South America.

Foreign Students:



In the academic year 2002/03 there were altogether 596 297 students. That means that only 0.016% of the regular students were foreigners.

4.15.3. Export of Romanian Students and Researchers

Far more young Romanians study abroad than foreign students in Romania. In the academic year 2002/03 19 176 Romanians were studying as regular students at foreign universities.

The European Union should improve the student exchange program by stimulating students from all over Europe to travel and study in Romania. This reciprocity is not symmetric, since many Romanians study abroad, but very few Europeans decide to travel and study (go to conferences and summer universities) in Romania.

Romanian Students Abroad (2003):⁶⁹⁷

Australia	111
Austria	451
Belgium	330
Bulgaria	72
France	3642
Germany	3695
Hungary	3147
Italy	908
Japan	119
Republic of Moldova	734
Spain	623
Sweden	205
Switzerland	452
United Kingdom	447
United States	3407

In 2003/04 807 Romanian teachers took part in mobility programs.

4.15.4. Integration into International in Particular European Networks

In 1992, on the initiative of the Romanian Black Sea University (BSU) Federation, the Black Sea University Network was founded by 11 states. Many partners of the BSU Federation are also members of this network. Its aim is the promotion of university cooperation of states which are members of the Organization of Black Sea Economic Cooperation. At present, the network has 92 universities. The network also participates in other cooperations, like: the European Centre for Peace and Development in Belgrade; the Croatian Diplomatic Academy in Zagreb; the Mediterranean Academy of Diplomatic Studies in Malta; the International Centre of Black Sea Studies in Athens.

The national BSU Federation focuses on the organization of European summer schools for young scientists, economists, managers and teachers and builds up its competence in the area of further education. About 1 000 people from up to 42 countries take part in these programs every year. The Bruges European College supported it. The BSU Federation also has developed research activities through its research centres. It runs a National Centre for Sustainable Development (NCSD), a Conflict Prevention Study Centre (CPSC www.cpsc.ro) and a Laboratory for Information Technology in the Area of Education (LITE). Since 1999 the organization has had a consulting function for the Economic and Social Council of the Black Sea Economic Cooperation.

SEE: Romania is a member of the Stability Pact for South Eastern Europe (SEE) and takes part in the cooperation programs and initiatives in the educational and training area, within the Working Table 1 – Task Force Education and Youth/ Enhanced Graz Process.

EU Programs: Romania has taken part in the EU mobility programs Socrates, Leonardo da Vinci and Youth for Europe since 1997. From the Romanian perspective this is considered an essential prerequisite for a successful integration process since it gives Romania the chance to show that Romanian institutions are capable of taking part in EU projects. National agencies exist for both programs, which are coordinated by the Minister of Education and Research.

31 <http://stats.uis.unesco.org>

In accordance with the decision no. 3/2000 of the Council of Association, Romania takes part as a member with equal rights in the 2nd phase of the education and training programs. In the academic year 2000/01 € 3 100 000 were granted for the Erasmus program and according to data published by the National Socrates Agency, 3 005 students took part in mobility programs.

From 1991 to 2001, Romania took part in the TEMPUS program and received altogether 108 Million € to make 267 Joint European Projects, 104 Complementary Measures Projects and 1 267 individual mobility grants possible. From 1991 to 1997 there were altogether 17 397 participants, among them 5 551 incoming and 11 846 outgoing students.

The relation of outgoing and incoming students within the mobility programs is on average approx. 5:1. Many universities worry about this imbalance and measures were taken to improve the situation. Since 1991 various universities have been offering complete study programs in foreign languages. They are supported by partner universities and financial support is provided by TEMPUS. Individual subjects are increasingly offered in foreign languages mainly in English. The foreign language programs, web pages and the flow of information were improved. To attract foreign students, Romanian language courses are offered free of charge and tutoring in foreign languages which accompany the classes taught in Romanian are offered and study materials for exchange students are available. Many universities have invested in infrastructure like dormitories, cafeterias, etc. which are important for international students. Teaching staff mobility is promoted by a PHARE project of the Socrates Agency from 2004 to 2006.⁶⁹⁸

The introduction of ECTS had a positive impact on international cooperation and the number of international agreements increased from 73 in 1997 to 141 in 2002.⁶⁹⁹

The State Secretary for Higher Education has declared in the last national report dealing with the implementation of the Bologna process that in the area of international cooperation, modules, intensive courses and joint degrees should be introduced.⁷⁰⁰ Recently a joint degree program for South East European history was concluded with the department for history at the University of Graz, University of Ljubljana and the faculty for history and philosophy of the University of Cluj.

4.15.5. Bilateral and Multilateral Agreements on the Cooperation of Research

According to the homepage of the Ministry of Education and Research (www.edu.ro) there are numerous bilateral research and education agreements outside the regional and international networks e.g. with the Republic of Moldova and the Ukraine.

4.15.6. International Programs

Romania is involved in the following exchange programs: CEEPUS, COPERNICUS, EURECA, LEONARDO, PECO, PHARE, ERASMUS, SOCRATES, TEMPUS, YOUTH FOR EUROPE.

Since 1998 Romanian universities have been taking part in CEEPUS projects. From 1998 to 2003 more than 1 500 students and teachers have taken part in CEEPUS programs. In the

⁶⁹⁸ Romania National Report – Bergen, 2005

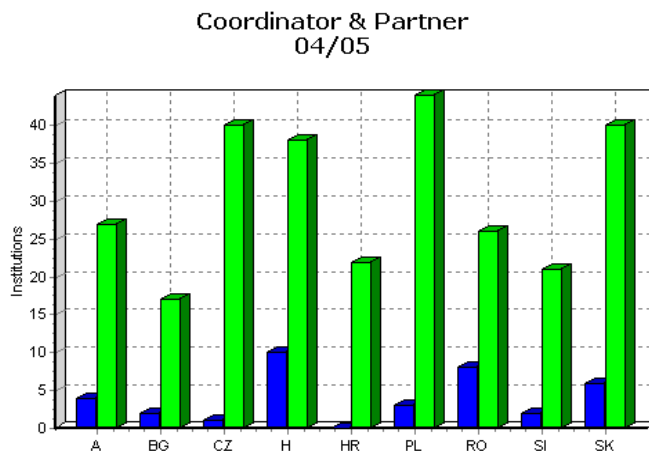
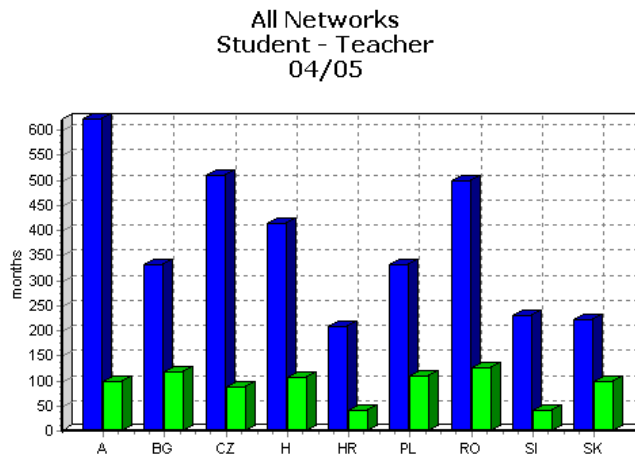
⁶⁹⁹ [http://www.wes.org/eWENR/03Nov/Romani a.htm](http://www.wes.org/eWENR/03Nov/Romani%20a.htm)

⁷⁰⁰ Romania National Report – Bergen, 2005

academic year 2004/05 eight programs were coordinated by Romanian institutes and they took part as a partner in 26 programs. 499 students and 126 teachers took advantage of this mobility program. Thus Romania was located in 1st place regarding mobility of teachers. But Romanian researchers, as a result of preconceptions, barely have a chance to get into leading positions e.g. as coordinators of international networks and projects. Particularly, it is not expected that are able carry out efficient administration, which is not necessarily their fault.

4.15.7. Visiting Researchers Active

In 2002/03 330 foreign teachers visited Romania.



4.16. Transdisciplinarity

The transdisciplinary approach still needs to be stimulated, as a matter of policy. The professors teaching a certain subject usually take into account the necessity of the transdisciplinary approach.

MVlad: I strongly disagree, since there is incredibly strong resistance against new fields and against the creativity needed in order to think interdisciplinary. And a lot of fear that mediocrities might loose their positions.

4.17. Public-Private-Partnership Models for Research and Teaching

There is an agency called Agentia Nationala pentru Parteneriatul Universitatilor cu Mediul Economico-Social (APART) – National Agency for Qualifications in Higher Education and Partnership with the Economic and Social Environment (ACPART).⁷⁰¹ Its mission is “to promote and support cooperation between higher educational institutions, economic agents and other institutes and organizations, in order to provide specific partnership development, professional formation and specialization, technology transfer, organizing of business incubators and technology parks, labour market research, academic opening towards the economic and social environment, facilitation of higher education graduates absorption by the labour market, development of entrepreneurial dimension of Romanian Universities.”

Economic actors barely participate in the financing of universities. However, private companies have started the practice of offering scholarships to students with very good results, under the condition of subsequently hiring them after graduation (e.g. law firms). In addition to that, some companies work together with Universities on single research projects or they finance Universities by allocating certain tasks (mission oriented research).

The cooperation between industry and universities is more and more promoted by MEC (Ministerul Educatiei si Cercetarii) – a public organisation which finances public universities and research in general. There are funds directed through research projects, where actors of industry (the beneficiary of the outcome) finance parts of the project. On the webpage of the Technical University of Cluj-Napoca, we can see a list of research projects with actors of industry involved for each of the departments of the university.⁷⁰²

Regarding spin-off enterprises, there is no law or other regulation on spin-offs but an initiative for it has been started by the universities. There is generally a poor commercialization of products developed through scholarly research activities.

4.18. The Role-Model for Scientists

Since one of the main tasks is to allocate EU funds for the development of candidate countries, most of the researcher’s efforts are channelled into EU projects. Therefore, the role model for the actual scientist is rather the entrepreneur type.

- Research: How much “researcher-driven” fundamental research does exist based on the idea of searching for truth without having a particular purpose in mind?

The universities and research institutes are not able to create the settings for such activities (or it might not be in their intention to do so). However, there are incentives for research set forth in the Romanian legislation regarding the conditions for the promotion of professors into higher professional degrees/positions (e.g. in order to become associate professor, a university lecturer has to be the director of a grant project for scientific research or to participate in 3 such grant projects)

⁷⁰¹ For more information on the matter I could visit a local branch of the agency, if you tell me it is important.

⁷⁰² http://www.cert.utcluj.ro/ccsttii/download6/contracte_cercetare_terti_pncdi_2004.pdf

4.19. Inter-ethnic Co-operation

There are no conflict management activities at the universities.

There should be, and they start improving on a slow basis. There is a great need for people with conflict-management skills, especially in order to teach how not to take critique personally. This tendency is a communist one, since one was criticized under communism for mainly personal reasons. Romania does not know the difference between public and private interests! Management knowledge is in fashion, but constantly underestimated.

Although the University of Cluj/Klausenburg emphasizes its multilingual orientation a peaceful atmosphere prevails. The current conflict – dealing with the splitting of the Babeş-Bolyai University of Cluj and with the establishment of a Hungarian state university⁷⁰³ – shows that similar activities would be necessary. It should be stressed that the problems at multilingual universities are not “homemade”, but created outside and go back to conflicts between the UDMR and other political parties.

Individual courses and research projects are carried out occasionally. The cultural centres which are attached to universities, such as the German cultural centre in Cluj, offer lectures and events promoting mutual understanding and try to convey a better understanding of the corresponding culture.

Particularly in Transylvania, there are universities which offer courses or entire study programs in the minority languages. The members of these different nationalities study or work beside each other rather than with each other. Recently the German study programs are being attended by more and more Romanians and Hungarian.

MVlad: Normalization of the situation between Romanians and ethnic minorities can be achieved by giving up on the ethnification of politics, a feature of post-communist societies, as the break-up of Yugoslavia has shown.

The University of Cluj/Klausenburg: In 1995 a major change took place regarding the German and Hungarian study programs at the Babeş-Bolyai-University. A project to further develop the German study programs, presented by the Babeş-Bolyai-University, was approved by the Ministry of Education. On December 18, 1995 the Senate of the Babeş-Bolyai-University passed the Charter of the University which provided the following: “The Babeş-Bolyai-University provides for the professional education in Romanian language. It also offers a professional education in Hungarian and German.” In the sub-chapter on structure and activities, it states: “The courses are taught in Romanian. Education of teachers, artists, journalists, theologians and social workers is also offered in Hungarian and German.” With this option, the Babeş-Bolyai-University accepted responsibility (which has not been undertaken before in Romania) regarding the development of study programs in German and created prerequisites for a new relation to German culture. In the Charter of 2000 and in the Charter of 2003 it was stressed again that the Babeş-Bolyai-University has to provide study programs under the same conditions in Romanian, Hungarian and German.

In accordance with the provisions of the Charter, the introduction of German study programs at non-philological faculties at the Babeş-Bolyai-University began in the academic year 1995/1996.

⁷⁰³ 80 well-known Romanian and foreign scientists have asked in an open letter addressed to the president, the prime minister and the president of the EU commission, the splitting of the Hungarian study programs at the UBB and the establishment of a Hungarian University. The FAZ reported about this incident and created some debate.

Because of the growing interest of students and of the efforts made by Prof. Dr. Andreai Marga, the long-time Rector of the “Babes-Bolyai” University in Cluj, a German Library was founded in 1994 and one year later, with financial aid of the German embassy, it was turned into the German Language and Cultural Centre. The German Language and Cultural Centre, which is located in the centre of Cluj, close to the university, soon became a centre of German culture and a meeting place for everyone interested in studying German. At this centre everyone can read newspapers, magazines and books published in Germany and concerts and lectures take place there. The centre has not only opened a door to German culture, but also creates a “European perspective” together with the other international centres and libraries which have been founded within the last two years by the Babeş-Bolyai-University (the American Cultural Centre, the English Library, the Austrian Library, the Italian Library, the Spanish Library, the Library of the Nordic Languages and the Japanese Library) and with the French Cultural Centre, which was established outside of university.⁷⁰⁴

15 of the 21 faculties offer a Romanian and a Hungarian study program, 9 faculties a German program. The faculty of Protestant theology and the faculty of Roman-Catholic theology teach courses exclusively in Hungarian. The university offers 105 long-term and short-term studies in Romanian, 52 in Hungarian, 13 in German and 4 in English.

The language and cultural variety, however, is not only represented by the study programs but is also mirrored in the administrative structures. The vice-president or the chancellor of the faculties concerned must belong to either the Hungarian or German minority to be able to administer the study program in the minority languages. Moreover, at the central level, each of these three groups is represented by a vice-principal, who is also a member of the Senate's College, and by a specific general secretariat. Therefore, the university's executive board comprises 20 representatives of these ethnic groups, who hold offices such as the vice-principal, dean, vice-dean, scientific secretaries and heads of departments.

Max van der Stoel, former OSCE High Commissioner on National Minorities, delivered the following statement about the UBB Cluj: “At my request, a number of international education experts drew up a number of recommendations regarding the increase of the number of subjects taught in the minority languages and the revision of the university charter in such a way that full equality of three lines of study – Romanian, Hungarian and German – would be assured. The positive attitude of the rector Mr. Marga (who was also Minister of Education at the time) helped considerably in ensuring the acceptance of most of our proposals. However, the UDMR was not satisfied with the further expansion of the multicultural system at the Babeş-Bolyai University. It continued to insist on the need for a separate Hungarian language state university. As a first step in that direction, a private university – ‘Sapientia’ – was created. Without financial assistance from the state, it will have few opportunities to expand. It receives most of its support from Hungary. Clearly the Hungarian parties in both Slovakia and Romania prefer a system of separate higher education. This can perhaps be partially explained by their fear that in a common higher education institution for majorities and minorities the interests of the majority tend to prevail. But it could also be explained by a reluctance to follow the path of integration which some leaders of the minorities demonstrate.”⁷⁰⁵

A very positive trend shows that ethnic Hungarians are leaving the private university “Sapientia” in Miercurea Ciuc, deciding to go to Targu Mures, where classes are basically

⁷⁰⁴ Andrei Marga, Präsident des Akademischen Rates <http://www.ubbcluj.ro/www-ge/despre/rektor.html>

⁷⁰⁵ Statement by OSCE High Commissioner Max van der Stoel, in Jan De Groff, Gracienne Lauwers (eds), *Cultural and Educational Rights in the Enlarged Europe*, Wolf Legal Publishers, Nijmegen, 2005, 82-83.

being taught in Romanian. A chance of overcoming the cultural ghetto syndrome which dominated inter-ethnic relations under communism!

The autonomy of the Romanian, Hungarian and German line of study in the university is a reality certified by the presence of Romanians, Hungarians and Germans in all decision-making bodies.⁷⁰⁶

Rector's OFFICE

Principal

Romanian line of study: 3 Vice-Principals

Hungarian line of study: 2 Vice-Principals

German line of study: 1 Vice-Principal

1 General Chancellor

ACADEMIC COUNCIL

President

Hungarian line of study: 1 Vice-President

German line of study: 1 Vice-President

Members: Romanian line of study: 4

Hungarian line of study: 1

STRUCTURE OF THE UNIVERSITY SENATE

Total number of member: 117

Members from the teaching staff: 85

Romanian line of study: 61

Hungarian line of study: 20

German line of study: 4

Senate member General Director: 1

Romanian line of study: 20

Hungarian line of study: 10

German line of study: 1

⁷⁰⁶ <http://www.ubbcluj.ro/www-en/despre/multicultural.htm> und <http://www.ubbcluj.ro/www-en/despre/pl.htm>

LINES OF STUDY STATISTICS
2005

Line of study	Tenured teaching staff	Number of specializations			Doctoral fields	Number of students		Number of PhD students
		Bachelor studies	University extension	Master studies		Bachelor studies	Master studies	
Romanian line of study	1000	88	9	72		34854	2857	
Hungarian line of study	230	50	6	22		6401	271	
German line of study	40	15	3	3		1023	726	
Jewish studies	4	1		1		92	15	
Languages of teaching: English, French, Russian,	-	4	-	55		1010		
Total	1270	157	18	152	23	43288	3854	3500

During the last Joint Government Meeting of the Romanian and Hungarian Governments (November 2006, Budapest), the Romanian minister of education proposed a common financing program for the private Hungarian “Sapientia” University.

4.20. Trends

4.20.1. Market Orientation – Greater International Involvement

The applicative research is targeted at the market, taking into account the priorities stated in the national research plan. Fundamental research, as well as that of excellence, implies more international involvement.

4.20.2. University Reforms

Right now (October 2006) a new law on education is being discussed and would have been planned already for the school year 2005/06. Furthermore, higher education standards will be set in the future in a separate law, the draft for this “law on higher education”⁷⁰⁷ is currently under survey and public discussion. One of the main changes will be a decrease of democratic decisions within University affairs, because different positions like heads of department, Deans or Rectors will not be elected but selected by a special national board according to objective criteria. The draft is criticized for not tackling important points and for avoiding basic political decisions.

⁷⁰⁷ Proiectul legii învățământului superior , <http://www.edu.ro/index.php/articles/6796>

4.20.3. Strengths, Weaknesses, Needs and Expectations from EU-Member States

The subjective evaluation of research is the strongest factor that has contributed to improving Romanian research. Depending on the evaluation, researchers are promoted in rank and funds for researchers, research projects and institutions are allocated. In the official evaluation system, publication in Romanian journals has the same value as publication in prestigious foreign journals but the majority of articles published in these Romanian journals are of little value. Transparency and objectiveness of the financing mechanisms of research are needed. At present, they are intentionally vague and continue to encourage corruption.

COMMENT: I think that the above assessment is not entirely true. In the official evaluation system for promotion of professors in higher positions, the publication in Romanian journals does not have the same value as the publication in prestigious foreign journals. The rate is 1 article published abroad / in a journal on the ISI list to 4 articles published in Romanian journals, recognized in the respective field of science. So, in order for these articles to be taken into account, the journals have to be on a certain list (the list of the Institute for the Science of Information – ISI, of Philadelphia), to be included in an international database (quotation of an article in an international data base is equivalent to 3 articles published in Romanian journals, recognized in the respective field of science) or to be recognized by CNCSIS. Furthermore, there are a lot of very good articles published in Romanian journals.

After the improvement of the evaluation system, it is necessary to create mechanisms to attract excellent Romanian researchers who are working abroad right now. (There are twice as many researchers working abroad than in Romania).

MVlad: This is a redundant statement, as long as researchers are paid less than cleaning personnel in Romania.

It is necessary to invest more in fundamental research projects in important areas like biotechnologies, nanotechnologies, information technologies and cognitive sciences. In these areas fundamental research can easily lead to applicable innovations. Yet a broad group within the academic field thinks that Romanian Universities can not be in such money-intensive fields like nano-physics and that they should focus on fields where they are traditionally strong and that do not require lots of investment in infrastructure.

The present conditions do not stimulate an immediate integration of research institutes within universities, although this integration has to take place. It is necessary that research activity be combined with education.⁷⁰⁸

5. RESEARCH OUTSIDE THE UNIVERSITY REALM

5.1. Academies of Arts and Science

The Romanian Academy was founded in 1866 under the name “Romanian Academic Society”. It was founded as part of a wide sweeping modernisation process after the union of Wallachia and Moldavia in 1859. In 1879, a statute transformed the Romanian Academic Society into a public institution called “Academia Româna.”

⁷⁰⁸ From the Reform Proposition of Romanian Research System by Romanian Academic Forum March 2005

In 2001, a law was passed about the organisation and procedures of the Romanian Academy (Lege Nr.752/2001 privind organizarea și funcționarea Academiei Române). Furthermore, there is the statute of the Academy.

According to Article 1(3) of Law 752/2001, the Academy is a fully autonomous public entity.

5.2. The Structure of the Romanian Academy

The Romanian Academy is lead by the general assembly. It meets at least once a year in order to ratify new projects, evaluate past actions or welcome new members. If necessary, the general assembly may be called in for a special session.

Between sessions of the general assembly, the Academy is headed by a presidential committee which includes the president, vice-president and the general secretary, as well as the presidents of the different scientific sections.

The board of directors is in charge of the management and administration of the Academy. The board comprises the president, four vice-presidents and the general secretary. The general secretary is selected for a five-year-term, all other board members operate on four-year-terms. This rule is supposed to create more continuity. All members of the board of directors are members of the Academy as well as scientists. The president is in charge of all Academy activities, of task delegation and of realizing the Academy's program. The president also represents the Academy on the outside. The vice presidents coordinate the different sections and support the president. The general secretary is in charge of staff administration as well as of all legal and business matters. The general secretary also is head of the Academy's budget and financing.

The Academy has sublets in Timisoara, Iasi and Cluj.

There are a few institutions that are not a part of the Academy, yet they are closely related to it. Most important among those are the libraries which formerly served the function of the Romanian National Library, and still serve that function today in certain areas.

The Academy is divided into departments or sections, each of them headed by a president. There are the following departments:

Philology and Literature (Secția de Filologie și Literatură)
History and Archeology (Secția de Științe Istorice și Arheologie)
Mathematics (Secția de Științe Matematice)
Physics (Secția de Științe Fizice)
Chemistry (Secția de Științe Chimice)
Biology (Secția de Științe Biologice)
Geology (Secția de Științe Geonomice)
Technical Sciences (Secția de Științe Tehnice)
Agriculture and Forestry (Secția de Științe Agricole și Silvice)
Medicine (Secția de Științe Medicale)
Business, Law and Sociology (Secția de Științe Economice, Juridice și Sociologie)
Philosophy und Theology (Secția de Filosofie, Teologie)
Art, Architecture (Secția de Arte, Arhitectură)

The Academy accepts members from those areas comprised in its sections. It also conducts research in those disciplines. Almost all significant scientific and artistic disciplines are present. There is a noticeable focus on Romanian history, folklore and literature, as well as on natural sciences. Foreign languages are among the missing areas.

MVlad: The Romanian Academy of Science is a closed institution, similar to the Indian caste system. In addition, I find it dominated by former communists, and really valuable people have no say. Also, it is an organization oriented against women and minorities.

There are 181 academics and “associate members” elected for life.

This number is set by law. Requirements for acceptance are Romanian citizenship, at least 65 years of age, and extraordinary scientific, artistic or literary accomplishments. Associate membership candidates may be up to 65 years old and are eligible for full membership after that. The Academy has Romanian and foreign honorary members with no age requirement who are selected by the general assembly.

Regular members carry the prestigious title “Academician” (Acad.).

The full members are almost all males of Romanian descent aged 65 to over 90. Among the active members there are only 11 women. There is a clear under-representation of members of national minorities. Due to the age requirement, the members are scientists and artists who have been successful during the communistic and totalitarian era.

Officially, the Academy is considered to be fully autonomous, it is also in charge of its own financial administration. However, it is financially dependent on the government. There is no real cooperation with the business sector, thus its influence on the Academy is almost non-existent.

5.3. The Academy’s Self-Definition

Article 1 of the law of the Academy describes the Academy as the highest national forum of culture and sciences, designed to bring together great personalities from inside and outside Romania in order to make progress and celebrate success in the areas of science, literature and the arts.

The Academy describes itself as a “symbol of national spirituality, a forum of recognition, a space of fundamental research.”

According to its articles, the Academy has the following main tasks: Cultivation of the national language and literature, studying national history, research in the most important scientific areas, and promoting the democratic and ethical principles of a free exchange of ideas in Romanian science, art and literature.

5.4. Functions

Article 8 of the law of the Academy provides for certain main tasks, among those:

- Support the arts and sciences in every possible way.
- Cultivate the Romanian language and set down rules of orthography.
- Protect the national cultural heritage in the property or under the administration of the Academy.
- Scientific and cultural events, research, postgraduate and doctoral studies.

- Publications in the arts and sciences as well as the publication of periodicals.
- Grants of awards and diplomas.

The Academy is not exclusively restricted to this role; it actively performs research, art and literature as well. Already the Academy's founders intended not to make it only a forum of national recognition, but also an active centre for science, literature and art.

But the Academy does consider itself a collection of the Romanian "elite" and as "the centre of science, art and literature."

Under Article 10 of the Law 752/2001, members of the Academy receive € 330 before tax in compensation per month, Romanian honorary members receive € 250. Similar to teachers and government employees, there are other kinds of compensation as well, such as free first class train tickets.

Within the Academy, there are 66 institutes and research centres in Romania that contribute to the cultivation of the arts and sciences and where many scientists and other staff are employed. Most of these research facilities specialize in one particular area, but there are also facilities with a more complex profile. The variety of institutes goes all the way from an archive of folk art to a national institute for the study of totalitarianism to an institute of South-East-European studies. In 2001, two of these institutes were recognized as excellent by the EC.

The Academy maintains, among other things, a chemical laboratory and a centre of immunology and a centre of applied and fundamental technology. A list of all institutes can be found at http://www.academiaromana.ro/academia2002/acadrom/pag_inst.htm. The Academy also includes the astronomical observatory in Bucharest and the Retezat National Park. Furthermore, the Academy runs libraries which are of great national importance for study and research (http://www.academiaromana.ro/academia2002/acadrom/pag06_01.htm), as well as the National Museum of Antiques, the "Mina Minovici" Museum and an art collection.

The Academy has its own publishing house, which has published many significant national periodicals and other important works. Examples of these are the dictionary of the modern Romanian language (comparable to the German "Duden") and specialist journals for applied sciences.

These institutes cooperate with each other on major research projects, such as the Romanian language dictionary. There are thirteen commissions within the Academy with a focus either on specialized problems of one area, or on more general questions. There is, for example, a commission of historians, a commission for the standardisation of geographic terminology and a commission for global changes of the environment.

Each year, the Academy offers awards for extraordinary publications, exceptional accomplishments or to honour the life achievements of exceptional scientists. There are currently 70 such prizes. They are named after the most important Romanian personalities. One may receive only one award in a lifetime, members being excluded from receiving them.

The "honorary diploma of the Academy" and the "diploma for academic achievements" are awarded to prestigious Romanian or foreign scientists and persons of the cultural life who have made valuable contributions to the works of the Academy, or who have contributed to the development of scientific relationships.

There are several foundations in connection with the Academy. Most of them were abolished during the totalitarian era, and today efforts are being made to reactivate them. The most important one is the “Foundation of the Mehachem H. Elias family” (founded in 1923). Its considerable budget is dedicated to the sciences as well as to humanitarian concerns. With the help of the foundation, the Academy has been able to build and maintain research centres and hospitals and to award scholarships.

Different events of the Academy and its institutes and museums are open to the public. There are also concerts. These are individual events; there are no extensive programs or series of lectures. Art. 8 of the Law of the Academy provides for such events.

Regarding political involvement the Academy sometimes gives political advice in research matters. MVlad: Too often, as it is a politicized “truth –holder” in some respects.

5.5. International Contacts and Participation in Projects

Foreigners are not eligible for full membership in the Academy. There are 112 foreign honorary members, among them several scientists who were born in Romania but adopted another citizenship. Most foreign honorary members come from the USA and France.⁷⁰⁹

The Academy mostly considers itself to be a national institution and there is a strong focus on Romania and “Romanian issues”.⁷¹⁰

MVlad: This is deplorable, and it does not matter if you are Nobel-prize winner. If you do not have Romanian citizenship, there is no chance to be employed permanently in universities or to become a regular member of the Academy.

5.6. Financing

The Academy takes its financing from the government and from private donors, especially from foundations and donations. The Academy covers part of its expenses through its own earnings, e.g. from its publishing company, *Academica*.

In the spirit of the tradition of enlightened and generous donations, the Romanian Foundation for Science and Art was established in 1999 as a centre of high intellectual tenor, a platform for lofty dialogue between the eminent thinkers of contemporary Romanian society, but also as a place where donations are taken for the multilateral support of the Romanian Academy and, through it, of Romanian culture.

6. OTHER RESEARCH INSTITUTIONS OUTSIDE THE UNIVERSITIES

The Romanian research areas are underperforming for several reasons. Among these reasons are a lack of financial resources and the migration of good researchers to more developed states.

Not many companies in Romania can afford to do research. It is also a problem that in Romania companies can not claim separate research expenses in taxation and accounting. Their activities lie in the areas of research listed in Figure 1. Most important are agriculture, followed by medicine and chemistry.

⁷⁰⁹ For a list of foreign honorary members: http://www.academiaromana.ro/academia2002/acadrom/pag03_2.htm

⁷¹⁰ I have not been able to gather any information on international contacts or EU projects.

As one can see, most companies are doing research on their own field of agriculture. There are 90 such firms in the whole country.

The state of research activity in Romanian enterprises, which was mentioned previously, is again confirmed by statistical data.

If we take a look at the statistics, we can see the continual decrease in the number of researchers working in enterprises.

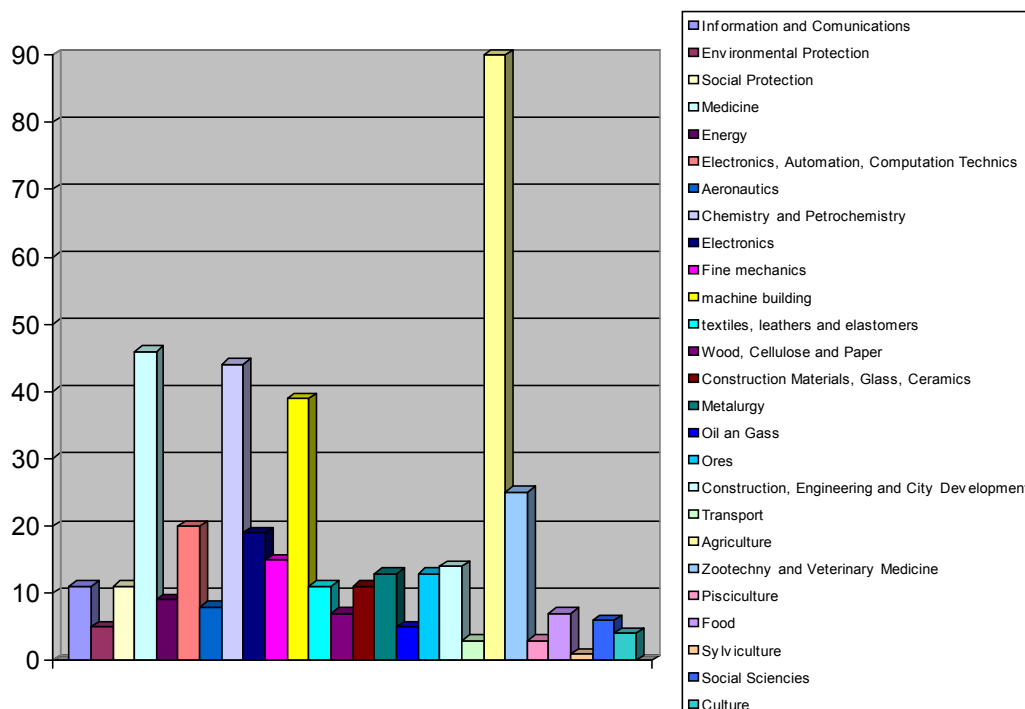
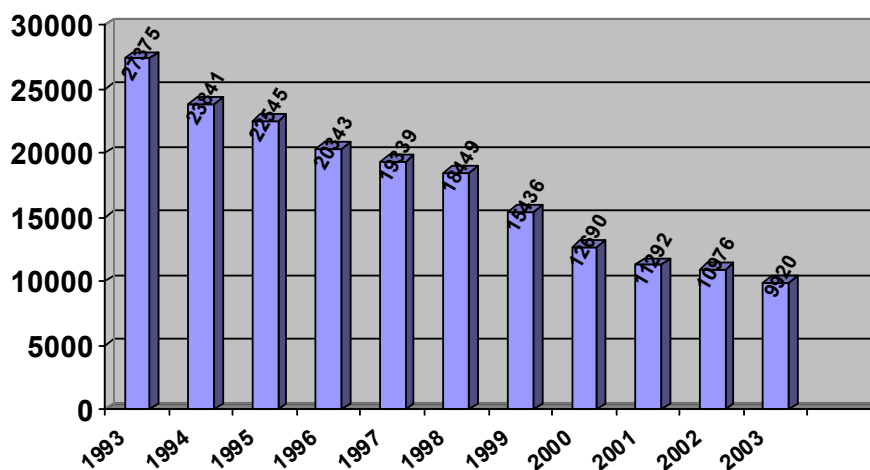


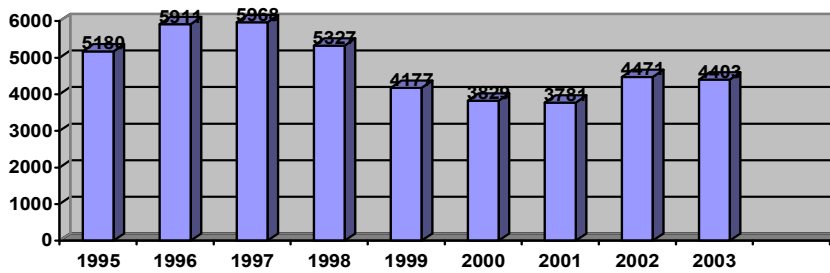
Figure 1: Number of researchers working in enterprises



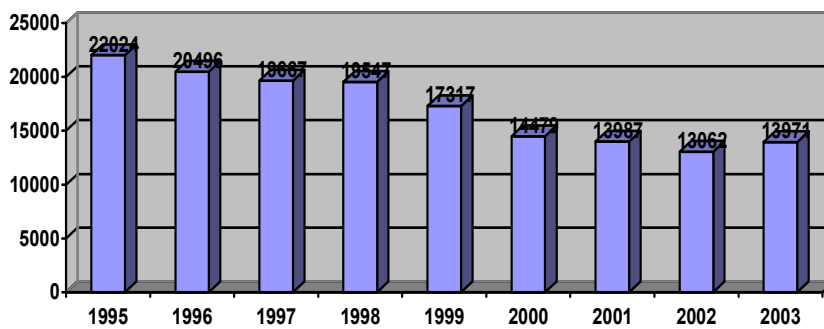
This decreasing number of researchers is mostly explained through a lack of resources for research that characterizes the Romanian business sector. The major problem, however, is not the lack of financial resources, rather it is the research management.

The distribution of researchers (university and non-university) among the different domains:

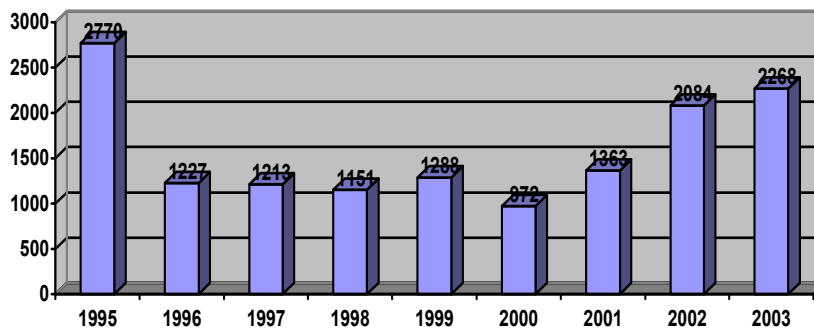
Natural and exact sciences:



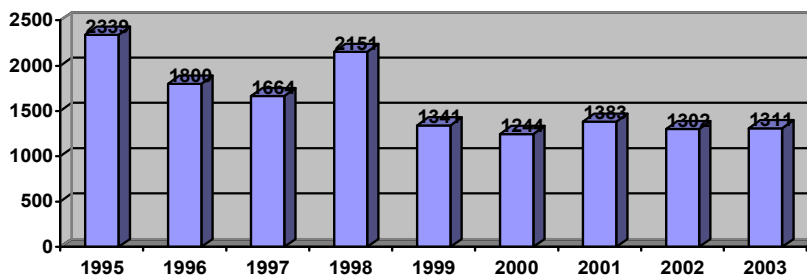
Engineering and technology sciences:



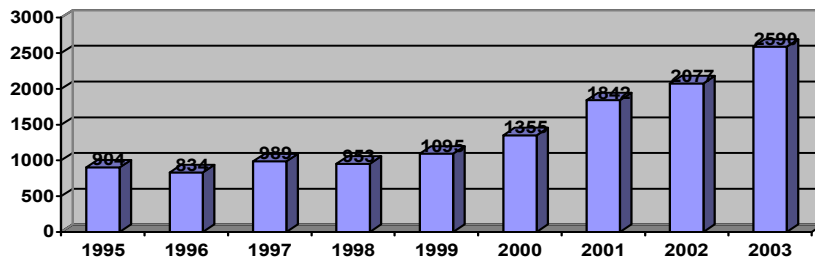
Medical sciences:



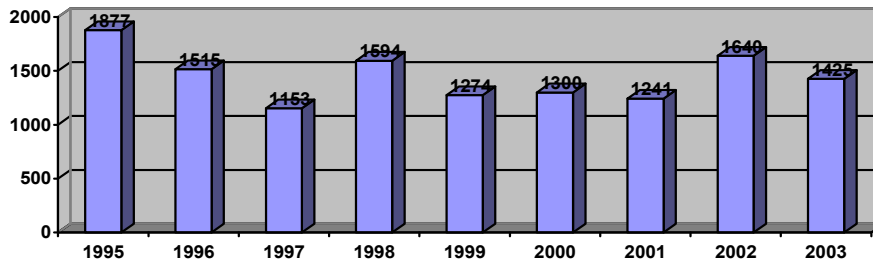
Agricultural sciences:



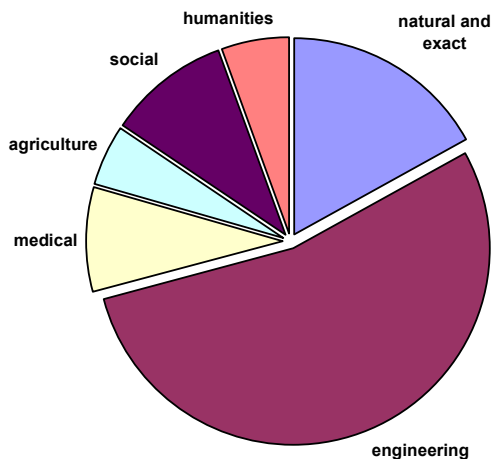
Social sciences:



Humanities:



Number of research projects in 2003, function of the domain:



7. EDUCATION OUTSIDE THE UNIVERSITIES

Besides the universities and the colleges there are academies, institutes and schools for postgraduate studies. The Romanian Academy also offers a doctorate program.

The academies usually have one focus point, for example music, art, sports or the military. The goal here is education and preparation for a particular profession, not an all around education of the student. Research is not a priority of the academies. There are several academies of the arts, beyond that the following academies are recognized as institutions of higher education:

- The police academy
- The National Institute of Magistracy
- The academy of news service
- The military academies, the technical military academy and the naval academy

- The national sports academy
- The academy of shipping navigation
- The business academy Bucharest
- A commercial college
- The Diplomatic Academy (the “Romanian Diplomatic Institute”)

There are no teaching academies as their independent branch of higher education. Students learn to be teachers either during their secondary education or at the universities and colleges. There are a few independent teacher colleges that are not connected to the universities and that specialize in training teachers.

MVlad: Lack of coordination between similar institutions and departments is a typical Romanian feature.

The type and duration of a teacher’s education depends on the field of teaching. Teachers in preschools and elementary/primary schools must do a four-year program at a pedagogical “Highschool.” Instructors teach in the primary sector but they must attend a pedagogical college. This program takes three years, two years for graduates of a pedagogical Highschool. Teachers at a “Gimnaziu” (for pupils aged 14-18) and teachers at vocational schools must do a three-year program in their respective subject at a college. Teachers at Liezen must complete a longer study program at a university. In addition, there is a practical part to their education which runs hand in hand with their studies and which is organised by the universities’ teacher training departments. University graduates may work as teachers and have three years to make up their teacher education.

The number of teachers without a university degree is decreasing due to the lower compensation. Only kindergarten and preschool teachers are still mostly graduates from pedagogical schools only.

The National Centre for Technical and Vocational Education and Training Development - (NCTVETD) is has been functioning since 1 January 1999, having been established through Romanian Government Decision no. 855/1998, modified by HG no. 1218/2000, as a public institution and legal person subordinated to the Ministry of Education and Research. NCTVETD was created with the aim of continuing the technical and vocational education reform (TVET) which has started with the European Union assistance, through the program Phare VET RO 9405 and it has among its responsibilities to propose education policy principles and strategies for development of the initial vocational training through the technical and vocational schools network, as well as the correlation principles between the vocational and specialized training in both pre-university and university education, to assure scientific coordination and to develop methodologies of design, elaboration, implementation and revision of technical and vocational education curriculum, scientific coordination and to develop design methodologies of evaluation and certification of the vocational training specific to the technical and vocational education, to contribute to scientific coordination and development of the training methodologies for the teachers in technical and vocational education, to contribute to the correlation, at principles and methodologies level, of the initial and continuous training of teachers from technical and vocational education ⁷¹¹

The institutes also offer professional education in a particular area. Institutes are mostly run by the different confessions in order to train teachers of religious education and priests, but they also offer other programs, e.g. for social workers. The theological institutes also offer

⁷¹¹ <http://www.tvet.ro/details.php?lang=EN&id=3>

courses in science and have continuous education programs. There is also an institute for banks which offers short study programs, postgraduate studies and professional classes for students to take alongside their working life. An institute of European Studies is currently undergoing the accreditation process.

Like universities, institutes may obtain authorization to offer master's and doctorate programs.

The private institute of public administration and economy, the diplomatic academy and four other institutes are entirely dedicated to postgraduate education.

8. INTEGRATION INTO THE EUROPEAN UNIVERSITY NETWORK

Romania participates in activities such as ERI SEE (Education Reform Initiative of South Eastern Europe). There is a considerable attitude of acceptance and a desire to adopt European models and reforms in all areas of education and research. There is a strong interest on the part of Romanian education and research institutions to participate in this area.

The Romanian government is very serious about participating in European cooperation efforts in matters of educational politics. The importance of cooperation projects such as "Education and Training 2010", "Copenhagen Declaration", "Bologna Process" and "Enhanced Graz Process" becomes clear through a special strategy for this sector within the Ministry of Education.

This acceptance and confirmation of the common tasks and goals have had numerous concrete results in Romania, visible in the many reform measures. Most significant outside the universities is the expansion of the continuous education programs.

The centre of UNESCO-CEPES (European Centre for Higher Education/Centre Européen pour l'Enseignement Supérieur) is located in Bucharest, and Romania is very interested in participating in this organisation. Its activities mainly focus on cooperation in the field of university education in Central and Eastern Europe. The director of UNESCO-CEPES is the representative of UNESCO in Romania. Since 2003, the organisation has been an advisory member of the follow-up group of the Bologna Process.⁷¹²

9. CONCLUSION

MVlad general conclusion: There is a massive and urgent need to create new profiles based on the recognition of values and competence. Positive instead of negative selection requires the creation of new areas of teaching rather than assigning classes to mediocre figures. This has been the constant practice until now: it was not the information and education that one would gain, but the satisfaction "owed" to so-called teachers who do not wish to admit that their time has passed.

Educational reform requires a lustration law and motivation of students for quality. I am confident that European integration is Romania's only chance for such improvement.

⁷¹² <http://www.eurydice.org>

Research Project UnivSOE

"Institutions of Tertiary Education in Central and South East Europe: Developments, Structures and Perspectives of these Institutions for their Integration into the European Higher Education and Research Area"

Country Report: Serbia

Marko Kmezić

1. INSTITUTIONS OF HIGHER EDUCATION	471
1.1. International and Regional Co-operation	471
1.2. Organisational Structure	472
1.3. Transdisciplinarity	474
1.4. Autonomy and Freedom of Science	475
1.5. Implementation of the Bologna Process	476
1.6. Financing of the Universities	478
2. NOT UNIVERSITY RELATED RESEARCH INSTITUTIONS	478
3. CONCLUSION	480

1. INSTITUTIONS OF HIGHER EDUCATION

The structure of higher education institutions in Serbia is organized as follows: on the tertiary educational level in Serbia there are Universities, which must contain at least three different faculties in order to be established, Faculties, and Academies of Art. Within the organization of Universities, there can be established Institutes, University libraries, and other organizations whose activities are in accordance with activities of University. Apart from regular studies, Universities are entitled to organize teaching through special form of studies for innovation of knowledge and permanent expert advanced training, and teachers training.

There are six state Universities in Serbia which were founded by the Republic of Serbia. These are Belgrade University, Belgrade University of Arts, Novi Sad University, University of Kragujevac, University of Nis, and dislocated University of Pristina. Universities not founded by the Republic are the University "Braca Karic", the European University, "Megatrend" University of applied sciences, Trade Academy, Faculty for Management, University of Novi Pazar, University "Singidunum", University "Union", Medical Academy – US Medical School, and Faculty of informatics technologies.

According to the data from the Ministry of Science and Technology (from 1996) in Serbia there are 56 scientific institutions completely independent from universities, and predominantly engaged in research. These institutions are not involved in education, even though many of them have scholars with Master's degrees or PhDs. There are both university research centers as well as private and public non-university related research institutes.

Institutes of higher education are also Higher Schools (Vise Skole). They award diplomas of higher education in specialized fields of studies.

Besides these formal educational organizations, there are weak traces of private and NGO attempts to create a supplement for already enrolled students, such as the Alternative Academic Network, or the Belgrade Open School.

All these institutions are coordinated by the Ministry of Education and Sports.

The "Conference of Universities" was established for the closer co-ordination of work, determining of common policies, achieving of common interests, and co-operation. The members of the Conference are all accredited Universities in the Republic. The Conference has its own Statute.

For closer co-operation between Faculties of the same branch, there is the Conference of Common Professional Academies (Konferencija Akademija Strukovnih Studija). This Conference reviews issues of joint interest for improving educational or artistic activities in common profession studies; co-ordinates joint tasks (specifically enrolment policy); etc.

1.1. International and Regional Co-operation

Serbian Universities are involved in both regional and international institutional co-operation through bi and multilateral agreements. International co-operation has been established with 52 states, and on all continents. Belgrade University currently has 66 valid contracts about inter-university co-operation. This international co-operation goes through Contracts about co-operation between universities, multilateral contracts (Multilateral

agreement about the co-operation of 10 universities in SEE includes Belgrade University); and membership in international organizations (European Association of Universities, Danube Rectors Convention, UNIDRION, Balkan University Network). Some universities have established joint degree programs with foreign higher education institutions. Graduate studies of EU Law from University Centre from Nance, engineering management from Parisian Great School, and others are successfully being conducted by Serbian universities.

Universities in Serbia are taking part in the TEMPUS, CEEPUS and COPERNICUS European programs.

As part of the administrative support for international cooperation Belgrade University has a Sector for international co-operation. The goal of this sector is to nurture existing, and to create new contacts with foreign educational institutions, and to raise the quality level of services to its students by promoting the highest standards and professionalism. The University of Novi Sad also has an office for international co-operation, while the University of Nis called upon University Advisors from a Salzburg seminar to help them open an International Relations Office.

Serbian universities are able to host visiting scholars. Without prior open competition, institutions of higher education can hire lecturers from other higher education institutions from outside the Republic of Serbia as visiting scholars.

There is significant export of students and researchers, but with no official data. In this area there is more pure speculation about the number of outgoing students and researchers than even educated guesses, but with certainty there is huge “brain drain” in Serbia.

1.2. Organisational Structure

The legal base for all Universities in the Republic of Serbia is the Law about Higher Education. Apart from this each University has its own Statute. The Statute is the general fundamental act of each higher education institution in which the organization of institution, methods of work, management tasks, and other relevant issues are stipulated, all in accordance with Law about Higher Education. The Law about Higher Education was passed on 30.08.2005. This was the third change to the fundamental Law which regulates the higher education in Serbia in a very short time. Previously in 1998 Milosevic’s Government passed a Law on University, and in 2002 it was briefly changed by a new Law on University, which had an interim character, and aimed to disclose 1998 regulations which were oppressive and aimed to deprive universities of their most fundamental rights and allowed the government to seize complete control by appointing individuals of its choice to positions of power.

The ministry competent for Universities is the Ministry for Education and Sports of Republic of Serbia. The Ministry of Science is responsible for determining and financing research projects. As an exception, the Ministry of Internal Affairs maintains administrative control over special programs established in a specific faculty for the needs of providing of education for the police force members.

The National Council for Higher Education (National Council) is an independent body founded with the goal to secure constant development and advancement of the quality of higher education which might correspond to the Council for Research and Technology or the Advisory Body for University Development in Austria. This body has 16 members

elected by the Serbian Parliament, where 12 members are University professors, and 4 are chosen from prominent cultural, scientific, or merchant representatives. Apart from other provisions, the National Council makes recommendations to the Ministry for Education and Sports regarding the policy for higher education.

In Serbia it is in the competence of the Ministry for Education and Sports to distribute financial resources from the Budget of the Republic, and. Universities have bodies through which university members coordinate actions in various areas to control spending. One of these bodies is the Board for financial control.

University bodies could be divided into managerial and academic bodies. Managerial bodies on the Faculty are the Dean, and Faculty Council. the Dean is elected without public advertising, and by the full-time employed professorial faculty staff. There are also 3 vice deans (for studies, finances, and students). the Faculty Council selects the candidates for the Dean, and forms an election commission which is to elect the Dean for a period of 2 years. the Faculty Council is elected out of the full-time professors and Faculty associates. A small part of the Faculty Council is nominated by the Government, and the others are elected by secret vote by the full-time employed professors.

The academic body on the Faculty level is Scientific Board, and it consists of all professors and assistants at each faculty.

the Rector administrates the work of the whole university. However, the relationship between the University and the faculties, i.e. the rector *vis-à-vis* the deans, under the current system, resembles a confederate system. The main decision-making powers regarding employment, curricula and finances at the faculties are powers held by deans, while the rector holds a predominantly ceremonial and representative power. There are also three prorectors and one student rector. The Rector and prorectors are elected by the University Council without open competition and out of the full professors on one of the faculties within the university. Candidates for the rector are appointed by the scientific boards of the faculties, and candidates for the prorectors are proposed by the rector. The Rector is elected by anonymous vote with simple majority of the University Council members. The student prorector is elected by the student's parliament.

Functions which Universities perform are: Providing higher education; Scientific and research activities; Expert education and improving as well as expert exams; Publishing and printing activities relating to scientific, research and educational work; Trading with books and blank forms; Organization of seminars and expert level meetings; Library and documentation centre's activities; Expert and consultation works in the field of education; Financial, following technical activities, and other activities related to the work of University.

The decision-making processes which exist in Serbian universities can be described as mixture of the corporate government model and the democratic model with the participation of students and all academic staff. The democratic model (with the participation of students and university staff) is more present than the other in the organization of work of the universities in Serbia. In the establishing of the University Council students, through students parliament elected by the student body, nominate their own representatives for the University Council. The largest number of members of the Council are elected by the University staff. Yet again, the Government gets to nominate a number of members of the University Council by direct appointment. The Government has

this prerogative as a founder of the public universities. Still, this can hardly suggest that this is a corporate government model, since most of the members of the council enjoy democratic legitimacy. The Law about Higher Education provides that one of the principles of higher education is the participation of students in operating and managing the Universities, especially regarding the issues of importance for improving the quality of studies.

The higher education institution announces the number of positions for studies in the school year. Public universities consult the government, which decides on the number of vacancies. Candidates for enrolment in a higher education institution must take an entrance exam, or a test of capabilities and tendencies, in accordance with the general act of the autonomous higher education institution.

For the position of teacher, the Law requires the appropriate academic, expert, or scientific title, with no further elaboration. For lecturer the requirement is a Master's degree or expert specialist title. Professor of expert studies can be any elected person with the academic title of Doctor of Science or Doctor of Arts. For promotion to title of docent, associate professor, or full professor there are supplemental demands set. These concern the scientific, publishing, and academic work of the candidates (publishing of scientific works which have influenced the development of scientific thought in the area of expertise, number of elaborates, previous work at the faculty with respect to achieved results in work with junior staff, etc.). The higher education institution announces an open competition for the election of lecturers and researches. Election is conducted by the university, on the recommendation of the faculty (by peers). More detailed provisions for the election and promotion of candidates for a professorial position are determined in the general act of the higher education institution.

Universities announce the number of vacancies for each school year. Public universities consult the government, which decides on the number of vacancies. The Republic of Serbia decides on the number of students to be enrolled in each year in public universities in Serbia, while AP of Vojvodina since 2002, as holder of rights of the Republic of Serbia which is founder of all universities in Serbia, decides on the number of incoming students for the school year. The Conference of Common Professional Academies (Konferencija Akademija Strukovnih Studija) co-ordinates and proposes the enrolment policy. In 2006/2007 in Vojvodina there will be 9 932 students enrolled, while in Serbia this number has not been set at the time of submitting of this report. In the previous school year there were 28 370 new students enrolled in public universities in Serbia. There is no reliable data on the ratio of domestic and foreign students on the level of all universities in Serbia, but there is relatively small number of foreign students in Serbia, and most of them include Serbian minorities from bordering states.

1.3. Transdisciplinarity

Research and training is isolated through the specification of disciplines taught on different faculties within University. For example 31 faculties make up Belgrade University ranging from Law Faculty to Medicine Faculty. In order to be established, each university must contain of at least three faculties thus providing one "multidisciplinary and interdependent academic unit".

Faculties are divided into departments, so almost all of the faculties have a composite academic structure, i.e. various departments or divisions offering considerably wide and diversified study and research opportunities. Each of them operates its own academic

facilities - specialized libraries, research institutes, computer centres and adequate laboratories, as well as separate administrative services in charge of student documentation and graduation certificates, scientific research, financial matters, etc. etc.

There are possibilities for inter-disciplinary post-graduate studies. Depending upon the desired area of specialization it is sometimes necessary for a candidate to pass certain entry exams before starting a post-graduate program on a different faculty. Difficulties in organizing interdisciplinary studies are concerned with blurring boundaries between disciplines.

The Centre for Multidisciplinary Studies was founded in 1970 by the Belgrade University and the Republic of Serbia with goal to encourage and help the development of research and post-graduate studies of young scientists in bordering, or multidisciplinary areas of research and science. Other universities are working on establishing Associations of Centres for interdisciplinary and multidisciplinary studies and research (ACIMSI at Novi Sad University).

1.4. Autonomy and Freedom of Science

Besides the fact that it is constitutionally guaranteed, freedom of science is specified in detail in the Law about Higher Education. Academic freedoms are the freedom of scientific and research work, and artistic creation, including freedom of publishing and public presentation of scientific work, and artistic achievements; freedom to choose the method of interpretation of academic curriculum; and freedom of choice of study programs. Besides these direct provisions, the freedom of Academia is stipulated by clauses about the autonomy of the university, and the right to a higher education, which is available to each person, under condition that he or she has finished a high school education. This all is repeated in Statute of each of the universities.

Autonomy of the University vis-à-vis the state is one of the fundamental principles determined in the 2005 Law about the Higher Education.

The Law contains the clause on the inviolability of the academic institution's area. Representatives of the Ministry of Internal Affairs (Police) may not enter the area of the academic institution, unless permitted by the authorities of the institution in question, unless there is a breach of public security, or in case of a danger to human life, health, or property.

Apart from this provision, the University is autonomous in its right to: determine study programs, rules of studies, and rules of enrolment; to determine internal organization; to pass its own statute and elect its own managerial bodies in accordance with the Law about Higher Education; to elect new professors and assistants.

It is often said that the autonomy of the universities has expanded in certain areas even beyond what is called the "European standards". An example of this is when the National Council for Higher Education was established, The Conference of the Universities in Serbia was entitled to nominate 10 of the total 16 members of this body.

Regarding the economic factors, public universities get most of their funds from the budget of the Republic of Serbia. The Ministry of Education and Sports has it in its competence to distribute financial resources from the Budget intended for higher education institutions, as well to control its spending. However, Universities are free to use these funds autonomously in accordance with Law and Statute. The problem pressing Serbian universities lies in the fact that under the current regulations HE institutions must state their financial needs in advance, fixing their financial demands with precision, as they will be particularly financed from the State budget. This is evidently a deviation from the financial principles of the European state universities and it would affect the financial

autonomy of the University. Private universities get funds for their work by their founders which can be private or legal persons. In other aspects the same rules apply as for the public universities.

Nor could be found in the Law about Higher Education, or any other legal document, a provision which would suggest dependence of academic institutions upon societal forces. But while Serbia suffers from a drastic decline of the standard of living, and lack of trust in social values, there are expectations that universities could be a decisive factor to renew the confidence in a more promising future.

1.5. Implementation of the Bologna Process

The Bologna process has not been fully implemented. Preparations are under way for the Bologna process to start to be implemented in 2006/2007 school year in majority of the faculties. So far 3 cycle studies, ECTS, Quality assurance, Addition to the Diploma, and PhD studies have been implemented in some, but not all faculties. Here is a more detailed insight in each of these areas:

Three cycle studies (Bachelor-Master-Doctoral) are in the process of being implemented by faculties in Serbia in accordance with the Bologna process. On 21 faculties three cycle studies started in October 2005, while others are expected to begin three cycle studies in the school year 2006/2007. In the University of Belgrade currently 13 faculties have the curricular scheme 4+1+3; six faculties have the scheme 3+2+3; while in accordance with the Bologna process the Faculty of Medicine, Faculty of Stomatology, and Faculty of Veterinarian Science there are integrated 5 and 6 years studies. Undergraduate studies (the Bachelor's degree) extend over four to six academic years, depending on the faculty. Teaching courses are divided into two semesters for each year of study. On some universities it is also possible to get a Specialist's Qualification which may lead to Master's degree. Specialization studies provide graduate students with a combination of theoretical contents and practical techniques necessary for the performance of highly specialized professional duties. Fulfilment of all formal requirements and a successful defence of the final thesis leads the student to the Specialist's Diploma and the appropriate specialist's title. Master programs (the Master's degree) combine two-year course work with individual research culminating in a final thesis. Upon completing the course work, students are expected to pass a range of comprehensive exams and to defend their master's thesis, on the basis of which they are granted the degree of Master of Arts/Science in the pursued area. PhD studies are being conducted on every faculty. So far the dominant model for doctoral studies have been based on the research approach – a Master's degree student was being allowed work on a dissertation under a mentor. Doctoral studies which involve three-year course work and which, if successfully completed, qualifies the candidate to work on a doctoral dissertation are in preparation in most universities, and expected to begin in the 2006/2007 school year. This degree offer is restricted to those scholars who have demonstrated a superior ability in a recognized academic discipline.

Life-long learning does exist, but it is in its infancy through the Centre for Multidisciplinary Studies, which has been opened just a year ago now.

The first institutional quality assurance exercises were conducted at universities in Serbia after 2000, but only in order to figure out the first steps needed in university reforms. In case of the introduction of European quality assurance standards, which would refer to the usual infrastructure available at most of the EU countries' universities, most of the SEE countries would be unable to meet them, Serbia included.

As part of the implementation of the Bologna process quality control is part of the changes which faculties are undergoing. Many faculties have established various bodies (commissions, evaluation committees, centres for control of studies) in order to provide greater quality in their work. In this process students are also taking part, in some faculties by participating at evaluation bodies, in other by taking part in electronic evaluations. The Law about Higher Education provides that one of the principles of higher education is the participation of students in operating and managing the Universities, especially regarding the issues of importance for improving quality of studies.

Generally not all subjects should be represented at all universities, but with the exception of University of Arts, all other universities do represent different subjects. As mentioned in this report, in order for a university to be established, it must contain of at least three different scientific fields.

Universities are promoting scientific educational and artistic works in accordance with the demands of modern society, and based upon universal values. Part of this work includes promoting, and securing a basis for multicultural and multilingual communication. Practically this does not mean much since the role which universities are playing in interethnic co-operation is insignificant. Teaching programs everywhere are being conducted in the Serbian language, sometimes in English, and at Novi Sad University if there is interest of the students – in the Hungarian language.

In declarations and in words both trends-market orientation and greater international involvement are in action. But it is really difficult to say, because in practice, there is not even a defined strategy for the development of the country itself, so there is no defined market demand. There is great interest in international projects. For example, on a recently held tender for FP6 for the countries of the Western Balkans there were more than 80 applicant projects.

The creation of centres of excellence was made possible by the latest statute of some universities (*centri izvrsnosti*), but their establishment is still in progress at this time. One of the goals of the universities is to establish contact with the environment (city and regional government, business community, etc.). There are ongoing initiatives through the TEMPUS program to provide guidelines on the development of project-based interdisciplinary courses to suit the needs of the local and regional construction industry, and to provide guidelines on the suitability of well experienced professionals from the local industry to be appointed as visiting lecturers on interdisciplinary postgraduate engineering courses, and such. Generally the process of opening the universities for this kind of co-operation is still in progress.

The underlying philosophy of education is still closer to the tradition of classic humanities, and it provides for a general education. However, adjustments described in this report (co-operation with economic and industrial factors, legal clinics, etc.) are aiming to make a change with a goal to provide well-educated students with specific training and prepare them for the labor market. It can with certainty be said that academic philosophy is changing from teaching to learning. This is a slow shift from teacher-centred to learner-centered activities and assessment.

In Serbia reform is in process, and it will be ongoing for a longer period of time. Perhaps the general legislative framework will not be changed soon, but nonetheless, it is a process.

1.6. Financing of the Universities

University institutions are financed in accordance with the law and statute from the following sources:

- By funds distributed by the founder of the institution; For the higher educational institution founder secures sources for: material expenses, current and investment expenses, wages of the employees, library, equipment, scientific and artistic work which is performed in function of improving quality of studies, scientific and expert improvement of the employees, special work with gifted students, international co-operation, sources of information and information systems, publishing activities, activities of student parliament and extracurricular activities of students, financing of equipment conditions for studies of students with special needs. At present, the public investment for higher education covers only 0.4% GDP. Regarding funds coming from the state, they are in the scope from 56% to 85% of all universities' revenues (depending on the Faculty).
- By self obtained incomes: through scholarships; donations, gifts and legacies; funds for financing of scientific and research work; projects and contracts relating to studies, and consultancy activities; compensation for commercial and other services. The non-government money obtained by universities seems to be coming mostly from the tuition-paying students.

The Ministry of Education and Sports decides on the basic financial means for all activities or the development of specific areas of research or centres of excellence upon the recommendation of the National Council, and Ministry of Science. The managing body of the higher education institution is responsible to the Ministry for Education and Sports for the sustainable and justifiable spending of the funds distributed from the budget. Since the budget is planned in advance and on the recommendation of the National Council, the criteria how the budget is being controlled is operating efficiency, rather than expediency.

2. NOT UNIVERSITY RELATED RESEARCH INSTITUTIONS

There are two Academies of Sciences and Art in Serbia. The Serbian Academy of Sciences and Arts (SANU), and the Vojvodinian Academy of Sciences and Arts (VANU). SANU was founded by Law of November 1, 1886 as the Serbian Royal Academy. In 1947 it was renamed to the present name - The Serbian Academy of Sciences and Arts. VANU was founded in 2004, and although it does not call up the tradition of old Vojvodinian Academy, which was shut down in 1992 with abolishment of Vojvodinian autonomy, it has been practically re-established. The legal basis is the Law about SANU, and the Statute. The legal basis for establishing VANU is found in Serbian Constitution, and the Statute of Vojvodina. This is due to the fact that re-establishing the VANU had its political connotation in relations between the political elite from Novi Sad and Belgrade. The legal basis for its work is the Statute. The organizational model for Academies is that of a public law institution with forms of self-government. The institutional structure of academies is organized by their statute. SANU is composed of departments. Departments are the basic scientific and cultural units of the Academy. Departments include one or more fields of sciences or arts. There are 8 of them: the Department of Technical Sciences, the Department of Medical Sciences, the Department of Literature and Language, the Department of Social Sciences, the Department of Fine Arts and Music, the Department of

Historical Sciences, the Department of Mathematics, Physics and Geo Sciences, and the Department of Chemical and Biological Sciences. Members of SANU are elected by the highest administrative body, the Assembly, which is made up of all SANU members. Academy is not merely an honour club. Within the Departments there are Committees focused on defined scientific research projects and topics with clearly outlined artistic and scientific objectives. These Committees are comprised both of SANU members and distinguished scholars and representatives of related sciences and arts outside the Academy. Part of this research is also the publication of books, articles, etc., organizing of scientific meetings and seminars.

There are 10 SANU institutes. The Archaeological Institute, the Institute for Balkan Studies, the Institute for Byzantine Studies, the Geographical Institute, the Ethnographical Institute, the Institute for the Serbian Language, the Institute of Technical Sciences, the Historical Institute, the Mathematical Institute, and the Institute of Musicology. Each of the institutes has its own goal of research, and they all collaborate externally with hired scholars. The Academy does accept foreign members.

It nurtures foreign co-operation and the Foreign Relations Department of the Serbian Academy of Sciences and Arts is in charge of the realization of the programs of international co-operation.

International cooperation of the Serbian Academy of Sciences and Arts is realized through the following programs:

- Bilateral agreements between the academies based on signed agreements on scientific cooperation (list of inter-academic agreements, international scientific, research and development projects);
- International scientific meetings, round tables, lectures of scientists from Yugoslavia and abroad;
- Participation of the members of the Serbian Academy of Sciences and Arts at international scientific meetings;
- Cooperation with international scientific associations.

It does participate in EU funded projects (digitization of library etc.)

The Academy enjoys full autonomy vis-à-vis the state and economic actors. It seems that in certain situations the state is not autonomous vis-à-vis the Academy. Some SANU members are taking part in political daily life in Serbia, thus creating an image of the Academy taking part in political life.

SANU is financed from the budget of the Republic of Serbia, and VANU from the budget of the Budget of the Autonomous province of Vojvodina.

The relationship between the Academy and Academia can best be described as aco-operative one. This is also due to the fact that a significant number of the Academy members are professors from universities. There are even shared joint Research Centres between the Serbian Academy of Arts and Sciences and universities (University of Nis for example).

Non-university related research institutions are: the Economic Institute, the G 17 Institute, the Institute for European Studies, the Institute for foreign politics and trade, the Counselling Centre for legal and economic matters, Matica Srpska from Novi Sad, Beograd, Institut za dezinfekciju, dezinsekciju, deratizaciju i razvoj, Beograd, the Institute for architecture and urbanism of Serbia, the Institute for Astronomic Research, the Institute

for Biological Research “Sinisa Stankovic”, the Institute IHTM Chemical Centre, the Institute for Comparative Law, the Institute for testing of materials, the Institute for Criminology and Sociology Research, the Institute for Medical Research, the Institute for Nuclear and other Mineral Materials, the Institute of Nuclear Sciences “Viinca”, the Institute for Application of Science in Agriculture, the Institute for transportation and roads, the Institute for Forestry, the Institute for Urbanism, the Institute for Protection of living Environment, the Institute for Protection of Health, the Scientific Institute of Veterinary, the Institute of Physics, the Institute for Corn, the Institute for Chemical Sources of Electricity, the Institute for Application of Nuclear Energy, the Geological Institute, the Zrenjanin Institute for Agronomy. Many of the above-mentioned institutes and research associations are taking part in state and economic fields. For example, the Institute for transportation and roads is regularly making feasibility studies on new roads and the environment, the Institute for Forestry is working on the biological recultivation of areas polluted by heavy industry, the Institute for Urbanism is creating development plans for cities and towns in Serbia, etc. Not exactly private research companies, but these institutes and research centres are part of the private companies: Beograd, IHTM Kompanija, Beograd, INI PKB “Agroekonomik”, Kragujevac, “Zavodi” Zastava Car Factory (under unclear ownership status), Magnohrom Kraljevo, Center for Research and Development of Refractors, Nis, EI “IRIN”, Niš, MIN Holding Co. MIN Institut a.d., Pancevo, Institut “Tamis”, Smederevo, SARTID AD, Metalurgical institute, Sombor, DP “Agroinstitut”, Subotica, “Agrozavodi”, A.D., Prva Petoletka, Uzice, Scientific and Research Center for Pneumatics, Valjevo, Institut “Krušik”, HK, Vrbas, DP “Agrozavod”, Vršac, Hemofarm koncern AD. Some private companies run their own research, as shown above. Most of their research work is related to agriculture, pharmacy, and heavy industry.

3. CONCLUSION

It can be concluded that it is perhaps early for this kind of report at the stage of the reform process in which Serbian higher education, as well as the rest of the Serbian society currently is. Many questions remain open, and yet many remain to be seen how they will function in practice. But all the pointers were set during the last six years since the fall of Milosevic, and now it is important that the process is kept alive. There I see important role for the Education Reform Initiative of South Eastern Europe to play through networking and the exchange of information in the field of education and training on the tertiary level. General interest in Serbia does exist for this kind of cooperation, but perhaps the answer would vary from faculty to faculty.

Research Project UnivSOE

"Institutions of Tertiary Education in Central and South East Europe: Developments, Structures and Perspectives of these Institutions for their Integration into the European Higher Education and Research Area"

Country Report: Slovenia

Marko Kmezić

1. ORGANIZATIONAL STRUCTURE.....	482
1.1. System-Wide Regulation and Policy Planning: Institutional Structure, Law-Making and Planning Process	482
1.2. Financing and Budgeting.....	483
1.3. Internal Governance and Management Structures as well as Strategic Planning.....	483
2. FUNCTIONS PERFORMED.....	485
2.1. Autonomy and Accountability	485
2.2. Research and Technological Development	486
2.3. Teaching	486
2.4. Internationalization.....	488
2.5. Inter-ethnic Co-operation	488

1. ORGANIZATIONAL STRUCTURE

1.1. System-Wide Regulation and Policy Planning: Institutional Structure, Law-Making and Planning Process

Slovenia's vision concerning education and science foresees a society based on knowledge with an internationally competitive economy and sustainable, regionally balanced development. Therefore higher education, research and technological development all play important role in contemporary Slovenian society. Aiming to improve its performance in these fields Slovenia signed the Bologna Declaration in 1999. With only two public universities in 1993 the institutional landscape has expanded to fifteen higher education institutions which cover all fields of study: three public universities (incorporating forty-one faculties, three art academies and four professional colleges) and twelve private higher education institutions (one university, five faculties and six professional colleges). The number of students has more than doubled since 1991. According to the Statistical Office of the Republic of Slovenia the share of higher education students per thousand inhabitants has risen from 19.1% in 1991 to 41.1% in 2005.

Higher education in Slovenia is regulated by the Higher Education Act (Uradni list RS, No. 119/06). The consolidated text consists of the Higher Education Act (Uradni list RS, No. 67/93) and its changes and amendments published in Uradni list RS, Nos. 99/99, 64/01, 100/03, 63/04 and 94/06. Since the independence of the Republic of Slovenia higher education has undergone several legislative and structural changes, rapid institutional development, and a significant increase in student numbers. The system went through three reform phases: 1993-2004, 2004-06 and the last one in 2006. The most important changes were introduced in 2004, and supplemented in 2006, in accordance with the Bologna principles and a three-cycle system. Slovenia has decided to restructure its higher education in the spirit of the so called "quality reform", meaning that the aim is not to change the educational system simply for the sake of change, but rather to introduce new elements into the system in order to improve its quality.

Tertiary education in Slovenia is divided into traditional higher education and the newly developed higher vocational education sector. Higher education institutions comprise public and private universities and their members - faculties, art academies, and professional colleges.

The competent body for planning and implementing higher education, research, and technological development is the Ministry of Higher Education, Science and Technology (until November 2004 the Ministry of Education, Science and Sport). This ministry is responsible for the concept, state and development of higher education system, and within it the Science and Higher Education Directorate performs tasks in the area of higher professional and university education and research activity. The National Assembly adopts The Master Plan for Higher Education and The Master Plan for Research. These plans regulate the fields of study, research and art of national importance, the standards for performing higher education activities and the funding framework. The Government prepares Master Plan Bills on the basis of expert advice provided by its bodies: the Council for Higher Education and the Council for Science and Technology. The Council for Higher Education gives advice to the Government, elaborates the Master Plan for Higher Education, conducts accreditation procedures and gives opinions on various other matters. The Council for Science and Technology prepares and initiates proposals for the research policy (higher education research included), evaluates the status and development, proposes instruments and measures

for the implementation of research policy, proposes the amount and the allocation of state budget funds, draws up priority lists of research projects and young researchers, etc. The Council for Student Affairs discusses student's issues and social conditions of their studies. The Minister determines detailed conditions concerning admission quotas, tuition fees, accommodation in student residence halls and other rights and obligations of students in higher education, the elements of the form of a diploma supplement.

To coordinate the Bologna process at the state level, the Minister appointed a Panel of Experts for the Follow-up and Implementation of the Bologna process in the Republic of Slovenia in 2003. The Panel consists of representatives of the competent Ministry, higher education institutions, students, employers, representatives of the Council for Higher Education and the National Higher Education Quality Assessment Commission. In addition, the National team of Bologna promoters was established.

1.2. Financing and Budgeting

Public universities or its members may obtain assets from the budget of the Republic of Slovenia, tuitions and other study contributions, payments for services rendered, donations and gifts, and "other sources". The universities are the owners of the assets which they have obtained from public or other sources.

The education system in Slovenia is almost fully financed from the state budget. In recent years, approximately 6% of GDP have been spent on education. Out of this percentage from 1.33% to 1,36% of public expenditure has over the past four years been allocated for the tertiary education. Public higher education institutions own and manage their own property although a substantial part of their activity is directly financed by the State. The governing board, which decides upon financial transactions, is composed of the representatives of the founder, students, faculty and staff. The system of lump sum financing of higher education has been introduced by the academic year 2004/05. No tuition is charged for full-time undergraduate studies in Slovenia. Part-time students, however, pay tuition thus comprising important source of university financing.

Private University of Nova Gorica (UNG) believes that one of its advantages is the diversity of ways in which its activities are financed. While part of the public expenditure for tertiary education goes to private institutions as well, the University relies on a number of sources, not exclusively on those coming from the state funds. An important part of the university's financial sources comes from international funds, local community, industry, students' tuition fee, donations, etc. UNG has additionally established a foundation named Edvard Rusjan foundation which so far is the only one of its kind in Slovenia. Its aim is to raise donation funds so that these can be used for further development of the University as well as for expansion and realisation of its activities.

1.3. Internal Governance and Management Structures as well as Strategic Planning

In Slovenia universities are governed by Rector, Senate, Administrative Board and Student Council. The Rector leads and represents the University, above all by ensuring and being responsible for the legality of University's actions; adopting, with the assent of the Senate, the quality rules of the University, the study programmes, the research and the development, artistic and academic activities; appointing, upon a proposal by the Member Senate, the Dean of a Member etc. The Rector may confer a power of procuration and appoint a University manager. The Rector is elected for a term of four years by the full-time teachers, researchers

and associates at the University and all those satisfying the conditions for the election into the University Senate. The students also have the voting right providing with one-fifth of electorate votes.

The Senate is the highest academic body of the University. The Senators are elected from the teaching staff of the Members who are full-time employees of the University and students. The University Senate performs following tasks: it helps in shaping the national programme of higher education and the national programme of research and development; formulates the development strategy of the University; adopts together with the Administrative Board the Statutes of the University; adopts the general acts of the University; adopts study programmes upon the proposal of the Senate of a Member; integrates and coordinates the research work of the University; gives the University Members, through the Habilitation Commission, its assent before the first election into a title, etc.

The Administrative Board is a managing body that decides primarily on the matters of economic nature and ensures good functioning of the University. It adopts, together with the Senate, the University Statutes; adopts the financial plan, the annual report and the business report; adopts other decisions relating to the management of the University, etc.

The University Student Council is a body of the students of the University. The Student Council discusses and gives the competent bodies of the University its opinion on the University Statutes and on all matters relating to the rights and obligations of students. The University Student Council forms its opinion on the candidates for the Rector of the University and elects the members of the bodies of University, and proposes the candidates for their working bodies from among students.

Bodies of the university members are Dean, Senate, Academic Assembly, Administrative Assembly, Administrative Board, and Student Council. The Dean leads and represents the Member. The Dean is the academic chair of the Member and conducts tasks on the grounds of law, the ordinance on the establishment of the university, the Statute and the powers of the Rector transferred by the latter to the Dean. The Dean is responsible for the legality of the Member's activities. It is appointed by the Rector for a term of two or four years upon the proposal by the Senate of the Member from among its teaching members. The Dean performs following duties: he coordinates the educational, scientific research and artistic work; ensures the quality of the Member, the study programmes, the scientific research, artistic and academic work (self-evaluation of the Member); reports on the work to the Rector, etc.

Senate of the Member is the highest academic body of the Member. It consists of the teaching members of the Member who are full-time employees and of the students. The Senate adopts the regulations of the Member; adopts the draft study programmes; proposes to the Rector the appointment of a Dean, etc.

The Academic Assembly of the Member is body which consists of all the teachers, researchers and associates, and student representatives. The Academic Assembly elects the members of the Member's Senate and proposes to the Senate the candidates for the Dean.

Universities are founded of its member faculties. After the 2004 and 2006 system reforms universities were turned from associations of independent faculties into integrated institutions. A Member of the University is an institution without legal personality, when it conducts in the name and on behalf of the University the activities within the framework of the national programme of higher education and the national programme of research and development, for

which the funds are provided by the Republic of Slovenia. In implementing the national programme of higher education and the national programme of research and development, the Member operates in the name and on the behalf of the University. The organizational units of a Member are: departments, chairs, institutes, clinics, centres and libraries. Autonomous institutions of higher education and other autonomous institutions may join the University as Associate Members, where the mutual rights and obligations of the University and an Associate Member are to be determined in a special agreement.

University teachers can have following titles: full professor, associate professor, assistant professor, and senior lecturers. Full professors and senior researchers are elected by the University Senate for unlimited duration. Associate professors, assistant professors, higher lecturers, lecturers, research associates, higher research associates and senior lecturers are elected by the Senate of the Member for a period of five years. Assistants are elected by the Senate of the Member for a period of three years. In the event of a first election into the title or an election into a higher title, the Member shall transmit the entire materials to the habilitation commission together with the evaluations of the rapporteurs, the opinion of the Student Council and the results of a student poll on the pedagogical work of the candidate. The habilitation commission is special body which proposes to the University Senate the election into the title of full professor or senior researcher. The rules for the elections into the titles of teachers, researchers and associates are determined with a special act adopted by the University Senate. The habilitation commission decides within two months on the application for election into the title and transmits its decision to the Senate that is competent for the election. The Senate of the Member decides on the election of the candidate into the title within one month of having received the assent of the habilitation commission.

A Member may incorporate teachers at foreign universities into its pedagogical, research and development or artistic work in order to conduct a lecture cycle or all lectures of an individual subject. The visiting teacher may also be incorporated into the research work of the Member.

2. FUNCTIONS PERFORMED

2.1. Autonomy and Accountability

The autonomy of universities and single higher education institutions is determined and assured by the Constitution of the Republic of Slovenia and by the Higher Education Act. Higher education institutions are autonomous in managing their internal organisation and operations (considering their statutes and the legal requirements), selecting and electing the faculty, electing the internal bodies: rectors, senates, administrative boards and student councils, deans, and academic assemblies.

In compliance with the law and upon the consent of the Council of Higher Education, higher education institutions design study programmes and decide upon their content, including enrolment conditions, selection criteria, and professional titles. They manage their own property. The right of disposal or burdening of the property still requires the founder's consent. Higher education institutions receive funds from the state budget in block grants and distribute them according to the criteria adopted by the management board, still taking in account criteria determined by the Minister. Higher education institutions are also responsible for their self-evaluation.

2.2. Research and Technological Development

According to the Slovenian Government Communication Office, “science is one of the fields in which Slovenia least lags behind the developed world. It can compete on equal terms in international research projects”. The competent body for planning and implementing higher education, science and technology is the Ministry of Higher Education, Science and Technology. According to statistical data (Statistical Office of the Republic of Slovenia, Ministry of Higher Education, Science and Technology) there are around 4,650 FTE researchers in Slovenia (around 7,000 researchers in head count). Among them, around 34% are employed in business sector, 31% in government sector, 30% in higher education sector and 5% in private non-profit sector. Gross domestic expenditure on research and development is 1.49% of the GDP.

Slovenia's main development document relating to research and development is the National Research and Development programme (NRDP) 2006-2010, which is a synthesis of the most general objectives and policies on research and development from national strategic documents. Significant sections of the NRDP are included in the plans and documents for the utilization of EU structural funds. Ministry of Higher Education, Science and Technology promotes research and development activity and innovation through financial support for companies working in the field of technological development. In line with the Lisbon Declaration, greater emphasis is to be placed especially on R&D activities and specific objectives such as increasing investment by the commercial sector in R&D, increasing the proportion of innovative companies, and increasing the proportion of personnel trained to carry out R&D in the commercial sector. It is planned that in the next 3 to 5 years a partnership of companies, research institutions and the government will draw up detailed strategic R&D programmes reflecting the needs and priorities of the Slovenian economy.

According to the Statistical Office of the Republic of Slovenia, Ministry of Higher Education, Science and Technology, there are 808 research teams within Slovenian research establishments, while important research centres are to be found at universities. At the University of Ljubljana there are 255 such teams, whilst at the University of Maribor there are 86 and more than half of those are active in the area of engineering sciences. There are 47 non-university research institutions, 18 of which have the status of national research institutes. In addition to research work at universities, national and other research institutes, there are 277 business companies with research and development teams, particularly in industry.

2.3. Teaching

Slovenia has three public universities (University of Ljubljana, University of Maribor, and University of Primorska), one private university institution (University of Nova Gorica) and twelve single institutions of higher education (samostojni visokošolski zavodi) established as private institutions. In the academic year 2006-2007 62,314 students were enrolled at the University of Ljubljana, 25,531 students at the University of Maribor, 6,256 students at the University of Primorska and 696 students at the University of Nova Gorica. There were also 5,316 students studying at independent higher education institutions.

The studies at the University are conducted within the framework of the national programme of higher education in accordance with the study programmes adopted by the Senates of the University Members with the assent of the University Senate.

The structure of studies consists of three cycles. The features regarding the contents of study programmes at individual cycles are merely outlined by the Higher Education Act, while details are provided for in the national framework for higher education qualifications.

The first cycle has a binary structure and offers two types of study programmes: university (academically oriented) and professional programmes. Duration of the first cycle programmes is determined by years of study (two to four years) and credit points (180 to 240). In one academic year 60 credit points can be obtained, each representing 25 to 30 hours of student workload, which adds up to between 1500 and 1800 hours annually. Study programmes leading to regulated professions must comply with EU directives, and therefore they can differentiate from these rules. The second cycle offers one type of study programmes. A general requirement for admission to such programmes is a successfully completed first cycle programme. Bridging requirements, amounting from 10 to 60 credit points, can be set for applicants having completed the first cycle programme in an inadequate field. Second cycle programmes contain 60 to 120 credit points. Their actual duration must be designed in connection with the appropriate first-cycle programme. Programmes in the same field must not exceed five years altogether (3+2, 4+1). The third cycle also offers one type of study programmes that is doctoral programmes. A general admission requirement is the completion of a second-cycle study programme or, in exceptional cases, a first-cycle study programme in combination with documented research or professional achievements that can be validated with 60 credit points. The programmes take three years to complete.

It is planned that the new structure of studies should be gradually implemented while the 2009/2010 academic year has been set as the final time limit. The 2008/2009 academic year is set as the last one when enrolment into old study programmes will still be possible. However, most of the faculties are already offering accredited new study programmes to students from 2006/2007 academic year.

Access to academic study programmes is open to holders of the high school diploma (matura certificate), the final examination certificate, plus an additional examination in one of the general matura subjects. The selection criteria in case of limited access (due to the possible lack of staff, premises and other capacities in ratio with the number of applications for enrolment) are determined by the individual study programme. If the number of eligible applicants exceeds the number of places available, a selection is made on basis of upper secondary school grades and/or an aptitude test. Access to masters' study programmes is open to holders of the diploma obtained in academic study programme, exceptionally and subject to certain additional requirements also to holders of the higher professional diploma. Access to doctoral studies is open to holders of the diploma in academic study programmes or to holders of the masters' study programme diploma.

Higher Education Act provides for the possibility of joint degrees in all three cycles and prescribes special rules for them. Joint degrees are prepared by the Council for Higher Education of the Republic of Slovenia taking into account the criteria and recommendations of European institutions. All higher education institutions that offer such programmes must define the joint diplomas and the diploma supplements. In addition, higher education institutions provide and organise various training programmes as a form of life-long education. Studies are organized as full-time or part-time studies.

Quality of higher education institutions and study programmes is assured by accreditation and internal and external evaluation procedures. The accreditation of higher education institutions and study programmes is the responsibility of the Council of the Republic of Slovenia for Higher Education as well as the conduct of external evaluation procedures since. Internal evaluation procedures are the responsibility of higher education institutions.

2.4. Internationalization

Slovenia has successfully adapted to trends of international co-operation in education, and it nurtures bilateral, regional, and multilateral co-operation at the individual, institutional, and governmental levels in the sphere of tertiary education. Special attention was given to co-operation with the neighbouring countries, and to the education of members of the Slovenian national minority in the neighbouring countries, and Slovenian emigrants.

Since 1992, more than 30 international bilateral agreements have been signed by Slovenia on education, culture, and science, more than 20 programmes have been established and some protocols signed. At the regional level Slovenia participated in the higher education multilateral projects within the scope of the CEEPUS and ALPS-ADRIA programs. After being granted the status of an EU candidate country in 1999, Slovenia could no longer benefit from the TEMPUS programme, but became eligible to participate fully in the Community programmes. The current period signifies for Slovenia a transition from what is named "assistance" programmes, which the European Union had previously intended for the Central and East European countries, to co-operation on a more equal footing in three major programmes, SOCRATES for the field of education, LEONARDO for the field of vocational and technical training, and Youth. Slovenia is also very active in the Stability Pact for South-Eastern Europe, in particular in the Task Force Education and Youth - Enhanced Graz Process.

Slovenia has also been active in education projects initiated by the Council of Europe and UNESCO programmes such as: the Education for Democratic Citizenship, the Education of Roma/Gypsies etc.

There are various institutions in Slovenia in charge of facilitating and assisting in matters of international co-operation. These are the Ministry of Education and Sport, the Centre for Mobility and European Education and Training Programmes (Center za mobilnost in evropske programe izobraževanja in usposabljanja - CMEPIUS), the National Education Institute (Zavod Republike Slovenije za šolstvo), the Centre for Vocational Education and Training (Centre za poklicno izobraževanje), the Slovenian Adult Education Centre (Andragoški center Slovenije) and other public institutions in the field of education. The Educational Research Institute (Pedagoški inštitut) also actively participates in international research projects.

2.5. Inter-ethnic Co-operation

During the process of developing the Slovenian education system the respect for the plurality of cultures was explicitly taken into account, while part of the Slovenian education system consists of modified programmes, and programmes in ethnically and linguistically mixed areas. Ethnically and linguistically mixed areas in Slovenia are Prekmurje and Slovenian Istria where members of Hungarian and Italian minority live. However, modified programs referred to in the process of developing the Slovenian education system are part of the mainly pre-school institutions and elementary school institutions, while not so at the university level. The organisation and the education programmes for pre-school institutions and schools in ethnically mixed areas have been adapted in the following fields: educational aims, timetables, syllabi, attainment target and examination syllabi, admission requirements, and programme implementation guidelines. There are no ethnic conflicts at Slovenian universities per se, but also there is no special focus on ethnic diversity management.

Research Project UnivSOE

"Institutions of Tertiary Education in Central and South East Europe: Developments, Structures and Perspectives of these Institutions for their Integration into the European Higher Education and Research Area"

Country Report: Ukraine

Anna Fedorchenko

1. ORGANIZATIONAL STRUCTURE.....	490
1.1. System-wide Regulation and Policy Planning.....	490
1.2. Financing and Budgeting.....	491
1.3. Internal Governance	492
2. FUNCTIONS PERFORMED	493
2.1. Autonomy and Accountability	493
2.2. Research and Technological Development.....	493
2.3. Teaching	494
2.4. Internationalisation	495
2.5. Inter-ethnic Co-operation	496

1. ORGANIZATIONAL STRUCTURE

1.1. System-wide Regulation and Policy Planning

The Cabinet of Ministers (the Government of Ukraine) and its executive bodies are the highest executive authorities for higher education. The following bodies also exercise control in the field of higher education, within their areas of competence:

- The Ministry of Education and Science of Ukraine, which is the **core executive body** in the field of education and science;
- Other central executive bodies, sharing control of state-owned higher education institutions (*e.g.*, The Ministry of Health Protection, Ministry of Defence, etc.);
- Highest Attestation Commission (subordinated to the government, supervises the attestation of all academic staff and the activities of all research-degree-granting academic bodies);
- Authorities of the Autonomous Republic of Crimea;
- Local governments;
- Corporate and private owners of higher education institutions.

Ukraine's Ministry of Education and Science is responsible for strategic planning in higher education. It participates in the development of state policy with regard to standards and quality of education, forecasts national needs for specialists at all levels and fields of training, initiates international co-operation and organises the licensing and accreditation of higher education institutions. The Ministry also approves the statutory documents of all higher education institutions (state-owned as well as private), appoints the rectors of state-owned higher education institutions subordinated directly to the Ministry, approves the appointment of rectors of other higher education institutions, and monitors the implementation of state policy nation-wide.

The Ministry of Education and Science of Ukraine is also responsible for the management of the higher education system, ensuring the implementation of state policy in the fields of education, research, and intellectual property rights. It is composed of the Board (Collegium), whose decisions are implemented via orders of the Minister, the Attestation Collegium, which awards academic titles, and the Scientific-Methodological Council on Education, which ensures compliance of current educational practices with state standards.

The licensing and accreditation procedures of higher education institutions are subject to decision by the State Accreditation Commission (SAC), which, in turn, is subject to approval by the Ministry of Education and Science of Ukraine.

The main platform of Ukrainian state policy for higher education is defined by the *Constitution of Ukraine* (VRU, 1996a), *Law on Education* (VRU, 1996b), *Law on Higher Education* (VRU, 2002a), *Law on Scientific Research and Scientific Research-Technical Activities* (VRU, 1991a) as well as by decrees and regulations of the President and Cabinet of Ministers of Ukraine. The present legal basis for higher education is partially incomplete and contains some discrepancies; the laws on education do not always correspond with the legal norms of other relevant fields of law. Thus, the current legal framework needs a technical review.

The Ukrainian Law on Higher Education, adopted in 2002, doesn't fully reflect the goals and tasks for the reformation of the higher education system of Ukraine in the context of

European requirements. It is necessary to adopt a new law on higher education which would correspond to modern worldly and European trends of higher education development and the guidelines of Bologna Process. Indeed, while Ukraine has been participating in the Bologna Process since 2005, its higher education system remains too peculiar for integration into the European system of higher education, even after recent efforts to reform the system.

1.2. Financing and Budgeting

The funding of higher education institutions complies with the Budgetary Code of Ukraine, the Laws of Ukraine *On Education* (VRU, 1996) and *On Higher Education* (VRU, 2002), and the laws on the state budget of Ukraine for each given year. Depending on the type of ownership, higher educational institutions shall be financed at the expense of:

- the state Budget;
- local budgets;
- owners of higher educational institutions that are in private ownership.

However, the state-owned higher education institutions are only partially financed by the state budget. Additional funds derive from external resources and include tuition fees and income from research activities.

The Autonomous Republic of Crimea finances its public higher education institutions from its own budget. Private higher education institutions should rely solely on their own funding resources.

Each higher education institution establishes its own tuition fees. The sample contract between a higher education institution and a fee-paying student developed at each institution needs the approval of the Ministry of Education and Science. Fees paid to higher education institutions are exempt from taxation and left in full at the disposal of those institutions (applicable to budget-financed institutions only; private institutions do not enjoy a tax exemption status unless they are budget-financed or registered as research institutions, according to special criteria developed by the Ministry of Education and Science.)

The quota of students enrolled in higher education institutions on a tuition-free (budget-financed) basis depends on budget allocations for personnel training provided by the executive bodies of the central and local governments. If a state-owned higher education institution admits students beyond the number of available state-funded places, yet within the limits permitted by the licence, tuition fees apply.

In practice, the state's share in the funding of universities constitutes about 40 %, while almost all the remaining costs have to be paid by legal persons, that is by ordinary people trying to enable their children to study. This is a heavy burden for most Ukrainian families, as the very high tuition fees do not comply with the living reality in Ukraine.

From January 2002 to September 2005, the *Law on Higher Education* (VRU, 2002a) required that no less than 50 percent of the students in state-owned and communal higher education institutions receive budget-financed higher education. However, in practice this has failed from the outset, being too unrealistic, at least for some state-owned higher education institutions. In September 2005, the Ukrainian Parliament repealed the respective provisions.

However, the present demographic situation in Ukraine will lead to a reduction of the number of the secondary school, and the corresponding potential high school, graduates by more than

40% in the next 10 years, so that there will be more than enough university places for all of them. This means that the situation regarding access to higher education at the expense of population can change profoundly. Thus, the higher education institutions could face serious financial problems.

No doubt, the recent political and economical crisis in Ukraine doesn't contribute to investment in the sphere of higher education. Additionally, the financing of higher education is hindered by discrepancies between the above-mentioned laws in the field of higher education and the Tax, Budget and Land Codes of Ukraine.

1.3. Internal Governance

The governing and administrative bodies are the General Conference of Employees, the Governing Board or Academic Council and the Rector.

The **Rector**, elected by the General Conference of Employees, fulfils the corresponding duties over a term of five to seven years. He signs a contract with the owner/founder of the institution in question (the Ministry of Education and Science, in the case of state-owned institutions) and is accountable for the development of educational activities, financial management, and maintenance. In exercising these activities, the Rector relies on a Governing Board or an **Academic Council**. This is composed of vice-rectors, deans, leaders of governing bodies (including student associations), and elected members representing the teaching and research staff, who constitute no less than 75 percent of the total membership. The Council is headed by the Rector and is set up for a five-year term (seven years for 'national' institutions). The Rector should implement the decisions of the Academic Council.

The Academic Council elects the deans of each Faculty (*fakultet*, i.e. School or College devoted to a branch of studies), and the chairs of each *kafedra* (teaching department) on a competitive basis, for a term of five to seven years.

The **General Conference of Employees** is the highest collective governing body at institutions of the third and fourth accreditation level. It convenes at least once a year. Teaching and research staff members should constitute no less than 75 percent of the members of the Conference.

The competences of the General Conference include:

- Adoption of the statute and bylaws of the higher education institution and subsequent amendments to them;
- Election of the Rector of the institution, and evaluation of the Rector's performance;
- Election of the commission on labour conflicts according to the *Labour Code of Ukraine* (2003).

National higher education institutions must also have a **Supervisory Board**. The Supervisory Board oversees the future development of the institution, assists the administration in implementing state policy, controls the institutional administration, and ensures efficient interaction with state governance bodies, the academic community, the public, and the political and commercial stakeholders. The Cabinet of Ministers approves the composition of the supervisory boards of the national higher education institutions.

2. FUNCTIONS PERFORMED

2.1. Autonomy and Accountability

Though Article 29 of the Law on Higher Education states that the administration of a higher education institution must be in accordance with the principles of autonomy and self-government, the Ukrainian system of higher education still remains highly centralised and the issue of academic freedom is very urgent one, even if the calls for more autonomy have recently become more intense. The central government as well as the local governments have every possibility to interfere in the internal life of universities. The state doesn't even entrust universities (licensed and accredited by the state) with the final examination of students and the granting of diplomas; the former is done by so-called state examination commissions, the heads of which are appointed by the Ministry of Education and Science; similarly, only state diplomas have a real weight.

According to state legislation the scope of autonomy and self-governance of Ukrainian higher education institutions can be defined as including the following activities:

- Identifying suitable forms of studies and administration;
- Recruitment of teaching and research staff, and other personnel;
- Delivery of additional educational services;
- Development of study and research programmes;
- Publishing activities;
- Management of joint actions and collaboration activities;
- Use of the institutional estate.

However, state-owned higher education institutions of the fourth level of accreditation may receive the status of national institutions (e.g. L'viv Ivan Franko National University), according to which they enjoy wider autonomy in decision-making, in some areas:

- Creation, reorganisation, and decommissioning of their structural units;
- Leasing of estate items to other legal entities;
- Establishment and awarding of their own academic degrees of Docent and Professor;
- Internal incentives offered to their teaching and research staff.

At present it is not easy to envisage if a new law on higher education would bring about a serious change of the current understanding of the principle of autonomy of higher education institutions on the part of the Ukrainian legislature. On the other hand there is no guarantee that granting more autonomy to the universities in the near future would be a positive step in preventing the Ukrainian education from becoming solely a matter of commerce.

2.2. Research and Technological Development

In Ukraine research is an integral part of higher education institutions of the third and fourth accreditation levels. Fundamental, as well as applied, research activities in Ukraine occur both in the higher education institutions and in the special research institutes such as those under the Ukrainian National Academy of Sciences; the State Register of Research Institutes currently lists thirty-two institutes that enjoy taxation and customs privileges, particularly related to the purchase of research equipment and materials. About 43,000 researchers and teaching staff are regularly involved in research activities.

Research activities of Ukrainian academics comply with the Laws of Ukraine *On Scientific Research and Scientific Research-Technical Activities* (VRU, 1991a), *On Innovation Activity* (VRU, 2002c), and *On Higher Education* (VRU, 2002a). The Ministry of Education and Science of Ukraine is the main body that implements state policy in the fields of research and scientific innovation. State priorities for research in science and technology are defined on a five-year basis through legislative acts of the Ukrainian Parliament.

However, there are some essential problems in this field. An essential portion of scientific-pedagogical workers does not participate in the scientific activities. The insufficient funding entails the scientific efforts of some of them to be seen as a “hobby” and end in the best cases with a yet another dissertation.

Hence, funding from the state budget is insufficient; however, there are some funds outside of the budget that can be involved. Thus, the Ukrainian government supports fundamental research via the State Foundation of Fundamental Research, which awards grants to Ukrainian researchers on a competitive basis. Additionally, Ukraine has entered into more than 60 bilateral and multilateral agreements on international scientific-technical cooperation; accordingly competitions for the realisation and financing of scientific projects are arranged yearly. Nevertheless, most universities turned out to be very passive in this respect. Special attention should be also paid to public-private-partnerships; no effective mechanisms have been developed so far.

2.3. Teaching

There are 334 institutions of the third and the fourth accreditation levels (232 public and 102 private). Ukraine boasts 130 universities, 63 academies, 135 institutes, and 2 conservatories. At present, 66 state-owned universities and academies have earned national status.

Private universities are declared to be equal in their rights and legal status to the state and municipal higher education establishments, but in reality their standing is far beyond the state higher education establishments.

According to the Article 53 of the Constitution of Ukraine every citizen has the right to a free access to higher education. Thus, the respective provision seems to be very progressively formulated, but the contemporary realities in the education sector very often contradict the constitutional provisions, showing the weaknesses of the state policy in the education sector. Though this requirement of the Basic Law is formulated clearly enough, the Ukrainian government and the Ukrainian Constitutional Court obviously seem to have another understanding of the respective article (as to the tuition-free access to higher education see above).

To enter a university a secondary school graduate has to pass very difficult entrance exams. The content of the examination often corresponds to a level of knowledge of a university professor. This shows the weak link between the secondary school and the university education within the respective context.

An essential problem as to the teaching staff is its age. The number of young graduates opting for an academic career is not satisfactory. Many professors are not willing to change teaching methods so they correspond to new scientific and technological achievements; they are not ready to face the today’s challenges.

And generally, the Ukrainian state should seriously think about creating an atmosphere in which a young talented person would feel appreciated and useful to the state. There are no teaching concepts to promote talented students. The lack of interest on the part of the teaching staff in this respect can be partially explained through the absence of fiscal incentives.

An important step in order to advance the level of higher education would be to modernise its technical base and to introduce modern technologies from the internet and well-developed university search engines to virtual laboratories on a large scale. An overall computerisation of libraries would be one of the main focuses in this context; there are no electronic libraries so far. Moreover, the libraries lack modern literature.

A good example of an institutional initiative in this respect is the creation of a national education and research network, known as the Ukrainian Research and Academic Network (URAN). In time, the URAN network is expected to provide access to substantial intellectual content, databases in various fields, electronic libraries, distance-learning courses, powerful search engines, and multi-server information processing.

2.4. Internationalisation

The Ministry of Education and Science co-operates with EU member states and other neighbouring countries of the region. Most recently, the Ministry approached the ministries of education of EU member countries with a request to support Ukraine as it joins the Bologna Process.

Ukrainian educational institutions' co-operations with various intergovernmental and non-governmental international organisations – UNESCO, UNICEF, the European Union, the Council of Europe, etc. – are strengthening.

With regard to Europe, the Ministry of Education and Science of Ukraine co-operates with the EU in general within the framework of the Tempus programme, and on a bilateral basis with member countries and their education agencies. During the first ten years of Ukrainian involvement in Tempus, Ukrainian higher education institutions submitted about 500 applications for competition.

At present, 50 Ukrainian higher education institutions and 15 research institutes have co-operation agreements with 61 German higher education institutions. In 1998, a conference of Ukrainian and German rectors signed a co-operation agreement among their higher education institutions. This co-operation includes the Ukrainian Free University in Munich, Germany, one of the oldest cultural centres of Ukrainian diaspora in Western Europe.

Also co-operation with Austrian universities increases. Admirable is the enthusiasm of University Professor Dr. Wolfgang Mantl from the Karl-Franzens-University of Graz, who holds annual lectures at the National Ivan Franko University of L'viv without any special co-operation agreement, as well as his efforts with University Prof. Dr. Joseph Marko to include this university in a new co-operation network between the University of Graz and universities in South-East Europe.

The visa regimes on the part of the EU member states affect naturally the mobility of Ukrainian students and researchers. It's a pity that the Ministry of Foreign Affairs and the Ministry of Science and Education have not found ways to essentially facilitate the movement of this category of Ukrainian citizens abroad.

Foreigners also have the right to higher education in Ukraine on a tuition basis, unless otherwise agreed through Ukraine's international agreements. Some universities propose courses in English, particularly medical universities. Thus, the State Medical University of L'viv accepts a lot of students from Arabic countries as well as from Turkey and China (they have to pay more for the corresponding education in their home countries).

Due to the country's growing access to the international education arena, equivalence and the recognition of academic degrees have become high priority issues. The Ukrainian degree of Candidate of Sciences is, roughly equivalent to the PhD degree. The second higher-level research degree of Doctor of Sciences is generally close to the status of a Habilitation, awarded in a number of countries based on research productivity criteria. In Ukraine, a Doctor's degree requires one more dissertation defence after the defence of the dissertation for the degree of Candidate. In addition, a Doctoral candidate must have published at least one monograph on the topic and no less than twenty articles in the national journals, selected by the Higher Attestation Commission separately for each specialisation. The Ukrainian academic title of Docent may be considered as equivalent to the title/position of Associate Professor, and the Ukrainian title of Professor as equivalent to Full Professor. The Ukrainian academic title of Senior Researcher has no equivalent in the countries of the European Union, although similar titles exist in some East European countries.

2.5. Inter-ethnic Co-operation

Ukraine ratified the European Charter for Regional or Minority Languages and the relevant law, which entered into force on 10.06.2003 and states that provisions of the Charter shall apply to languages of the following national minorities in Ukraine: Belarusian, Bulgarian, Gagausian, Greek, Jewish, Crimean Tatar, Moldavian, German, Polish, Russian, Romanian, Slovak and Hungarian. At the same time it is stressed that, "While applying provisions of the Charter, measures aimed at strengthening Ukrainian as a state language, its development and functioning in all spheres of public life on the whole territory of Ukraine shall not be considered as such that prevent or threat preservation or development of languages to which according to Article 2 of the present Law provisions of the Charter apply."

The national legislation refers to the rights of minorities in the field of higher education in the way described below.

According to Article 7 of the Law on Higher Education (with amendments from 20.12.2006) "*The language of education shall be determined by the Constitution of Ukraine and the Law of the Ukrainian SSR 'On Languages in the Ukrainian SSR' of 28.10.1989*"; indeed, the title of the latter has not been updated so far.

Hence, according to the Law of the Ukrainian SSR "On Languages in the Ukrainian SSR" education in infant schools, schools, vocational and higher educational establishments in Ukraine shall be in Ukrainian. In places where national minorities live, education in the above-mentioned establishments may be in Ukrainian as well as in the national language of the majority of the population residing in the respective territory. Further, the Article 28 of the respective law states: "Groups educated in the relevant national language may be set up for training the national staff in such institutions." However, "In all groups with the Russian language of education and non-Ukrainian-language educational institutions regardless of their subordination, the study of the Ukrainian language shall be ensured."

So far, only the Russian minority, which is the biggest in the country, essentially enjoys the right to be taught in its native language. However, the percentage of students receiving education in the Russian language varies from region to region. Thus, about 87% of the Russian-speaking groups in Crimea receive education in Russian, 53% in the Region of Luhansk, 25% in the Region of Kharkiv, while only 3% in the City of Kiev and 0% in the Region of L'viv or Ivano-Frankivs'k.

Several drafts of a new Law on Languages have been already proposed, but no result has been achieved so far. Should a new law be adopted, it might bring about some changes at least in regard to **higher** education as the teaching can be reduced to Ukrainian language only. However, this still remains unclear.

4. Questionnaire

Research Project UnivSOE

Fragebogen zum Forschungsraum Mittel- und Südosteuropa *Questionnaire for the Research Area SEE*

1. Der Forschungsraum in Südosteuropa The Research Area SEE

- 1.1. Welche Forschungs- und Lehrinstitutionen bestehen?
Universitäten, Akademien der Wissenschaften, außeruniversitäre Institutionen, Fachhochschulen, pädagogische Akademien etc...?
Which institutions for research and teaching do exist on the tertiary educational level such as universities, academies of sciences and arts, not university related public and/or private research institutions, institutions of higher education for applied sciences, teacher training, etc?
- 1.2. Wie sieht die Ko-ordination/Zusammenarbeit dieser Institutionen aus?
How and by whom are these institutions co-ordinated? How do these institutions co-operate?
- 1.3. Wie sieht die regionale und internationale, insbesondere europäische Einbindung aus?
How are these institutions involved in regional and international, in particular European research and teaching programs?
- 1.4. Welche Verwaltungsstrukturen bestehen?
Which administrative structures exist?
- a) Wie sind die Agenden auf die Ministerien verteilt? Welches Ministerium ist für die Forschungsagenden, welches für die Universitäten zuständig?
How are responsibilities allocated to ministries? Which ministries are competent for research and/or universities?
 - b) Bestehen eigene, unabhängige Beratungsorgane nach dem Modell eines Forschungs(bei)rates (zB Rat für Forschung und Technologieentwicklung in Österreich) bzw Beirates für die Universitätsentwicklung (zB Österreichischer Wissenschaftsrat)?
Are there special, independent advisory bodies for the ministries such as the Council for Research and Technology or the Advisory Body for University Development in Austria (Austrian Science Board)?
 - c) Welche Forschungsfördereinrichtungen bestehen? (Nach dem Beispiel des FWF, der DFG bzw FFG für die anwendungsorientierte Forschung)?
Are there specialized institutions for the financial management and fostering of research such as the Austrian Fund for Scientific Research (FWF) and the DFG and FFG for applied sciences research?
 - d) Entwicklung der Forschungsquote in den letzten fünf Jahren?
How did the research quota develop over the last five years?
- 1.5. Verfassungsrechtliche Grundlagen
The constitutional framework
- a) Kompetenzgrundlage in Angelegenheiten von Forschung und Universitäten?
How does the allocation of competences for research and universities look like?

- b) Wie ist die Wissenschaftsfreiheit ausgestaltet?
How is the constitutionally guaranteed academic freedom (of science) further specified by laws and by-laws or regulations?

2. Die Universitäten *The Universities*

2.1. Rechtsgrundlagen?

Which legal basis do universities have?

2.1.1. Entstehung? Jüngste Reformen?

When were they established? Are there any recent legal reforms?

2.1.2. Normqualität?

Is the legal framework for universities adequate? Are there laws or by-laws or other statutes concerning the universities?

2.2. Welches private/öffentlichrechtliche Organisationsmodell besteht?

Which public and/or private models of organization do exist?

- b) das korporative Modell
the (mediaval) corporative model
- c) das demokratische Modell
the democratic model with participation of students and all academic staff in all decision-making processes?
- d) die Managementuniversität („Universitätsräte“ als „Aufsichtsräte“ der Gesellschaft über die Universität?)
the corporate government model (with University Councils similar to boards of overseers of private companies where „delegates“ of the „economy and society“ decide on the development plans of the universities)

2.3. Welche Funktionen hat die Universität?

Which functions do universities perform?

2.3.1. Autonomie:

Autonomy:

- gegenüber dem Staat?
Vis-à-vis the state?
 - gegenüber der Wirtschaft?
Vis-à-vis the economy?
 - gegenüber anderen gesellschaftlichen Faktoren?
Vis-à-vis other societal forces?
- Bestellung der Universitätsorgane?
How are university bodies (rector, senate, etc) put in place? By appointment/election by whom?
- Finanzierung der Universitätseinheiten?
How are university institutions (faculties, departments, institutes, etc) are financed?

2.3.2. Forschung:

Research:

- (1) Erkenntnisorientierte Grundlagenforschung: „zwecklose“ Wahrheitssuche?
How much investigator driven basic research does exist based on the idea of searching for truth without having a particular purpose in mind?

- (2) Anwendungsorientierte Grundlagenforschung? Innovation? Patente?
How much targeted basic research is there? Innovation? Patents?
 - wer entscheidet finanzielle Grundsicherung, Schwerpunktbildung?
Who decides on the basic financial means for all activities or the development of specific areas of research or centers of excellence?
 - Wer bildet den wissenschaftlichen Nachwuchs aus?
Who trains scientific academic staff and post-docs?

- (3) Produktorientierte Anwendungsforschung (Produktforschung, angewandte Forschung): Effizienzsteigerung?
How much applied research for the development of specific products does exist? Is there an increase of efficiency?

2.3.3. Lehre:

Teaching: *What is the underlying philosophy of „education“?*

- Bildung ? allgemeines Menschenbild?
To provide for a „general“ education in the tradition of classic humanities?
- Ausbildung? Berufsvorbereitung – Marktorientierung?
To provide specific training in preparation for the labor market?
- Undergraduate – postgraduate Modelle, Doktorat?
Which curricular models for undergraduate, postgraduate studies do exist? Is a PhD program the final goal?
- Bologna?
Is the Bologna process implemented?
- lebenslanges Lernen; berufsbegleitende Aus- und Weiterbildung
Do courses for life-long learning exist? Are there courses for vocational training or for complementing practical job experience?
- Wie sieht die Zusammensetzung des Lehrkörpers aus?
How is the faculty composed?
 - Verhältnis von Professoren/Assistenten, Männern/Frauen, wissenschaftlichem/nichtwissenschaftlichem Personal?
Relation of professors/assistants, men/women, scientific/non-scientific staff?
 - Alter?
Age structure?
 - Herkunft (Nationalität)?
Place of origin (ethnic or national affiliation)?

2.4. Effektivität:
Effectivity:

- Schwerpunktbildung: Sind alle Fächer an allen Universitäten vertreten?
Specialisation and creation of centers of excellence: Should all subjects be represented at all universities?
- Findet Qualitätskontrolle, -sicherung statt?: Auswahl der Studierenden (Aufnahmsprüfungen?), Forscher-Lehrer (Bewerbungs-, Berufungsverfahren?); Out-put evaluation; Wie wird Forschungs- und Lehrleistung gemessen? Zahl der Veröffentlichungen, Abschlüsse, Diplomarbeiten, Dissertationen?
Is there quality assessment? How are students selected? Are there entrance exams? How are lecturers and researchers selected? Are there special procedures for application and promotion? With regard to out-put evaluation: What are the numbers of publications, degrees awarded, masters and PhD theses?

2.5. Finanzierung und Effizienz:
Financing and efficiency:

- Wie werden die Universitäten finanziert? (Studiengebühren?)
How are universities financed? Are there fees?
- Wird die finanzielle Gebarung kontrolliert? Nach welchen Kriterien?
How are budgets controlled? What are the criteria:
- Kostengünstigkeit
Cost efficiency
- Wirtschaftlichkeit
Operating efficiency
- Zweckmäßigkeit
Expediency

2.6. Internationalität
International co-operation

- Wie ist der Zugang zu den nationalen Hochschulen geregelt (incoming)?
How is access to the national university system regulated (numbers of incoming?)
- Wie ist das Verhältnis von inländischen und ausländischen Studenten? Aus welchen Ländern stammen sie?
What is the ratio of domestic and foreign students? Which countries do they come from?
- Gibt es einen Export von Studenten – Forschern (outgoing)?
Is there an export of students – researchers (numbers of outgoing)
- Gibt es eine Einbindung in internationale, va europäische Netzwerke?
Is there an integration into international, in particular European networks? Which one?
- Bestehen bi- und multilaterale Forschungskooperationsabkommen?
Are there bi- and multilateral research cooperation agreements?
- Gibt es eine Beteiligung/Führung an internationalen Programmen?
Is there a participation/lead function in international programs?
- Sind Gastforscher tätig?
Do you host visiting scholars?

2.7. Transdisziplinarität:
Transdisciplinarity:

- Wie groß ist die Abschottung der einzelnen Fächer/Disziplinen innerhalb der Einheiten/Fakultäten/Universitäten?
Is research and teaching being isolated through specification of research subjects and disciplines within particular subdivisions of the universities?
- Gibt es interdisziplinäre post-graduale Lehrprogramme, Forschungsprojekte innerhalb der Disziplinen, disziplinenübergreifend?
Are there inter-disciplinary post-graduate teaching programs, research projects within the different scientific disciplines (law, economics, social sciences, medicine, natural sciences) or transgressing the borders of those disciplines?

2.8. PPPs? Gibt es im Bereich von Forschung und Lehre PPP Modelle?
Are there public-private-partnership models for research and teaching?

- Gibt es Stiftungsprofessuren?
Are there chairs or institutes financed by private foundations?
- Sind Wirtschaft und Industrie an der Finanzierung der Universitäten beteiligt?
Do economic actors participate in the financing of universities?
- Gibt es Kooperationen mit der Industrie an Universitätsinstituten?
Is there co-operation between industries and universities?
- Gibt es spin-off-Unternehmen?
Are there spin-off enterprises?

2.9. Das Rollenbild des Wissenschaftler:
The role-model for a scientist?

Einzelkämpfender Wahrheitssucher? Forschungsunternehmer/-manager?
Is he/she the individual genius in search of truth? Or is he an organizing or and manager organizing research activities?

2.10. Integrationsfunktion?

Which role do universities play for inter-ethnic co-operation?

- Gibt es spezielle Konfliktbewältigungsaktivitäten an den Universitäten?
Are there conflict management activities?
- Spezielle Forschungsschwerpunkte, Seminare?
Are there specific research activities, seminars?
- Grad der Multiethnizität?
What is the level of multi-ethnicity or ethnic distances?

2.11. Trends? Ökonomisierung – Internationalisierung

Which trends are there? Market orientation – greater international involvement

- Welche Trends bestehen?
Which trends are there?
- Welche Universitätsreformen sind geplant?
Are there any plans for university reforms?
- Stärken, Schwächen, Bedürfnisse, Erwartungen an die EU-Länder?
What are strengths, weaknesses, needs, and expectations from EU-member states?

3. Der außeruniversitäre Sektor im Bereich der Forschung *Not university related research institutions*

3.1. Akademien der Wissenschaften *Academies of Sciences and Art*

3.1.1. Gründungsdatum? *When were they founded?*

3.1.2. Rechtsgrundlage? *What is their legal basis?*

3.1.3. Welches Organisationsmodell besteht? *Which model of organization exists?*

- privatrechtlicher Verein?
Private law association?
- Öffentlichrechtliche Körperschaft mit Selbstverwaltung?
Public law institution with forms of self-government?
- Sonstiges?
Other?

3.1.4. Welche Binnenstruktur besteht? *How is the institutional structure organised?*

- Satzung, Statuten, Geschäftsordnung?
Articles of association, statute or by-law, rules of procedure?
- Eine oder mehrere Klassen?
Are there one or more divisions?
- Beschränkung auf einige Wissenschaftsbereiche oder für alle zugänglich?
Restricted to some scientific disciplines or not?
- Aufnahme der Mitglieder durch Wahl?
Recruitment of members by elections?

3.1.5. Welche Funktionen liegen vor? *Which functions are performed?*

- Ist sie reine Gelehrten-gesellschaft? (dh nur Versammlung gewählter Mitglieder als Auszeichnung für wissenschaftliche Leistung);
Is the Academy only an association of scientists, i.e. an assembly of elected members thereby honoring their scientific achievements?
- Betreibt die Akademie auch Forschungsinstitute, an denen sie wissenschaftliche Mitarbeiter beschäftigt?
Does the Academy also run research institutions with hired scientific staff?
- Vergibt sie Preise und Stipendien (zur Nachwuchsförderung)?
Does the Academy award prizes and scholarships (in order to support young researchers)?

- Erteilt sie Politikberatung in forschungspolitischen Angelegenheiten?
Is the Academy involved into legal and political counselling with regard to research policies?
- Hat sie internationale Kontakte und ausländische Mitglieder? Ist sie in EU-Projekte eingebunden?
Does the Academy accept foreign members and does she have international relations? Does she participate in EU-projects?
- Bietet sie öffentliche Vorträge bzw Lehrangebote an?
Does the Academy offer public lectures and teaching modules?
- Wie hoch ist ihre Autonomie vom Staat, von der Wirtschaft?
What is her degree of autonomy vis-à-vis the state and economic actors?

3.1.6. Finanzierung *Financing*

- Wie wird die Akademie finanziert?
How is the Academy financed?
- Gibt es Kooperationen mit der Industrie?
Are there co-operations with corporations/Industry?

3.1.7. Welches Selbstverständnis, welche Selbsteinschätzung hat die Akademie? Leistet sie einen Beitrag zur Integration? Wie sieht die (ethnische) Zusammensetzung ihrer Mitglieder aus? Worin sieht sie ihre größte Leistung der Vergangenheit? Was kann/will sie für die Zukunft leisten? *What is the underlying „philosophy“ of the Academy, her self-perception? Does she contribute to societal integration? What is the ethnic affiliation of her members? What is seen as the biggest achievement in the past? What are her goals for the future?*

3.1.8. Wie ist ihr Verhältnis zu den Universitäten und übrigen außeruniversitären Forschungsinstitutionen ausgeprägt? *How is the relationship to universities and not university related research institutions?*

3.1.9. Stehen Reformen bevor? *Are there any reform plans?*

3.2. Sonstige Außeruniversitäre Forschungsinstitutionen *Other not university related research institutions*

3.2.1. Welche Forschungsgesellschaften als Kooperationen zwischen Staat und Wirtschaft bestehen? *Are there any research associations functioning as a bridge between the state and the economy?*

3.2.2. Welche privaten Forschungsunternehmen bestehen? *Which private research companies do exist (e.g. Think Tanks)?*

3.2.3. Betreiben Wirtschafts- und Industrieunternehmen eigene Forschungsabteilungen? *Do private companies run their own research departments? In which branches and which fields?*

3.3. Einbindung in den Europäischen Forschungsraum
Integration into the European Research Area

- Besteht ausreichend Information über die Mitwirkungsmöglichkeiten für Forscher an Programmen der EU?
Is there sufficient information for participation in EU programs?
- Erscheinen Initiativen wie SEE ERA Net als sinnvoll?
Do initiatives like SEE ERA Net help in this regard?
- Was fehlt?
What is missing?

4. **Der außeruniversitäre (tertiäre) Sektor im Bereich der Bildung**
The not university related tertiary education sector

4.1. Welche Ausbildungsinstitutionen bestehen neben den Universitäten?
Which educational institutions in the tertiary sector exist except universities?

- Fachhochschulen?
Institutions of higher education for applied sciences?
- Pädagogische Akademien?
Colleges for Teacher Training?
- Andere?
Others?

4.2. Einbindung in den Europäischen Hochschulraum
Integration into the European University Network/European University Area

- Interesse an der Teilnahme an Aktivitäten von zB ERI SEE (Education Reform Initiative of South Eastern Europe) (= Erweiterter, fortentwickelter Graz Prozess, Vernetzung und Erfahrungsaustausch auf dem Gebiet der Bildung und Ausbildung im tertiären Sektor, Graz Konferenz Jänner 2005)?
Is there any interest in participation in activities such as ERI SEE (Education Reform Initiative of South Eastern Europe) (=enhanced Graz Process, Networking and exchange of information in the field of Education and Training on the tertiary level, Graz Conference January 2005)?
- Was fehlt?
What is missing?

5. Summaries of the Commissioned Articles on University Development in Europe to be published in Volume I

5.1. Walter BERKA: Wissenschafts- und Kunstfreiheit als „Prozessmotor“ der Innovation

Die Freiheit der Wissenschaft und ihrer Lehre wird als ein bewahrendes, tendenziell eher reformfeindliches Grundrecht angesehen, während sich die Kunstfreiheit im Gegensatz dazu als ein gewährleistendes, progressiveres Grundrecht darstellt: Künstler, die sich in Gerichtsverfahren auf die Kunstfreiheit beriefen, stellten durchwegs Werke der eher anstößigen und provokativen Art her oder waren durch den Eingriff in Ehre oder Privatsphäre Dritter durch die Kunst gekennzeichnet. In ihrer Tendenz ist die Wissenschaftsfreiheit in der hochschulpolitischen Praxis eher konservativ, die Kunstfreiheit eher progressiv.

Im europäischen Vergleich fällt auf, dass die beiden genannten Grundrechte fast nur in Österreich und Deutschland explizit als solche verfassungsgesetzlich verankert sind, während sie in anderen Ländern und auch in der EMRK nur im Rahmen der Meinungsäußerungsfreiheit aufscheinen. In der österreichischen Verfassung werden beide Grundrechte „ohne Schranke“ verbrieft, es gibt keinen Vorbehalt wie bei den meisten anderen Grundrechten. Dies erklärt sich daraus, dass Kunst und Wissenschaft auf besonderen Schutz angewiesen sind, weil sie Ausdruck individueller Kreativität und geistiger Originalität sind und die menschliche Schaffenskraft sich frei entfalten können muss. Die Verfassung gesteht dem Einzelnen Autonomie zu und fördert somit Innovation, gleichzeitig besteht aber auch ein Handlungsspielraum, der positiv wie negativ gefüllt werden kann. In Österreich entscheidet in der Praxis die Universität selbst darüber, wie groß dieser Handlungsspielraum ist. Mittels Zuweisung von Ressourcen durch die Universitätsleitung und direkte Anordnungsbefugnisse kann von Seiten der Universität steuernd eingegriffen werden – der Spielraum des einzelnen Trägers der Wissenschaftsfreiheit wird kleiner, wobei es immer ein verbindlich verbürgtes Mindestmaß an Freiheit geben muss.

Österreich ist in der Entlassung der Universitäten in die Autonomie weiter gegangen als viele andere europäische Länder. Die Universitäten haben Rechtspersönlichkeit, besorgen ihre interne Organisation autonom, können frei über ihnen zugewiesene Mittel disponieren und das Personal selbst auswählen. Dies beschneidet zwar die individuelle Wissenschaftsfreiheit der Angestellten, steht jedoch nicht im Widerspruch zur institutionellen Komponente der Wissenschaftsfreiheit, die eine sachgerechte Organisation des universitären

Wissenschaftsbetriebs verbürgt. Eine solche Autonomie steht mit ihrer hohen Innovationskraft im Gegensatz zum eher traditionellen Konzept der Wissenschaftsfreiheit. Dieses hat bei der Universitätsreform aber ohnedies nur eine marginale Rolle gespielt – im Vordergrund standen die organisatorische Effizienz und die Sicherung der Wettbewerbsfähigkeit.

5.2. Hellmut FISCHMEISTER: Die Max-Planck-Institute als Beispiel außeruniversitärer Forschungseinrichtungen

Im Herbst des Jahres 1946 wurde durch die sich in der britischen Besatzungszone befindliche Kaiser-Wilhelm-Gesellschaft (KWG) die Max-Planck-Gesellschaft (MPG) zur Förderung der Wissenschaft gebildet. Die Max-Planck-Gesellschaft übernahm die Prinzipien der 1911 gegründeten Kaiser-Wilhelm-Gesellschaft, allen voran das sogenannte „Harnack-Prinzip“, welches besagt, stets die besten Forscher zu berufen, diese von ihren Lehrverpflichtungen zu befreien und ihnen eine völlig freie Methoden- und Themenwahl zu gewähren. Darüber hinaus werden den Forschern sehr großzügige personelle, apparative und finanzielle Ressourcen zur Verfügung gestellt. Diese Freiheiten sind natürlich an eine hohe Verantwortung für die wissenschaftliche Leistung der Abteilung gebunden, denn ein Leistungsdefizit würde zu einer Reduktion des Haushaltes führen.

Eine Berufung wird ausschließlich an ausgewählte Spitzenforscher herangetragen, was einen wesentlichen Faktor des Exzellenzklimas der Max-Planck-Gesellschaft darstellt. Vorschläge für eine Berufung werden vielfältigen Prüfungen unterzogen und auch Nachfolgeberufungen dienen mehr der konsequenten Erneuerung als der unbedingten Fortsetzung eines vorgegebenen Weges durch eine Forscherpersönlichkeit. Zahlreiche wissenschaftliche Kooperationen verbinden die Gesellschaft mit anderen Forschungsorganisationen und Universitäten. Dadurch entstehen zahlreiche Forschungsinitiativen, welche auch jungen Diplom-, Promotions-, und Habilitationskandidaten die Möglichkeiten bieten an bedeutenden Projekten mitzuarbeiten. Auf diese Weise wird eine große Anzahl von Wissenschaftlern herangebildet, die neue Innovationsprozesse anregen können und weltweit zu den besten Köpfen der Wissenschaft zählen.

Die Geldgeber setzen sich vor allem aus namhaften Industrie- und Wirtschaftskonzernen zusammen und verzichten auf steuernde Eingriffe, wodurch die Wissenschaftler ihre Forschungsgebiete allein aus wissenschaftsimmanenten Erwägungen wählen können.

5.3. Peter Claus HARTMANN: Die Universität der frühen Neuzeit im Heiligen Römischen Reich

Die Entwicklung des Wesens und der Struktur der frühneuzeitlichen Universität im Heiligen Römischen Reich (mitteleuropäischer Raum) stellt für die Universitäten eine wichtige Epoche dar, die durch die Zeitspanne vom ausgehenden Mittelalter bis zum Beginn der Aufklärung vor allem durch Humanismus, Reformation und katholische Reform geprägt ist.

Eine so genannte Volluniversität bestand in dieser Zeit aus vier Fakultäten – Theologie, Jurisprudenz, Medizin, Artistenfakultät. Die Artistenfakultät diente als Vorbereitung für die anderen Fakultäten und lehrte die Studenten die sieben Artes liberales. Diese lassen sich wiederum aufteilen in das Trivium (Grammatik, Rhetorik und Dialektik) und das Quadrivium (Arithmetik, Geometrie, Musik und Astronomie). Als universale Gelehrten- und Wissenschaftssprache galt Latein. Päpstliche und kaiserliche Privilegien, welche meist bei der Gründung einer Universität verliehen wurden, garantierten die europa- und reichsweite Anerkennung der Studienabschlüsse.

Bereits am Beginn der frühen Neuzeit entstand die geistige Strömung des Humanismus, der eine Bildungsreform einleitete. Wichtige Zentren in dieser Zeit waren die Landesuniversität Ingolstadt und die Reformuniversität Wittenberg, wo Martin Luther Theologieprofessor war. In der ersten Hälfte des 16. Jahrhundert war auch die Verschränkung von Humanismus und Reformation, welche von einer bürgerlichen Bildungsbewegung getragen wurde, von großer Bedeutung. Durch zahlreiche neugläubige Fürsten wurden viele protestantische Universitäten wie Marburg in Hessen, Königsberg in Preußen und Helmstedt in Braunschweig-Lüneburg gegründet. Aufgrund der verschiedenen Religionen (katholisch, lutherisch und ab 1648 auch calvinistisch) gab es auch verschiedene konfessionelle Bildungslandschaften. Diese kulturelle Vielfalt rief Konkurrenzdenken hervor und konnte die Universitäten zu Höchstleistungen animieren.

Trotzdem blieben im Vergleich zu den späteren Jahrhunderten alle Universitäten relativ klein und mit wenigen Lehrstühlen und einer begrenzten Anzahl an Studenten versehen. Die Bedeutung der Hochschulen nahm allerdings angesichts der steigenden Bedürfnisse nach gut ausgebildeten Akademikern zu. Deshalb wurden von den Landesherren ständig neue Universitäten gegründet, sodass es um 1700 bereits 40 Universitäten gab. Diese Universitäten wurden jedoch überwiegend nur als Lehranstalten gesehen, da die Kombination von Lehre

und Forschung noch nicht zum Wesen der Universitäten gehörte. Aus diesem Grund waren auch die Universitätsbibliotheken im Gegensatz zu den Kloster- und Hofbibliotheken, eher klein.

5.4. Werner HAUSER: Lehrerausbildung Neu: Pädagogische Hochschulen

Die Lehrerausbildung in Österreich nahm im Jahre 1744 mit der Schulordnung Maria Theresias ihren Anfang und verlief in ihrer Entwicklung bisher weitgehend parallel mit den Entwicklungen im Bereich des Schulwesens. Zwei Trennlinien ziehen sich von diesem historischen Ausgangspunkt an bis heute durch das Schul- und Ausbildungswesen: Auf der einen Seite steht das dauernde Spannungsverhältnis der politischen Parteien in ihren Positionen im Bereich des Schulwesens, auf der anderen Seite die bis heute nicht aufgelöste Trennung der Lehrerausbildung an den Universitäten und an den pädagogischen Hochschulen. Auch das Hochschulgesetz 2005, das mit 1. Oktober 2007 in Kraft getreten ist, hat daran nichts geändert. Eine einheitliche Lehrerausbildung für den Primär- und Sekundärbereich ist in weite Ferne gerückt. Mit dem neuen Hochschulgesetz konnte jedoch zumindest die bisher in unzähligen Einzelgesetzen geregelte Materie der Lehrerausbildung einer einheitlicheren Regelung zugeführt werden und nicht zuletzt durch die neuen Pädagogischen Hochschulen die Akademikerquote in Österreich angehoben werden.

Den neu geschaffenen Pädagogischen Hochschulen kommt nach dem Gesetz die Aufgabe zu, wissenschaftlich fundierte Bildungsangebote in den Bereichen der Aus-, Fort- und Weiterbildung in pädagogischen Berufsfeldern zu entwickeln und anzubieten. Die Fort- und Weiterbildung bildet dabei – im Gegensatz zu den Universitäten und Fachhochschulen – einen der Ausbildung gleichgestellten Aufgabenbereich.

Als Organe sind an den Pädagogischen Hochschulen der Hochschulrat, das Rektorat (Rektor und sein(e) Vizerektoren) und die Studienkommission vorgesehen.

Die Autonomisierung der Hochschulen bleibt jedoch auch nach dem neuen Hochschulgesetz Wunschdenken: Die Studienkommissionen haben kaum Handlungsspielraum, zentrale Befugnisse wie die Bestellung von Rektor und Vizerektor, die Genehmigung des Organisations- und Leistungsplanes oder die Bestellung von Stammlererschaft und Verwaltungspersonal verbleiben beim jeweils zuständigen Regierungsmitglied. Es wurde weder wie im Fachhochschulbereich eine unabhängige Expertenkommission zur Prüfung und

Entwicklung des Studienangebotes geschaffen, noch konnte man sich darauf einigen, den pädagogischen Hochschulen – wie den Universitäten – die Entwicklung der einzelnen Studiengänge im autonomen Wirkungsbereich zu überlassen.

Kritisch muss auch die Bologna-Vereinbarkeit der neuen Hochschulen geprüft werden: Kaum eine europäische Institution für Lehrerausbildung ist mit der in Österreich implementierten Ausbildung an den Pädagogischen Hochschulen vergleichbar bzw. kompatibel.

5.5. Sigurd HÖLLINGER: Die österreichische Reform der Universitäten in europäischer Perspektive

Europas Universitäten sind überwiegend öffentlich-staatlich. Eine staatliche Finanzierung oder eine mehr oder weniger deutliche Einflussnahme durch den Staat sind ihnen gemeinsam. Es gibt jedoch in vielen europäischen Ländern Bestrebungen, die Autonomie der Universitäten zu erhöhen, die Geschwindigkeit mit der Reformen gesetzt werden, ist jedoch sehr unterschiedlich.

In Österreich wurde mit dem Universitätsgesetz 2002 eine der größten Veränderungen der letzten 150 Jahre in der Universitätslandschaft vorgenommen. Forschung und Lehre sollten gestärkt und gleichzeitig die Wirtschaftlichkeit der Universitäten erhöht werden. Das Hoheitsverhältnis zwischen Universität und Staat wurde durch ein partnerschaftliches Zusammenwirken abgelöst. Die Universitäten können nun ihre Vorschläge für die nachfolgenden Leistungsvereinbarungen zwischen Staat und Universität in die Finanzverhandlungen einbringen und so Schwerpunkte in der Entwicklung setzen. Die Universitäten treten zwar nicht als Unternehmen, jedoch als unternehmensähnliche Einrichtungen im Wettbewerb auf. Das gesamte Personal wird seit dem UG 2002 von der Universität und nicht wie zuvor vom Staat angestellt. Damit sollte auch ein neuer Kollektivvertrag einhergehen, der aber bis dato nicht fertig ausverhandelt werden konnte. Eine leistungsorientierte Personalentwicklung ist dadurch nur schwer möglich.

Etwa zwei Drittel aller Studiengänge in Österreich wurde bis dato auf das Bologna-System umgestellt, mehr als ein Drittel der österreichischen Studierenden eines Studienjahres nimmt an Auslandsprogrammen teil und verbringt mindestens vier Monate außerhalb Österreichs: Der „Europäische Hochschulraum“ wird Wirklichkeit.

Insgesamt schmälert die erfolgte Umwandlung der staatlich gelenkten Universitäten in autonome Einrichtungen mit eigener Rechtspersönlichkeit nicht das verfassungsgesetzlich gewährleistete Recht auf Freiheit der Wissenschaft und ihrer Lehre. Das UG 2002 schreibt vor, dass es keinen Zwang zu Arbeiten geben darf, die der Forschende nicht mit seinem Gewissen vereinbaren kann und enthält damit bereits Teile der Empfehlung zur Europäischen Charta für Forscher.

In der Praxis haben sich einige Kritikpunkte zur neuen gesetzlichen Regelung ergeben: So können etwa Universitäten nur sehr schwer Vermögen bilden, da Gebäude und Liegenschaften nach wie vor nicht im Eigentum der Universitäten stehen. Die Frage der Studiengebühren bzw. des Universitätszuganges bedarf einer langfristigen Lösung. Auch besteht seit vielen Jahren die Forderung, das Budget für den Hochschulbereich zu erhöhen – im europaweiten Vergleich schneidet Österreich mit 1,28% des BIP hier schlecht ab, die EU-Empfehlung lautet, das Budget bis 2015 auf 2% des BIP zu erhöhen.

5.6. William M. JOHNSTON: Hochschulbildung in den Vereinigten Staaten Amerikas als Herausforderung für die Universitäten in Europa und Großbritannien

Die Spannung zwischen Lehre und Forschung durchdringt alle Sektoren der US-amerikanischen Hochschullandschaft und die bessere Vereinbarkeit der beiden Bereiche in den USA stellt die größte Herausforderung für Europa dar.

Die Hochschullandschaft erweist sich als in mehrere Sektoren gegliedert, wobei drei Bereiche besonders hervorstechen: Die privaten vierjährigen Colleges, die privaten (Forschungs-) Universitäten und schließlich die staatlich finanzierten (Forschungs-) Universitäten. Zwischen diesen und den europäischen Hochschulen lassen sich einige große Unterschiede feststellen. So ist beispielsweise die Länge der „Undergraduate“-Ausbildung in den USA mit vier Jahren um ein Jahr länger als in Großbritannien und gewisse Studien, wie Jus oder Medizin, können nur im „Graduate-Studium“ studiert werden, sie zwingen zu einer längeren Gesamtstudienzeit. Zudem besteht eine viel stärkere Identifikation der Universitätsabsolventen mit ihrer „alma mater“ als in Europa, die sich auch in finanziellen Zuwendungen an die Universität manifestiert.

Die Studenten sollen durch ein Universitätsstudium für eine Reihe von Herausforderungen vorbereitet werden. Dazu zählen etwa unvorhersehbare Ereignisse wie Terrorismus und

ökologische Ausnahmezustände und die Tatsache, dass Religion und Diskurse über Werte im weltweiten politischen Alltag an Bedeutung gewinnen.

Das vierjährige Liberal Arts College ist die markanteste Institution des US-amerikanischen Hochschulsystems. Seine Besonderheit liegt vor allem im Bereich der individuellen Persönlichkeitsbildung, die bereits bei den strengen Auswahlverfahren beginnt.

Die Infrastruktur zur Forschung erweist sich als großes Netzwerk bestehend aus vier US-spezifischen Körperschaften, den universitären Publikationsorganen, den professionellen Interessensverbänden von Forschern, den privat finanzierten Forschungseinheiten wie Büchereien und Spitälern und schließlich den privaten Stiftungen. Eine weitere Besonderheit besteht in der Bereitschaft der Hochschullandschaft für institutionelle Selbstkritik und Selbsterneuerung.

Das US-amerikanische Hochschulsystem lässt sich nicht einfach kopieren. Das Forschungsnetzwerk um die Universitäten ist einzigartig. Im Gegensatz dazu stellt sich die Mehrsprachigkeit der Forscher des europäischen Hochschulsystems gerade für die Geistes- und Sozialwissenschaften als großer Vorteil dar.

5.7. Helmut KONRAD: Idee und Genese der österreichischen Privatuniversitäten im internationalen Vergleich

Die tertiäre Bildungslandschaft in Europa wurde in den letzten Jahren durch zahlreiche große Veränderungen geprägt. In Österreich herrscht noch immer die Meinung vor, dass Universitäten staatliche Bildungseinrichtungen sind und damit auf eine lange geschichtliche Tradition zurückblicken können. Jedoch unterlagen auch die Universitäten in den letzten Jahren zahlreichen Erneuerungen und Umgestaltungen.

Österreich weist im Gegensatz zu anderen deutschsprachigen Ländern eine zentralistische Universitätsstruktur auf. Qualitätsstandards wurden in Österreich nicht durch kompetitive Konkurrenz definiert, sondern durch die Verwaltung gesichert – Wiener Universitäten waren dabei scheinbar vor allem durch die Nähe zum Ministerium bei Interventionen begünstigt.

Auch die Universitätsreform im Jahre 1975 konnte nur wenig an der zentralistischen Ausrichtung der Universitäten ändern, obwohl diese Reform von großer Bedeutung für die Erneuerung der Verwaltungsstruktur der internen Mitbestimmung war.

Neben den staatlichen Universitäten haben sich zu Ende des 20. Jahrhunderts auch Fachhochschulen etabliert, welche sich durch verkürzte Studienzeiten und praxisorientierte Studienpläne sehr schnell an den vorhandenen Markt anpassen konnten. Im Jahr 1999 reagierte Österreich auf diesen Erfolg der Fachhochschulen und schuf ein Bundesgesetz über die Akkreditierung von Bildungseinrichtungen als Privatuniversitäten. Damit gelang es, mehr Transparenz, Qualität und Sicherheit für Anbieter und Studierende zu schaffen. Dies wurde und wird vor allem durch den Akkreditierungsrat gesichert, da dieser zwei grundlegende Aufgaben übernimmt: Zum einen ist er für die Durchführung und Verlängerung von Akkreditierungen der verschiedenen Institutionen und Programme zuständig, zum anderen hat er die Aufsicht über die bislang akkreditierten Privatuniversitäten. Der Rat agiert zudem unabhängig und hat nur dem Nationalrat Bericht zu erstatten.

In Österreich liegt die Zahl der Privatuniversitäten derzeit bei 11 – die Zahl der Bewerber um eine Akkreditierung war allerdings um ein Vielfaches höher. Das Lehrangebot an den Privatuniversitäten ist in seiner Bandbreite sehr weit gestreut und reicht von Kunst bis hin zu Medizin, wobei der Fokus in Österreich eindeutig auf den MBA-Programmen liegt. Das Hauptaugenmerk wird in der Zukunft allerdings weiterhin auf der Qualitätssicherung, der Sicherung der internationalen Mobilität und der praxisnahen Ausbildung liegen, welche den Einstieg in den heutigen Arbeitsmarkt erleichtern sollen.

5.8. Jürgen MITTELSTRAß: Leibniz, Kant, Humboldt – die Universität in der Aufklärungswelt

Die Geschichte der Universität vom 17. bis zum 19. Jahrhundert scheint gleichzeitig auch die Veränderung von der mittelalterlichen hin zur modernen Universität widerzuspiegeln. Diese Entwicklung vollziehen die Universitätstheoretiker Leibniz, Kant und Humboldt in ihren Hochschulkonzepten nach.

Leibniz, der zeit seines Lebens als Gegner der Universitätsorganisation bekannt war, hat dennoch durch seine wissenschaftlichen Ausführungen die moderne Universität stark beeinflusst, seine bildungspolitischen und -systematischen Konzepte führten zu einer Neuordnung des Wissenschaftswesens. Leibniz strebte schon in jungen Jahren eine Reform des schulischen Unterrichts an und sah in der Organisationsform der Akademien die Zukunft der wissenschaftlichen Ausbildung. Seine Pläne für diese Akademien hat Leibniz in zahlreichen Schriften wie der „mathesis universalis“ oder der „scientia generalis“ dargelegt. Den Akademien gelang es allerdings nicht die Universitäten (obwohl diese sich in der Zeit um

1818 in der Krise befanden) zu ersetzen, da sie in zu geringem Maße auf die Lehre konzentriert waren.

Für Kant ist – im Gegensatz zu Leibniz – die „Idee der Universität“ in philosophischer Hinsicht zu sehen und wird von der Philosophischen Fakultät getragen, der in diesem Sinne allein die wissenschaftliche Wahrheit und Vernunft zukommt. Die Philosophische Fakultät wird deshalb in Kants Konzept als vierte neben den drei bestehenden Fakultäten (Theologie, Jurisprudenz, Medizin) integriert und soll als Kontrollorgan für die übrigen fungieren. Kant erweist sich mit diesen Vorschlägen als großer Theoretiker einer neuen Universitätsidee, allerdings noch nicht als deren wirklicher Reformierender.

Dieser Schritt – die tatsächliche Umsetzung der Universitätsreform – gelingt erst Wilhelm von Humboldt. Die Reform Humboldts zielte allerdings nicht darauf ab, die Universitäten zu erhalten, sie sollten vielmehr einer institutionellen Umwandlung zum Opfer fallen. Auch der Name „Universität“ sollte von einem neuen Forschungsbegriff („Forschung in Einsamkeit und Freiheit“) ersetzt werden. Jedoch wurde ihm bald klar, dass es leichter sein würde, eine neue Bildungseinrichtung doch unter dem Namen „Universität“ zu gründen. Seine Reform ist daher weit weniger Neuschöpfung als Erneuerung – eine Universitätsreform wider Willen, da sie eigentlich der Abschaffung derselbigen dienen sollte.

5.9. Michael MITTERAUER: Die Anfänge der Universität im Mittelalter. Räume und Zentren der Wissenschaftsentwicklung

Ausgangspunkt für die Forschung über die Anfänge der Universität muss unser heutiges Verständnis derselbigen sein, denn auch wenn die im Mittelalter als „universitas“ bezeichneten Vereinigungen von Professoren und Studenten gewisse Ähnlichkeiten mit einer heutigen Universität aufweisen, so gibt es doch nicht sehr viele Gemeinsamkeiten. Davon zu unterscheiden sind Universitäten, die dem Charakter nach Zentren wissenschaftlicher Forschung waren. Allerdings kann man im Mittelalter davon ausgehen, dass diese Zentren weitgehend abgeschottet waren und kaum weitreichender Wissenschaftstransfer stattgefunden hat.

Die Wissenschaftsentwicklung, welche seit dem Hochmittelalter in Europa in den Universitäten existent ist, basiert auf einem Erbe, das in die griechisch-hellenistische Wissenschaft zurückreicht. In zahlreichen größeren Wissenschaftsräumen des Frühmittelalters erfolgte die Auseinandersetzung mit der Antike. Als die drei wichtigsten Vermittler zwischen

Antike und dem hochmittelalterlichen Europa können die arabisch-islamische Wissenschaft mit ihrem Zentrum in Bagdad, die byzantinische Wissenschaft mit dem Zentrum in Konstantinopel und der stärksten Kontinuität zur Antike, sowie der Wissenschaftsraum des lateinischen Westens, welcher vor allem durch seine großen Übersetzungszentren in süditalienischen Regionen und durch die wissenschaftlich betriebene Jurisprudenz in Oberitalien bekannt wurde, genannt werden. Auch das nördliche Frankreich kann hinzugerechnet werden, denn hier beschäftigte man sich vor allem mit Theologie und Philosophie. Dies lässt schon erkennen, dass der Entstehung der Wissenschaftszentren in Europa eine bipolare Struktur innewohnt.

Generell lässt sich sagen, dass in allen Bereichen, wo zwischen Wissenschaft und Lehre Unterschiede zugelassen wurden, sich dynamische Entwicklungen erkennen ließen.

5.10. Gerd ROELLECKE: Gesellschaft – Staat – Universität

An den ersten Universitäten, unter ihnen etwa die Universität von Bologna, wurde ursprünglich das antike römische Recht, die „Digesten“, gelehrt. Mit dem regen Zulauf durch in- und ausländische Studenten entwickelte sich langsam ein eigener Stand der Universitäten und Studierenden, die Universität wurde von dieser ständischen Ordnung und damit der Gesellschaft geformt. Das Gewinnen, Behalten und Weitergeben neuer Erkenntnisse der Wissenschaft musste schon damals durch eine gewisse Organisation – der Universitäten – gewährleistet werden. Diese Organisation der Universitäten ist aber vor allem der Politik und weniger der Wissenschaft ein Anliegen, weil man über die Organisation die Wissenschaft beeinflussen kann. Universitäten sind in ihrer Finanzierung vom Staat abhängig, die Politik kann daher die Vergabe von Geldmitteln an die Einhaltung bestimmter Bedingungen knüpfen. Die Organisation in der Wissenschaft kann demnach auch gegen die eigentliche Wissenschaft wirken, so geschehen etwa während der Studentenunruhen der 60er und 70er Jahre, als die Universitäten – und nicht der Staat! – der Wissenschaft erheblichen Schaden zufügten.

Die Gesellschaft hat daher mit der Entwicklung des Instruments der „wissenschaftlichen Projektarbeit“ und der Anerkennung der Wichtigkeit der wissenschaftlichen Reputation zwei Faktoren geschaffen, die eine universitätsunabhängige Entwicklung der Wissenschaft sicherstellen: Projekte machen aufgrund ihrer inhaltlichen, zeitlichen und räumlichen Begrenzung die Forschungsarbeit übersichtlicher und vermindern das Finanzierungsrisiko. Zur Umsetzung braucht es zwar ein gewisses Maß an Organisation, jedoch nicht die

Organisationsform der Universitäten. Reputation als zweiter Faktor ist demgegenüber das Ansehen, das ein Wissenschaftler in der Fachwelt genießt. Die Universität und damit die Organisation haben nur wenig Einfluss auf das Entstehen von Reputation, über das Ansehen entscheiden hauptsächlich die Fachwissenschaftler außerhalb der Universität. Reputation schafft demnach Macht außerhalb der Universität und der ihr eigenen Organisation.

Aus dem Gesagten folgt für jede Art von Hochschulpolitik, dass Wissenschaft sich zwar notwendigerweise in irgendeiner Art organisieren muss, diese Organisation sich aber streng an den gesellschaftlichen Zweck der Wissenschaft halten muss. Dieser ist zum einen die Produktion neuer Erkenntnisse und zum anderen die Ausbildung neuer Fachkräfte. Dabei sollen drei Ebenen unterschieden und streng voneinander getrennt werden: die Ebene der Forschung und Lehre, der Verwaltung und des Managements. Die erste Ebene ist zentral, die beiden anderen „dienen“ ihr gleichsam und schaffen den nötigen Freiraum für die Selbstorganisation von Forschung und Lehre.

5.11. Walter RÜEGG: Die Universität in der „Moderne“ des 19. und 20. Jahrhunderts

Die ersten Universitäten Europas, damals noch fast ohne eigene Infrastruktur und Autonomie, lehrten bis zur Französischen Revolution alle nach ein und demselben Curriculum, es gab keine nationalen Institutionen, die sich in ihrer Lehrstruktur in irgendeiner Form von anderen abheben hätten können. In den folgenden Jahren durchlebte die europäische Universitätslandschaft eine Krise, unzählige Universitäten wurden geschlossen oder in „grandes écoles“, Spezialhochschulen, umgewandelt. In der Moderne setzten sich dann aber schließlich doch die Universitäten durch und wurde zu den führenden europäischen Ausbildungszentren.

Die heutige Autonomie der Universität fand in Wilhelm von Humboldt ihren Vordenker: Als Privatgelehrter wurde er 1809 von König Friedrich Wilhelm III. mit der Gründung einer neuen Universität in Berlin beauftragt und vollzog mit seiner liberalen Universitätskonzeption nach den Vorarbeiten Friedrich Schleiermachers den Schritt von der staatlich dominierten Eliteinstitution zur autonomen, forschenden Universität. Hätte Humboldt auch seine Vorstellungen einer finanziellen Autonomie der Universität verwirklichen können, hätten die heutigen Hochschulen das Modell der „unternehmerischen“ Universität wohl schon lange verwirklicht. Mitte des 19. Jahrhunderts nahm Deutschland dann vor allem in der naturwissenschaftlichen Forschung eine Vormachtstellung in Europa ein, zurückzuführen auf

die erfolgreiche Eingliederung der Institute und Seminare in die institutionelle Autonomie der Universität. Die deutschen Reformen wurden im Folgenden auch in anderen europäischen Ländern nachvollzogen, so in Frankreich, Italien, Skandinavien und Großbritannien, wobei größere institutionelle Neuerungen aber erst nach dem 2. Weltkrieg erfolgten. In Japan organisierten die Universitäten sich ab 1886 nach dem deutschen Modell, China folgte Ende des 19. Jahrhunderts. Nach der Entkolonialisierung Afrikas und Asiens konnte auch das amerikanische Universitätsmodell eine gewisse Vorbildfunktion einnehmen, die NATO und die USA initiierten auch die ersten umfangreicheren Austausch- und Stipendienprogramme. Ihr Erbe trat nach 1960 die OECD an, die ihre Aufgabe heute vor allem in der Evaluation der nationalen Bildungspolitik der Mitgliedsstaaten sieht. In der Europäischen Union nahm 1999 mit dem Beschluss der europäischen Bildungsminister, bis 2010 einen Europäischen Bildungsraum im Hochschulbereich zu schaffen, der „Bologna-Prozess“ nahm seinen Anfang. Die „unternehmerische“ Universität, deren Anfänge in den USA zu finden sind, verbreitete sich in den 90er Jahren des letzten Jahrhunderts, ihren Ausgang in Großbritannien nehmend, entwickelte sich zunehmend auch in Europa die Idee einer „unternehmerischen“ Universität. Die Universität soll sich im stetigen Wettbewerb mit anderen Hochschuleinrichtungen beweisen – ohne den Humboldt’schen Anspruch der wissenschaftlichen Bildung zu vernachlässigen.

5.12. Franz STREHL: Universitätsmanagement – Ansätze, Probleme

Die Hoffnungen und Erwartungen, welche Gesellschaft, Politik und Wirtschaft an die Universitäten stellen, unterliegen einer ständigen Veränderung. In vielen Ländern gibt es seit den 1990er Jahren Versuche, das Universitätssystem vollständig zu reformieren. Zumeist werden diese Reformen auf Managementkonzepte gestützt, um den komplexen Anforderungen der Umwelt besser entsprechen zu können. Lehr- und Forschungsstrukturen müssen verändert werden, um mit knappen Ressourcen die bestmöglichen Curricula für erfolgreiche Studenten und optimale Forschungsergebnisse bieten zu können.

Das Universitätsmanagement orientiert sich dabei zu einem großen Teil an den „3 Es“ des New Public Managements: Economy, Efficiency, Effectiveness. Auch deshalb genießen die Universitäten in den letzten Jahren mehr institutionelle Autonomie und Selbstbestimmung, allerdings wird dafür ein hohes Maß an effektiven Outputs und effizientem Umgang mit den Ressourcen erwartet. Die Rechenschaftslegung wird dabei widersprüchlich gesehen. Man kritisiert einerseits, dass sie zu einem Abhängigkeitsverhältnis von den Zentralstellen führt,

andererseits gibt es auch Forderungen, wonach die staatlichen Stellen, welche Finanzierungsmittel zur Verfügung stellen, auch die Möglichkeit zur Kontrolle erhalten sollen. Aus diesem Grund werden Leistungsvereinbarungen zwischen dem zuständigen Ministerium und den jeweiligen Universitäten getroffen, welche Ziele festlegen, sowie den Leistungsumfang seitens der Universitäten und eine (outputorientierte) Budgetallokation seitens des Ministeriums enthalten.

Die Leitungs- bzw. Entscheidungssysteme innerhalb der Universitäten sind traditionellerweise in kollegialen Strukturen organisiert. Auch in diesem Bereich gibt es stark divergierende Meinungen: Die Befürworter der kollegialen Strukturen heben vor allem die Freiheit von Lehre und Forschung hervor, die nur mit einem hohen Maß an Mitbestimmung durch Kollegialentscheidungen realisierbar sei. Im Gegensatz dazu sind Kritiker der Meinung, dass große Gremien, die eine zweistellige Mitgliederzahl übersteigen, nicht fähig sind, dynamisch auf Veränderungen der Umwelt zu reagieren.

Der Idealtyp der heutigen Universität wird in einer starken Managementspitze und beratenden Gremien gesehen, welche schnell und innovativ auf mögliche Herausforderungen der Umwelt und der Gesellschaft reagieren können. Allerdings kann die Universität der Zukunft nur gewinnen, wenn die Qualität der Konzepte hoch ist und bleibt.

5.13. Heribert WULZ: Die rechtlichen Aspekte der Universitätsorganisation. Österreich als Paradigma am Beginn des 21. Jahrhunderts

Die europäische Politik hat erkannt, dass der Reichtum Europas im Vergleich zu anderen Regionen nur erhalten werden kann, wenn ein hohes Bildungsniveau der Bevölkerung angestrebt und in zunehmendem Maße gefördert wird. Dabei stehen die Universitäten und Bildungseinrichtungen des tertiären Sektors im Mittelpunkt der Aufmerksamkeit, weil sie die die immer stärker werdende Bildungspartizipation zu verkraften haben. Diese Herausforderung können sie mit ihren derzeitigen Ressourcen nicht bewältigen. Zudem erschöpft sich die Aufgabe der Universitäten nicht allein in der Ausbildung der Studenten und in der wissenschaftlichen Forschung: Sie sollen nun auch eine tragende Rolle im Bereich des lebenslangen Lernens übernehmen. Zugleich müssen auch die Forschungsergebnisse in einem hohen Maße innovativ sein, um – in Kooperation mit der Wirtschaft – dieser auch Anreize bieten zu können.

Die starken strukturellen Veränderungen, die sich in den letzten Jahren vor allem durch den Bologna-Prozess an den Universitäten vollzogen haben, sind besonders in der Autonomie der Universitäten spürbar. Dieser Autonomiegedanke lässt sich in der Festlegung der internen Struktur, des akademischen Profils und der institutionellen Politik erkennen. Jedoch kann eine Einschränkung dieser Autonomie vor allem in Bezug auf finanzielle Mittel festgestellt werden.

In Österreich muss die Veränderung und die Entwicklung der Universität auch immer als eine Rechtsentwicklung gesehen werden. Im Wesentlichen wurde durch das Universitätsgesetz 2002 der Autonomisierungsprozess, dessen Anfänge bereits im UOG 1993 lagen, zu einem Ende gebracht. Das UG 2002 kann allerdings nur als Ausgangspunkt einer weiteren Entwicklung gesehen werden. Allerdings sind nur jene Universitäten völlig autonom, welche über genügend eigene Mittel verfügen. Somit bleibt die Finanzierung weiter in der Hand des Staates, der Druck auf die Universitäten, sich ein eigenes Budget zu verdienen, wächst beständig. Dies ist auch ein Trend, welcher in Zukunft zu einer weiteren Entstaatlichung der Universitäten führen könnte. Auch kann als eine weitere Entwicklungstendenz eine Zunahme der Differenzierung bzw. Spezialisierung der Universitäten gesehen werden.

6. Wolfgang MANTL: Is there a Common European University? A General Conclusion

After a long period of development it can be said that the university is the historically successful answer to the rather sceptical question of whether science can even be organized. We do not want to hark back to ancient forms of acquiring and transferring knowledge, which still play a roll in certain institutions such as academies. The European university is approximately 1,000 years old, and it is not be centred around “Bologna”. It has older Jewish, Christian and Islamic roots. Following forms of schooling, craft-learning and close personal relationships (Meister-pupil, as still can be seen in the fine and performing arts) came the Renaissance, humanism and the Reformation, as well as the Catholic reform, all of which have had lasting momentum through the Enlightenment until the present. This came in two forms: utilitarianism and neohumanistic educational ideals, both of which have also been important since the erosion of communism in the transformation states.

The philosophy of utilitarianism demanded strict vocational training, which the universities also offered at the time: Maria THERESIA and JOSEPH II should be mentioned here along

with NAPOLEON I. and his foundations and, ultimately, modified cadet schools. Utilitarianism successfully lives on in the contemporary universities of applied science. Even communism, as a radical type of enlightenment, built a utilitarian system of universities and universities of applied science, and research and ideological instruction were carried over into the hierarchically superior academies of sciences.

The neohumanistic educational idealism is also a child of the enlightenment: Wilhelm von HUMBOLDT continued the enlightenment traditions of European universities such as Glasgow, Edinburgh, Leiden and, in the German-speaking world, Halle (1693) and Göttingen (1734), where incidentally the great practical invention of the seminar as a discursive educational tool followed.

After the loss of Halle in the Napoleonic Wars, HUMBOLDT arranged for the founding of the University of Berlin, borne of the ideals of education through science, the freedom of research and teaching, the unity (at least – often formulated so narrowly today – the connection) of research and teaching and different institutional and organisational consequences. These ideals have continued to have an effect until today, but were admittedly realised in different ways. The Humboldtian idea became the global model in the 19th century and even made its way to US universities.

Individual and institutional autonomy ensued on a philosophical-historical basis which had not only the present and the future in mind, as is sometimes the case today with sporadic research and teaching activities. The formation of the next generation of scientists has always been an important task of the university. The modifications of the last few decades occurred in the form of equality of men and women, social equality of opportunity, internationality, as well as inter- and transdisciplinarity. Even the process of European integration, which is strongly geared towards the universities of the Anglo-Saxon world, the mature daughters of European universities, proves this with fresh intensity. More HUMBOLDT can perhaps be seen at the top North American universities than in the average European university.

The awareness of the importance of major research within and outside of the university developed in Europe around the turn of the 20th century (Max WEBER, Adolf von HARNACK: 1911 Kaiser-Wilhelm-Institute, the predecessor of the current Max-Planck-Institute and similar structures). The question of the critical mass and right size, and

associated sufficient financing is an issue which, especially in the post-communist transition states, plays an important roll.

There have always been research institutions and libraries outside the university, nevertheless in the last two centuries the university has succeeded in becoming the “central site” of science of the enlightened world.

The Anglo-Saxon traditions, which now come from the outside and influence the European education process, but were in fact the field in which the European ideas were planted, can be characterized by the following features: a civic culture which centres more around the market as opposed to the state, and mental patterns which – encouraged especially through the democratic order – are particularly open to innovation.

Through the self-mutilation of Europe in the 20th century, English established itself as the virtually undisputed language of science. Advances in natural sciences and techniques in the Anglo-Saxon world did not only have an impact on individual research results (re: the ranking of Nobel Prize winners!), rather on the entire “electronic revolution”, even though in a virtual age the wish for instantaneous oral communication remains. One can speak of the “invincibility” of the seminar and even the good, old-fashioned lecture, although distance learning, etc. have grown strongly.

In Europe the “3-step formation”, Bachelor, Master and PhD, has been implemented; although it has been partly misunderstood: for instance the American Bachelor studies are actually quite different than the current European concept. Orientation towards the market has caused the “schoolification” of the university curricula and, even if in no way with sanctioned legal norms, has been canonized in the so-called Bologna Process. Emphasis on the market economy in the universities has underlined the importance of competition in research and teaching, and the importance of effective and efficient university management. One consequence has been the 20-year forced discussion in Europe about evaluation and ranking, at least a discussion about transparent measurements and assurance of long-term quality, and with associated consequences.

After over 50 years of experience at the university, I advocate the view that science as a creative form of life is very sustainable and motivating. The university as the organizational

structure of science is not so secure. It is indeed not an ivory tower, rather it is stormed not only by church and state as it used to be, but by many social forces of even a European and global dimension. The individual and institutional freedom of research and teaching are still the constituents of cognition. Everything must be done to prevent its “evaporation” in society and the economy, as well as to keep the university as the “central site” of science, even if there are more complementary, but not replacement, academies, universities of applied science and other non-university research and training institutions than could have been imagined in Europe 50 years ago.

The university councils are an important recent invention, also in Austria; they exercise leadership next to the rectors, even during the relativization of the traditional senates. The university councils are organs of integration of pluralistic positions and interests. Austria is a model with its University Law of 2002 and the university councils institutionalized therein.

There is still much to be said in favour of being conscious of the distinction between recognition and decision in order to facilitate “distance” for the university and its professors, assistants and students in legally guaranteed autonomy. This distance enables the free development of specific achievements. In any case the enlightened-liberal understanding of the productive force of freedom, even when considering utility, is still of great significance. The slip of the “schoolified” and bureaucratized mass and group universities of the last half century into single institutions, schools and research groups in the service diverging force should be avoided. Method-based knowledge must not give way to servile “apathy of methods”. The wilderness of fragmented private universities is worrying, even if the old “full university” cannot always be maintained. Some “house cleaning” can also not be avoided, but research and teaching must not drift apart and damage recognition.

The university needs the sciences and humanities, needs knowledge not only of a utilitarian nature but also to orient itself. The university should remain a house with many rooms, not just a village with many houses. The coexistence and the survival of man require functioning institutions for “critical self-reflection” (Jürgen MITTELSTRAß).